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THE NATIONAL NURSERYMAN



JANUARY 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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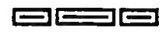
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From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

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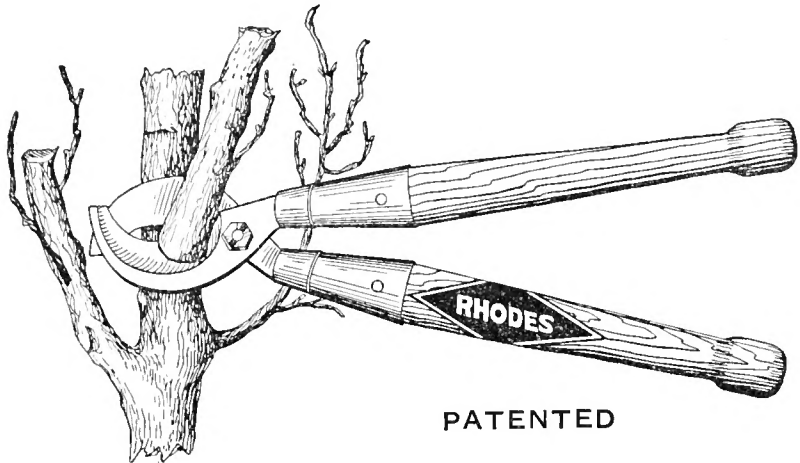


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PRUNING SHEARS**

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The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

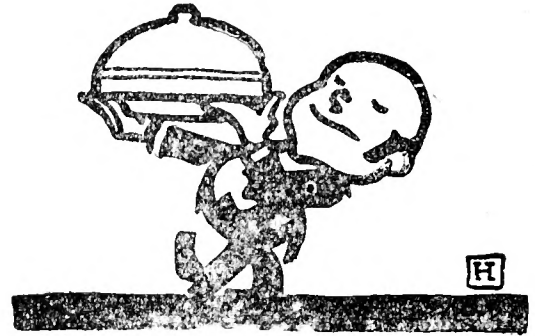
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Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
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The Preferred Stock

The Preferred Stock



SERVICE

We consider it good service, and therefore a part of good business to give our friends complete information concerning our products, and to this end we cordially invite inquiries.

Bulletins will be issued regularly throughout the Spring season. Are you on our mailing list?

But other phases of service are not overlooked.

**PREFERRED STOCK
PREFERRED GRADING
PREFERRED PACKING
and
QUICK ACTION**

All of these are most necessary in the Spring.

Bulletin No. 2 will be ready about January eighth.

Jackson & Perkins Company

Rose growers and nurserymen
Wholesale only

Newark, - New York

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We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS



THE
North-Eastern Forestry Co.

**CESHIRE
...Connecticut...**

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Hardy Lily Bulbs

**Lilium Auratum, Magnificum,
Album, Rubrum, Melpomene,
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Case lots only

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Seeds of Rosa Multiflora Japonica

This new Japanese stock is considered better than Manetti or Multiflora for budding Roses.

Raffia

**Red Star Brand XX Superior Brand
AA West Coast, also in 20 colors**
Shipped promptly from stock.

All of above can be shipped at once.

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

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mention the National Nurseryman.

Wishing you one and all
A NEW YEAR
of Peace and Prosperity

The Storrs & Harrison Co.

Painesville, - Ohio

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

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| Arbor Vitae—American | Concolor |
| Arbor Vitae—Compacta | Englemans Spruce |
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| Arbor Vitae—Globosa | Norway Spruce |
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| Arbor Vitae—Pyramidalis | Pinus Mugho |
| Arbor Vitae—Siberian | Pinus Flexilis |
| Arbor Vitae—Tom Thumb | Pinus Ponderosa |
| Arbor Vitae—Orientalis | Pitch Pine |
| Arbor Vitae—Orientalis Aurea | Red Cedar |
| Arbor Vitae—Orientalis Pyr | Retinispora, 3 varieties |
| Austrian Pine | Swedish Juniper |
| Biota, 3 varieties | Scotch Pine |
| Black Hills Spruce | White Pine |
| Colorado Blue Spruce | White Spruce |
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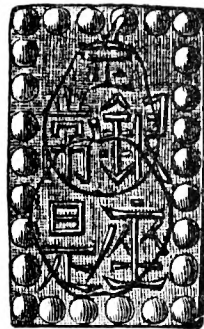
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

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Established 1872

1500 Acres

SHRUBS SHADE TREES EVERGREENS

Good assortment. Excellent quality.

All our own growing.

Fall trade list now ready. Ask for your copy.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

SURPLUS STOCK

- 100 Ailanthus, 1½-2 inches
- 1000 White Ash, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches
- 140 Box Elder, 10 to 12 ft., 1½ to 2 inches
- 12000 Elm, 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches, 2½ to 3 inch
- 120 Linden, 10 to 12 ft.
- 12000 Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 300 Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 5000 Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch.
- 800 Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch.
- 200 Tulip Tree, 1½ to 2 inch, 2 to 2½ inch.
- 150 Weeping Willow, all sizes up to 3 inch.
- 150 Erect Willow, all sizes up to 2 inch.
- 1500 Viburnum Opulus, 3 to 4 ft., 4 to 5 ft.
- 2500 Viburnum Sterilis, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 500 Deutzia Crenata, 2 to 3 ft.
- 400 Deutzia Candidissima, 2 to 3 ft.
- 3000 Deutzia Pride of Rochester, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 5000 Lilac Purple, 2 to 3 ft., 3 to 4 ft.
- 1000 Lilac White, 2 to 3 ft.
- 1200 Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
- 500 Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft.
- 900 Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 1600 Spirea Billardi, 2 to 3 ft., 3 to 4 ft.
- 1200 Spirea Collosa Alba, 10 to 12 inch.
- 400 Spirea Reevesi, 2 to 3 ft.
- 2000 Spirea Thunbergii, 2 to 3 ft.
- 4000 Snowberry, 2 to 3 ft., 3 to 4 ft.
- 3500 Indian Currant, 2 to 3 ft., 3 to 4 ft.
- 1500 Spirea Salicifolia, 2 to 3, 3 to 4.

C. M. Hobbs & Sons, Bridgeport, Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

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HATBORO, PENNA. JANUARY 1920

No. 1

The Nurseryman and The Florist



IN THE old country the trades or professions as indicated by the terms Nurserymen and Florists are almost synonymous, especially when applied to those who grow rather than those who handle cut flowers in the stores. The old country florist is considered a nurseryman who specializes in flowering plants and cut flowers.

In the United States the florist business developed entirely independent of the nursery business, and classed as a whole, they have very little in common with each other.

Until quarantine 37 went into effect the florists of this country depended very largely upon the nurserymen growers of Europe for their material. Now the supply is shut off, is the American nurseryman going to make an effort to grow and supply their needs?

There is a host of plants the American nurseryman can grow, in fact, does already grow them, but not in a way that is necessary to supply the requirement of the American florist trade. Will the nurseryman lay himself out to properly grow and supply this material? There is a tremendous field awaiting development, or will he leave it to the florist trade to supplant him in his own field.

From now on the florist trade will be investigating every source from which to draw material to fill up the vacuum caused by the stoppage of imports. Many plants, hitherto ignored by the florists will be experimented with, to find out their possibilities as interior decorative subjects and to furnish material for cutting at Christmas and Easter.

Nurserymen growers of ornamental nursery stock should be the natural source of supply, if they care to measure up to the opportunity. It will not necessarily mean they must begin to grow exactly the same stock that has hitherto been imported.

Some of the things that come to mind may be found listed in almost any nurseryman's catalogue and which are forced and brought into flower by the florist are *Deutzia gracilis*, *Deutzia Lemoinei*, *Astilbe Japonica* and other sorts, Lilaes, *Azalea mollis* *Forsythias*, *Dicentra spectabilis*, *Hydrangea hortensia*, *Otaksa* and varieties, *Azalea amoena*, *A. Hano de Giri*, *A. ledifolia* and numerous other early flowering shrubs and herbaceous plants to say nothing of the bulbous plants, such as some of the Liliams and Narcissus.

While many nurserymen grow and sell the above mentioned plants, it is very few who grow and handle them in a way that would satisfy the greenhouse man who has to bring them into saleable condition.

Plants to be of value to the florist, who wants to force them must be a finished product, shapely, well grown, well budded or wooded to become a thing of beauty in a few weeks, such as the Dutchmen used to send over before the authorities in Washington had had dreams. In fact the signs all indicate American ornamental horticulture will have to develop along its own lines, even if we could imitate the standardized and stereotyped products of the European nurseryman, it would be kind of un-American to do so.

Nature is so prodigal with her raw material in the United States, the horticulturists of the country will fall far short of its reputation for enterprise, ability and originality, if it does not take a leading place in growing ornamentals as well as other lines of endeavor.

Few of us think and work along original lines, unless we are forced to. Quarantine 37 may turn out the needed spur to accomplishment. In surveying the field of raw material suitable for florists purposes, the evergreens suggest big possibilities. Take the Junipers, Thuyas, *Retinisporas* that are in such variety and are very adaptable for interior decorative use if grown for that purpose.

To fit them for florist's use it is only necessary to grow them in pots. I do not mean grow them in the field and then dig them up and put them in a pot or tub, that is a process undeserving of the term of skilled practice, but grow them from the cutting graft or seedling up, so that when they are ready for the market, there is a well shaped top with a nicely proportioned root system, such as is seen in well grown, potted plants.

The Japanese have shown how it is possible to grow an evergreen in a pot for a century or more, and produce an aged tree in perfect miniature. American effort is more likely to have perfection of proportion along with youth and the younger the better, providing beauty is not sacrificed. In addition to the coniferous evergreens there are others as well as the Box and Bay trees that are amenable to pot culture.

The *Ligustrum Japonica*, *L. lucidum*, *L. Amurense* are only waiting for some good growers to take hold of them and demonstrate what fine subjects they are for florist's use.

Leucothaea Catesbaei, *Ilex Crenata* also have possibilities as potted plants, in fact, if the nurseryman wants to cater to the needs of the florist he has a large variety to draw from and can go far ahead of the European nurseryman in furnishing material for florist's decorative work.

French Orchards and Nurseries After the War

By Major Lloyd C. Stark, Ex-President of the American Association of Nurserymen and Ex-President of the Mississippi Valley Apple Growers' Association. Vice President of Stark Bros.' Nurseries and Orchards Co.



AFTER the Armistice was signed and we moved back from the front, I made several trips through the French orchard and nursery sections.

In comparing the French orchards with American orchards we must realize first of all that there is no such thing in France as a big commercial orchard industry as we know it in America, but France does produce an enormous quantity of fine fruits for the simple reason that practically the entire country is spotted and dotted with orchards and fruit gardens.

The grape industry on the contrary is commercialized and organized on a gigantic scale. This is necessarily true for the simple reason that Frenchmen very seldom drink water, using their light wine instead. There are several reasons for this: First, the French water in many sections is dangerous. One of the most important things in our army was to see that the soldiers did not drink water until it was properly boiled or sterilized in a "lister" bag by the addition of chloride of lime disinfectant.

On our arrival in France we landed at Bordeaux, probably the largest wine market in the world, and the center of export for all the French vineyard industry. Bordeaux lies some fifty miles back from the coast on the Gironde River. On entering the mouth of the Gironde as soon as the Sand Dunes are passed we found beautiful vineyards on every hand, and as we steamed up the river the French vineyardists and peasants left their work among the grape vines to line up along the banks and welcome us to France. This was just after the first American exploit at Cantigny and Chateau Thierry and you may be sure there was great warmth in the French welcome.

For fifty miles up to Bordeaux on either side, as far as the eye could reach, we saw almost solid vineyards. This same condition existed in many other sections of France, both along the southwestern coast and the Mediterranean shores. Also in the old Province of Burgundy where the famous Burgundy wines are made, Dijon being the center of the Burgundy district. The climate in southwestern and the south of France is, of course, semi-tropical and citrus fruits flourish and are grown in abundance. In the northwestern, central and northern sections of France, deciduous fruits are raised in great quantities. Every little home has its fruit garden and you will see pear trees growing over the stone walls pruned up in fan shape, in every conceivable design and fashion.

In Burgundy in the garden of the chateau where I had my headquarters after the Armistice I saw a row of dwarf apple trees 50 years old and the trees were only about 2-2½ feet high, the base of the trees being only about 4 to 6 inches in diameter. They prune them back every year almost like our vineyardists prune a grape vine. They were grafted on the wild dog briar of France.

Up to the north of France in the vicinity of Calais and Bologne, where I spent a month or so, along the British

front, the cider and apple industry is considerable, but in Normandy I saw what I considered the best orchard land and the best orchards in France. And it is in Normandy that the greater portion of the apples are produced for the famous French cider, also apples for market. The land in Normandy struck me as being more like our American orchard and farm land than any I saw in France. The fields were larger and there was a certain similarity between their forest trees and those we see in the central states of America.

Most of the orchards are grown in sod. Very few of the orchards, except those planted in gardens, were cultivated. Their style of tree is entirely different from ours. They head them about 5 or 6 ft. high and simply have a flat sort of umbrella-shape head in most instances.

I inquired as to which were the most satisfactory and most profitable commercial varieties. In most every case I found each little village and each little locality had varieties of its own. No variety of apple seems to be generally disseminated or universally popular, tho I was told that in many cases the favorite local varieties were probably one and the same with the favorites in some other locality—simply grown under another name.

I found that the apples used in making cider were blended; some sweet apples or crabs and some so-called "bitter" ones. The Frenchmen claim only by this blending could the exceptional quality of cider be produced.

The French method of making cider on a large commercial scale, will some day become popular in this country when its worth is appreciated, no doubt.

The pear industry in France is much more important than in the United States. They seem to have no trouble with the blight, which, of course, is largely due to the climate. The most popular variety was the "English William" which is none other than our dear old Bartlett. I saw large commercial orchards that were paying big profits on Williams in the neighborhood of Angers, and also up in Normandy.

In many sections of France fruit trees are used to line all the highways. This is a practice that should be, and some day will be, carried on in our country. Think of the millions of acres now entirely idle that could be producing fruit here in America if we planted hardy varieties of fruit trees along the state and county roads, to say nothing of the national highways. Many claim that it can't be done satisfactorily in this country, but there is absolutely no argument there. The French do it and we are just as smart as the French. We have better varieties and we have just as good soil and climatic conditions. Some day we will do it.

Up in the country to the north of Verdun, in the edge of the Ardennes Mountains, as we pushed the German armies back through the Argonne and Woevre Forests we saw many fine apple orchards that had been uprooted and wantonly destroyed by the enemy. It will take a long time to bring these orchards back again, and a great

many of the fruit tree stocks that formerly came to America must now be used to replant the destroyed orchards and fruit trees of France and Belgium.

In visiting the nurseries throughout France where they grow the apple, pear and cherry seedlings, we found a pitiful state of affairs. Many of the men had been killed in the war and the nurseries had been kept going by the older men and women left behind. Of course, to a large extent they were in bad shape. It will take several years before they are back to their former standard. In the meantime the great shortage of seedling crop is being felt not only in Europe but in America as well.

For instance, apple seedlings that used to cost us \$5.00 or \$6.00 are now worth \$50.00 and \$60.00, and we can only get a few at any price, and some of the other sorts are even worse. In other words, in the world today there is probably less than one-fifth the normal supply of stocks for the purpose of producing fruit trees. It will take a good many years to get the production back to normal, especially in France, where out of about ten million able-bodied men they have lost about two million killed and as many more crippled for life, and of course a lot of others have been ill and won't get back to work in normal shape for years; some of them never. Then, in addition, in many sections, they haven't recovered from their suffering and malnutrition during the war.

In America the seeds used to produce American-grown fruit tree seedlings nearly all come from France and as there has been no seed to amount to anything coming from France the American crop has been reduced to a very small proportion of the former output. This terrific scarcity of fruit tree stocks, coupled with the fact that nearly all nurserymen turned their acreage into producing cereals during the war, has greatly reduced the supply of fruit trees in this country, and this situation is even worse in other countries. In three or four years it is to be hoped we will be back to normal in America, but it will take them much longer than this in France.

The French people love their fruit trees and orchards almost as their children and that is why there was such indignation and horror when the enemy deliberately destroyed all the fruit trees as they retreated. The French Government Post office issues calendars each year. On these calendars they have pictures of two or three different kinds. On last year's set one of the pictures showed a French orchard with all the trees cut and fallen on the ground with the bare stumps glistening in the sunlight, and with it was a statement showing the French hatred for an enemy who kills harmless, helpless fruit trees. I saw this calendar displayed prominently in nearly all the homes and shops throughout France. I mention this merely to show how close the heart of the Frenchman is tied up in his fruit trees. He feels toward his fruit trees a good deal like the American master feels toward his faithful dog.

Since the war America has realized the great value of her orchards and the great necessity of keeping up her orchards. She knows the tremendous food values and health-giving qualities of her fruit products. The war accentuated more than ever before in the minds of the people in general not only the value but the absolute necessity of plenty of good ripe or well canned fruit for the proper development of children and the maintenance

of health.

The tremendously increased interest in orchard planting and fruit growing in general is the result. The central west especially is realizing the enormous profits to be made from well cared for orchards of the best modern varieties of fruit, and more and more of the far-seeing orchardists are planting high quality varieties and varieties resistant to disease and eliminating such weakling trees as Ben Davis, etc.

In one of our leading central-western states the State Horticultural authorities have reported that in the last ten years there has been a loss of 50% in bearing orchards. This is primarily due to one thing — Ben Davis! Too many Ben Davis were planted. Ben Davis is a very weak tree, especially susceptible to all kinds of canker. There was, shortly after the great Ben Davis planting in this state a let-up of interest in orchards, consequently many of these trees were not properly pruned and cared for, hence when the interest again revived they were heavily pruned—too heavily pruned. This simply invited the entrance of canker and as most of these trees happened to be Ben Davis the canker literally wiped them out by the thousands, and today, where vigorous, healthy orchards might have been, there are a few snags and stumps. If these men who planted Ben Davis had planted some variety with a good healthy tree they would be making thousands of dollars today where they are making nothing but pasture rent.

There are those who still defend the Ben Davis and there is no question but what in some orchards it has been a great profit-maker, but the trouble is, as soon as the tree gets a little age it will pass out and this is where the big loss comes. Also, it is not right to grow such common fruit as the Ben Davis apple—such poor quality—for the American public, when good varieties can be grown just as cheaply—high quality sorts that will bring even more money than Ben Davis, live longer, and will give far greater satisfaction to the ultimate consumer. If one wishes to plant an apple of the Ben Davis type there are one or two which have all the good bearing quality of the old Ben, a stronger tree, not susceptible to canker and an apple that is better quality and far more beautiful than the old Ben.

Going back once more to the French orchards: There is one thing that stands out when one investigates the French fruit industry and that is the Frenchman appreciates quality in fruits. In America our buyers in the past have paid too much attention to appearance and too little to what was under the skin. In France the popular varieties are all high quality varieties. They won't grow or use poor quality apples, such as the Ben Davis, and the popular peaches, are the high quality peaches, and the popular pears the high quality pears.

In America we are learning and the public is rapidly coming to appreciate the difference in quality of the various varieties of fruits. This is especially true in the large cities and is getting more and more true in the smaller towns as well as among our farm population.

We can learn much from the French when it comes to producing large quantities of fruits on small acreage, back yard gardens, etc., but from a commercial standpoint their orchards are not as well systematized and

cannot compare with our American orchards. Also I feel sure that our varieties are 50 years ahead of the French varieties. There seems not to be in France the desire for improvement that is always apparent not only among American nurserymen and orchardists, but in all lines of endeavor this side of the Atlantic.

In conclusion please remember this one thing—(forgetting my subject for the minute)—and it is this: There is just one God's country in the world, and that is America! All the other countries have their good points and their bad points but there are more good points and fewer bad points to contend with in America than anywhere in the world. Don't ever let anybody try to convince you to the contrary.

A NEW DAY FOR THE NURSERY BUSINESS

*By McKay Nursery Company, L. J. Tucker, Sec.-Treas.,
Madison, Wis.*

Such a splendid article as the one by Mr. George Parker, Fayetteville, Arkansas, published in October issue of Nursery Trade Bulletin furnishes food for reflection. Before we can hope to secure the maximum benefits from advertising, our houses must be set in order. The American Association of Nurserymen should consist of members that stand for distribution of high class stock. Members should have an intelligent understanding of grades and quality. We regret to say that we have seen many trees, shrubs, etc., distributed by members of our Association that should be on the brush pile. It is evident that some of the members need educating along these lines, and if they cannot be educated to grow, grade, and pack properly then they do not belong in the American Association of Nurserymen for if allowed to remain they will only bring disrepute on the Association. A membership must mean all that should be implied—a square deal, good stock of the grade and age specified and properly handled.

Can we ask the planter to have faith in all members of our Association today? How many nurserymen when purchasing nursery stock consider whether the seller is a member of the American Association of Nurserymen or not? Why on earth should they consider this, when he knows he is just as liable to receive stock poorly graded and packed from a member as from a non-member. No member should be allowed to violate all rules and principles of business, such as selling stock early in the season, and if prices go down your order is filled complete, but if prices happen to advance, your order is packed short and by so doing drags off a few dishonest dollars, if he succeeds in his intentions. This of course does not apply to all cases, sometimes he over sells by mistake; however, nurserymen dealing square and above board are careful what they agree to do and this type as a rule fulfill their contracts. There is also a tendency among some Nurserymen to grade carelessly when stock is high priced; very often the grade is not so good as when stock is only worth one half as much. Such procedure is entirely wrong. The value should not and does not enter into the grade, and until grades and quality can be depended upon, there would be no use to have shipments

carry a blue tag as suggested by Mr. Parker.

The dues of one-fourth per cent on volume of sales is no small item; however, if we build up an organization composed of Nurserymen that stand for quality and square dealing, we will then have an Association that can put on an advertising campaign as to what its members can and will do when selling to the planter. It is true such advertising whether along the lines of general publicity or in advertising the Association will benefit the fellow on the outside, but the public (Mr. Planter) will soon learn where dependable stock can be secured and then the fellow who hasn't seen the advantages of the American Association will be knocking at our door for admittance. Right here a thorough investigation should be made of the applicant's business methods, etc., and if found worthy admit him. If not worthy refuse him a membership until he can come up to the requirements. First of all our Association must be deeply concerned as to its quality of members—weed out those who cannot stand the test and then when the quality can be banked upon, advertising of the Association can begin and be kept up under a full head of steam. No organization can be advertised into prominence unless back of the name is something upon which the public can depend, and this something is number one strictly first class nursery stock always up to grade and quality specified. This is the foundation upon which a permanent and lasting structure can be built, and if so built the American Association of Nurserymen will grow and prosper.

With all due respect to our able Vigilance Committee permit us to suggest that some of the money which will be spent for advertising be used in paying for one or two assistants to our Executive Secretary. Their duties would be to call on Nurserymen, both members and prospective members, investigate their business methods, etc. These assistants would also be available to assist the Adjustment Committee in any matters that might come up. Further with worthy Nurserymen they could present our claims to them relative to a membership in our Association. Such a policy would make available and place in the hands of our officers valuable information upon which prompt action could be taken.

We are not losing faith in our brother Nurserymen, for very often we think some of the practices referred to are caused from poor methods and sheer carelessness. The work of the American Association of Nurserymen and experience of years which it has had should and we believe it does, give competency for the responsibilities now before it.

It is along these lines that we see a new day in the Nursery business, and as the day dawns we can take up as our slogan "Buy your Nursery Stock from a member of the American Association of Nurserymen for the stock furnished must be and will be right."

Miss Elizabeth Pitkin, daughter of Mr. and Mrs. James Moore Pitkin, Newark, N. Y., was married December 15th, 1919 to Mr. George Rhoades Van Duser.

The National Nurseryman joins with the many friends of Mr. and Mrs. Pitkin in wishing the bride and groom long life and happiness.

THE NATIONAL ASSOCIATION AS A BUSINESS PROPOSITION

Many of the members of the National Association are just beginning to realize the tremendous power it can wield for the benefit

of the nursery business.

Of course, there is the usual number of members as well as outsiders who are indifferent and whom it is difficult to inspire with enthusiasm so necessary to its success. From a purely business point of view, is it needed? One may as well ask if the Government of the United States is needed. While we are yearning to be made a law unto ourselves, or at least not be amenable to the laws made for the other fellow, we know a lawless state only produces a chaotic mess.

The Association is needed to formulate and adopt a standard or code of doing business, to protect its members and to accomplish *en masse* what the individual can not do. The larger the mass it controls the greater the power it has to accomplish for the good of the trade.

Those who are familiar with the personnel of the Association know it represents the best in the Nursery business and they also know the majority of those composing this body of men are in earnest in desiring to establish a code of doing business that will elevate the trade to the position it belongs.

The biggest job the Association has on hand at present is to create a market for its own ideas. Attract attention to itself, show it can make money for its members by giving them a prestige and standing that it would be difficult to obtain outside the membership. This cannot be done except by strict discipline and adherence to the code it establishes.

A business association has to be business like and give some very tangible value for the amount it assesses its members. To create this value, no half measures are possible.

The transition from a semi-social organization to an unsentimental business one is naturally proving somewhat slow and before it can create a desire for membership from outsiders or make the insiders value theirs more, it will have to hang very close together and be very just and perhaps somewhat ruthless in enforcing its rulings.

An association which no nurseryman can afford to ignore in his business transactions is the one that is needed to put the trade on its feet.

It may be paradoxical to say so but the first consideration of the Association should be, the protection of the buying public to see that its members give the very best value and service. The Association's value to the buying public, will decide the value to its members. Unless this is the dominant idea in all its rulings it will fail to win the public confidence. After the Association has once become recognized by the public as the big factor that stands between it and the unscrupulous nurserymen, insures them a square deal when doing business with one of its members, its prestige will be such there will be no need to worry about membership or money to carry out its objects.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc. Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
 Foreign Subscriptions, in advance \$2.00
 Six Months \$1.00

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 by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., January 1920

Subscribers to "Nurserymen's Fund for Market Development"

A Happy New Year

Happiness cannot possibly come except through unselfishness.

Let us put our New Years Wishes in active operation and reap a full harvest in 1920.

Price fixing for next Spring sales has to be attended to soon and it will be no easy matter to decide just what price to fix.

One trade or commodity is waiting on the other to set the pace.

The general tendency of prices still seems to be skyward at least there are very few lowering prices to be noted. Yet every one knows the upward movement must stop somewhere. Will the prices come down with a crash like a "busted" stock market, or will there be a slow adjustment to meet actual conditions?

Every sane man and woman wants the latter, and it follows that the nurseryman who prints his spring price list with this in mind will be as conservative as possible and not be stampeded into taking advantage of the unusual conditions to boost prices beyond what sound business practice would warrant, or to lower them without a good reason for doing so.

There are three factors to be considered, The Nurseryman, the Stock and the Public? The nurseryman wants all he can get. The stock is short, these two will combine to put prices up.

The public is the unknown factor. There is a point

when he will lose interest in planting and that will be when he feels he is being gouged for something he can do without.

The exceptions will be those who want something regardless of price and these are not in sufficient quantity to insure a strong, steady demand that alone insures success to the trade.

A firm, even downward tendency in the prices of next Spring's price lists, would have a better tonic effect on the business than a sensational advance.

Pre-war prices were too low in comparison with other things. Nursery workers are entitled to a better standard of living than they had, to secure this stabilizing the business is more essential than sensational prices during excitement.

THE CENSUS In looking over an advanced copy of the schedule as finally framed for the census of Agriculture it is noted there are only two questions for the Nurserymen to answer in relation to their trades.

No. 1. The number of acres used in growing trees, plants, vines, etc.

No. 2. Amount received from sale of Nursery Products during the year 1919.

It is unfortunate better provision was not made for getting more detailed statistics and information of the Nursery business than these two questions will give. The schedule provided for very complete information of the fruit growing industry and other branches of Agriculture. One would think it would at least have been a distinction between fruit and ornamental stock. The Nursery trade is sadly in need of better statistics than are at present available and the census would seem to be a means to obtain it. The subject should at least be considered and put in line for attention for the next one.

THE BEAUTY OF DECIDUOUS TREES IN WINTER

At this time of the year the chief beauty of the deciduous trees is their branching habit and outline as seen against the sky.

To the casual observer only the extremes of form are noted, such as the slender outline and upright growth of the Lombardy Poplar as compared with the spreading growth of the Apple tree. But each kind of tree is different in its method of branching and habit and can readily be distinguished nearly as far as they can be seen.

To the practical nurseryman and landscape gardener it is of immense value to know and distinguish mature trees in their winter effect, because this is their condition during at least five months of the year and it is possible to develop much beauty in landscape effects without their summer clothes.

A really successful landscape should be interesting and beautiful at all times, changing from one effect to another as the seasons pass.

The winter beauty of some trees is due to their wonderful symmetry and proportions of the trunk and branches so often seen. It is their own peculiar habit as in the Sassafras and Birch that adds distinction to the landscape. The winter effect of the Black Walnut is not particularly pleasing. It has neither symmetry nor prettiness and is perhaps best described as gawky when seen along side of the graceful lines of the American Elm or Weeping Willow, yet it too has its admirers.

Many who are quite familiar with trees are often confused and unable to distinguish between the Norway and Sugar Maple when in foliage, a little study of their branching habits and outline in the winter would reveal very conspicuous differences also of the Silver and Red Maple. In fact it is a good time to study trees, their true branching habit is so readily seen.

THE APPLE CROP

They are becoming alarmed in Missouri because the 1919 apple crop has only 46% of a full yield and are hysterically suggesting the destruction of private orchards and such like ill conceived, radical measures to protect commercial orchards.

Missouri need not be stampeded into doing anything ridiculous. New York the leading apple state of the East is only 34% and other leading apple states of the east, such as Virginia, 45%, Michigan 42%.

It was evidently an off year in the apple growing districts of the east and mid-west, while it was nearly a full crop in the west. Washington being 92%, Oregon 91% and California 98%.

Final commercial apple crops of December, 1919 gives the total as 53.6% of a full crop all 26,174,000 barrels against 55% and 24,734,000 for 1918.

J. B. Saunders, director of Bureau of Plant Industry of Harrisburg, Pa., has sent out a special notice to Nurserymen and florists concerning shipments to Florida.

To prevent the introduction of the Japanese Beetle into Florida, all shipments of nursery stock, greenhouse plants and other plants with roots attached and all roots of plants except edible or bulbous roots free of earth are prohibited.

From the State of Delaware and that portion of Pennsylvania east of the Susquehanna River and from New Jersey the shipments are also prohibited unless they have been washed free of all earth and the roots inspected immediately before shipment and certified free from the Japanese Beetle Larvae. Each package of plants from the above districts must bear a certificate signed by the Inspector. The above regulations are in addition and do not modify the requirements of the regular Florida permit certificate.

Charles M. Peters, of Salisbury, Maryland has practically sold out his entire stock. He is going to concentrate on growing grape vines for the market of 1920. Specializing on Moore's Early and Concord. While he cannot accept any more orders or delivery for the coming spring he hopes to have a big stock to offer next fall.

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

January, 1920.



SPRAYING MATERIALS.

In the markets, fruits and vegetables are graded as sprayed or unsprayed—higher prices being asked and paid for the sprayed grades. This is logical with shrubs, etc.

We Manufacture High Grade
SPRAYING MATERIALS—consequently
our guarantee stands for something:-

Bordeaux Mixture
(Paste & Powder)

Arsenate of Lead
(Paste & Powder)

Fish Oil Soap

Calcium Arsenate
(A most efficient poison
for the Least Expense)

Blue Vitriol

Led-Bor

(Bordo-Lead of highest
analysis)

Kalidor

Virulent poison combined
with Bordeaux Mixture
in powder form.)

Egg Preserver
(Water Glass)

Paris Green

(Special Mixtures, Etc.)

Write for interesting literature on
Spraying materials, Insecticides, etc.



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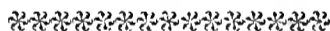
Norfolk, Va.

New Orleans, La.
Jacksonville, Fla.

Scarcity of Stock

makes our offer of choice shade trees and shrubs

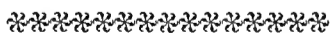
Interesting Reading



We offer in assorted sizes Norway and Sugar Maples, Horse Chestnut, Catalpa Bungei, European Sycamore, American Elm.

In shrubs Althea, both bush and tree shape; Cornus Siberica; Deutzias; Hydrangea P. G.; Kerria Japonica and Japonica Variegated; Philadelphus assorted; Prunus Pissardi; Golden Elder; Spirea Opulifolia Aurea, Thunbergii and Van Houtte.

In evergreens Douglas Spruce, White Spruce, Norway Spruce; White and Scotch Pine; Retinospora Picifera and Picifera Aurea, Plumosa and Plumosa Aurea; Arbor Vitae Columbia, Compacta, Ellwangeriana, Lutea, Siberica and Siberica Lutescens.



W. B. COLE

Painesville - - Ohio

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

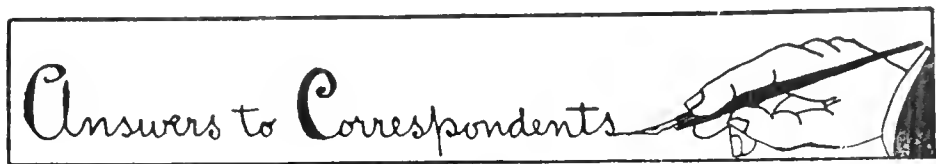
"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania



December 1, 1919.

The National Nurseryman,
Hatboro, Pennsylvania.

Gentlemen:—

We have heard quite a bit about *Cotoneaster acutifolia* and would like to learn more about this variety, its hardiness, etc.

Very truly yours,

VAUGHAN'S NURSERY,
Carl V. Croggs.

Bailey's Cyclopaedia gives the *Cotoneaster acutifolia* as being a native of North China but makes no reference to its hardiness.

It is described as a shrub attaining a height of about 12 feet with spreading slender branches, flowering in May and June, the fruit, oval black berries half inch long in September and October.

Possibly some of our readers have grown it and have had some practical experience with it. If so we should like to hear from them.—*Editor*.

Dear Sir:—

Do you know if the seedlings from *Ligustrum var Regelianum*, come true?

C. B. T.

Ligustrum Regelianum is a variety of *Ligustrum Iboia* and does not come true to type from seed. The seedlings are liable to show considerable variation, some being much more upright than others and not having the graceful spreading habit of the *Ligustrum Regelianum*. To raise a stock of plants true to type it is necessary to propagate by cuttings.

BILLBOARDS

Our associated trade the Florists are having quite a controversy among themselves as to the fitness of the billboard as an advertising vehicle for their slogan "Say it with Flowers."

The florist business is supposed to be one that caters especially to sentiment, art and the finer things of life and it should be the last one to offend against the ethics of good taste.

A billboard may be not unpleasing in itself and when properly used need not offend against good taste.

It will be largely a matter of how and where the billboards are placed.

If they are used as indiscriminately as others we see marring the beauty of the country side, it will not matter how artistic they may be in themselves they will advertise the fact that the dollar comes first, sentiment and other things "can go hang" when they interfere with the dollars coming the florist's way.

Marshall Bros. Co., Arlington, Nebraska, have amended the articles of their incorporation, changing the name from Marshall Bros. Co., to Marshall Bros.

PRUNING EXPERIMENTS WITH PEACHES

Experimental orchards were established both at Vineland and New Brunswick in 1912, with the view of comparing different systems of pruning as applied to varieties showing varying habits of growth such as the spreading, open habit; the compact spreading habit; and the upright habit of growth. The following five general forms of pruning were studied: Pruning out only such twigs as may have died or branches that may have been broken by accident; winter pruning to remove dead twigs, interfering and crossed branches and twigs, with a little top-thinning to prevent the formation of weak crotches and to admit sufficient light for the coloring of the fruit; winter pruning similar to the above, accompanied by cutting back the leading branches and twigs from one-third to one-half of the previous season's growth; summer pruning in which any suckers or undesirable shoots are removed during the growing season, and all leading shoots are pinched back during June or July to encourage a compact growth of the tree; and combined winter pruning and cutting back with summer pruning. All of the trees were cut back to a height of 18 in. when set, and the experiments in both orchards also included a comparative test of planting in dug holes as compared with holes made with dynamite. Measurements were made of the total linear twig growth and the circumference growth of the trees during the first season prior to the assignment of various pruning treatments. These measurements, together with growth data secured by different systems of pruning during the first two seasons after planting, are here presented in tabular form and discussed. No definite conclusions as to the actual effect of the various pruning treatments are drawn at this time.

Generally speaking, during the first season the trees at Vineland, where the soil is a sandy loam, averaged from about 200 to 350 in. more growth according to the variety than at New Brunswick, where the soil is gravelly red shale loam. Considerable variation in total twig growth was found to occur between individual trees at the close of the first season. This apparently had no influence upon the growth of the trees in the second season, for whereas between some groups an average difference of 50 in. the first season was appreciable in the second season, between other groups an average difference of 100 in the first season was not noticeable the second season. In both the Vineland and New Brunswick experiments the smaller the circumference in 1912 the greater the percentage increase in circumference in 1913.

The data already secured indicate that permitting the development of branches, shoots, or suckers on the lower part of the trunk during the growing season tends to increase the girth of the trunk more rapidly than where such growth is removed and where the trunk is longer and the branches higher above the ground. In the summer pruned treatments the shoots are removed from the trunk, giving in almost every case a greater twig growth to each inch increase in trunk circumference. In the no pruning and winter pruning treatments the twigs were allowed to remain on the trunks, resulting in a narrow ratio of increase in trunk circumference to increase in twig growth. Where most of the growth is made at the very top of the tree it will have proportionally less influence upon the circumference of the trunk near the ground.

Summer pruning reduces the amount of the necessary thinning of twig growth in winter, but increases the amount of clipping back due to the increase in vigor of the secondary twigs on the leaders. The summer pruning of the combined winter and summer treatment reduced the pruning required in winter to about one-half at Vineland and from one-third to one-half at New Brunswick as compared with the winter and cut back treatment. Pinching back the main twigs increases the number of secondary or side twigs.

The summer pruning only treatment at Vineland made the greatest average total growth and the winter cut back treatment was second. At New Brunswick the no pruning treatment made the best total growth and the summer pruning only treatment was second. Summer pruning apparently did not affect or reduce the amount of twig growth made by the trees during the second season. Of the various treatments the winter pruning without cutting back was the cheapest and the combined winter and summer pruning the most expensive. The data thus far secured indicate that varieties having an upright habit with numerous twigs and branches are more expensive to prune than varieties with spreading, open habit growth.

THE WESTMINSTER NURSERY
J. E. Stoner, Prop.
 WESTMINSTER - - - MARYLAND
 Offers for Fall 1919
 250,000 Cal. Privets in grades, 1, 2, and 3 yrs.
 300,000 Asparagus, 2 and 3 yr., Asst.
 Barberry Thun., 18-24 in. and 2-3 ft.
 Lombardy Poplars in grades 6 to 16 ft.
 Oriental Planes in grades 6 to 12 ft.
 Tulip Poplars, 6-8 ft.
 Horse Chestnuts in grades 7 to 12 ft.
 Catalpa Spec in grades 8 to 12 ft.
 Butter Nuts 4 to 8 ft., - grades.
 Can supply the above in car lots or less.
 We also have a good stock on Spireas Van., 2-3 ft.,
 Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
 and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Vincennes Nurseries, W. C. REED, Prop.
 VINCENNES, - - INDIANA
Cherry 2 Year Usual Supply.
 Demand very heavy no more Car lots to offer, can furnish limited amounts in assorted Orders.
Cherry, One Year
 Thrifty and nice, will only dig limited number. Not as heavy as usual owing to cold April. Will make excellent two year. Prefer to carry over if our customers will let us.
Peach, One Year
 Limited amount in assorted Orders only.
Apple 2 Year
 General List Leading Varieties in limited quantity.
Hardy Nut Trees
 Grafted and Budded Pecans, English Walnuts and Grafted Black Walnuts in the best Varieties.
Trade List now ready.
 Subscribers to "Nurserymen's Fund for Market Development."

STRAWBERRY PLANTS
 We offer for spring delivery 1920 a large stock of the following strawberry plants.
Parsons Beauty Klondike Gandy
 The most extensively planted varieties for commercial purposes.
 We are located in the largest STRAWBERRY CENTER in the WORLD and have the soil and climate to produce the best strawberry plants. Only limited stock of other varieties unsold.
 Would be pleased to quote you.
Bunting's Nurseries, G. E. BUNTING & SONS, Props.
 Selbyville—Delaware
 Subscribers to "Nurserymen's Fund for Market Development."

Landscape Photographs
 Good landscape views are vitally necessary to the nurseryman. Get our view work in the hands of your agents. We know positively they make sales. It is time now to order for spring. Special price this month.
 A SAMPLE SET SENT FREE
B. F. CONIGSKY
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EVERBEARING STRAWBERRY PLANTS
 PROGRESSIVE, FRANCIS and PEERLESS
 We can supply you fresh dug every day, healthy, true to name, well rooted plants at attractive prices.
BASIL PERRY,
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Strawberry Plants Only
 Let us book your order now while our stock is complete.
 More than forty million plants Standard and Everbearing.
 More than 200 acres of healthy true-to-name plants grown on light new soil. Quality was never better.
 Shipped direct to you or your customers under your own tag. We please others, and would like to try YOU.
E. W. Townsend & Sons
 Wholesale Nursery
 SALISBURY, - - MARYLAND
 More than fifteen years growing plants for nurserymen and dealers.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS
 FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.
 TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.
The Willadean Nurseries
 Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"
 Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.
 Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
 100 William St. - - New York, N. Y.

STARK'S "DELICIOUS" APPLES TOO FRAGRANT AND TEMPTING TO SHIP

Past years it has been the custom of the Stark Brothers Nursery and Orchards Company, Louisiana, Mo., to send the editor Christmas Greetings along with a package of crystalized sunbeams in the form of "Stark Delicious" apples.

This year the greetings arrived, as proven by the package, but not so much as a core was left in it. Evidently the fragrance had been too much for the mail clerks.

ADAPTATION IN RELATION TO HARDINESS

M. J. Dorsey (*Minn. Hort.*, 46 (1918), No. 12, pp. 456-469, fig. 1).

A contribution of the Minnesota Experiment Station, discussing seasonal response, or reaction, of varieties to growing condition as a basis for a clear understanding of what is ordinarily meant, in horticulture, by adaption and hardiness.

Data are given on experiments conducted by J. C. Whitten at the Missouri Experiment Station and described to the author in a letter, which indicate that there is a fundamental distinction between a variety, or a clone, and a species in respect to differences brought about as a result of reaction or adaptation to their environment. In these experiments seed of native forest trees secured from the northern tier of States so far as possible and from each intervening State to Texas and the Gulf tier were sown at the Missouri Station over 20 years ago. The northern seed came up first generally. The seedlings from the extreme northern seed made far less height growth at first than those from seed obtained in the center of the natural distribution of the species. The northern seed produced trees which, for the first few years, took a much shorter growing period, starting later in the spring and shedding their leaves much earlier in the fall. Some of the seedlings from the South killed back to the ground the first season. The extreme southern seedlings had a relatively brief rest period, pushing out into growth with the first warm days of late winter or early spring and shedding their leaves very much later in the fall. At the end of 10 years prac-

tically all the specimens had reached a common habit of growth and seemed essentially equal in their hardiness.

Elberta and Old Mixon Free peach trees, propagated from Michigan and Ontario southward to the Gulf States, were planted out at the Missouri Experiment Station at 1 year of age. Whitten reports that "we have never been able to detect any differences in hardiness, in phenology, or in habit of growth or characteristics of these introduced trees. Evidently if there was any difference in the trees as propagated in these different States that difference was overcome by their first summer's growth here in the orchard."

In order to determine something of the season of maturity in Minnesota of plants from the southern and northern range of a species, 3-eye cuttings were obtained from a wild grape (*Vitis vulpina*) from Arkansas, Missouri, Iowa, and different sections of Minnesota. These were all planted in the same cold frame at the fruit breeding farm at Zumbra Heights. In the fall of 1916 the first killing frost killed the leaves completely on those from Arkansas and Missouri, while those from Iowa north were uninjured. Although the difference in frost resistance was striking, there was no marked difference in maturity between the several lots in the nursery bed, since the leaves were not green on each lot. The author also cites from the experience of Macoun, who found at the Central Farm, Ottawa, Canada, that with apples there is not only a relation between hardiness and early ripening of fruit, but also that in hardy varieties both fruit and wood ripen early.

Experiment Station Record.

H. B. Christensen, Jr., Lakewood, New Jersey, proprietor of the Lakewood Nurseries reports a very good business. He recently engaged in the retail nursery and agency business and is making gratifying progress.

NOT APPLICABLE TO QUARANTINE 37

"You-all gotta wait fo' yoah supper 'til I ster'lize de ice pick," said a colored cook to her mistress. "I done drop'd it on de flo' and de hygiene teachah tol' me to be careful er germs."

STATE QUARANTINE OR SPECIFIC REGULATIONS

The following table has been compiled by Prof. J. G. Sanders, Director of Plant Industry, Department of Agriculture, Harrisburg, Pa., from recent inquiries as to quarantines in the different States.

The replies received were in response to the following questions:

"Does your state prohibit the shipment therinto of all Five-leaved Pines, or Pines and Ribes from Pennsylvania?"

'Have you quarantined against Berberis Vulgaris and varieties, Chestnut trees, Japanese beetle, and Oriental fruit moth?"

| Five-lvd. Pines | Ribes sp. | Chestnut Trees | Barberry (Except Japanese) | Oriental Fruit Moth | Japanese Beetle | Special State Laws for Nursery Stock |
|--|---|---|--|---|---|---|
| Georgia Illinois Indiana Maine (special Permit Maryland Michigan Minnesota New Hampshire New Jersey New York North Carolina South Carolina Tennessee Virginia (Special restrictions requiring name of consignee) West Virginia | Georgia Illinois (black currant only) Maine Maryland Massachusetts Michigan Minnesota (black currant only) New Hampshire New Jersey North Carolina South Carolina Tennessee West Virginia | Georgia Michigan Mississippi (under consideration) North Carolina South Carolina Tennessee West Virginia | Indiana Michigan Minnesota Ohio South Carolina Tennessee Wisconsin | Mississippi (under consideration) New York (locally, where found) Virginia (special restriction requiring name of consignee) | Delaware (contemplated) Mississippi Florida (under consideration) New Jersey (local district) | Alabama Arkansas Florida Louisiana Michigan Texas Virginia West Virginia |

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes
Get our New Trade Catalogue,—ready September.
Spring price list out of date.

Thomas B. Meehan Co.
WHOLESALE NURSERYMEN,

DRESHER PA.
Subscribers to "Nurserymen's Fund for Market Development."

Willowdale Nurseries

KENNETT SQUARE, PA.

WE OFFER FOR FALL 1919

100,000 Privet in sizes from 2 to 5 ft.
Oriental Planes, American Elms.
Norway, Sugar, Sycamore and Silver Maples.
Pin and Red Oaks.
American, European and Silver Linden.
White Dogwood, Horse Chestnuts and Lombardy Poplars.
Salisburias and Tulip Trees.
Butternuts, Filberts, Walnuts and Pecans.
Evergreens and Shrubbery in good assortment.
Have many large Shade Trees in caliper from 3 to 8 inches.
Send list of wants for prices.

THE RAKESTRAW-PYLE CO.

KENNETT SQUARE PA.

We will be pleased to make you prices on any of the following stock, well grown, well dug and well packed:

- 5000 Spirea Van Houtte 2-3 ft.
- 3000 Spirea Van Houtte 3-4 ft.
- 500 Purple Lilac (Very stocky) 3-4 ft.
- 1500 Lonicera Pink and White, 18-24 in., 2-3 ft., 3-4 ft.
- 200 Golden Elder 3-4 ft.
- 150 Cornus Siberica 2-3 ft.
- 400 Cornus Siberica 3-4 ft.
- 200 Philadelphus Lemoine Erectus 2-3 ft.
- Norway Maple 1 1/4-1 1/2 and 1 1/2-2 in.
- European Mountain Ash 6-8 and 8-10 ft.
- 30000 Palmetto Asparagus 2 and 3 yr. No. 1.
- 3000 German Iris, 10 varieties fine stock.

The Coe, Converse & Edwards Co.
FORT ATKINSON, WIS.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

NURSERYMEN

Florists and Seedsmen

Headquarters for first-class help, furnished free of charge to employers. Tractor hands, teamsters, general men for farms, single and married, all nationalities.

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F. & F. NURSERIES

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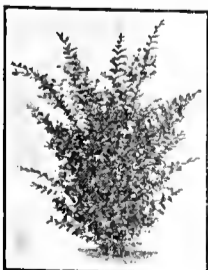
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THE CHRISTMAS TREE AND ITS FUTURE

Statements which to our mind sound preposterous appear in the daily press of New York as to the quantity of Christmas trees shipped into the city. We will endeavor to obtain the correct figures later, for we cannot believe that 200,000 carloads of from 2500 to 4000 trees each—or some 600,000,000 trees were ever received here in ten years, let alone one. Reports state that these trees were offered at wholesale at 35c a bundle of 4, 5 or 6 trees, according to size. That there was indeed an abundant supply is evidenced from the fact that on the morning of Christmas eve trees were being offered in the streets of New York, good big ones, 6 feet high, at 25c each, and some 3 ft. to 4 ft. high for as low as 5c each. But at the same time in the more well-to-do neighborhoods, prices remained at from \$1.50 to \$4 for corresponding sizes.

We are firm believers in the Christmas tree. There should be one in the home of every family where there are children. We will go as far as to advocate the Christmas tree even where there are but husband and wife.

At the same time we deplore the heartless cutting of our forest evergreens in the way in which it is now done. The Christmas trees offered represent on an average a growth of from five to fifteen years. The majority of them may be looked upon as specimens or very nearly that, and so represent the selected product of an immense territory. Were they nursery grown they could not be offered at the prices mentioned, therefore we can only gather that they came from our forests and woodlands now growing rapidly bare. We are informed that the annual consumption of wood representing good trees for industrial purposes is twice that of the present rate of production.

WHAT IS GOING TO BE DONE ABOUT IT?

The growing scarcity is reflected in the price of timber for all purposes, and in the printing industry, in the increased cost of paper, both print and book. Print paper, even where contracted for by the thousands of tons per annum, costs the great newspapers double the price of six years ago, while the smaller newspapers are paying three or four times the 1913-1914 price. The book paper market is three times as high as it was in 1914 and we are informed that present indications are that it will go before long to five times that price; in other words, from 4c. per lb. to 20c. This has not been brought about entirely through scarcity of material, it is true—wages and legislation each bear their part.

The fundamental principle is that a rise of \$1 in the raw material means an increase of \$3 or more to the purchaser. In the case of cotton for instance, a man buying a white shirt or a woman a cotton blouse finds the cost just about three times what it was in 1914, cotton having increased in price from 8c. and 10c. per lb. to 40c.

Coming back to the Christmas trees: The woodcutter this year, generally speaking, has received but a bagatelle for his raw material, but the retailer has reaped a harvest, \$2 up being the price asked for a tree until this slump of the day before Christmas, caused by the immense quantity thrown on the market.

A restriction of the cutting of these young forest evergreens could only be brought about through Government action reinforced by widespread education and we hope that our Government will take such action and adopt restrictive measures controlling forest cutting, after giving the nurserymen sufficient time to furnish this young stock. The Christmas tree industry could then be made a source of profit to all farmers and nurserymen who would then become the legitimate sources of supply.

We see a great opportunity, too, both for conservation and for added enjoyment in the practice of buying small living trees in pots and, after enjoying them indoors, planting them out to commemorate the holiday and embellish the home grounds. This custom, which is already being advocated and promoted by enterprising nurserymen, would not only prevent the denuding of woodlands but would also add to the horticultural and landscape features of hundreds of thousands of homes, and give the nursery business a permanent boost into the bargain.

Let there be more Christmas trees, then, but living ones that will add to, not deplete our natural resources.—*The Florists' Exchange*.

FUTURE PROSPECTS

Sustained industrial activity is the prediction of the Committee on Statistics of the Chamber of Commerce of the United States, which today issued its regular end-of-the-year review of business and crop conditions.

The Committee emphasizes the hopefulness of the manufacturing industry generally, which although encountering constant labor troubles and shortage of fuel and materials, has orders in excess of its capacity for production within any reasonable time.

"Among the vast numbers of retail dealers" says the report "there seems to be a confidence in the continuation, at least until another harvest, of the present great demand for commodities of all kinds, because of the unexampled strength of the agricultural situation.

"On the whole the farming communities are prosperous, because of the high prices of their products and their liberal spending is the back-bone and sustaining power of the present volume of business in much the greater part of the country. The farmer is buying liberally and intelligently. He is buying more automobiles, more tractors, more poultry, more blooded cattle, more farm implements and machinery, more gasoline engines and electric lighting plants for his dwelling house and buildings. He is paying cash mostly and also paying off what comparatively few mortgages remain."

OHIO NURSERYMEN TO MEET

The nursery stock situation will be one of the important topics up for consideration at a meeting of Ohio nurserymen in connection with the annual farmers' week program at the Ohio State University from January 26 to 30. The nurserymen's program comes on January 28 when H. S. Dav. of Fremont, Ohio, and T. B. West, of Perry, Ohio, will speak.

From F. C. DEAN, Ohio State University,
Columbus, Ohio.

T. E. Malin, manager of the Fancher Creek Nurseries writes:—

The demand for nursery stock this season has been beyond all expectations and all nurserymen along the Pacific Coast are sold up practically at this time in fruit trees, grape vines and small fruits.

The ornamental business does not begin until some time in January or February and from present indications the ornamental men will have a record season.

As you are well aware the nurserymen two years ago who planted fruit trees and stock for budding and grafting were not justified in planting more than the normal demand, as we were then actively engaged in war and every man was trying to do his patriotic duty by using his money for government bonds and subscriptions. Since the war has ceased there has been an active demand for all kinds of fruit and grape lands throughout the Pacific Coast. Many large tracts are being subdivided and the normal stock in the hands of the nurserymen for planting this year has not satisfied the demand.

THE
American Association of Nurserymen

Notes from the Executive Secretary's Office

GOULD BILL:—Some members have responded to the request for instructions, but not enough to form an opinion as to the Association's wish. You can probably get this, if you want it. What are your wishes in the matter?

STATISTICS:—That matter had been reported on by President Moon. The \$50,000 appropriation has been approved by Secretary Houston; but there must be strong and numerous requests from Nurserymen. The Department of Agriculture has facilities for gathering these Statistics and in the readjustment of trade under new conditions, it seems important that figures showing available stock in the country be secured and through a neutral and independent agency. The information would seem to be of great value to nurserymen especially.

MARKET DEVELOPMENT:—A very practical article was distributed on "Fall Planting," to 800 newspapers who are using our service. Copies have been sent to members. Later articles will be prepared by writers of national reputation and it is planned to provide different articles to cover different sections and different conditions.

CREDIT & COLLECTION BUREAU:—Members will please write our office at Princeton, New Jersey, about their claims when they wish information, giving the Bureau's number or the debtor's name. Remember, your Bureau has unusual facilities for supplying you with prompt and accurate Credit information on those in the trade; where we haven't it, we can get it.

U. S. FIDELITY & GUARANTY Co.:—This Special, direct Service is available at a cost of \$5.00 per year. It includes a Directory of the 12,000 local Attorneys under bond to the Association; the Directory's price alone is \$10. You are supplied also with blanks that call for free credit reports from these Attorneys.

SURPLUS STOCK:—What would the members think of listing their Surplus in the Secretary's office, to be reported to those inquiring for it? The Secretary is every day receiving inquiries of that nature. Obviously, he cannot recommend anybody's stock, even though knowing where the things wanted can be obtained; the Secretary represents all the members; but it has been suggested that on inquiry for an article, the names of all members having it could be furnished by the Secretary, if that information were on file here. That is offered for your consideration.

HORTICULTURAL SOCIETY MEETINGS:—Should be attended by nearby nurserymen. We overlook a great opportunity to present ourselves and our industry but particularly our Association, to the bodies whose interests are ours too. One or two Nurserymen should be on every

program of every fall and winter meeting of fruit-growers. In our own trade conventions, we experience no difficulty to get representatives of the Agricultural Colleges, the Inspection Departments and others, to address us; when we overlook the invitation, we are sometimes reminded that speakers are available. We are helped and our friends in other activities are given opportunity to present themselves and their work favorably. Can't we do the same for ourselves? The nursery industry and the serious aims of this Association deserve and even require to be presented to planters and fruit-growers by those in the trade, who know most about what we are doing. There are so many misconceptions about the nursery business, so many wrong conclusions drawn from well-meant but hurtful articles in occasional papers, that we owe it to ourselves to correct wrong impressions by talking for our Association whenever the opportunity offers; and when it is not offered, it should be sought. Now, the fall and winter is the time when these Horticultural meetings are held; let every Nurseryman attend those nearest to him; let him get on the program and tell about the serious business men in the trade as represented by this Association. The Secretary is going to consult President Moon about the appointment of a Committee on Speakers who will make it their business to see that somebody talks at every Horticultural Society and Garden Club meeting. We must not leave it to those who know little about the nursery industry and less about our Association, to represent us always; we must represent ourselves. Consider yourself now appointed to attend your own local or State Horticultural Society meeting, to talk as a Nurseryman and as a member of your National Association.

M. D. FUND:—Again: While this work will be financed out of the revenue of the Association, those funds will not be available until after the June Convention. We depend until then upon the subscriptions made. Obligations have been assumed that must be met and we have only the promised money in sight. Some subscribers may feel that the Association's action has released them, but it has not. Those who have not remitted the balances called for by the Market Development Committee are requested to mail their checks. It is embarrassing to continue to ask for the money, even though the circumstances require it.

The Secretary wishes to thank, in this general way, the many members whose good-wishes and assurances of cooperation and assistance are very heartening; only the press of Association work prevents individual acknowledgments until later opportunity.

Yours truly,

John Watson, *Executive Secretary*.

Princeton, N. J., October 25, 1919.

PLANT NAMES AND THEIR MEANINGS

By Willard N. Clute in the *American Botanist*

The names of plants have ever formed an important part of Botany. The collecting of plants and the running down of their names by the use of a "Key" was long considered the end and aim of plant studies and even now this amusement has not entirely ceased to interest the botanizer. The question as to the exact name each plant should bear, originated shortly after the Christian Era and still forms the subject for numerous acrimonious debates among the devotees of "the Amiable Science."

Meanwhile the meanings that lie in plant names have received scant attention. To be sure, nearly all botanical Manuals attempt to give the derivations of the generic names but apparently with only indifferent success, if we may judge from the diversity of derivations suggested. Since the generic names are usually taken from the Latin and Greek, a correct derivation ought ordinarily to be easy, but frequently it is far from being so. In the case of the common or vernacular names, the difficulties increase. There is no recognized authority upon which we may depend. Common names have been derived from all countries and from all languages. They have been given by philosopher and peasant, physician and farmer, civilian and savage, soldier and statesman. Learning has given us names derived from classic sources; ignorance has mispronounced and misapplied these names and coined others. As a result, the vernacular names present many puzzling problems which stand as a challenge to our ability, but the possibility of their solution adds zest to the study. Moreover, a wealth of tradition, poetry, folklore, fancy, custom, religion and other phases of life lie embedded in these names like jewels in the mine, and any extensive investigation is sure to be rewarded. Some of these names are older than the science of Botany itself; others are even now in the making.

It is manifestly impossible for any single individual to satisfactorily cover the whole field of plant names, but if any progress is to ensue, a beginning must be made, and it is purposed to set down here some observations on the subject which we trust will call out from others the additions, corrections, and further suggestions that the subject merits.

A good place to begin our studies is at that group of common, showy, and often poisonous species that long stood first in the botanical Manuals and is known as the Ranunculaceae. This word is only part of the title of the group. It should really be *Plantae Ranunculaceae*; that is *Ranunculus*-like plants. As usually written, however, the names of plant families leave off the first word. Inquiring into the meaning of *Ranunculus*, we find that the word is derived from an animal rather than from a plant. *Rana* is the Latin word for a little frog and, because many plants of this group grow in marshy places where frogs abound, the old naturalist Pliny gave the name *Ranunculus* to one of the typical genera. From this name came the designation for the family and also for the order *Ranales* which includes, besides the Ranunculaceae, the Magnoliaceae, the Anonaceae, the Berberidaceae, the Lauraceae, and several others.

In any discussion of plant names it is unnecessary to devote much attention to the specific names. These are

usually descriptive of plant parts and such other characters as size, habitat, color, abundance, and the like. Various proper names used are also self-explanatory. Some specific names, however, deserve mention, as for instance in *Clematis viorna* where the specific name comes from two Latin words meaning ornament of the wayside. *Ranunculus sceleratus* is of interest from an occasional mis-translation which makes it celery-leaved. The real meaning of *sceleratus* is acrid or biting. *Zanthoxylum apiifolium* may be properly translated celery-leaved for that is what the name really means.

Turning to the generic names, we find many of them dating back to periods earlier than the Christian Era. Some have been given in honor of heathen deities, others are the names of ancient plants entirely unrelated to the plants which now bear them, the titles having been misplaced through the vicissitudes of time or the carelessness of early writers, and still others are of such obscure derivation that the translations are at best mere guesses.

Paeonia, the genus of plants we now call peonies, was named for a mythological personage, the physician Paeon, who is reported to have used the plant in medicine and to have cured the god Pluto with it. Old fashioned folk call the plant, piny, perhaps with better authority than we have for calling it peony, for properly pronounced the generic name is *Pi-o-ne-a*, easily shortened to piny. The larkspur genus *Delphinium* is named for a fancied resemblance of the flowers to the classic figure of the dolphin (*Delpin*.)

Anemone is usually supposed to be derived from the Greek *anemos*, meaning the wind, but the latest editions of Gray's Manual says it is a corruption of *na-man* the Semitic name for Adonis "from whose blood the crimson-flowered Anemone of the ancients is said to have sprung." Our first derivation seems to be more in favor for it has given the vernacular name of windflower to several species. Wood's "Class-book of Botany" says that these plants were called anemones because many species love windy places. Whatever the derivation, it may be mentioned in passing that the accent should be placed on the third syllable making the word sound exactly like Annie Mony. Thus far this has been overlooked by those sticklers for the new way of pronouncing *Arbutus* and *Glad-iolus*. *Anemonella*, the generic name for the rue anemone, is a diminutive of *Anemone*.

The authorities also fail to agree as to the derivation of *Clematis*. Wood says it is from the Greek *klema* a vine or tendril, Gray says it is a name given by Dioscorides to a climbing plant with long and lithe branches. As to *Adonis*, Wood says "Feigned to have sprung from the blood of Adonis when wounded by the boar" but Gray opines that "Adonis was a favorite of Venus and after death was changed to this flower."

The globe flower genus, *Trollius*, is another bone of contention. According to Wood it is derived from *Trollen* meaning golden. Britton's Manual derives it from *Trol*, round. Webster's Dictionary says it is from *Torolya*, the Hungarian name for the plant, and Gray explains it as from *Trollblume*, the German common name. *Troll*, it will be remembered, is the German name for a mischievous dwarf or fairy. Perhaps the flower is named for the troll! Anybody is at liberty to adopt whichever derivation seems to him most correct or to make one of his

own. In any event, one can hardly look for accuracy in lesser writers when the authorities differ so markedly.

Dioscorides is responsible for the generic name *Thalictrum* applied to the meadow rue, which Wood says means "to be green." *Helleborus*, usually regarded as of unknown derivation, is said by the same author to come from two Greek words which mean "the food that causes death." The genus is well known to be poisonous. *Aquilegia* is derived from *Aquila*, the eagle, in allusion to the spurs which suggest the talons of a bird of prey. *Aconitum* is reported to be derived from the Greek *Akoniton*, meaning without dust, because the plants grow in rocky places, while *Hydrastis* is assumed to come from the Greek word for water, though the translation does not go unchallenged.

The other genera of the Ranunculaceae are somewhat more easily interpreted. *Actaea* is the ancient name for the elder whose leaves the plants of this genus are said to resemble. *Cimicifuga* is from the Latin *cimex*, a bug, and *fugare* to drive away, accounting for the common name of bugbane. *Zanthorhiza* is the descriptive Greek for yellow root, and *Nigella* is the diminutive of *niger*, meaning black. *Coptis* means to cut, in allusion to the divided leaves. *Caltha*, according to Wood, is from the Greek for goblet, the flowers being like golden cups. Gray says it was the ancient Latin name for the common marigold which, however, does not necessarily invalidate the original derivation. *Myosurus* is, in Latin as it is in English, mousetail, being so called because the carpels are attached to a long slender axis. *Troutvetteria* is named for E. R. von Trautvetter. Gray says "an able Russian botanist" but Wood says "German" and the name looks it. *Hepatica* refers to the liver in the original Greek because of its leaves which are supposed to be shaped like the liver, and *Eranthis*, or the winter aconite, means spring flower. *Isopyrum* is the ancient name for some species of fumitory.

The number of vernacular names bestowed upon a given species depends in part upon its abundance, in part upon its conspicuousness, and in part upon its usefulness. Some may have as many as twenty common names and others lack a single one. It is interesting to note that the best known common names are nearly always generic; that is, they are applied to a number of species, instead of one, with, or without, qualifying adjectives. This is the case with *Ranunculus* where buttercup and crowfoot are common designations even when the flowers show no hint of butter color and the roundish and often undivided leaves could scarcely be likened to a crow's foot. Such

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INCORPORATED 1902

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Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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adjectives as ditch, water, mountain, tall dwarf, early, and the like are self explanatory as in the case of the specific names; in fact, they are very frequently literal translations of such names.

The names of obscure derivation are the ones of most interest. Take, for instance, the word knops in such terms as golden knops applied to several species of *Ranunculus*. This is archaic English for a flower-head and in all probability goes back to the Teutonic knopf or its equivalent, meaning a head, bud, or button. Spearwort, a generic term for several small species of *Ranunculus*, is derived from an Anglo-Saxon word meaning a spire or shoot just as we still say a "spear" of grass. In all probability the spears used in combat were similar though larger spears.

The three common species of *Ranunculus*, *R. acris*, *R. bulbosus*, and *R. repens*, naturally have the greatest number of common names. They might also be said to be joint owners of a number of names referring to their color, as yellow gowan, horse gold, gold balls, gold cups, gold weed, butter rose, butter cress, butter daisy, butter flower, in addition to butter cup. Several of these terms may be applied with equal propriety to other species of the genus. The word gowan is now used in Scotland to indicate the daisy, but it once meant any kind of flower or bud. When Burns wrote of "gowans fine," he doubtless meant wildflowers in general. Butter daisy is a different rendering of yellow gowan. The word rose is another term that once had a less restricted meaning than we allow it at present, as witness rock rose, Christmas rose, rose moss and rose of Jericho. Butter rose is simply a butter colored flower. In horse gold, the word horse implies coarse, common, or spurious. It is often thus employed in flower names, as horse-mint, and horse-radish.

The names blister flower, blister wort, blister plant and biting crowfoot are applied to several species noted for their acrid and biting juice, especially *R. sceleratus*, *R. bulbosus* and *R. acris*. The name of St. Anthony's turnip, applied to *R. bulbosus*, probably has the same suggestion. The bulbous base of the stem is not unlike a turnip in shape, and St. Anthony is the saint above all others for which hot and blistering things might properly be named. This species is also called St. Anthony's rape. *Ranunculus sceleratus* is called water celery and celery leaved crowfoot, but in reference to its leaves and not as a translation of the specific name. The worthless properties of this species have earned for it the name of cursed crowfoot, but it is apparently not the only species cursed for *R. arvensis* bears the names of hell weed and devil's claws. To this species also belong starve acre and hunger weed. The plant is said to receive the last two appellations because when it is present in the field the crop will be short and the owner brought to want. Devil's claws quite likely refers to the way the plant lays hold on the field rather than to any particular thought of the devil. *R. repens* is called ram's claws though no ram we have ever seen had claws. Possibly the name is derived from the Icelandic *ramur*, meaning strong, in allusion to the way the species grasps the soil. Sitfast is another name applied to this plant whose hold on the soil makes it especially applicable.

Ranunculus ficaria is called figwort from the fig-like shape of its roots. It also bears the name of lesser colan-

dine, the truecelandine being a yellow-flowered plant of the poppy family. Another of its names, erain, is unmeaning enough until we discover that erain or eran is an ancient name for marsh, hence cranberry and perhaps crane, a storklike bird. *Ranunculus trichophyllus*, owing to its much divided leaves is known as water milfoil. The true milfoil is usually regarded as belonging to the yarrow genus (*Achillea*). Double forms of *R. acris* are sometimes known as bachelor's buttons, as are many other buttonlike flowers. Finally, cuckoo-buds applied to some species of *Ranunculus* finds authority in Shakespeare where

"Cuckoo buds of yellow hue
Do paint the meadow with delight."

OPPORTUNITIES OFFERED FOR WOUNDED SOLDIERS

*Service Men will be Paid \$80 a Month for Attendance at
Agricultural College*

The Federal Board of vocational training, through S. E. Farwell, district vocational officer, calls attention to the help which the board gives to returned soldiers. He points out that many young men have sustained major disabilities and have returned directly to their homes without learning of the opportunities offered for special training.

Qualified men will be paid at the rate of \$80 a month for attendance at agricultural colleges and will be furnished with books and supplies, and with medical attention.

The State College of Agriculture at Ithaca has placed the facilities of the college at the services of the rehabilitation officers for the training of men who have the college requirements. The college feels that the opportunity is so vital to the welfare of young men that it should be widely known. Returned soldiers may write directly to Mr. S. E. Farwell at 469 Fifth Avenue, New York, or may get in touch with the local agricultural agent.

There are already a number of service men on the rolls of the college of agriculture.

A STATE ASSOCIATION FOR ARKANSAS

The nurserymen of Arkansas have organized a State Nurserymen's Association. George Parker, Fayetteville, has been elected President; E. H. Balland, Piggott, Clay county, Secretary.

The next meeting will be held at Little Rock, Arkansas, in early spring.

Lewis Graton, Whitman, Massachusetts, has originated a new strawberry, which was awarded the Massachusetts Horticulture Society's Silver Medal, and is laying plans to put it on the market this coming spring. Mr. Graton has been specializing in small fruits and thinks his new St. Martin Strawberry is a winner.

Reports from Cincinnati, Ohio, say the Borers are attacking the birch in the vicinity of this city. This pest is very difficult to control or to eradicate as it works immediately under the bark and completely girdles the tree before it is discovered.

It is not so readily seen as the borers that attack the peach, beech and other trees. Other localities have experienced the same trouble. There are very few birches of any size in the vicinity of Philadelphia due to the same cause. It is possible, the birch being a northern tree has been carried a little too far south for its welfare and on this account is succumbing to the pest, as we have not heard that it is being attacked in its natural habitat.



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If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.
We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.
THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.
DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.
W. C. 2, London, England

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

Strawberries
Raspberries
Blackberries
Dewberries

Iris
Privet
Spirea
Rhubarb

Asparagus
Horseradish
Hardwood cuttings
Volga Poplar

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." **LOWDHAM, NOTTS, ENGLAND**

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St. Boston, Mass.

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,

both grafted, and seedlings from grafted trees, and

ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122 1/2 GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog at a special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

Boston Ivy **Clematis Paniculata**
Shrubs **Raspberries**
Blackberries **Evergreens**
Ornamental Trees **Perennials**
California Privet Hedge
Japan Berberry

Prices on request

PETER BOHLENDER & SONS
Tippecanoe City, Ohio

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher

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Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Arborvitae

AMERICAN

(*Thuja Occidentalis*).

- 200 3 to 3½ ft.
- 200 3½ to 4 ft.
- 500 4 to 4½ ft.
- 500 4½ to 5 ft.
- 500 5 to 5½ ft.
- 200 5½ to 6 ft.
- 100 6 to 7 ft.
- 100 7 to 8 ft.
- 100 8 to 10 ft.

GLOBULAR (T. Globosa).

- 25 18 to 24 in.
- 25 2 to 2½ ft.

CHINESE (Biota Orientalis)

- 25 2 to 2½ ft.
- 25 2½ to 3 ft.
- 25 3 to 3½ ft.
- 25 3½ to 4 ft.
- 25 4 to 4½ ft.
- 25 4½ to 5 ft.
- 25 5 to 5½ ft.
- 25 5½ to 6 ft.
- 25 6 to 7 ft.

RED (Juniperus Virginiana)

- 25 3 to 3½ ft.
- 25 3½ to 4 ft.
- 25 4 to 4½ ft.
- 25 4½ to 5 ft.
- 25 5 to 5½ ft.
- 25 5½ to 6 ft.

Cypress

GLORY OR BOSKOOP

- 10 5 to 6 ft.
- 10 6 to 7 ft.

Fir

CEPHALONIAN

(*A. Cephalonica*).

- 10 2½ to 3 ft.
- 10 3 to 3½ ft.
- 10 3½ to 4 ft.
- 10 4 to 4½ ft.

NOBLE (A. Nobilis).

- 25 18 to 24 in.
- 25 2 to 3 ft.

NORDMANN'S

A. Normanniana

- 25 2 to 2½ ft.
- 25 2½ to 3 ft.
- 25 3 to 3½ ft.
- 25 3½ to 4 ft.

WHITE OR CONCOLOR

(*A. Concolor*).

- 25 18 to 24 inch.
- 25 2 to 3 ft.

Hemlock

CANADIAN

- 200 2 to 2½ ft.
- 500 2½ to 3 ft.
- 500 3 to 3½ ft.
- 500 3½ to 4 ft.
- 200 4 to 4½ ft.
- 100 4½ to 5 ft.
- 100 5 to 6 ft.

IRISH JUNIPER

(*J. Communis Hibernica*).

- 10 4 to 4½ ft.
- 10 4½ to 5 ft.
- 10 5 to 5½ ft.
- 10 5½ to 6 ft.

PFITZER'S JUNIPER

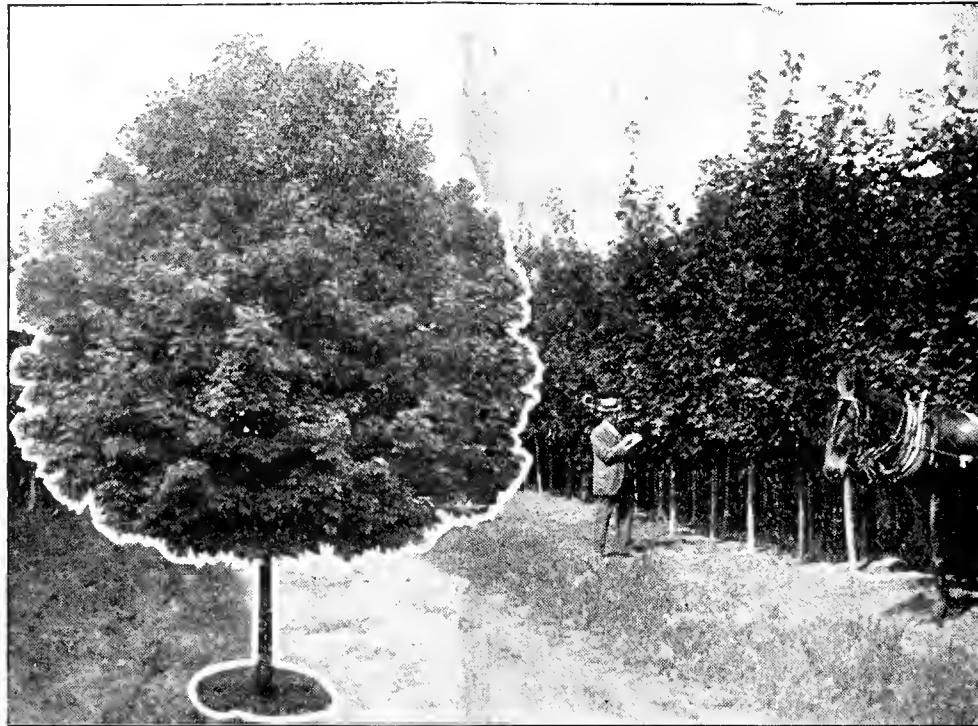
(*J. Chinensis Pfitzeriana*).

- 20 2 to 3 ft.
- 20 3 to 4 ft.
- 20 4 to 5 ft.

SAVIN JUNIPER (J. Sabina).

- 10 2 to 2½ ft.
- 10 2½ to 3 ft.
- 10 3 to 3½ ft.

Harrisons' EVERGREENS



Norway Maples

Pine

AUSTRIAN

- 25 3 to 3½ ft.
- 25 3½ to 4 ft.
- 25 4 to 4½ ft.
- 25 4½ to 5 ft.
- 25 5 to 5½ ft.
- 10 5½ to 6 ft.
- 10 6 to 7 ft.
- 10 7 to 8 ft.

Retinospora

JAPANESE

(*Retinospora Obtusa*).

- 15 3 to 4 ft.
- 15 4 to 5 ft.

JAPANESE (R. Filifera).

- 15 2 to 2½ ft.
- 15 2½ to 3 ft.
- 15 3 to 3½ ft.
- 15 3½ to 4 ft.

JAPANESE, PEA-FRUITED

(*R. Pisifera*).

- 15 2 to 2½ ft.
- 15 2½ to 3 ft.
- 15 3 to 3½ ft.
- 15 3½ to 4 ft.

JAPANESE, GOLDEN PEA-FRUITED (R. Pisifera Aurea).

- 50 2 to 2½ ft.
- 50 2½ to 3 ft.
- 50 3 to 3½ ft.
- 50 3½ to 4 ft.

JAPANESE, PLUME-LIKE

(*R. Plumosa*).

- 50 3 to 3½ ft.
- 50 3½ to 4 ft.
- 50 4 to 5 ft.

JAPANESE, GOLDEN PLUME-LIKE (R. Plumosa Aurea).

- 100 3 to 4 ft.
- 50 4 to 5 ft.

JAPANESE, THREAD-LIKE

(*R. Pisifera Filifera*).

- 15 3 to 3½ ft.
- 15 3½ to 4 ft.
- 15 4 to 5 ft.

SULPHUR-TINTED

(*R. Sulphurea*).

- 25 18 to 24 in.
- 25 2 to 3 ft.



Canadian Hemlock

FERN-LIKE

(*T. Occidentalis Fellicoides*).

- 25 3½ to 4 ft.
- 25 4 to 4½ ft.
- 25 4½ to 5 ft.
- 25 5 to 5½ ft.
- 25 5½ to 6 ft.

PYRAMIDAL (T. Pyramidalis)

- 25 3 to 4 ft.
- 25 4 to 5 ft.
- 25 5 to 6 ft.

Cedar

BLUE VIRGINIA

(*Juniperus Virginiana Glauca*)

- 25 3 to 3½ ft.
- 25 3½ to 4 ft.
- 25 4 to 4½ ft.
- 25 4½ to 5 ft.
- 25 5 to 6 ft.

JAPANESE

(*Cryptomeria Japonica*).

- 15 5 to 6 ft.
- 15 6 to 7 ft.

VEITCH'S JAPANESE

(*R. Squarrosa Veitchii*).

- 50 2 to 2½ ft.
- 50 2½ to 3 ft.
- 50 3 to 3½ ft.
- 50 3½ to 4 ft.

Spruce

COLORADO BLUE

Selected Blues—Compact

- 50 3 to 3½ ft.
- 50 3½ to 4 ft.
- 50 4 to 4½ ft.
- 50 4½ to 5 ft.
- 50 5 to 5½ ft.
- 50 5½ to 6 ft.
- 50 6 to 7 ft.

COLORADO GREEN

- 50 3 to 3½ ft.
- 50 3½ to 4 ft.
- 50 4 to 4½ ft.
- 50 4½ to 5 ft.
- 50 5 to 5½ ft.
- 50 5½ to 6 ft.
- 50 6 to 7 ft.

DOUGLAS

- 50 3 to 4 ft.
- 50 4 to 5 ft.
- 50 5 to 6 ft.

KOSTER'S BLUE

(Specimen Plants)

- 50 3 to 3½ ft.
- 50 3½ to 4 ft.
- 50 4 to 4½ ft.
- 50 4½ to 5 ft.
- 50 5 to 5½ ft.
- 50 5½ to 6 ft.
- 50 6 to 7 ft.
- 50 7 to 8 ft.

Norway Spruce

- 500 3 to 3½ ft.
- 1,000 3½ to 4 ft.
- 1,000 4 to 4½ ft.
- 1,000 4½ to 5 ft.
- 1,000 5 to 6 ft.
- 500 6 ft.
- 300 7 ft.
- 100 8 ft.
- 100 10 ft.

WHITE

- 10 18 to 24 in.
- 10 2 to 3 ft.

YEW

English (*Taxus Baccata*).

- 25 2 to 2½ ft.
- 25 2½ to 3 ft.
- 25 3 to 4 ft.

IRISH, TRAINED

- 25 2 to 3 ft.

Harrisons' Nurseries, Berlin, Maryland

80
N 21

pl



THE NATIONAL NURSERYMAN



FEBRUARY 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Cuthbert Raspberries

Spiraea Van Houtte

Other Ornamentals

Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



A large supply of:-

Elm, American White - Ash, Fraxinus Viridis

Maple, Silver Leaved, Norway, Sugar

Poplar, Carolina, Lombardy, Norway, Silver Leaved, Golden

Catalpa, Speciosa, Bungei -- Balm of Gilead

Shrubs

Cornus, Siberica, Stolonifera, Floridus Rubra

Lilac, Purple and White

Spirea, Aurea, Billardi, Rosea, Douglasi, Opulifolia,
Van Houtte

Philadelphus, Coronarius, Gordon's, Grandiflorus, Lemoine

Viburnum, Opulus, Sterilis, Lantana

Ampelopsis Engelmanni

Always pleased to quote on your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

BULLETIN, BULLETIN

Containing a long list of scarce items will be mailed frequently throughout the season. If you are not on our mailing list, or do not read them carefully, you will lose a whole lot of time and money. Remember the orders you place with us **Get Service.**



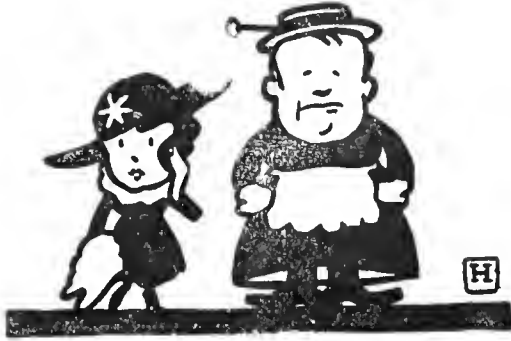
C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock



QUALITY & QUANTITY

We have them both.
Ask for our lists.

We issue bulletins regularly through the Spring season—and in fact have just published Number 3. It is part of our service to try to keep our customers informed concerning our supplies. Our price lists quote:

PREFERRED STOCK
PREFERRED GRADING
PREFERRED PACKING

and our service includes

QUICK ACTION

in answering inquiries and in taking care of orders.

Are you on our mailing list?

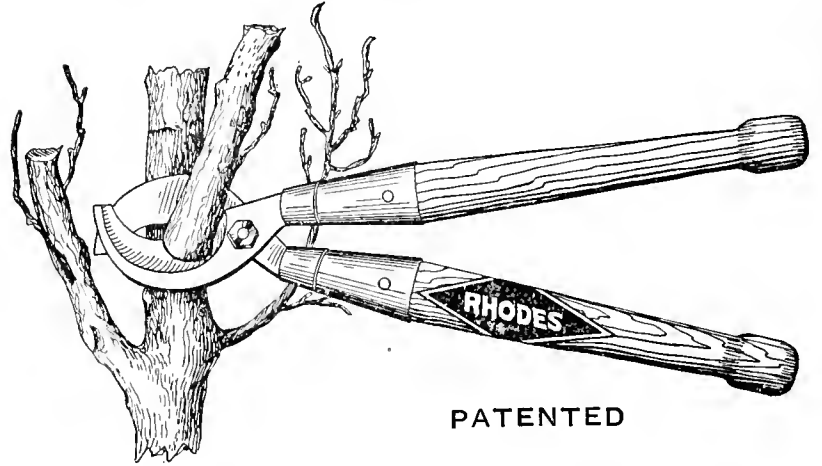
Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

RHODES DOUBLE .. CUT .. PRUNING SHEARS

In Use Throughout the World



PATENTED

The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
Grand Rapids, Mich.

Hardy Lily Bulbs

Lilium Auratum, Magnificum,
Album, Rubrum, Melpomene,
Reseum, Giganteum.

Case lots only

BAMBOO CANES

Natural and dyed green, in bale lots, all sizes.

Write for details.

Raffia

Red Star Brand XX Superior Brand

AA West Coast, also in 20 colors

Shipped promptly from stock.

All of above can be shipped at once.

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

==

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES

MISERY likes Company" — so we are also present. Isn't it tough to open your mail every day and find inquiries and orders,—big orders at fancy prices, for stuff you know you haven't got and can't get?

Fruit, Small-fruit, and Roses,—they're the worst. Remember when we all had lots of them, and they were a "drug on the market?"

Our only consolation is that we are all in the same fix.

Of course, every Nurseryman is doing a powerful lot of thinking,—and the NEXT YEAR will no doubt take care of itself.



THIS Nursery is pretty well fixed in the matter of Ornamental stock. As you know, we grow about everything needed in trees shrubs and perennials, and although the past year's sales have been quite heavy, we are in fairly good shape to handle whatever business comes our way the coming season.

We surely will appreciate opportunity to supply your requirements in these lines, and—do not hesitate to inquire for what you need in the lines which are short. We MIGHT be able to fix you up with just the variety and number needed.

Come early.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

| | |
|------------------------------|--------------------------|
| Arbor Vitae—American | Concolor |
| Arbor Vitae—Compacta | Englemans Spruce |
| Arbor Vitae—Douglas Golden | Jack Pine |
| Arbor Vitae—Globosa | Norway Spruce |
| Arbor Vitae—Hoveys Golden | Norway Pine |
| Arbor Vitae—Pyramidalis | Pinus Mugho |
| Arbor Vitae—Siberian | Pinus Flexilis |
| Arbor Vitae—Tom Thumb | Pinus Ponderosa |
| Arbor Vitae—Orientalis | Pitch Pine |
| Arbor Vitae—Orientalis Aurea | Red Cedar |
| Arbor Vitae—Orientalis Pyr | Retinispora, 3 varieties |
| Austrian Pine | Swedish Juniper |
| Biota, 3 varieties | Scotch Pine |
| Black Hills Spruce | White Pine |
| Colorado Blue Spruce | White Spruce |
| Douglas Spruce | |

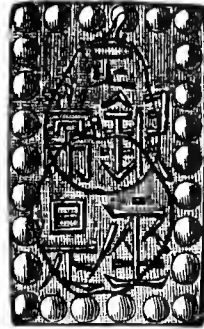
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

SHRUBS SHADE TREES EVERGREENS

Good assortment. Excellent quality.

All our own growing.

Fall trade list now ready. Ask for your copy.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of
Fruit Trees, Small Fruits and Hybrid Tea
Roses.

Large Supply of
Ornamental Trees, Shurbs,
Perennials,
Vines, Evergreens.

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

SURPLUS STOCK

- 100 Ailanthus, 1½-2 inches
- 1000 White Ash, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches
- 140 Box Elder, 10 to 12 ft., 1½ to 2 inches
- 12000 Elm, 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches, 2½ to 3 inch
- 120 Linden, 10 to 12 ft.
- 12000 Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 300 Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 5000 Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch.
- 800 Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch.
- 200 Tulip Tree, 1½ to 2 inch, 2 to 2½ inch.
- 150 Weeping Willow, all sizes up to 3 inch.
- 150 Erect Willow, all sizes up to 2 inch.
- 1500 Viburnum Opulus, 3 to 4 ft., 4 to 5 ft.
- 2500 Viburnum Sterilis, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 500 Deutzia Crenata, 2 to 3 ft.
- 400 Deutzia Candidissima, 2 to 3 ft.
- 3000 Deutzia Pride of Rochester, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 5000 Lilac Purple, 2 to 3 ft., 3 to 4 ft.
- 1000 Lilac White, 2 to 3 ft.
- 1200 Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
- 500 Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft.
- 900 Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 1600 Spirea Billardi, 2 to 3 ft., 3 to 4 ft.
- 1200 Spirea Collosa Alba, 10 to 12 inch.
- 400 Spirea Reevesi, 2 to 3 ft.
- 2000 Spirea Thunbergii, 2 to 3 ft.
- 4000 Snowberry, 2 to 3 ft., 3 to 4 ft.
- 3500 Indian Currant, 2 to 3 ft., 3 to 4 ft.
- 1500 Spirea Salicifolia, 2 to 3, 3 to 4.

C. M. Hobbs & Sons, Bridgeport, Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA. FEBRUARY 1920

No. 2

Nurseryman, Demand Real Evidence that Barberry Spreads Rust

It seems to me that it is time for the nurserymen of this country to make a fight against the continued interference of various Departments of Agriculture with the nursery business. We all know what has been done relative to bringing into this country of certain ornamentals. Good intelligent inspection would have guarded against any danger of plant disease. In fact the government could have had its men across the water right on the shipping grounds where every plant could be inspected as well as the soil.

A few wise men mostly under thirty, many just past twenty-one, after a year or two at some experiment station presume to tell men of fifty and over who have handled plants all their lives that certain things happen and that the only way to remedy the matter is to do it their way. Often times they know nothing about the matter but take it for granted that because some fellow who had a hobby ten or a hundred years ago in some foreign country or other state, knew what he was talking about and that they should follow in their footsteps.

It is an easy matter for a federal or state official to make most people believe that some thing will harm them or make them believe it will do them good if it costs him nothing and can be done at the other fellow's expense. But tell him there is a little expense attached to it, even though it be but five dollars and he will have to be shown. The farmers are being worked this way relative to the common barberry getting rust on wheat and I believe that an attempt will be made in Ohio soon to get a law enacted that will compel people to spoil their plantings by digging out the purple barberry. We have not enough color in this country as it is, and surely nothing can take the place of the purple barberry as it is the only purple shrub, that is purple for any length of time, but if there was no doubt that it caused the rust that appears upon wheat, most people would not object to removing it. But there is a doubt and more than that a bigger reason to believe that the common barberry has nothing to do with wheat rust than that it is responsible for it. Many nurserymen were farmers before they went into the nursery business and they knew something about wheat rust thirty to forty years ago. Does it not seem strange to them that they or their neighbors were bothered with wheat rust when such a thing as a barberry plant was not known. They can find farmers in many localities that will tell them of the trouble they had with rust several times as far back as thirty years ago and that they had no barberry, their neighbors had none and there were no shrubs on or near the farm except a rose bush, a lilac or spirea.

Now nurserymen, even though you never intend to

handle another plant of common barberry, here is your chance to show that the various departments of agriculture as well as the federal horticulture board can make mistakes which cost you money and work a hardship on other people, as well as preventing this country from becoming as well known for its landscaped grounds as the several countries of Europe are. This should not be such a difficult matter to accomplish.

Do it by showing there was wheat rust before there was barberry. Show that it takes rust weather to produce rust. That the various departments make mistakes the same as other people. That it is not long since some "expert" said that the trees in some of our large eastern cities would have to be destroyed or that they would spread a certain scale all over the country, but that a means was found to combat the scale even on trees over one hundred feet tall. Show that not long ago, "experts" told farmers to kill their hogs when they got the cholera and then to burn them. That "experts" said not long ago that one who was infected with tuberculosis, was sure to die before he was fifty, but that we know today they were all wrong. They were telling what their grandfathers told and believed what their grandfathers believed.

The thing for the nurserymen to do is to show to the farmer that there are many localities where they have wheat rust nearly every year. Most old farmers will tell you that that is due to weather conditions but the experts will tell them that there is a rusty barberry in the neighborhood. If the reply is that they had rust thirty years ago, the "experts" will answer that some one unknown to them had barberry in the neighborhood.

In the western plains where they raise wheat by the hundred or more acre fields they seem to have more rust than many other places, still there are but a few scattering houses, around which there grows not a single shrub often times no lawn. In many places no shrub of any kind within ten miles and especially was this true fifteen years ago, but the "experts" will say the rust will travel a hundred miles and skip places where they do not often have rust and light upon these particular fields.

A great lot of immigrants from Denmark and Sweden came into our northwestern country, mostly into Minnesota. They told about Denmark passing a law requiring the common barberry to be eradicated in Denmark. Minnesota passed a law requiring its removal because Denmark did and then came Montana, because Minnesota had set the example and still another state because Montana had set the example.

They say that since the removal of barberry in Denmark they have not had a single outbreak of rust in the country. They do not go on and tell that in this great

country tens of times as large as Denmark that we have had but two or three serious epidemics in the past fifteen years and that within those fifteen years we have planted ninety per cent of all of the barberry in the country.

One in looking into the matter closely might if he was careless of what he said, say that barberry was a preventative, but we will admit that it becomes infected with rust in neighborhoods where they have had wheat rust off and on. We know that there are a lot of things that are bothered with rust. We can go out to some health resort, where conditions are ideal and sit around and hear the management tell that not a person has had a cold around this place all fall. We know that we can have as good a cold as we ever had inside of one day right in that place if we are so inclined, all we need to do is to make conditions just right. Go out and play ball, spade in the garden or romp with the kids, anything to perspire freely until our underwear is wet, then without putting on a coat get into an automobile and ride for thirty minutes. You will get your cold and there wasn't a "barberry" near.

Nurserymen, this is a simple thing to fight, fight it not for the sake of the barberry but for more sane action in the future relative to nursery stock. Get busy and show that there was WHEAT RUST LONG BEFORE THERE WAS ANY BARBERRY WITHIN MILES, that there is WHEAT RUST IN MANY PLACES AND NO BARBERRY WITHIN MILES. Then we will see about that statement in Farmers Bulletin 1058 which states in part on page 6 "The next spring it again has to depend upon the barberry to get started." Locate the many places where they have wheat rust and no barberry and then ask them to explain that statement.

Napoleon, Ohio, December 11th, 1919.

W. A. RITTER.

ANOTHER QUARANTINE PROPOSED BY THE F. H. B.

A public hearing was held by the Federal Horticultural Board at Washington, D. C., on Tuesday, January 27th, to consider the advisability of quarantining certain townships in New Jersey, on account of the prevalence of a "dangerous insect" known as the "Japanese Beetle." The proposed quarantine covers the "movement from said territory into other States, territories, and districts, of marketable, perishable food crops of all kinds, including green corn, tomatoes, beans, peas, cantaloupes, watermelons, grapes, raspberries, blackberries, cherries, peaches, apples, and all other fruits, vegetables, and fresh food products other than canned, dried or preserved products; also of hay, forage and grain crops of all kinds, and of nursery and greenhouse products, including trees, shrubs, plants of all kinds, bulbs and flowers, should be restricted or prohibited."

In opening the hearing Dr. Marlatt stated that it was the intention of the Board to allow the widest latitude in the discussion, so that the subject might be threshed out from every angle, and the several speakers availed themselves of this opportunity.

It was shown that the beetle was mainly found in abundance in weedy and uncultivated areas, but where cultivation was thorough, few, if any were discovered. The evidence also appeared to prove conclusively that the beetle was not particularly harmful excepting when

driven by spraying from its natural feeding grounds, it being particularly partial to the "smart weed." Under such conditions, it was stated, it would feed on the foliage of fruit and ornamental trees.

It was apparently agreed that thorough cultivation was the best means of preventing infestation.

That the beetle could readily be carried from infested areas in baskets of berries, and sweet corn was not disputed and some time was given over to a discussion as to how this might be regulated.

It was quite apparent from the trend of the discussion that the Board has no intention of placing a hard and fast quarantine on the districts affected, but to permit shipments of nursery stock and food products under proper inspection and such regulations as would prevent as far as possible, the spread of the beetle.

The final action of the Board will be awaited with great interest.

Among the nurserymen and florists present at the hearing were, Mr. Eisele, of Henry A. Dreer, Inc., W. A. Manda, South Orange, N. J.; E. T. Steel, Palmyra, N. J.; Peter Koster, Bridgeton, N. J.; Thomas B. Meehan, Dresher, Pa.

AMERICAN ASSOCIATION OF NURSERYMEN

Notes From the Secretary's office

Princeton, N. J., January 26, 1920.

MARKET DEVELOPMENT:

A meeting of the Market Development Committee was held at the Old Colony Club, in New York, January 13th with all members of the committee present: O. Joe Howard, Chairman, Pomona, North Carolina; F. L. Atkins, Rutherford, New Jersey; Robert Pyle, West Grove, Pennsylvania; Earl D. Needham, Des Moines, Iowa; E. F. Coe, New Haven, Connecticut; and, by request, the President and the Secretary. Chairman Howard had sent out a questionnaire that was very generally answered by the members and the tabulated information given served as a guide to the committee. Action taken was in response to the general sentiment indicated by the replies to the questionnaire.

The Blue Tag was left open for the present; it has been the subject of much debate. A great many nurserymen seem to think that they are already required to use quite an assortment of tags; the colored tag idea has been very often used for advertising purposes by different firms; it is subject to imitation and has other objections.

The committee decided to advertise a Trade Mark instead; something that can be registered and protected against infringement or improper use. Electros will be made and distributed to the members as soon as possible for use on stationery and wherever the Trade Mark will help the members to identify themselves with the Association and its advertising. The advertisements will be in small space in papers that will reach planters in territory represented by our membership and will state briefly what the membership of the Association stands for.

It was decided to continue the distribution of educational articles wherever their publication can be secured

through the cooperation of the local press. The subjects treated will be of general interest and general in their application. The committee considered sectional articles but voted against them as tending to suggest the idea of different interests whereas the Association's work must be made to cover activities that are national in scope and whose benefits must be applicable to all. Only articles will be used that apply with equal suitability to all parts of the country.

Illustrations cost too much in making and in distributing to warrant their use except in mats which all papers do not use in their make-up. That cost would be too much for present funds available.

A fuller report will be made to all members in a few days.

LEGISLATION:

On the 8th of January, President Moon and I went to Washington to appear before the House Committee on Agriculture, a hearing having been arranged through Chairman Haugen of that Committee. Mr. Moon spoke for the appropriation for Statistics and his remarks can be found in the pamphlet of printed hearings under Bureau of Statistics. I addressed the Committee in the interest of the appropriation asked for to provide for experimental work investigating home production of stocks and seedlings. Members interested can find these remarks in the printed hearings on appropriations for the Bureau of Plant Industry.

While the appropriation for experimental work by the department was originally covered by the Gould Bill, it was taken up by the Department and put into the estimate for the next fiscal year. The Statistics item was also included in the estimate. And I wish to add here that not only were those two items included by the Department in the appropriations asked for by them as being necessary, but Mr. Moon and I were accompanied to the hearings by Dr. Taylor, Prof. Coville, Mr. H. P. Gould, Mr. Esterbrook and other prominent officials of the Department who also spoke earnestly for both appropriations.

There is a chance that we will get both appropriations, but only a chance. The Department is asking for a larger sum than usual and new items of expense are carefully scrutinized, especially just now when war expenses have created a deficit and when there is much talk of the necessity for economy. But, should we fail this time, the ground-work has been laid for further effort later. We were asked a number of questions by the Committee, who seemed interested and we found that representatives of a national trade organization are heard with consideration in Washington.

In the Department, where we called on the Chiefs of the various Bureaus, we were cordially received and assured of interest in our work and of the Department's desire to cooperate with us. We found them, for example, greatly interested in a project to have all plans for public buildings include planting-plans. At the proper time, nurserymen may be able to assist in getting legislation to secure that. It will mean development of another market.

Prof. Coville, of the Bureau of Plant Industry, has been conducting some interesting experiments in keeping plants dormant with warmth instead of with cold,

a proposition so opposite to our custom as to seem impossible and yet, if practicable on a large scale, suggesting the possibility of radical changes in storage methods. Prof. Coville has promised to give us full information on his experiments.

At the Federal Horticultural Board, where I had business for one of our members, Mr. Althouse showed me a very compact little Bulletin covering the various Federal and State requirements for inter-state shipments. Having had a great many letters from members asking for just that information, I asked for a supply and through the courtesy of the Board, they have been received and a copy mailed to each member of the Association. Members are urged to make sure in every instance that their inter-state shipments comply with all the regulations; if they do that, it will save them anxiety and possible loss.

If some members think that this spring they have as many orders as they can fill, it should be remembered that demand enables the seller to decline unprofitable orders and doubtful credits; that demand and high prices stimulate over-production which should be avoided; and that efforts should be followed that will continue the demand and make a market for what is coming on for later delivery. Indications are that planting plans seem to contemplate that continuing demand and an unusual market two and three years from now; but plans are made in most cases without adequate knowledge of what others are planning to plant. The result in some lines is apt to be surplus stock and unprofitable prices; that cannot apply to fruit-trees immediately unurtailed; but in the case of deciduous shrubs and cereless prices should reach a point where consumption is tain shade trees, there is apparent more of optimism unwarranted than of knowledge of conditions and judgment based thereon. Two and three years from now is the time of uncertainty. There are two things necessary to provide against losing what has been gained; effort to continue demand and methods of sale that will mean a profit; both require close cooperation.

Yours truly,

JOHN WATSON, *Executive Secretary.*

WILD FLOWERS FOR THE GARDEN

Miss Edith Helen Curtis, Callieoon, New York, has started in the business of selling native flowering plants, collected from the hills and valleys of Sullivan County, N. Y., and Wayne County, Pa.

An attractive list of about forty-five varieties indicates botanical knowledge and familiarity with the kinds offered.

Properly handled the business should prove an interesting and profitable one.

There are many of our native plants that deserve a place in our gardens and more attention from the horticulturists to cultivate and improve them.

Charles L. McIntosh, 617 Denniston avenue, Roanoke, Virginia, has started in the brokerage business to handle nursery stock and accessories.

OPEN LETTER TO NURSERYMEN FROM THE PRESIDENT OF THE NATIONAL ASSOCIATION

To all the hazards of the elements that the nursery business is heir to, now comes to all of us the imminent hazard of the Quarantine. These quarantines have indeed become so frequent that nurserymen cannot longer view with complacency the possibility that at any time their nurseries may be further restricted or even entirely prevented from shipping by the power that the Federal Government and many individual states possess over our industry.

It has been the policy of most nurserymen, until now, that if a quarantine did not affect them personally, "why worry."

As president of the American Association of Nurserymen, I feel that the time has come to awaken nurserymen everywhere, from a condition of passive complacency to the imminent possibilities of great financial loss, if the practice of quarantining and restricting shipping of nursery stock continues.

I recall at once, from my limited knowledge, that only within a few years, and for the most part within eighteen months, that the majesty of the law has said to nurserymen:

Thou shalt destroy thy common barberry.

Thou shalt be restricted in shipping five-leaved pines.

Thou shalt be restricted in shipping currants and gooseberries.

Thy shipping is restrained on account of corn borer.

Thy shipping is restrained on account of brown tail moth.

Thy shipping is restrained on account of gypsy moth.

Thy shipping is restrained on account of citrus canker.

Thou shalt not import as formerly.

This great country of ours will spend upwards of two million dollars in 1920 for pest control. Of course, this is as nothing compared to the value of our forest and agricultural resources. If such a sum of money will insure the horticultural industry, including nurseries protection and freedom to expand and prosper, no one can complain.

The entomologist and the nurserymen ought not be at variance. Entomologists should provide us with practical formulæ for attacking and controlling pests, and if necessary see that the remedies are applied. Only very seldom and for a short duration, should the quarantine be necessary.

Haven't we a right, to expect from the money available and the growing experience and skill of the entomologist, to find the quarantine a measure to be resorted to with decreasing frequency? If it doesn't decrease, after expenditure of such sums of money, won't the tax payers be interested in knowing why their efforts to provide such encouragement and protection to horticulture have been unavailing?

I suggest

A. That nurserymen, right now, look into the appropriations their states spend upon entomological work. If your legislature is in session, examine the pending appropriation bill; there may be some things in it nurserymen of your state will take exception to. Consider if the amount of money expended brings the result.

B. Ascertain if your state has authority to quarantine

your nursery. If the entomologist can place such quarantine, I recommend that you seek to have the bill amended, making your Secretary of Agriculture or your Governor the person who can issue such an order and then see that such a quarantine may only be ordered after a hearing has been held at which all interested parties may be heard. Remember that when your entomologist has power to issue such a quarantine order, he is detective, prosecutor, jury and judge. Our entomologists I believe are high class, well intentioned men; but nurserymen can only view with concern the well-nigh arbitrary power that some laws give them over our industry.

C. Make sure that the necessity for any quarantine issued under the laws of your state may be reviewed annually upon the request of a small number of the firms affected. Otherwise when are these quarantines to be lifted, once they are placed?

D. Seek to secure in your state laws that will compensate anyone who may have trees or nursery stock destroyed by official order, when it can be shown that the presence of the pest is something that the owner has not through negligence of his allowed to exist. Most states compensate farmers for cattle that are killed because of tuberculosis or "foot and mouth disease," why pay for one and not the other?

Nurserymen should get busy and seek these things for their respective states now. Remember in doing it we have no inherent quarrel with entomologists, they are doing much good work, and we must keep our nurseries in the best possible order ourselves, then insist on justice from them, and strive logically and calmly to work out together the problems which grow out of these relationships.

J. EDWARD MOON,

President American Association of Nurserymen.

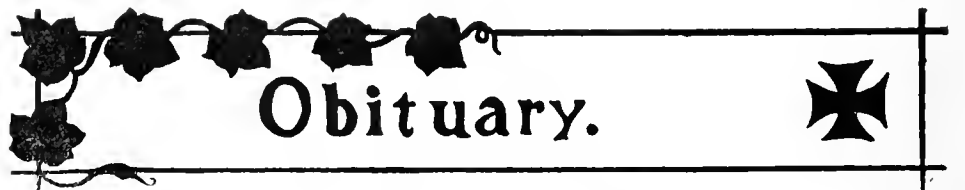
PENNSYLVANIA NURSERYMEN'S ASSOCIATION

February 4th, at the Adelphia Hotel, Philadelphia, will be the time and place of the next meeting of the Pennsylvania Nurserymen's Association.

Mr. A. E. Wohlert, Narberth, Pa., will bring up the matter of uniform trade terms for discussion.

All members are urged to attend to help to find a solution of the many difficult and trying problems that confront the nursery business at this time.

HENRY MOON, *Secretary,*
Morrisville, Pa.



Obituary.

ANDREW F. O'CONNELL

With regret we report the death of Andrew F. O'Connell, proprietor of Overbrook Nurseries, Overbrook, Pa.

Mr. O'Connell has been ailing since the death of his only son last March.

He was born at West Chester, Pa., and has a brother who is foreman at the well-known nurseries of Hoopes Bros. & Thomas, of that place.



SPRAYING MATERIALS.

In the markets, fruits and vegetables are graded as sprayed or unsprayed—higher prices being asked and paid for the sprayed grades. This is logical with shrubs, etc.

We Manufacture High Grade SPRAYING MATERIALS—consequently our guarantee stands for something:-

Bordeaux Mixture
(Paste & Powder)

Arsenate of Lead
(Paste & Powder)

Fish Oil Soap

Calcium Arsenate
(A most efficient poison for the Least Expense)

Blue Vitriol

Led-Bor

(Bordo-Lead of highest analysis)

Kalidor

(Virulent poison combined with Bordeaux Mixture in powder form.)

Egg Preserver

(Water Glass)

Paris Green

(Special Mixtures, Etc.)

Write for interesting literature on Spraying materials, Insecticides, etc.



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N. Y. City

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Columbus, Ohio.
Savannah, Ga.

Norfolk, Va.

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Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

February, 1920.

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

Scarcity of Stock

makes our offer of choice shade trees and shrubs

Interesting Reading

TREES.

We offer in assorted sizes Norway and Sugar Maple, Horse Chestnut, Tulip Trees, European Sycamore, American Elm.

SHRUBS.

Altheas, Calycanthus, Cornus Ellegantissima, and Siberica, Deutzias, Forsythia, California Privet, Philadelphus, Prunus Pissardi, Golden Elder, Spirea (pulifolia Aurea.

PERENNIAL PLANTS.

Agrostemma, Aquilegia, Boltonia, Chrysanthemums, Coreopsis, Delphinium, Dianthus, Funkia, Gaillardia, Hibiscus, German Iris, Japan Iris, Lythnis Viscaria, Monarda, Platycodon, Sedum, Viola, and general assortment.

FRUIT.

Few Standard and Dwarf Pear and Quince.

W. B. COLE

Painesville - - Ohio

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., February 1920

Subscribers to "Nurserymen's Fund for Market Development"

Such terms as The Customer, The
THE CUSTOMER Market, The Demand are often used
synonymously by salesmen, adver-
tisers and those studying the sale of nursery stock.

Unless the premise is clearly understood it is hardly
likely correct conclusions can be arrived at.

The demand for nursery stock exists and is to a certain
extent a natural result of the present social order or
standard of living. It is influenced by the tastes and de-
sires of the people.

The market is the medium by which these tastes and
desires may be encouraged, developed and satisfied. Until
recently there has been no organized attempt to develop
a market for nursery stock. Each individual nursery-
man did what he could on his own account, usually the
individual nurseryman who spent a lot of money adver-
tising his own stock, indirectly.

What salesman has not experienced the pleasure of
working up a good prospect for someone else to have the
order handed to him without much effort on his part?

The National Association has now organized to devel-
ope a market in a cooperative way on a large scale, not
that it will do away with individual effort but it will at
least give the individual more time and in a position to
give better economic consideration to his own particular
subject, the customer.

All the foregoing is merely preliminary to a study of
the collective customer to see how he must be handled to
make him "come across" and support the nurseryman
much better than he has done heretofore.

To those who sell to individual customers and know of
their varying temperaments considering them collectively
seems futile, yet in the very last analysis each individual

is his own customer. What will satisfy us will satisfy
all.

Our attention is attracted by what we can see, hear or
read about. If we don't know it exists it does not exist
as far as we are concerned.

We are interested in what may profit us, what is beau-
tiful or unusual, in what our neighbors have, unless we
are interested we never desire or want to purchase.
But when we do want to buy, decision to do so is largely
influenced by confidence; confidence we are getting a
square deal, full value with courteous treatment thrown
in for good measure.

Simple, isn't it, a mere application of the Golden Rule.

WEDDING BELLS

William Flemmer, Jr., of the Princeton Nurseries,
Princeton, N. J., was married January 28th, to Miss
Emma L. Wilkinson, Elizabeth, N. J., at the home of the
bride's uncle in Montreal, Canada.

Before returning to Princeton where they are going to
make their home, they will spend a two weeks honey-
moon trip in Florida.

"Bill" did his bit when his country called as attested
by the Croix de Guerre awarded for bravery in action.

Now he has won a bride. Fortunate in love and war.
His many friends will join the National Nurseryman in
wishing the bride and groom long continued happiness
and good fortune.

Miss Nell Margaret Youngers, daughter of Mr. and
Mrs. Peter Youngers, Geneva, Nebraska, was married
to Mr. Lionel Milton Henkle on Wednesday, January
7th, 1920.

They will make their home at Keatney, Nebraska,
upon their return from their honeymoon, February 1st.

The National Nurseryman along with the many nur-
serymen friends of Mr. and Mrs. Youngers wish the
bride and groom a full share of happiness and pros-
perity.

OAK PARK NURSERIES

Leslie H. MacRobbie, formerly manager of the Swan
River Nurseries, Patchogue, L. I., N. Y., has bought out
the Oak Park Nurseries, at that place.

He has built a very attractive office, and has done a
great deal of work in renovating and renewing the
stock.

MEETING OF THE WESTERN ASSOCIATION OF NURSERYMEN

The thirtieth annual meeting of the Western Associa-
tion of Nurserymen was held January 28th and 29th,
1920, at the Hotel Baltimore, Kansas City, Missouri.

President, Earl D. Needham, Des Moines, Ia.; Vice-
President, E. F. Bernardin, Parsons, Kans.; Secretary-
Treasurer, George W. Holsinger, Rosedale, Kans.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Spring 1920

15,000 Cal. Privets in grades, 1, 2, and 3 yrs.

30,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Sold out on Pear, Plum and Cherry
Have limited number of Peach and Apple
to offer in light grades

Raspberries and Blackberries

WRITE FOR PRICES
Grafted Hardy Northern Pecans

Seedling Pecans

STRAWBERRY PLANTS

We offer for spring delivery 1920 a large stock of the following strawberry plants.

Parsons Beauty Klondike Gandy

The most extensively planted varieties for commercial purposes.

We are located in the largest STRAWBERRY CENTER in the WORLD and have the soil and climate to produce the best strawberry plants. Only limited stock of other varieties unsold.

Would be pleased to quote you.

Bunting's Nurseries, G. E. BUNTING & SONS, Props.
Selbyville—Delaware
Subscribers to "Nurserymen's Fund for Market Development."

Landscape Photographs

Good landscape views are vitally necessary to the nurseryman. Get our view work in the hands of your agents. We know positively they make sales. It is time now to order for spring. Special price this month.

A SAMPLE SET SENT FREE

B. F. CONIGSKY

416 N. Jefferson Avenue - - Peoria, Ill.

EVERBEARING STRAWBERRY PLANTS

PROGRESSIVE, FRANCIS and PEERLESS

We can supply you fresh dug every day, healthy, true to name, well rooted plants at attractive prices.

BASIL PERRY,

Georgetown - - Delaware

When writing to Advertisers please mention the National Nurseryman.

**Strawberry Plants
Only**

Let us book your order now while our stock is complete.

More than forty million plants Standard and Everbearing.

More than 200 acres of healthy true-to-name plants grown on light new soil. Quality was never better.

Shipped direct to you or your customers under your own tag. We please others, and would like to try YOU.

E. W. Townsend & Sons
Wholesale Nursery

SALISBURY, - - MARYLAND

More than fifteen years growing plants for nurserymen and dealers.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

THE APPLE IN COMMERCE

Address to the Tennessee Horticultural Society at Nashville, December 9, 1919, by James Handly, Founder of National Apple Day, Quincy, Illinois.

THE giving the apple its accredited position in the kingdom of commerce causes some thought estimation and conception of what is possessed and governed in widely circulating courses in the realm of commerce. It appears as the chief potent force for carrying fruit of the soil as well as fruits of all other industries, through courses and channels in supplying demands, that in turn send back currents of coin contributing to necessities and happiness in all communities.

Starting in a slender way the commodities of commerce first supply immediately local demands and then are carried over iron tracks, meeting wants of widely separated places and often go in courses crossing trackless oceans supply necessities to those living in far-away foreign climes.

From planting of the apple trees until passing years bring golden harvests the apple appears as one of the strongest attractions, and a chief in the mighty forces of all industries radiating from and through courses of commerce.

The amount of capital enlisted in the culture and promotion of the apple in commerce show figures that seem almost beyond conception. To commence with, in the country the value of land set apart for orcharding reaches values running into millions; then again in the countless nurseries for producing trees there are again millions of investments and millions again roll like grains of sand in different departments of service for growing apples; such as the various implements used for preparing and cultivating soils in orchards; the kinds of labor; sprayers of all kinds and spraying mixtures for fighting and exterminating the countless hosts of orchard pests; the picking, packing, cost of barrels and boxes, hauling, freighting, cold storing and insurance. The costs in commerce continue as seen in the large warehouses, auto trucks, splendidly equipped offices of buyers and commission men; especial equipment by railroad companies and ocean going steamers in freighting the fruit as required for destined markets.

Then there might arise the question is the apple of sufficient importance, bringing adequate returns for tremendous outlay of capital and imposed efforts in all departments of industry as indicated, and then given a shining position in the realms of commerce with coronet and crown as king of fruits?

The most immediate attraction of the apple is found in its recognized supplying sources for good health. On the highest scientific authority it is declared that the energy of caloric value of a juicy Jonathan apple is equal to that derived from two-thirds of a glass of milk, or small plate of beans, a lamb chop, two-thirds cup of rice, a potato or two slices of bread. There is computed to be as much energy in a pound of apple as there would be in fifteen cents worth of pork chop.

And at even present high prices for food supplies apples form a cheaper source of energy than lean meat or milk. In fact pound for pound apples compare fav-

orably with pure milk and contain a somewhat larger proportion of dry solids. If all the juices were dried out of the apple and all of the water desiccated out of the apple the percentage of nutrient material in the apple would be slightly larger than that contained in milk costing the same price.

It must be borne in mind however, that nutrient properties in apples and milk or meat are of different natures fulfilling different functions in nutrition,—and no one form of nutrition should be excluded for another. Based on even present high prices there is greater economy in apples than there is in any other fruit and in most vegetables. It therefore should be obvious from an economic standpoint apples constitute a source of food supply, which liberally used would reduce present high cost of living if apples were purchased in reasonable quantities by economical methods.

The scientific searchings into the elements of apples find showings of a very small percentage of protein or bunding material in apples it makes manifest that their most important food value depends upon their *Darwin's* fruit sugars and fruit acids. The variation in such component parts of apples is carried by different growths of the fruit character of soils and especially in the care taking, fertilizing and cultivating the soils. Their flavor is due to what is termed malic acid combined with oils and substances drawn from the atmosphere. While apples grown in the far northwest may not possess the delicious flavor so greatly relished by apple eaters, as apples grown in the Middle West, yet growing and developing in realms of super-abundance of sunshine and air, fruitage of trees growing in the wonderful volcanic ash soil, so favorable to the best development, they present the richest and most beautiful colorings and are sent into markets as finest qualities of fruit. The average composition of properly grown Jonathan apples show about four per cent of cane sugars and eight per cent of invert sugars which are mixtures of grape and fruit sugars and such grape and fruit sugars form a combination of digested cane sugars, sugars made palatable and enjoyable by their chemical composition.

The whirligig of time has wrought great changes in the scope and science of growing apples. Far above and beyond the early customs of small orchards or a few apple bearing trees chiefly for family service, expands the large commercial orchards, covering hundreds, and in some instances thousands, of acres with well developed trees, bearing fruit for domestic trade and in the far away foreign markets. These large orchards are supposed to be managed and directed by experts who appreciate the importance, and who no doubt catch the clarion calls for imperative necessity of increasing production. Some heed the calls and press orchard products to utmost limits. Then again it is to be regretted there are other growers who become listless and indifferent to requirements for reaching success in orcharding and allow their trees to be an easy prey to all kinds of diseases and fruit tree pests and become noted in having for what should seem the saddest results in all walks of life, "the harvest of barren regrets."

In 1896 the annual apple harvest in the United States reached returns of 69,000,000 barrels. There have been two or three of the passing years since that time when

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harvests have quite measurably exceeded the crop mentioned but in the best returns of most of the years the harvests ranged a little more than 40,000,000 barrels while in the years of marked failures the harvest returns were between 21,000,000 and 23,000,000 barrels. The United States government report for the present year places the annual crop as ranging along between 23,000,000 and 24,000,000 barrels.

Nearly a quarter of a century has passed since the notable crop of 1896, and revolving time has increased our population by adding between 15,000,000 and 20,000,000 more people to feed. Then comes the call from foreign shores, like the call from Macedonia, "Come over and help us" making earnest appeals from countries where orchards have been devastated in the lightning scorched tracks of devastating armies, asking for supplies of wholesome life sustaining, national fruit. Without enough apples to supply our own needs and wants, it will be quite obvious that the foreign calls for our fruit will too often go unheard and unheeded.

Such things should not be. This country has the soil, the climate, and all necessary guiding lights and efficient aids and advantages to grow from 100,000,000 to 150,000,000 barrels of apples annually, and every apple in such an increased annual crop would be needed for timely service in either the domestic or foreign trade.

As one of the organizers of the Mississippi Valley Apple Growers' Association, serving as its secretary for seventeen years, I frequently came in contact with orchards and orcharding in different parts of the country and was often impressed by rulings of cause and effect when observing either the success or failure of annual harvests. I was led to believe that failures were entirely too frequent and was influenced to institute the feature of having a national apple day with confidence that if there would be a concentration on the industry of growing apples all over the country on at least one day in the year it would be fruitful in leading to better results.

In the commercial courses of our best business men we know that on one day of every passing year, they draw off what is termed a trial balance taken from their financial records. And come weal or come woe the methodical business man faces the showing of such sheets with both eyes open. If the balances appear on the right side of the ledger the causes for such showings are discovered and persistently pushed in future efforts. If balances appear on the unfavorable side of the ledger it is followed with a searching for causes and when such causes become obvious there is a certainty that they will be eliminated in future endeavors and that lines leading to better results will be carefully followed.

It was anticipated with the establishing of a national apple day, those making failures in growing the national fruit would observe the annual returning event as a day for atonement and repentance arousing determination for future improvement. The day was first observed all over the country on the first Tuesday in October in 1905 and has since grown in favor and importance. There having been some objection made to the date in the extreme northern and southern sections of the country during the past two or three years the date was changed from October to the first Thursday in November in order to more readily secure ripe and maturing apples for feasts

of the favorite fruit which naturally became associated with the annual anniversary.

For the first few days I stood practically alone in reminding the public of the yearly returning date and through the medium of the press appealing for due recognition and fitting observance of the festival. Later, the International Apple Shippers Association which was quick to see the manifold advantages of having such a day came to the rescue with forceful vim and vigor placing the annual event in firmest fixed position before the public. The association offered first and second prizes to the cities making most notable celebrations in commemorating the day. It will be remembered that Cincinnati won the first prize that was awarded, and in other years, Pittsburgh, Pa., Chicago, Rochester, N. Y., Indianapolis, Ind., were among the prize winners.

The exceptionally light annual harvests of past three years having precluded possibilities for enthusiastic celebrations, the International Apple Shippers Association continued its commendable work by liberally using its own funds and generous contributions given for the purpose, shipped hundreds of carloads of apples to Europe for gratuitous distribution among allied armies fighting for the world's freedom on the battle fields of France. The association honored the last date for apple day by sending apples to the sick and wounded soldiers of the allies on both sides of the Atlantic. It is understood that New York City alone contributed \$5000 for this noble purpose.

Now that the people are emerging from the horrors of war and drawing nearer to the dawning of peace the association is contemplating offering prizes for the best results that can be shown in orcharding in the nation at large during the approaching New Year.

It being my intention to appeal to the different state horticultural societies to supplement their movement by offering prizes for the best results in orcharding discovered within their own boundaries let me hope that the horticultural society of Tennessee will co-operate by aiding a movement sure to increase production which is an urgent necessity of the present time. At the last meeting of the International Apple Shippers Association, held at Milwaukee in August, with delegates from Europe, South America, Canada, and Cuba, it was unanimously voted to change name from National Apple Day to International Apple Day, thus forging ahead of the United States Senate in forming a league and covenant of nations with assurance of enjoying the blessed fruits of peace.

In my former, earlier years I was engaged in the work of transporting lumber from Southern forests for use in large manufactories of the northern states. Being somewhat of a practical river man I contracted for freighting lumber saved at Paducah on the Ohio River to points on the Upper Mississippi, and became familiar with productions of Southern forests by the millions of feet of logs I witnessed floating down the Cumberland and Tennessee rivers. I always was convinced that soil upon which any variety of trees grew spontaneously would be ideal places for thrifty fruit bearing orchards and the people of Tennessee should be congratulated upon having their lines cast in such pleasant and favorable locations for growing apples and all other varieties of fruits.

As you have your efficient state University and experi-

THE
American Association of Nurserymen

ORGANIZED 1875

A Co-operative Organization of Four Hundred
 Nursery firms associated for mutual benefit.

Our aims and purpose :

- To improve conditions in the Trade wherever improvement is needed;
- To make business between Members profitable and pleasant through observance of the ethics of fair competition;
- To bring the Nurserymen and the Planters into closer relations and secure a better understanding of the problems of each;
- To disseminate accurate information about Trees and Plants and to encourage and assist in their more general and more profitable use;
- To advertise the Association in connection with our Publicity Campaign, so that the buying public can know what the Association is and what it stands for; to recommend its Members to planters as logical and dependable sources of supply; to get orders for our Members and to see that they are filled according to the Association's stated policy of fair-dealing;
- To assist Members to avoid bad debts with reliable Credit Information;
- To Collect Accounts for Members;
- To Collect Freight and Express Overcharges and to advise Members regarding any Transportation problem, through Mr. Charles Sizemore, Traffic Manager;
- To adjust all disputed accounts between Members through our Arbitration Committee;
- To see that the rights and interests of our Members are carefully watched and protected by our Legislative Committee;
- To secure a more accurate and complete Code of Standardized Plant Names through the work of our Committee on Nomenclature;
- To do all and anything that will add to the prestige and standing of the American Association of Nurserymen and make the business of its members more profitable and, as representative of the Nursery industry, to advance the trade in public esteem.

While not inviting membership, our doors are hospitably open to all reputable nursery firms who approve of our platform and care to stand with us.

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John Watson, *Executive Secretary.*

PRINCETON, New Jersey.

ment station together with your noted horticultural society all radiating governing and guiding lights leading to highest goals of well directed endeavors, I would neither presume nor assume, even if I felt never so competent, to impart any specific instructions, on best methods of horticulture. Still I appreciated the force of an expression of one of the most successful apple growers of my acquaintance in favor of cultivation. He said that every grower should cultivate and cultivate and then cultivate some more. My belief is that the grower should give his work attention and attention and then some more attention.

When a cold wave with rapidly falling temperature swept over the country late in last April it was regrettable to have seen that many orchard men did not have the inexpensive materials for lighting smudge fires, which would have sent clouds of smoke over their trees warding away falling frosts, and there were all too few evidences of firing by orchard heaters. Then owing to high prices for labor and spraying materials too many orchards were left to the mercy of multitudes of orchard pests. Was it any surprise or marvel that the countless orchards notably neglected left without any degree of care and attention were either ruined by orchard enemies or were practically barren at time for harvest? With the incessant, imperative demands for increased production the orchard men should awake and stretch every nerve to produce and produce and then produce some more.

Visitors to Tennessee feel something akin to reverence for the state as they realize they are treading on historic ground. The state has a glorious past and its future is luminous with brilliant possibilities. In its history we see many notable names inscribed on rolls of fame. It has given the United States three presidents noted for force and executive ability. The names of Jackson, Polk and Johnson, two of the number filling the office of governor of the commonwealth before being exalted to the highest office in the land, are familiar to all students. And the name of Jackson stands out in bass relief from the others. He stood behind the guns at New Orleans and he stood behind the guns in the office of President. His shots in both places will echo and reverberate through all corridors of time.

ILLINOIS STATE NURSERYMEN'S ASSOCIATION

Third Annual Convention Illinois State Nurserymen's Association will be held at Chicago, Hotel LaSalle, February 11 and 12, 1920

This is going to be the biggest, best and most important convention the Nurserymen of Illinois have ever held. No Nurseryman of Illinois who amounts to anything in his own estimation or that of his associates in business can afford to miss it.

A. M. AUGUSTINE, *Secretary.*
Normal, Ill.

The Englewood Nursery Co., of Leonia, N. J., has been incorporated, with a capital stock of \$60,000. The incorporators are Thos. H. Heminsley, of Englewood; C. W. Schroter, of Leonia, and W. H. K. Davey, of Belleville.

IMPORTS, AND QUANTITIES OF STOCK AVAILABLE IN THE FUTURE

*Read Before the Western Association of Nurserymen
January 22, by James McHutchison*

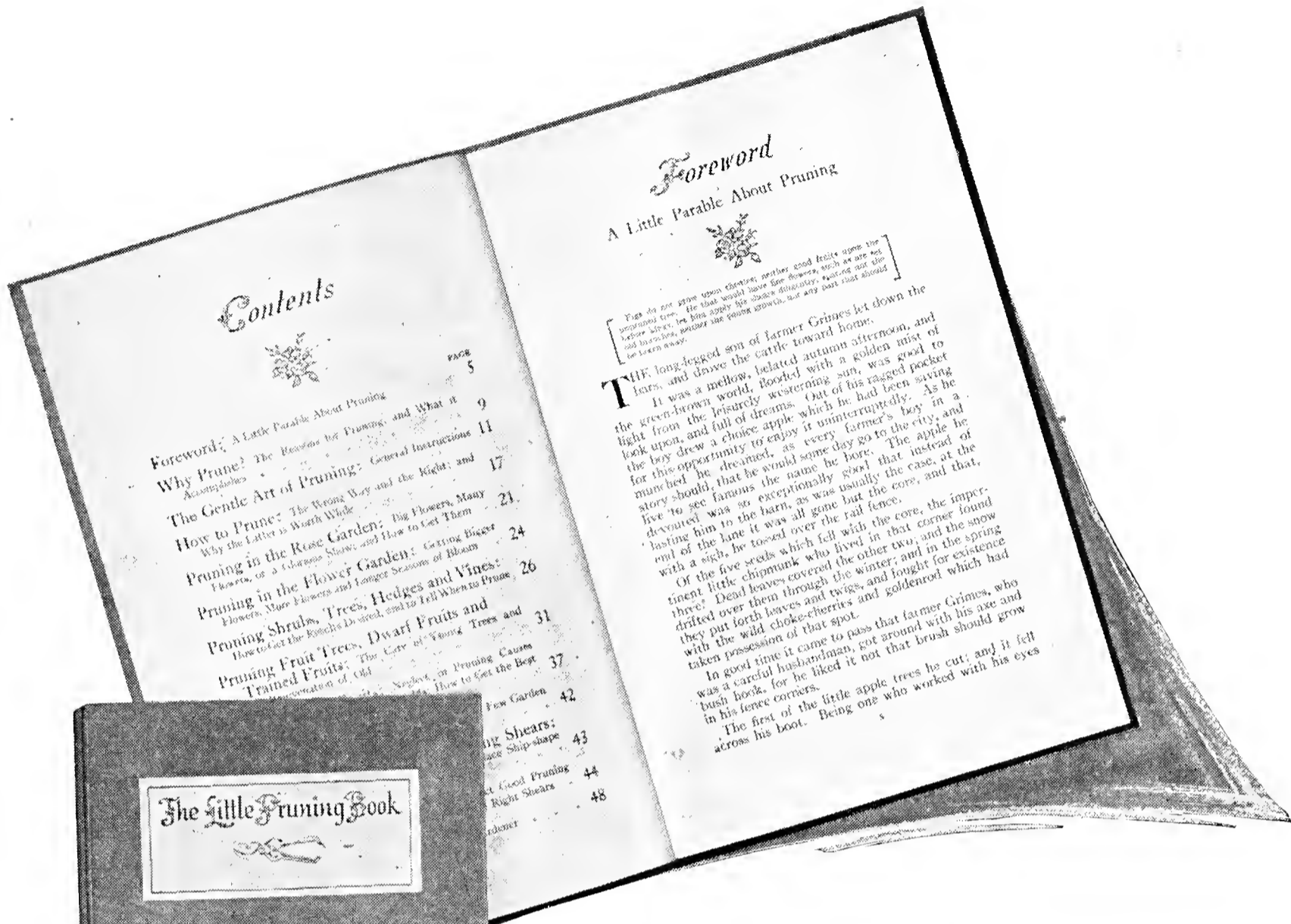
DON'T blame the French growers for the present high prices of French fruit and rose stocks, they are barely getting their own back. The high prices are due first to scarcity, second to the increased cost of production, both resulting from the war—for it should be remembered that the stocks dug this winter were started while France was still at war, with every able-bodied man planning and working and fighting more for the immediate export of the invading Hun than for the later export of such peaceable items as fruit stocks. Seeds were scarce and high priced, limitations were still in effect on the production and transportation of all non-essential items, and who could foresee today's demands?

When the armistice was signed in November 1918 it changed the situation completely; men were rapidly returned to peaceful vocations, international markets for fruit opened which stimulated the planting of fruit trees in all countries. Great Britain, Russia, Italy, Scandinavia, Australia, all wanted their share of the small crop and were willing to pay almost any reasonable price for their pro-rata share—but it was then too late in the year to procure more seeds or to plant them for 1919 crop even if they were procurable.

In competing with other countries as buyers of fruit stocks, America is at a distinct disadvantage by reason of Quarantine No. 37 which places importations of nursery stock absolutely under the control of five bureau chiefs in the U. S. Department of Agriculture. If these officials were in touch with business life or the commercial needs of the nation, the French growers would feel reasonably safe in producing for American markets, but since this Board stopped shipments of all varieties of ornamental stocks, many of which were grown exclusively for American markets and are unsalable in France or Europe, and paid little or no heed to the arguments and protests from the American buyers or the French sellers, the French grower does not know when the axe may fall on the exportation to America of fruit and rose stocks, so he is not over-anxious for American trade.

Be it said to the everlasting credit of the French growers that they did not meet our ill-considered and unwise quarantine by adding the price of the ornamental stocks that must be destroyed to the price of the fruit stocks we must have, as they could easily have done with adequate justification. On the contrary the prices to American importers are no higher than to importers in other countries, though these buyers do not expect credit from French firms this season. This is proven by the prices of Holland grown fruit stocks, which are now selling at about 60% higher prices than the French grown, though their value is assessed at about 25% less in normal seasons.

The demand on France for fruit tree stocks was enormous this season, as the growing of fruit trees was almost suspended in all civilized countries during the four war years; now every country wants fruit stocks—and France requires stocks to replant its own devastated pro-



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Foreword

A Little Parable About Pruning

There are not more than a dozen, neither good fruits upon the pruned tree. He that would have fine flowers, such as are not below leaves, he must apply his hands diligently, pruning not the old branches, neither the young shoots, but any part that should be taken away.

THE long-legged son of farmer Grimes let down the bars, and drove the cattle toward home. It was a mellow, belated autumn afternoon, and light from the leisurely westerling sun, was good to look upon, and full of dreams. Out of his ragged pocket the boy drew a choice apple which he had been saving for this opportunity to enjoy it uninterruptedly. As he munched he dreamed, as every farmer's boy in a story should, that he would some day go to the city, and live to see famous the name he bore. The apple he devoured was so exceptionally good that instead of lasting him to the barn, as was usually the case, at the end of the lane it was all gone but the core, and that with a sigh, he tossed over the rail fence.

Of the five seeds which fell with the core, the impatient little chipmunk who lived in that corner found three! Dead leaves covered the other two; and the spring they put forth leaves and twigs, and fought for existence with the wild choke-cherries and goldenrod which had taken possession of that spot.

In good time it came to pass that farmer Grimes, who was a careful husbandman, got around with his axe and bush hook, for he liked it not that brush should grow in his fence corners.

The first of the little apple trees he cut; and it fell across his boot. Being one who worked with his eyes

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Cleveland, Ohio

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PEXTO

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vinces. Even our own country increased its demands 100% over any of the previous four seasons, though we will probably not receive over 15% of our requirements.

As to the future. Since men are now available, and a good crop of seeds and a fair supply of labor was available this fall, with an average growing season the crop for 1920 should be almost double that of 1919, and though I hate to make predictions, I think we would be safe in figuring that prices in 1920 will be less than half what they are this season. As production increases and conditions become gradually normal, prices will continue to come down—though I question if they will ever again be as low as in pre-war years. Ten years ago I sold Myrobolan plum 5-9 m|m at \$1.10 per 1000, today I cannot buy them for less than \$60.00 net cash in advance. I don't think we will ever see those extremes again for the same reason that we will never see such a war again.

ONE OF THE RESULTS OF A QUARANTINE

The famous Paragon Sober Chestnut Nurseries and Orchards, Irish Valley, Lewisburg, Pa., have been sold to a group of capitalists for \$50,000.

Most nurserymen will be more or less familiar with the enterprise conducted by Captain Coleman K. Sober in growing and exploiting the Paragon Chestnut. From a small beginning he developed a nursery of a million trees and a bearing orchard of 50,000 trees producing annually thousands of bushels of chestnuts.

Just about the time the dreams of Captain Sober began to be realized, a thriving industry that would have benefited the whole world, as through the Captain's methods waste forest lands were to have been planted and made productive, a quarantine was put into effect, on account of the chestnut blight, which effectively ruined the business.

The Chestnut Blight Commission spent over a quarter of a million dollars accomplished nothing in the way of preventing the spread of the disease, but prevented the distribution of perfectly healthy trees by its quarantine and incidentally ruined an industry.

WAKING UP

Order 37 of the Federal Horticultural Board, placing a quarantine on the importation of nursery stock, incited much criticism, but it was confined mainly to nurserymen, florists, and Trade papers. When the Board goes further, however, and proposes to quarantine certain New Jersey counties in which large quantities of vegetables and fruits are produced, the people begin to wake up to the activities of the Board. The following editorial from the Philadelphia Evening Bulletin of January 21st is interesting. Perhaps had it been possible to interest the daily press in order No. 37, the quarantine on foreign nursery stock might not have been as tight as it is now.

A DRASTIC MEASURE

The Philadelphia consumer has a joint interest with the New Jersey farmer in the intimation from the Federal Department of Agriculture that an embargo may be placed upon the shipment of all fruit and vegetables from a considerable part of Burlington and Camden counties in New Jersey in an attempt to wipe out the Japanese beetle, a pest which has been increasing in that territory for the past three years, in spite of all efforts at extinction.

Even if the annihilation of this beetle is as important as the

Federal entomologists declare, these public interests have a comparative value and are to be considered. Such a measure as is proposed would seem to be a last resort, to be applied only after all means of inspection of outgoing produce had been utilized and partial or conditional restriction had been tried.

The beetle is supposed originally to have found its way into this country in an importation of iris, and although multiplying in numbers, has not spread beyond what might be called local limits, its presence on this side of the Delaware not having been reported. The plan of the Federal authorities is to keep it within local confines, as much as possible, and gradually to fight it out of existence. But a complete embargo on garden stuff would not prevent the transportation of the beetle in some of its various stages of development by other means which are daily afforded, and which are not capable of the inspection and precaution that might be exercised in the shipment of such produce and actually prove more effective than an embargo.

BABY RAMBLERS

An organization of young nurserymen, founded at the annual convention held at Milwaukee, Wis., June 28, 1916.

Their object is to perpetuate the best ideals and practices of the nursery business.



Baby Rambler Louis R. Bryant, Princeton, Ill.



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THE BENJAMIN CHASE CO.

DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

Charles Perkins, 2nd, of the Jackson & Perkins Company, Newark, N. Y., is now the proud father of a son, Master Charles Dale Perkins, born early in January.

Mr. Watson is attending the Kansas City Convention, and then expects to return via Chicago, where he is making some arrangements for the coming Convention.

FOR SALE

- 10,000 Dwarf Box, 3-year, No. 1
 - 2,000 Dwarf Box, 3-year, No. 2
 - 2,000 2 and 3-year Field grown, Climbing Roses
Crimson Rambler, Lady Gay, Blue Rambler, Dorothy Perkins, Red Dorothy Perkins, White Dorothy Perkins, Philadelphia Rambler, Mary Washington, Everblooming Crimson Rambler.
 - 300 Roses, 2 and 3-year,
Madam Frances Kruger, Sir Thomas Lipton,
Clothilde Soupert, Magna Charter,
Henry Martin, Baby Rambler.
 - 5,000 Linnaeus Rhubarb, 2-year,
 - 5,000 Linnaeus Rhubarb, 1-year, strong,
Packing Extra
- Shade Trees and Shrubs in large supply.
Write for prices.

J. B. WATKINS & BRO.,
MIDLOTHIAN, VA.

FOR SALE

A thriving and increasing Nursery Business, in a thriving Village located in the heart of the fruit belt. A thriving Farm and Garden seed store and Insurance business in connection. The Nursery work is attractive and demand high but for other reasons, we are thinking of selling.
Box 75, In care of National Nurseryman.

WANTED

POSITION WANTED

As superintendent or assistant superintendent or as a salesman with a retail ornamental nursery. Single; over thirty, with many years experience. Give details of position and state salary offered.

Prefer Eastern or Central States.

BOX 42, Care National Nurseryman.

STOCK WANTED

- CHERRIES**—Montmorency, on Mahaleb, dwarf form, 1 yr. 3-4 ft., 1 yr. 4-5 ft.
- PLUMS**—Shropshire Damson, Green Gage and Italian Prune
- CURRANTS**—Black Naples, or equally good; Cherry, Victoria or Perfection, 2 yr., No. 1.
- HARDY HYBRID RHODODENDRONS**—First grade healthy stock.

When quoting be sure to state clearly the sizes, age and variety of stock you have to offer, and quantity each size, with prices in lots of 1,000 and 5,000, for Fall Delivery

F. W. KELSEY NURSERY COMPANY
150 BROADWAY - - - NEW YORK CITY

WANTED—A nursery foreman. Must have extensive knowledge of ornamental varieties and be able to handle men. Good salary to start and good future. State age, single or married, nationality, creed and experience. Give references as to ability, experience and character. Send photo if possible.

FRAMINGHAM NURSERIES, Framingham, Mass.

WANTED—Married man who understands growing ornamental nursery stock. Also married man for propagating ornamental nursery stock. Opportunity for advancement in either position. State age, experience, salary expected, etc. in first letter.

Address Box A,
In care of The National Nurseryman.

WANTED

Several first-class experienced nursery workmen. State age, single or married, nationality, creed and experience. Give references as to ability, experience and character. Send photo if possible. Good wages to start and opportunity to advance.

FRAMINGHAM NURSERIES, Framingham, Mass.

WANTED

A Nursery Foreman who understands growing fruit trees and a general line of Nursery Stock. State experience and salary wanted.

THE BARNES BROS. NURSERY CO.,
YALESVILLE, CONN.

WANTED—A middle aged man as nursery foreman, who understands budding of fruit and roses; can handle help and teams. We have a good opening for the right party. Please reply stating age, experience, salary expected, etc.

C. R. BURR & CO.,
Manchester - - - Conn.

WANTED

Young man of energy and ability to take charge of a branch nursery for the growing of ornamental trees, shrubs, evergreens and roses. First rate opportunity to a man who demonstrates his ability, as a share of the profits of an old established business will be given in addition to his salary. Give full particulars, references and wages expected.

ELLIOTT NURSERY CO.,
Pittsburgh, Pa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

CUTHBERT RASPBERRY PLANTS

500 Sold at the 1000 Rate
No Charge for Packing
Guaranteed to be A No. 1

Write for Prices

Oak Park Nurseries
Leslie H. Mac Robbie
PATCHOGUE, L. I., N. Y.

ABELIA GRANDIFLORA

Nice lot of field grown, well branched stock. Two sizes, 8 to 12 in., 12 to 18 in., 18 to 24 in. By the 100 or 1,000.

THOMASVILLE NURSERIES
THOMASVILLE - GA.

SURPLUS BERRY PLANTS

Strong and heavy rooted, guaranteed true to name.
Herbert Raspberry Suckers and Transplants.
St. Regis Raspberry Transplants.
Superb and Progressive Everbearing Strawberry Plants.

BERT BAKER, HOOSICK FALLS, N. Y.

SPRING 1920

CALIFORNIA PRIVET 2 and 3 year, strong plants, well branched, 3 to 4 ft., 2 to 3 ft., 18 to 24 in., by the car-load.

SHADE TREES. Oriental Planes, Pin and Willow Oaks, Sugar and Norway Maple, Maiden Hair, Lombardy Poplars, etc.

FRUIT TREES. Only a few odds and ends left in 2 year olds. Also, several hundred transplanted apple, 3 years, not as smooth as younger trees, but good stock.

Kieffer Pear, 4 year extra heavy, 1-1½ in. 10 ft.
Peach and Plum, all sold, expect a fine lot in Fall 1920.

Send in your Surplus List

FRANKLIN DAVIS NURSERIES, INC.

Joseph Davis, General Manager.

Bulb Photographs

Our bulb photographs speak quality. Let us send you a selection for your approval.

THE NATHAN R. GRAVES CO.

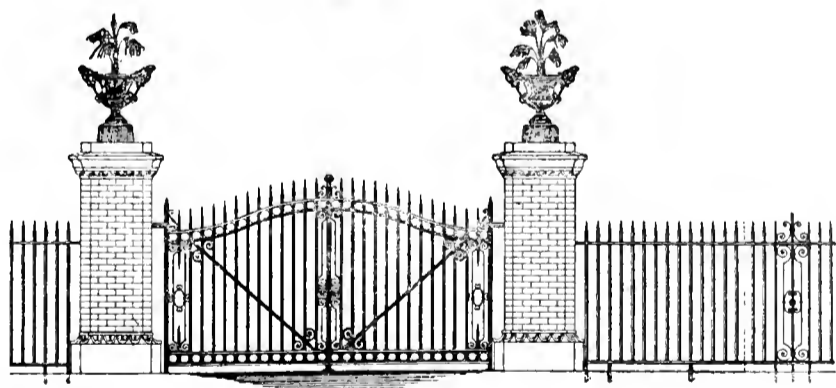
Horticultural Photographs

84 EXCHANGE ST. - ROCHESTER, N. Y.

300
Designs



Send for
Catalogue



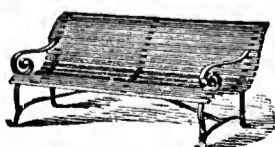
IRON-FLOWER-VASES WITH RESERVOIR

VASES



VASES

HUNDREDS of designs of plain and ornamental iron fence and entrance gate for parks, cemeteries, schools, private residences, country estates, town houses, suburban homes.



IRON SETTEES
WRITE FOR CATALOGUE.

AGENTS WANTED

The Stewart Iron Works Company
770 Stewart Blk., Cincinnati, Ohio

We have a surplus of a few thousand each of the following strictly No. 1 stock.

- Spirea Van - - 3½-4 ft.
- Spirea Van - - 2 -3 ft.
- Barberry Thun. - 14-24 in.
- Lucretia Dewberry Tips
- Asparagus, 2 yr.
- Horseradish sets
- Concord Grape, 2 yr.
- Downing Gooseberry, 2 yr.
- Peony Roots, 3 to 5 eyed divisions
- Cuthbert Raspberry Plants

P. D. BERRY & SONS

159 HALLER ST. - DAYTON, OHIO

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

- | | | |
|--------------|---------|-------------------|
| Strawberries | Iris | Asparagus |
| Raspberries | Privet | Horseradish |
| Blackberries | Spirea | Hardwood cuttings |
| Dewberries | Rhubarb | Volga Poplar |

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." **LOWDHAM, NOTTS, ENGLAND**

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS, both grafted, and seedlings from grafted trees, and

ITALIAN OR SPANISH CHESTNUT

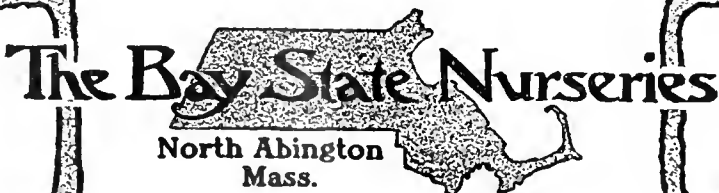
Portland Wholesale Nursery Co.

122 1/2 GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.



SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

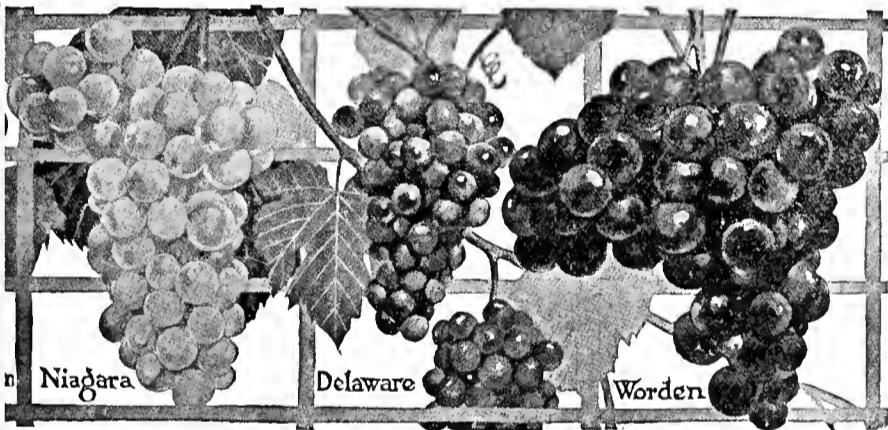
WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting
Established 1866 Send for Catalogue

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.
Largest Growers in America. Box 401, Dundee, Illinois

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

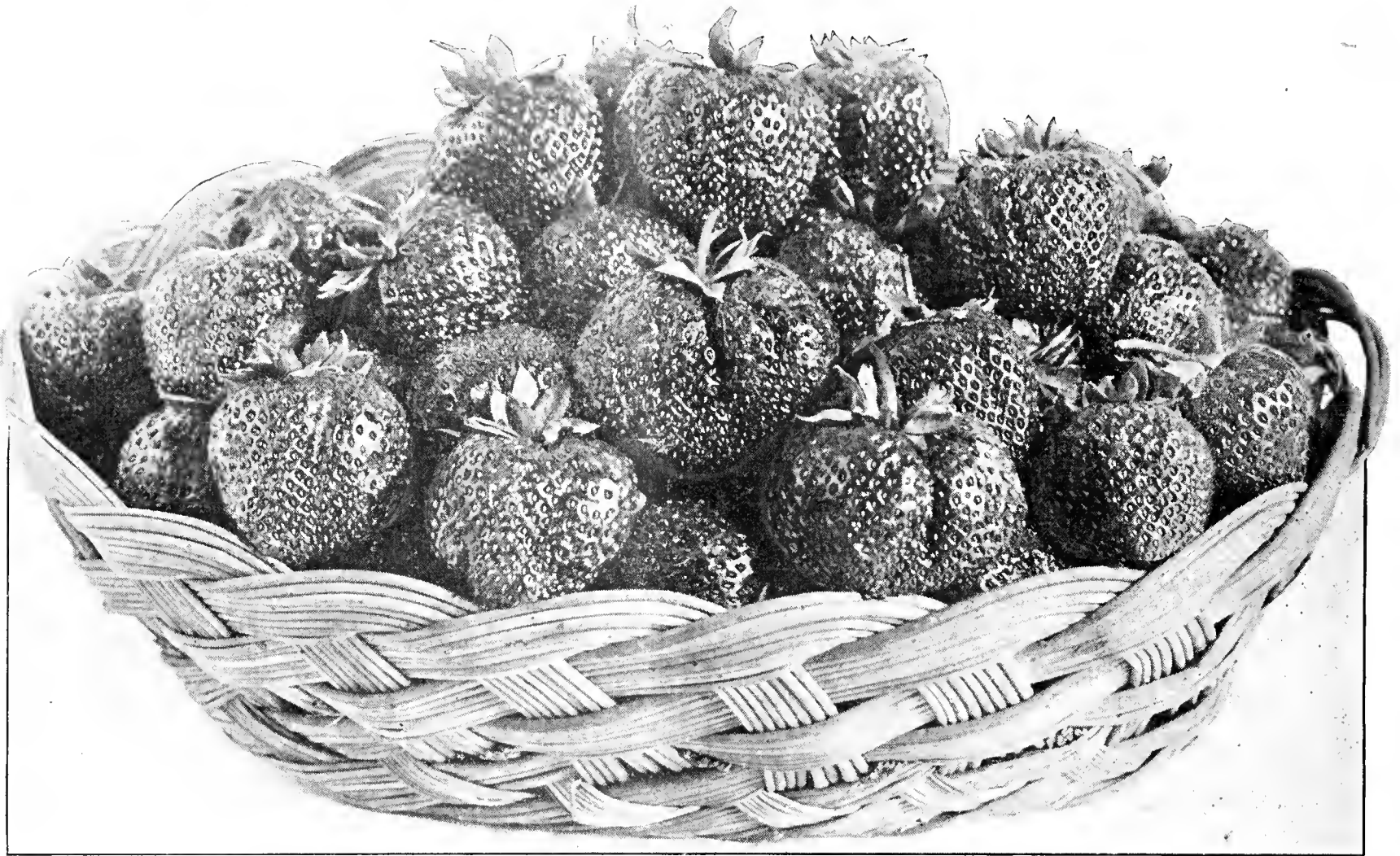
Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

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Harrison' Strawberries



Everbearing Strawberry Plants **PROGRESSIVE and SUPERB**

Plants will be fresh dug

- | | |
|--------------------------|----------------------------|
| Aroma. (Per.) | McAlpin. (Per.) |
| Bubach. (Imp.) | Missionary. (Per.) |
| Brandywine. (Per.) | Mitchell's Early. (Per.) |
| Big Joe. (Per.) | New York. (Per.) |
| Big Late. (Imp.) | Nick Ohmer. (Per.) |
| Big Valley | Parsons' Beauty. (Per.) |
| Campbell's Early. (Per.) | Premier. (Per.) |
| Chesapeake. (Per.) | Progressive. (Per.) |
| Dr. Burrill. (Per.) | Sample. (Imp.) |
| Excelsior. (Per.) | Senator Dunlap. (Per.) |
| Gandy. (Per.) | Sharpless. (Per.) |
| Glen Mary. (Per.) | Superb. (Per.) |
| Haverland. (Imp.) | Tennessee Prolific. (Per.) |
| Klondyke. (Per.) | Warfield. (Imp.) |
| Lupton. (Per.) | Wm. Belt. (Per.) |
| Matthews. (Per.) | |

HARRISONS' NURSERIES

Berlin, - - Maryland

2813



THE NATIONAL NURSERYMAN



MARCH 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



A large supply of:-

Elm, American White - Ash, Fraxinus Viridis
Maple, Silver Leaved, Norway, Sugar
Poplar, Carolina, Lombardy, Norway, Silver Leaved, Golden
Catalpa, Speciosa, Bungei -- Balm of Gilead

Shrubs

Cornus, Siberica, Stolonifera, Floridus Rubra
Lilac, Purple and White
Spirea, Aurea, Billardi, Rosea, Douglasi, Opulifolia,
Van Houtte
Philadelphus, Coronarius, Gordon's, Grandiflorus, Lemoine
Viburnum, Opulus, Sterilis, Lantana
Ampelopsis Engelmanni

Always pleased to quote on your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

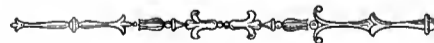
We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company
Strawberry Specialists,
Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

BULLETIN, BULLETIN

Containing a long list of scarce items will be mailed frequently throughout the season. If you are not on our mailing list, or do not read them carefully, you will lose a whole lot of time and money. Remember the orders you place with us **Get Service.**



C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The Preferred Stock

The Preferred Stock

Evergreens for Nursery Planting

Well established plants from 2 1/4 inch pots, 5 to 8 inches. Ready April 20th to May 1st.

JUNIPERUS (Juniper)

- Chinensis
- " Alba Variegated
- " Pfitzeriana
- Communis Aurea
- " Hibernica (Irish Juniper)
- " Horizontalis (Prostrata)
- " Suecica (Swedish)

- Sabina
- Virginiana Cannarti

RETINOSPORA

- Filifera
- " Aurea
- Obtusa
- Pisifera
- " Aurea
- Plumosa
- " Aurea
- Squarrosa Sulphurea
- Veitchiana

THUYA (Arbor Vitae)

- Biota Aurea Nana (Berckmans)
- Occidentalis (American)
- " Compacta
- " Conica Densa
- " George Peabody
- " Globosa
- " Hoveyi
- " Plicata
- " Pyramidalis
- " Siberica
- " Tom Thumb
- " Vervaeneana

Rosenthalii

French Fruit Tree Seedlings

- 38000 Plum (Myrobalan), 3 1/5 m|m
- 29000 Pear, 3 1/5 m|m
- 35000 Apple, 3 1/5 m|m

Jackson & Perkins Company Newark, - New York

The Preferred Stock

The Preferred Stock

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS



THE

North-Eastern Forestry Co.

CHESHIRE

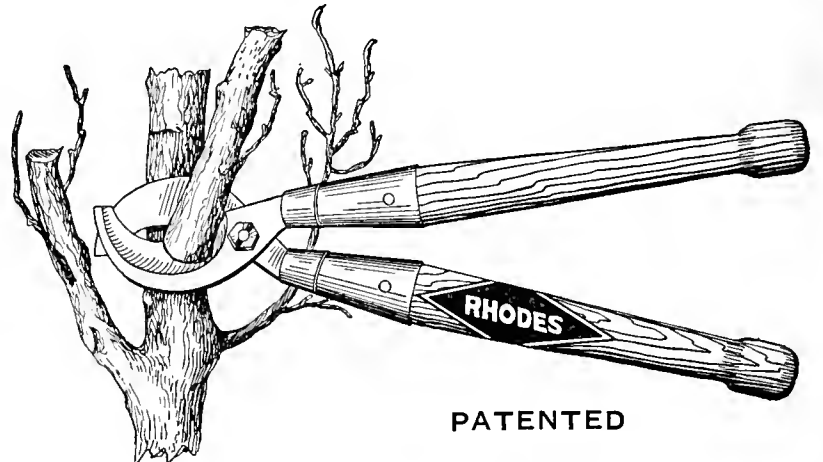
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please

RHODES DOUBLE CUT PRUNING SHEARS

In Use Throughout the World



The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue, Grand Rapids, Mich.

Hardy Lily Bulbs

Lilium Auratum, Magnificum, Album, Rubrum, Giganteum.

Case lots only

BAMBOO STAKES

Natural from Japan in 2 ft., 2 1/2 ft., 3 ft., 4 ft., 5 ft., and 6 ft. sizes.

Raffia

Red Star Brand XX Superior Brand

AA West Coast, also in 20 colors

Shipped promptly from stock.

All of above can be shipped at once.

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

mention the National Nurseryman.

PAINESVILLE NURSERIES

March Winds and March Business

We are braced against the one, but have both hands out for the other.

The lofty American Elm (illustrated), is one of those sturdy trees which defy the wild March blasts, and typify solidity and character.

We have some fine blocks of them ranging from 6 to 8 feet up to 3 to 4 inch caliper. Ash, Birch, other Elms, Maples, Oaks, Poplars, Salisburia, Sycamore, Tulip and Willows we grow in right good quantities and graduated size; with fair stocks of the less common and novelty ornamental trees from A to Z.

Also a fair supply of the hardier Evergreens in medium heights.

There is little in the line of hardy shrubs and vines we cannot supply; and as this copy goes to the printer, we still own a fair stock of Hardy Climbers, Wichuriana Hybrids, Sweet Briars and other miscellaneous field-grown Roses.

We have a very complete list of Hardy Perennials in good quantity.

We can't do much for you in the way of Fruit Trees, or in Currants, or Grapes. Other small fruits, the supply is fair.

At the proper shipping time, we can supply Strawberry plants in all standard varieties.



Our trade lists are now distributed,—a page or two short and with the 1000 columns rather thinly populated, but we believe the prices are right.

Write for Seed Trade Discount Sheet if not included. Our quality seeds are worth while.

THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

| | |
|------------------------------|--------------------------|
| Arbor Vitae—American | Concolor |
| Arbor Vitae—Compacta | Englemans Spruce |
| Arbor Vitae—Douglas Golden | Jack Pine |
| Arbor Vitae—Globosa | Norway Spruce |
| Arbor Vitae—Hoveys Golden | Norway Pine |
| Arbor Vitae—Pyramidalis | Pinus Mugho |
| Arbor Vitae—Siberian | Pinus Flexilis |
| Arbor Vitae—Tom Thumb | Pinus Ponderosa |
| Arbor Vitae—Orientalis | Pitch Pine |
| Arbor Vitae—Orientalis Aurea | Red Cedar |
| Arbor Vitae—Orientalis Pyr | Retinispora, 3 varieties |
| Austrian Pine | Swedish Juniper |
| Biota, 3 varieties | Scotch Pine |
| Black Hills Spruce | White Pine |
| Colorado Blue Spruce | White Spruce |
| Douglas Spruce | |

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

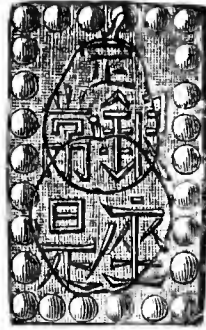
Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees

General line Nursery Stock



We still have a nice lot of
SPIREA VAN HOUTTE

Selling fast. Cover your needs
by wire collect

Also good assortment of

SHADE TREES

SHRUBS

EVERGREENS (especially nice
lot of Irish Juniper and English
Juniper)

Need any Lonicera Fragrantissima? We have
them in all grades.

All our own growing.

Ask for latest list.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of
Fruit Trees, Small Fruits and Hybrid Tea
Roses.

Large Supply of
Ornamental Trees, Shurbs,
Perennials,
Vines, Evergreens

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

SURPLUS STOCK

| | |
|-------|---|
| 100 | Ailanthus, 1½-2 inches |
| 1000 | White Ash, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches |
| 140 | Box Elder, 10 to 12 ft., 1½ to 2 inches |
| 12000 | Elm, 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches, 2½ to 3 inch |
| 120 | Linden, 10 to 12 ft. |
| 12000 | Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch. |
| 300 | Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch. |
| 5000 | Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch. |
| 800 | Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch. |
| 200 | Tulip Tree, 1½ to 2 inch, 2 to 2½ inch. |
| 150 | Weeping Willow, all sizes up to 3 inch. |
| 150 | Erect Willow, all sizes up to 2 inch. |
| 1500 | Viburnum Opulus, 3 to 4 ft., 4 to 5 ft. |
| 2500 | Viburnum Sterilis, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft. |
| 500 | Deutzia Crenata, 2 to 3 ft. |
| 400 | Deutzia Candidissima, 2 to 3 ft. |
| 3000 | Deutzia Pride of Rochester, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft. |
| 5000 | Lilac Purple, 2 to 3 ft., 3 to 4 ft. |
| 1000 | Lilac White, 2 to 3 ft. |
| 1200 | Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft. |
| 500 | Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft. |
| 900 | Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft. |
| 1600 | Spirea Billardi, 2 to 3 ft., 3 to 4 ft. |
| 1200 | Spirea Collosa Alba, 10 to 12 inch. |
| 400 | Spirea Reevesi, 2 to 3 ft. |
| 2000 | Spirea Thunbergii, 2 to 3 ft. |
| 4000 | Snowberry, 2 to 3 ft., 3 to 4 ft. |
| 3500 | Indian Currant, 2 to 3 ft., 3 to 4 ft. |
| 1500 | Spirea Salicifolia, 2 to 3, 3 to 4. |

C. M. Hobbs & Sons, Bridgeport, Indiana

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA. MARCH 1920

No. 3

Cotoneaster Acutifolia

In the January issue of the National Nurseryman, we published an inquiry asking for information about *Cotoneaster acutifolia* from any of our readers who may have had practical experience with this plant.

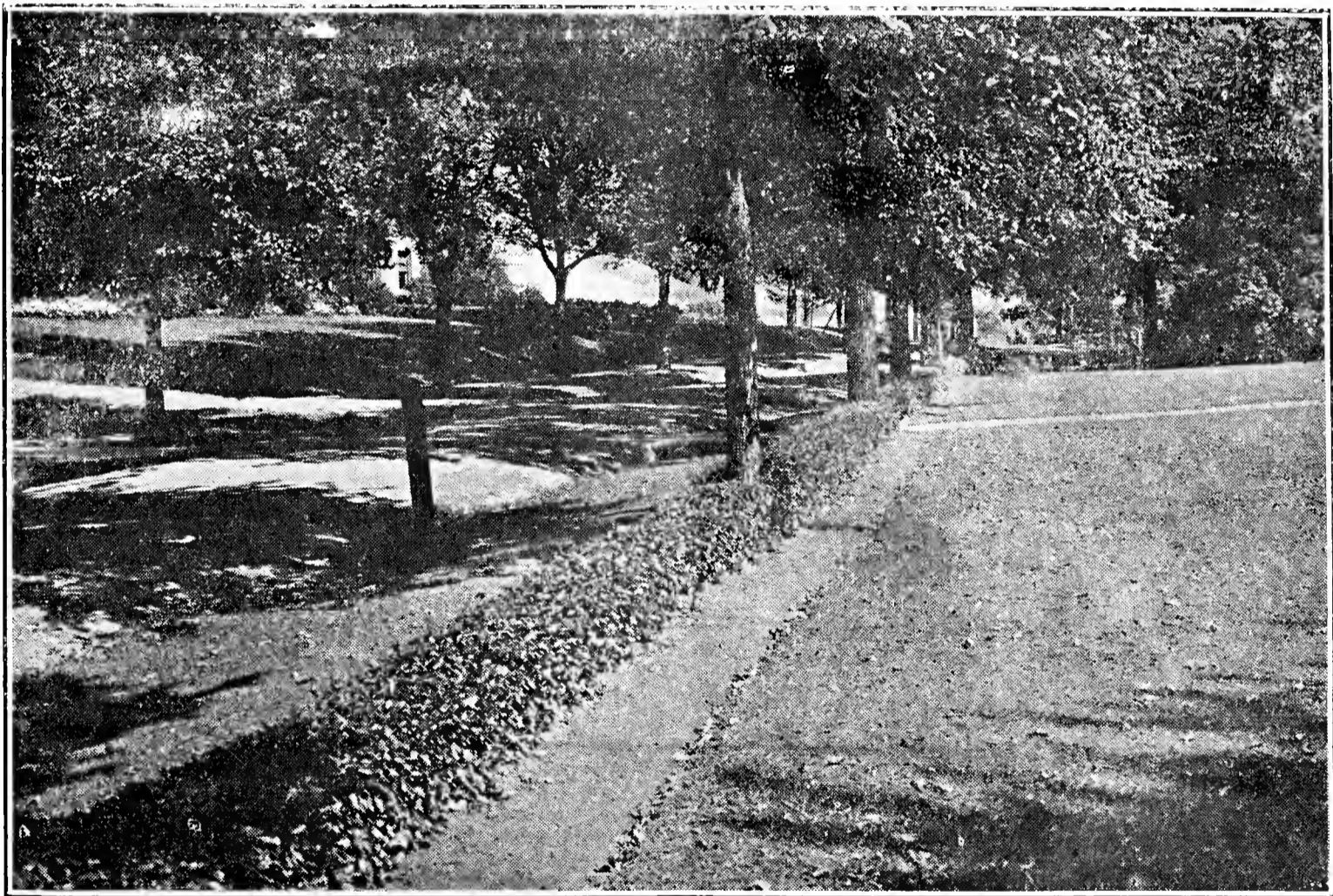
Mr. J. A. Young, president of the Aurora Nurseries, Aurora, Illinois, very kindly sent the following information:

Its growing range for hardiness extends well north into Canada, east of the Atlantic Coast and west of the Pacific. It is one of the few shrubs that can be grown successfully as a hedge plant throughout the cold wind-

groups on account of its splendid fall color of its foliage. In summing up the merits of this plant, it is certainly a most valuable acquisition to our list of shrubs that have been offered to the trade in recent years.

LeRoy Cady, Associate Professor of Horticulture, University of Minnesota, says—

Cotoneaster acutifolia probably came originally from the Orient by way of the Kew Gardens of England and into this country probably through the Experiment Station at Ottawa, Canada. It is one of the most attractive



Cotoneaster acutifolia used as a hedge in Minnesota

swept regions of Minnesota. It will stand any amount of shearing and its appearances are equally as attractive clipped either in formal outline or permitted to take a more natural growth. It is an individual shrub and assumes a slender, gracefully arching growth with leaves of shiny green. The flowers are white, borne the entire length of the stems. Each flower is followed in the autumn by a black berry. This fruit remains on the shrub until late in the autumn. After the first frost in the fall, the foliage assumes an attractive scarlet color immensely attractive. It is an excellent plant for large

shrubs for hedge purposes, especially clipped hedges. The plant is one of the earliest to leave out in the spring and one of the last to lose its foliage in the autumn. The foliage is dark green, glossy or shiny, and in the autumn on some soils takes on the autumn colors very nicely. The plant has given a good account of itself at University Farm for some ten or fifteen years.

The Aurora Nurseries are specializing on this plant as they consider it one of the best possible hedge plants for the northwest in addition to its value as an ornamental shrub.

WESTERN ASSOCIATION OF NURSERYMEN

*Address of President Earl D. Needham at Kansas City,
Mo., January 28, 1920*

Gentlemen of the Western Association of Nurserymen:

EACH one of us came here today for profit. The 30th annual meeting of the Western Association of Nurserymen will be better than those of former years, or not so good, more profitable, or less so to each of us, depending entirely upon our action during the next few hours and tomorrow. If you don't like what is said or done, say so now! Possibly a mistake is about to be made and your judgment is now very much needed. If the thing you think should be said or done is left unsaid or undone, speak up! Whose meeting is this, anyhow? It's your advice we want—that is what we came for.

Your committees have been at work for your best interests as will be shown by their reports.

The Program Committee has arranged a program that I believe will prove of unusual interest, but not of interest alone. It will doubtless be of help to each nurseryman whether producer or distributor. The papers on trade relations will open up avenues where each branch of the industry may appreciate more fully than ever before its obligations to the others.

LOCAL ORGANIZATION

Most of us belong to the "Mother of Nurserymen," The American Association of Nurserymen, at least each one of us should. While the A. A. of N. is best able to attend to some features of our business, it is nevertheless important that local or district organizations be maintained.

Nurserymen should become identified by attendance as well as by payment of dues to their State Horticultural Societies. Really it is a pleasant surprise to some members of these Societies to find that nurserymen wear no horns and look and act like other honest merchantmen.

Through the State Horticultural Societies and State Nurserymen's Associations, much good and constructive state legislation can be started on its way. It will stand us well in hand, I think, during the next few years to take the initiative in the matter of legislation and see that our policy be a positive rather than a negative one.

If one half as much effort as well as money had been spent in a positive program starting desirable legislation, as has been devoted to killing undesirable legislation, our business today would be on a far more satisfactory basis. The desirable, progressive, legislation we most need is to be had through the State rather than the Federal Laws. The vital importance of strong local Nurserymen's Organizations and Horticultural Societies in which the influence of nurserymen is felt is, therefore, readily appreciated.

PROPOSED APPROPRIATIONS

Your attention will be called to the work of the American Association of Nurserymen before the House Committee on Agriculture in endeavoring to secure appropriations for the work proposed in the former Gould Bill and also for a crop report furnishing information

as to the amount and size of nursery stock throughout the United States.

The former we should have at once in view of the attitude of the Bureau of Plant Industry towards Quarantine 37 and without any doubt we are entitled to the crop report.

An action of this body properly expressed to Hon. Gilbert Haugen, Chairman of the House Committee on Agriculture, may prove of considerable assistance in securing these two very desirable appropriations.

BUSINESS METHODS

During these times when it is so difficult to secure many varieties, there is a good deal heard about stock being untrue to label. I am somewhat surprised that an old practice of mis-labeling is not so dead as many of us had supposed. This practice is more likely to prevail among nurserymen who do not take the advantage of the benefits to be derived from membership in the different Associations now open to them. Therefore, it is quite apparent that one of the activities of an organized association must be the raising of the standard of business ethics of non-members as well as that of members.

Not one of us would buy an automatic revolver for our young son to play with. We would protect him and ourselves by keeping that dangerous thing out of his hands, nor would we sell such a revolver to our neighbor so that he could give it to his small son for a toy. We would do all we could to prevent that. Are we then going to sell to the tree dealer our surplus M. B. Twig when we have good reason to believe he will not hesitate to label them Delicious? Is our business any safer and does the nursery business suffer less when it is the tree dealer instead of ourselves who sells M. B. Twig for Delicious?

The members of the W. A. of N. should not, and I believe do not, need any caution about their own labels, but we all need to be careful that we do not become a party to the offence, by permitting the other fellow to sell our surplus under a wrong label. Care, more than that which evidently has been given this matter in the past, must be exercised or else we shall get some very drastic legislation, which our rather loose methods now invite.

VIGILANCE COMMITTEE

Special interest by many nurserymen is shown regarding the work of the Vigilance Committee. This committee rightfully assumes the position of a Clearing House, or a place where complaints can be properly lodged against any unethical practices of those connected directly, or indirectly with our industry. It is hardly fair to assume that this committee should itself secure the information necessary to make its work effective. This burden is upon our shoulders individually. Practices which are unfair to the trade when called to the attention of those guilty are frequently discontinued regardless of the fact whether they hold membership in this, or any other Association. The moral effect of an action of an Association is far greater than many may at first suppose it to be.

When such unethical practices are not discontinued it is well within the power of the different organizations of the nursery business to bring considerable pressure to bear, so that in the end, fair and honorable prac-

tices may prevail in order that the nursery business may be maintained on the real high, broad plane it deserves.

QUARANTINE

I shall have but little to say on quarantine 37. Unfortunately nurserymen are not of one opinion regarding this order but the way things are now developing it begins to look as though before long we will all know where we stand on this matter.

In a hearing before the house committee on Agriculture this month, I am advised that Dr. Taylor, Chief of Bureau of Plant Industry, made a statement to the effect that it was the plan to eventually cut out importation of all plant material. Users of Mahaleb and other imported seedlings will then more fully feel the effects of quarantine 37.

There is at this very time a hearing being conducted by the Horticultural Board regarding a proposed quarantine prohibiting the shipment from a certain part of New Jersey, of all nursery stock, farm produce, etc., to any point outside of that state. It is more than probable that this proposed quarantine will become effective, for the history of these hearings would indicate that they are merely to conform with the law and that always the proposed quarantine, with only one exception, has been adopted.

If this quarantine becomes effective, one of our leading nurserymen will be hit hard. True, his place is far away but how long will it be before we may expect similar quarantines here in the middle west? Why should we assume we are immune from such orders? Are we willing to be confined in our business to our own State borders? There are some men, and they are ones of influence and authority, who now believe that such a plan is the proper one to follow in order to most effectively combat insect pests, etc.

One significant thing about this late proposed quarantine, is that it strikes at the farmers. The farmers are close together, not 50 to 100 miles apart like us, and enough blows by this board directed towards the farm interests may have a strong tendency to eventually curtail its power.

As you know, the Federal Horticultural Board sits as Judge, Jury, Prosecuting Attorney and Warden of the Penal Institution. They are the whole show. They do not travel around to hold their hearings in the districts effected, but require the dissenting voices to come to them at Washington. This is surely unfair and prevents many from making the necessary efforts to secure their rights.

An opportunity presents itself to the legislative committee of the American Association of Nurserymen to take some possible action along lines that will bring about a re-organization of this Federal Horticultural Board, wherein the nursery interest may have proper representation and hearings may be held within the effected districts.

Your attention is called to the advisability of presenting a proper resolution to the American Association of Nurserymen, urging its Legislative Committee to go into these questions and pledging ourselves to assist them in any possible manner.

MARKET DEVELOPMENT

Market Development is an activity of the American

Association, still it is a matter of vital importance to every nurseryman, especially ourselves. There has been some criticism offered, that Market Development has not so far meant anything to the nurserymen this year. Quite true. It is also suggested that with stock so scarce that there is none for sale, there is no need for Market Development now. But, is it true there is no stock for sale? Most retailers have a large quantity of stock on hand unsold which they hope to sell between now and April first but Market Development won't help very much in selling any of that stock.

Market Development is looking towards the future and when the nurserymen appear with large stocks there will be no time in which to develop a market to absorb them. The time to dig bait is before you go fishing.

The Market Development Committee was convened this month by President Moon and under the chairmanship of O. J. Howard of Pomona, N. C., and decided upon a plan of activity for the next few months. This plan is broad enough to meet the requirements for most nurserymen and will be fully explained to you by Secretary Watson.

We have a duty to ourselves, to our local organization, to our parent organization and the welfare of this industry, to hold steady, remain firm, and try out the policy of those we have placed in charge of our affairs and to give this new advance plan of our organization a thorough trial, giving it all the help within our power, that the work which has been started may be put over in a big, broad constructive manner.

I, therefore, urge upon you the desirability of endorsing the action of the Market Development Committee of the American Association of Nurserymen by proper resolution to be sent to the officers of the American Association of Nurserymen and published in the trade papers.

TRADE RELATIONS

The nursery industry of today is one of specialists. No longer does the nurseryman take his customer through his plant and assemble his purchases as he goes along. System has now taken the place of this haphazard method. No longer does the average nurseryman boast truthfully that "I grow all the stock I sell." Specialists have taken his place.

It has been determined that the very climatic condition of certain places permit the growing of a better shrub than can be grown at another place, where possibly fruit trees, or maybe evergreens or strawberries apparently do best. This has resulted in most nurserymen specializing along the lines that do best in their territory and prove most profitable to them. Some of these nurserymen are growers only, leaving the distributing to others who specialize in that part of the work and thus we have the wholesale and the retail men, both identically interested in the same thing—the planting and growing of more trees, shrubs, etc.

These retail nurserymen, whether they sell through catalog or salesman, are supposed to be the distributors of all the stock produced, not only by themselves, but also by the strictly wholesale men. With this arrangement in effect, as it now exists, does it not become apparent to all that a very close relation exists between

both branches of the nursery industry, and that neither branch may be, or become, independent of the other without disturbing the whole scheme of affairs. If this plan, whereby the producer of the stock leaves to the retailer the task of distributing his wares, is most profitable for us, as it has so proven to be in other lines of merchandising, then can the factory be a stranger to the sales force or must each understand the problems the other must effectively meet before success is attained?

TRADE CONDITIONS

Reports received from all sections of the country and branches of the industry indicate from an immediate financial view point that business is good. In volume business is away ahead of former years. In most cases, stock has been sold at a price which nets the seller a handsome profit. The price which ten months ago seemed unreasonably high, now appears very low, however, it must be remembered that the prices named then for stock to be delivered this coming spring, contemplated every business cost that has developed in the meantime, therefore no money has been lost by those early sales. It is more than probable that had not those early sales been consummated, the present high level of prices would not yet have been reached. Early sales have reduced the supply available for the late buyer who wishes to secure his retail orders first, then buy what he needs to fill them. His frantic efforts have no doubt been somewhat responsible for the latest price increases. Surely the grower can not argue that his business even though secured at a higher price is really more profitable to him than that of the early, dependable, and regular buyer.

It is thought by some of the best informed nurserymen that while there is an apparently small supply of stock available at wholesale, that nevertheless there is in most items, sufficient quantities available to fill all retail orders.

This line of reasoning, if correct, is due to the fact that "wants" were covered earlier this year than usual and that retailers have been slow to unload any unsold stock, anticipating that they may yet need it themselves. Growers have been very cautious about over-selling and may possibly be undersold, so that by spring it is possible that an actual surplus may exist. If this condition develops and any fruit stock this year is burned, more than ever will each of us appreciate the need of the factory and sales force or the grower and distributor getting closer together, so that each may better understand the needs and problems of the other. Close co-operation will prevent many losses.

PRICE AND VOLUME

The same old 30 inch box still holds approximately 300 apples and but a short time ago represented a wholesale value of \$15.00 to \$25.00, while now the invoice will likely read about \$100, therefore when sales are doubled it is still possible that the volume or amount of stock used is cut in two.

Retail men are thoroughly surprised in comparing present stock requirements against those of a few years ago. While the same 30 inch box now costs twice what it formerly did and while the labor to fill it has doubled

in cost, and freight and express increased 28% to 35%, still when the value at retail price of this box filled is considered, a big reduction in operating cost is seen.

It costs less today than ever to pack out, box and ship \$100.00 worth of apple, cherry, or other fruit trees. Some price increases are at present unwarranted.

Holding firm to a fair price, refusing to be stampeded into demanding unreasonable prices, and whenever possible, offering a reduction to bring the price to a fair and normal basis, will do more to stabilize the business now and to save the profits which are now being made from filling a brush pile deficit in the near future, than any other policy, especially one of overlooking the interests of the planter in order to get the last possible penny now.

The retailer should be careful, in fact be very slow in adding one cent to the present selling price. Doubtless some items could be better cut out rather than disgust the public with abnormal and unnecessary prices.

Would it not be desirable for the growers and distributors assembled here, to express themselves in proper resolutions as being unfavorable to any business policy that will necessarily increase the selling price of nursery products?

Should we not endeavor to find more economical means in conducting our business, and by proper economy and efficient management, hold operating cost down, in order that our products, which are not usually classed by the buyer as essential to his welfare and life, may be offered to him at a price that will no longer justify him in denying himself of the best of the nurseryman's wares.



Showing a two year old plant
of *Cotoneaster acutifolia*

PUTTING OUR HOUSE IN ORDER PREPARATORY FOR THE MARKET DEVELOPMENT CAMPAIGN

*Address by Geo. Parker, Fayetteville, Ark., at Western
Association of Nurserymen, Kansas City, Mo.,
January 28th, 1920*

THE subject of "Putting our house in order" on which I have been asked to prepare a paper is one that has received more attention and more discussion at Nurserymen's Conventions the past several years than most any other subject. The best thing that could happen to our nurserymen's associations would be to forget, and forbid any reference to or discussion of this and similar subjects.

I am very sorry that the committee did not assign me the subject of "Making a market development campaign presentable for a house that is in order" in place of "Putting our house in order preparatory for the Market Development Campaign."

"You may succeed when others do not believe in you, when everybody else denounces you even, but NEVER when you do not believe in yourself." I want to make my position clear. I do not wish to be misunderstood, and I believe that most nurserymen will agree with me that ninety-nine per cent of the accusations against and criticisms of our business are unwarranted, exaggerated, and unjustified; that fully ninety per cent of the people who plant our stock do not give it proper attention.

I have confidence in the members of this association. I have confidence in the members of the American Association of Nurserymen. I have confidence in the established nurseries who have investments in the equipments for handling the nursery business. I believe that the members of this association are progressive business men. One evidence they belong to the association. Our success is commensurate with, and our growth measured by the service that we are able to render the public and the satisfaction we give our customers. No established nursery who have investments in the business, will dare run the risk and hazards and take chances on the consequences of an unscrupulous business, for, in no other business, are they so great. You will find them all striving, whatever may be their faults, toward better and more efficient methods, trying to improve the quality of their products and to satisfy their customers. For, the very nature of the business make it so that success otherwise is impossible. M. G. Kains, one of the leading horticulturists of the U. S. and an authority on this subject said: "Long experience and wide observation prompt me to say that the nurseryman is the backbone of the stock he sells; and that the number of upright nurserymen is legion. I have a considerable acquaintance among nurserymen, but I don't know one whose reputation for square dealing I can call in question. In all my dealings with nurseries I have invariably been well treated. This statement I make in simple justice to a maligned body of men the nature of whose business I know from personal contact to be peculiarly exacting, liable to earping criticism and to whose splendid work the whole continent owes a debt of gratitude which can never be repaid, for the intro-

duction and dissemination of new and superior as well as staple fruits and ornamental plants." You will find that the majority of other careful and intelligent buyers of nursery stock will agree with Mr. Kains.

Our paths are not always strewn with flowers. We have been abused by the dishonest and unscrupulous planter, by nefarious unjust and prejudiced court decisions, and by obnoxious, unreasonable and burdensome legislation.

There is one thing that we know and the public must be told of, that to handle nursery stock is different from any other line of merchandise. We have only a limited time in which to handle a large volume of business. Before we are too critical of the services rendered by nurserymen we should take into consideration circumstances and conditions often over which they have no control, such as weather conditions, railroad delays and many other things. So much is dependent on the care given trees and plants. So much is dependent on the proper planting, the fertility of the soil, the pruning, the spraying and the cultivation. Many of the complaints are caused by the planter neglecting some of these important details necessary for the success of the stock planted.

Will our house be put in order and market development be increased by a line of publicity that will demoralize and disintegrate the American Association of Nurserymen; that will cheapen prices and that will tend to lower rather than raise the high standards we have reached and desire to maintain? I wish to say emphatically no. I take it for granted and believe it to be a fact that the body of men who belong to the nurserymen's association are just as reliable, honorable, and as anxious to give a square deal as the Cement Manufacturers, the Building Material Manufacturers, the Florists, the National Fertilizers Association, the Coffee trade or the Southern Pine Association, or any other class of business men.

Then, the plan for "Putting our house in order" for the market development campaign is cooperative advertising of the established nurseries. Sales pre-suppose confidence, and desire on the part of the purchaser. The ultimate aim of all advertising is to make sales and profit for the advertiser but before you can make sales confidence must be established. Thus it is as necessary to direct advertising toward a basic foundation as it is to direct solicitation of sales.

A study of the various national cooperative advertising campaigns and industries akin to the nursery industry shows conclusively that such advertising has put their houses in order and has gained for them permanent and profitable results not only to the associations and industries as a whole but especially to each individual member.

Cooperative advertising by nurserymen would remedy many of their troubles because many of these troubles no doubt are caused by the public not being properly informed.

Nurserymen do not stress sufficiently in their own mind the importance or the dignity of their vocation." We talk about ourselves and each other, permit the public and the press to disparage and stigmatize us without resentment but do we say enough and is

there enough said about the good deeds and the work we are doing?

Picture a house—we could not well call it a home—bare of flowers, shrubs and shade trees. The picture is one of cold desolation.

Then picture that same house—a home now—with flower gardens, blooming shrubbery, the beautiful foliage of carefully selected trees. You have changed the picture to one of warmth, beauty and living delight. One of the good deeds of a nurseryman.

It seems that there must exist somewhere a "House that is in order," a very fine house. One that it has taken years of hard labor to build, a magnificent structure, the furnishings complete, the furniture well arranged, the color scheme well carried out, and the pictures on the wall artistically hung.

Very few people know of this house and they are now demanding that we tell them where it can be found. It is our duty to tell them of this house and to throw back the curtains and let the light of publicity enter therein and show up its beauty and purify the air and there will be seen with delight a "House that is in order."

Certainly it seems that nurserymen have products that appeal to the great majority. Does the average home owner, especially in the city, realize the value of an apple, cherry, plum or pear tree in the back yard? Not many, surely. Yet advertising would bring out that suggestion and give the impulse to plant fruit trees.

They also have a great organization composed of established nurseries who are responsible financially and otherwise and are in a position to give satisfactory service to the planters of nursery products. Yet the great majority may not know it. They must be told. They must be educated, informed.

There is more necessity, more urgent demand, and a greater opportunity for the advertising of an association of established nurseries than of any other business that can be thought of. You go to the lumber yard to buy some two by fours for your packing house, or lumber for tree boxes, or to build a house. You can easily judge for yourself as to the quality of this lumber. It is immaterial to you whether the company has been in business one day or is going out of business tomorrow. Not so with nursery stock where the quality can not be told for several years.

It is just as important that we keep our house in order as it is that it should be put in order. There is no doubt that a cooperative advertising campaign would prove lastingly beneficial as well as profitable to members of the American Association of Nurserymen and would keep our house in order by performing the following functions:

First, by creating needful appreciation and instilling confidence.

By giving wide spread information regarding nursery stock and its value.

By creating a desire for our products.

By increasing sales.

Gentlemen, I repeat it gives me great pleasure to say that I believe our house is in order; that we are ready, willing, and can safely guarantee to the public a square deal from any member of our association.

The feast is spread and everything is in readiness for us to enjoy the great business that will come into our hands through a campaign of cooperative advertising. I do not like to revert to the subject or to even think of it that there might be those in the association whose methods are not up to the high standards that have been reached and attained through years of growth but should there be, as the showers from Heaven that increase the flow of water in the streams and cause the stagnant pools to be purified, so will a campaign of cooperative advertising that will bring us closer together and make us realize more fully that "United we stand, divided we fall" will help us keep our house in order and purify and cleanse and bring in line any brother nurseryman whose methods might not be up to what is desired.

NEW BOOKS OF INTEREST TO THE NURSERYMAN

ESSAYS ON WHEAT

The title of this book, *Essays on Wheat*, hardly suggests a story that has the interest and readableness of a romance, yet such it is. Tables and statistics in it, yet it is one of those books anyone is likely to become so fascinated as to read it at one sitting.

There is food for thought in the foreword by J. Henry Fabre:—"History . . . celebrates the battlefields whereon we meet our death, but scorns to speak of the plowed fields whereby we thrive; it knows the names of the king's bastards, but cannot tell us the origin of wheat.

That is the way of human folly."

It is by A. H. Reginald Bullet, Professor of Botany at the University of Manitoba. Has fifty illustrations. Published by The Macmillan Company, New York. Price \$2.50.

OHIO NURSERYMEN MEET

The Ohio Nurseryman's Association met at Deshler Hotel, Columbus, O., January 28th, and following program was rendered.

Perennials as a Nursery Crop—W. F. Bohlender.

Value of a Cannery in conjunction with Fruit Growing—A. R. Pickett.

Evergreens from Cuttings—T. J. Dinsmore.

The Relation of the Inspection Service to the Nurseryman—E. C. Cotton, Chief, Bureau of Hort.

The Future of the Nursery Business—J. H. Dayton.

Labor Saving Devices for the Nurseryman—W. B. Cole.

There were about forty in attendance and an interesting meeting held. Out of state guests were Hort. Bowden, Geneva, N. Y., and J. F. Donaldson, Sparta, Ky. Officers elected for coming year are President, W. F. Bohlender; vice president, Charles Ernst; Secretary, W. N. Searff, and Treasurer, A. R. Pickett.

The Market Development Committee held a meeting in New York City on January 13th, and during the two days that followed. O. Joe Howard was appointed chairman of the Committee.



SPRAYING MATERIALS.

In the markets, fruits and vegetables are graded as sprayed or unsprayed—higher prices being asked and paid for the sprayed grades. This is logical with shrubs, etc.

We Manufacture High Grade SPRAYING MATERIALS—consequently our guarantee stands for something:-

Bordeaux Mixture
(Paste & Powder)

Arsenate of Lead
(Paste & Powder)

Fish Oil Soap

Calcium Arsenate
(A most efficient poison for the Least Expense)

Blue Vitriol

Led-Bor

(Bordo-Lead of highest analysis)

Kalidor

(Virulent poison combined with Bordeaux Mixture in powder form.)

Egg Preserver

(Water Glass)

Paris Green

(Special Mixtures, Etc.)

Write for interesting literature on Spraying materials, Insecticides, etc.



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Columbus, Ohio.
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Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

March, 1920.

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

IN STORAGE

Immediate Shipment

STANDARD PEAR, 11-16 inch

| | |
|------------|-------------------|
| 400 Anjou | 500 Bartlett |
| 500 Clapps | 1000 Duchess |
| 200 Wilder | 100 Worden Seckel |

STANDARD PEAR, 5/8 inch

| | |
|-----------|-------------------|
| 200 Anjou | 100 Clapps |
| | 200 Worden Seckel |

STANDARD PEAR, 1/2 inch

| | |
|------------|-------------------|
| 200 Anjou | 300 Bartlett |
| 100 Clapps | 500 Worden Seckel |

DWARF PEAR, 5/8 inch

| | |
|------------------|--------------|
| 300 Anjou | 800 Bartlett |
| 400 Clapps | 2000 Duchess |
| 150 Louise Bonne | 200 Mary |
| 300 Seckel | 300 Wilder |

DWARF PEAR, 1/2 inch

| | |
|------------------|---------------|
| 300 Anjou | 1000 Bartlett |
| 300 Clapps | 100 Lawrence |
| 100 Louise Bonne | 100 Seckel |

QUINCE, 5/8 inch

| | |
|--------------|-------------|
| 460 Anger | 100 Borgeat |
| 400 Champion | 100 Meeches |
| | 400 Orange |

QUINCE, 1/2 inch

| | |
|-------------|--------------|
| 720 Anger | 300 Champion |
| 200 Borgeat | 400 Meeches |
| | 400 Orange |

QUINCE, 3/8 inch

| | |
|-------------|--------------|
| 100 Borgeat | 100 Champion |
| 200 Meeches | 500 Orange |

W. B. COLE

Painesville,

Ohio.

The National Nurseryman

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The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed. Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., March 1920

Subscribers to "Nurserymen's Fund for Market Development"

PRACTICAL EXPERIENCE We are all shy on practical experience, in fact it is one of the chief causes of the present disturbed conditions of the world. If the Kaiser had had a little more practical experience in war and not so much theory he would have used all of his power to have prevented it instead of planning to bring it about.

If we had more practical statesmen we should not have so many foolish impractical laws and if there were more practical nurserymen we should not be pestered with so many unsound theories that are being tried out as eurealls.

It seems to be an unfortunate rule that real workers are seldom talkers, teachers and writers.

The man who really knows accomplishes but does not say much and is likely to be overlooked by the teacher as a source of knowledge.

We are all interested and will usually listen to theories on health and sickness by anyone who is entitled to prefix his name with Doctor, but when we are real sick and it is a case of life and death, we prefer a man who has had much practical experience as well as a good education.

A lasting impression was made on the writer as to the value of practical experience even without education and in medicine by being associated with a hospital nurse whose duty it was to receive all the patients brought to the hospital.

His prompt diagnosis was wonderful, pneumonia, typhoid, and other diseases were identified at sight. When asked how he did it the reply was because I see so many, some I can tell by the smell, others by the appearance of the eyes and lots of ways I cannot explain.

It is exactly the same with the plantsman, the man who handles plants by the thousand through the seasons and under varying conditions gains a knowledge about

them he cannot impart to others and which the other fellow however well educated cannot acquire except by the same method.

He seems to know instinctively the conditions which will bring disease and pests also the reverse, what will bring health and vigorous growth.

Belief is all too general that plant diseases and pests are visitations to be feared. It would be far better if they were considered perfectly natural and the result of ignorance and poor culture.

While epidemics will occur when conditions are right for the spread of it, there is much truth in the bull made by the Irish plantsman "If you keep your plants healthy and growing disease and bugs won't bother em none."

THE NEW SECRETARY OF AGRICULTURE. The appointment of Edwin T. Meredith of Iowa, to succeed D. F. Houston as Secretary of Agriculture gives

the Horticulturists of the country an opportunity to represent their case of quarantines and embargoes to the department for reconsideration, as we venture the opinion that Mr. Meredith might with grace give more heed to the requirements of the Horticultural trade than his predecessor.

Being a journalist he will be familiar with the growing dissatisfaction with the arbitrary powers of the Federal Horticultural Board.

COOPERATION BETWEEN SCIENTIFIC HORTICULTURISTS AND NURSERYMEN

Read before the S. D. Hort. Society, January 20, 1920, by Max Pfaender, with the Gurney Seed and Nursery Co., Yankton, S. D., formerly horticulturist at the Northern Great Plains Field Station, Mandan, N. D.

THE title of this paper no doubt, at once, calls attention to the fact that the speaker assumes the existence of these two distinct classes of horticulturists, namely: the scientific horticulturists and the nurserymen. There are, of course, other classes which affect the horticulture of a state, section or country but I have chosen these two for my discussion as I am most familiar with the aims, work and results of these two particular groups. And no doubt these two play, by far, the most important part in the development of a better horticulture of any state, section or country.

I believe that these two groups are more or less organized into state, sectional or national associations or societies. But it has also been deeply impressed upon me in my career, both as an experimentalist, or scientific horticultural investigator and as a practical nurseryman, that there has not been that cooperation between these two groups which would produce the greatest possible results for the public. Each group has followed its own destiny, each ignoring the other's existence.

The scientific horticulturists in many cases have confused the real nurseryman with the proverbial tree peddler and have therefore, very illogically however, stamped all nurserymen as profiteers, grafters or swindlers.

On the other hand the nurserymen have likewise un-

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warrantedly classed most scientific official horticulturists as impractical chair warmers and theoretical dreamers.

Whenever two groups of individuals are being compared I have always taken the stand that there are good and poor individuals in both and that is the way I feel about the two groups now under discussion.

I am also glad to say that it is a well known fact that the legitimate nurserymen have taken decisive steps to eliminate all individuals that are not conducting a first class, fair and square business.

Since there was no organized effort here in the northwest towards any cooperation between these two groups for their mutual benefit as well as for the interest of the public, and realizing the necessity and value of such cooperation, the speaker was instrumental in bringing together at Mandan, N. D., on August 23 and 24, 1918 a representative number of official horticulturists of the Northwestern States and the Canadian Provinces north of us, which resulted in the organization of the "Great Plains Official Horticulturists Association." The objects and purposes of this association in brief are: the coordination of horticultural investigations, the stimulation of interest and mutual assistance, the encouragement of proper and consistent horticultural publicity and last but not most important of all the adoption of a comprehensive plan of commercial cooperation.

Our second annual convention was held at Winnipeg, August 16th to 20th, 1919. At both meetings a number of representative nurserymen as well as horticultural writers were present on invitation from the association. The association is now definitely organized with a number of standing committees that are pretty much alive and right on the job.

The one committee that I wish to mention in particular is the one on commercial cooperation of which the speaker was made chairman. Other members of this committee are Mr. Patmore, of the Patmore Nursery Co., of Brandon, Man., Mr. Heckhouse, of the Prairie Nurseries Co., Ltd., of Estavan, Sask., and Mr. F. E. Cobb, of the Northern Great Plains Field Station, Mandan, N. D.

While the membership of the association is limited to official horticulturists, i. e. those employed by the state or federal government, still nurserymen are urgently requested to attend our meetings and to participate in all our deliberations. It is also specifically provided for that nurserymen may serve on standing committees. In this capacity it will be seen, that the nurserymen can be of great service in bringing about that closer cooperation between these two groups. It should also be mentioned that this association actually takes the initiative in the matter of commercial cooperation. The committee on commercial cooperation is to serve as a clearing house and as a go-between for bringing together the scientific horticulturists and the nurserymen. This means that it will assist nurserymen to secure all possible information of value to them, and such new varieties as are available for distribution as well as promising experimental material that might be of use to nurserymen. In order to make such a committee most effective it seems that committees of the several nurserymen's associations might be appointed for the purpose of getting together with and working hand in hand with our committee on commercial

cooperation. As soon as the work of this committee is organized it is intended that it will issue a brief report or statement giving what information and what plant materials may be available that might be of value to nurserymen in the northwest. Such reports are to be sent to all nurserymen in this section. The committee also wishes to secure from organized nurserymen or from individuals such suggestions and helpful criticisms as will assist scientific horticulturists to plan proper experimental work and to develop such new fruits and plants as are wanted by the nurserymen for their trade.

In the past, due to the lack of any suitable system of commercial cooperation, several outstanding cases of successful individual effort have appeared: the work of our own Dr. Hansen having been the most unique and effective system that could have been devised. Federal stations unfortunately can not adopt such a system due to the regulations. The Minnesota system has also been effective in getting new varieties into the trade. Iowa has also done considerable work along this line.

Little else has been done in the Northwest by other state or federal stations in any attempt towards commercial cooperation. With an effective system of cooperation and with both groups in the congenial state of mind and being desirous of mutual assistance, no doubt, much good will be accomplished.

For the most effective cooperation, it is absolutely necessary that the scientific horticulturist and the nurseryman meet on the level. They must have that true respect for each other which alone can be the welding link for a real cooperation which will make it possible that the results of the scientist will find their broadest application. For the data and information as well as the new creations in the plant world are of little value if these are not properly distributed and disseminated. And we all know that the nurseryman thru his catalog or agent as well as thru his products is one of the chief agencies of horticultural propaganda. He takes a new variety and makes it available to the public, he gets information from the experimentalist as to a good stock for certain purposes and grows and uses them in his trade and in this way he gets many good things before the public that would otherwise not become disseminated.

So far I have largely emphasized the value that the scientific horticulturists can and should be to the nurserymen but looking at this matter of cooperation from the other standpoint it becomes evident that the nurseryman can also be of considerable value and assistance to the scientist. Nurserymen can and gladly would assist the scientists in the testing of new and promising varieties especially in regard to their ease of propagation. They would also be glad to cooperate in propagation experiments as these could be conducted very often at no extra expense. When such experimental work is initiated however, a number of practical nurserymen should be consulted before such projects are definitely decided on.

Another phase of cooperation is that of horticultural publicity. Unfortunately, at present, most nurserymen are obliged to conduct their own publicity or educational campaign. In this matter of the dissemination of horticultural information there is no consistency or coordina-

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tion and uniformity. The federal government may send out a bulletin containing information on a certain important horticultural subject, applicable to a group of states. The states of this group may have a bulletin on the same subject but not at all in harmony with the government bulletin, or the states have no bulletin on the subject. Then the leading farm papers of that section may discuss the same subject in their columns from time to time without agreeing with either the state or the federal bulletin. Then aside from these three disagreeing discussions of the same subject a number of nurseries supply information in their catalogs, pamphlets or descriptive advertising matter according to their best judgment. In this case I am referring to a specific case and no identifying details have been given. A number of such cases can be cited. But this example shows the lack of cooperation in horticultural publicity and has been discussed because it affects both the scientist and the nurseryman. With these four or more sources of information, each one differing from the others, the public is at a loss to know what authority to follow. For this reason it would be advisable for the nurserymen of any particular section to request a more uniform supply of information. It might be possible for them to get the state to supply them with good practical bulletins on horticultural subjects which the nurserymen should be permitted to distribute to their customers on request. Many individuals prefer to take and follow information when it comes from a nursery that they are doing business with than from an experiment station that they often didn't know was in existence.

Many other facts might be brought out that could be properly included in this discussion but enough has been said to show that there is a great opportunity to assist in the development of a better horticulture by encouraging a real whole-hearted cooperation between scientific horticulturists and nurserymen.

I would be very glad to get all possible information and constructive criticisms on this subject from individuals of both groups. Our goal can not be reached in one or two years but the sooner we, of both groups get busy and make an earnest attempt to meet each other half-way and on an equal plane the sooner will we both profit thereby and great benefit will result to the public which needs our services and our goods.

It seems that up to the present time, with a few exceptions, the two groups have made no attempts to get together but from what I have observed, I feel certain, that once they do so they will be surprised at what line fellows the others are. There are so many broad-minded individuals endowed with good common sense in each group that when they meet, as they now have twice, on a small scale, they will soon become friends and each will realize that the other has some good points as well as some redeeming features. They will become greatly interested in each other because each can learn from the other, this can not be denied. We will overlook and forgive the small number in each group who feel they know it all. So my plea is let us get together, let us discuss our mutual problems, let us benefit by each other's experiences and let us help each other, then we will have cooperation.

A PROPOSED CORN BORER QUARANTINE

The Federal Horticultural Board Holds a Hearing

The Federal Horticultural Board proposes to quarantine New York, Pennsylvania, and all the New England States, prohibiting the inter-state movement of corn and broom corn, including all parts of the stalk, green or string beans in the pods, beets with tops, spinach, rhubarb, oat and rye straw as such or when used as packing, cut flowers or entire plants of chrysanthemums, asters, cosmos, zinnias, hollyhocks, also cut flowers or entire plants of gladiolus and dahlia, excepting the bulb thereof, without stems, and many other herbaceous plants, and in conformity with the notice of January 30th, held a public hearing at the office of the Board, in Washington on February 24th.

In opening the hearing Dr. Marlatt stated that this was but one of several hearings that had been held on this subject, that the result of the first hearing had been to establish quarantine covering corn in the infested areas of Massachusetts, but that up to the present time no other federal quarantine had been placed as so little was known of the activities or results of the Borer and new infested areas were continually being reported.

So many states are now placing quarantines on account of the Corn Borer, the department has been urged to take some action to forestall further state quarantines.

The agents of the department are making exhaustive surveys in certain districts, especially in New York and New England and every effort is being made to discover the present boundaries of the infested areas.

Massachusetts, New York and New Hampshire have already placed state quarantines. Wisconsin, Illinois, Florida, Washington, and Canada have quarantined certain states on corn and some have included nursery stock. The Board has already asked that modification of these quarantines be made in some of these states.

Any quarantine action which the Board takes now must necessarily be provisional and as an aid to state quarantines.

Mr. Caffrey, who is in charge of the investigations being conducted by the Board, said that the work largely up to the present time was to determine the limits or spread of the borer. In Pennsylvania it covered a very small area.

In many of the plants it is proposed to quarantine, it occurred only where corn or weeds were badly infested, and these plants were included in the list only because it indicated that the borer would take to them under certain conditions. Dahlias and bulbs are not dangerous carriers and even this may only occur when the stems are attached to the tubers.

He thought that a quarantine should only be placed on badly infested areas and should not prevent the shipment of plants that are found to be clean or from uninfested areas.

Detail maps were exhibited showing where the borer has so far been discovered. These maps indicated that it was confined to certain limited and well defined areas in Massachusetts, New York, and the northwest corner,—Erie County,—of Pennsylvania.

In the discussion which followed, it was stated that in many fields and gardens where cultivation had been thorough; not a trace of a borer had been discovered, and that good cultivation and prevention of weed growth was one of the best methods of eradicating the insect.

Dr. Britton, Connecticut State Entomologist, said that he had done considerable scouting in his state and found evidence of the borer. He is not in favor of applying a quarantine to states or portions of states that are not infested and did not think it right that the entire state of Massachusetts should be quarantined. He felt that the quarantine should be taken off the unaffected areas. One of the hardships to nurserymen, is the placing of quarantine on straw which is so largely used by them as packing material and for which there is no suitable substitute.

Wallace R. Pearson objected to the blanket quarantine on chrysanthemums. Hundreds of thousands of these plants are grown from cuttings and sold broad cast all over the country as small rooted plants and it was very clearly shown that these small plants were not attacked by the borer. He also feels that the quarantine should only apply to areas affected and that every energy should be spent in cleaning up infested sections and that nurserymen, whose premises were clean should be given certificates permitting them to ship their stock. "Get the people with you to help clean up," he said.

It was freely stated by several of the speakers, that while trying to warn the citizens in the infested districts of the danger of the Corn Borer, it had stirred up uneasiness in other states.

Dr. Marlatt agreed that this alarm was probably greater than the actual conditions warranted.

The Massachusetts Commissioner of Agriculture said that if the Federal Board agreed that if the danger of the spread of the borer is not so great as it has been made to appear, he hoped

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John Watson, *Executive Secretary.*

PRINCETON, New Jersey.

they would continue to do everything possible to allay this alarm and hysteria which seems to be sweeping the country. The greatest danger appears to be in Sweet Corn. He suggested that Federal quarantines be added to state quarantines in infested areas and on corn products but not on shelled corn which does not carry the insect, this, he said, would give greater confidence to the western states than would mere state quarantines.

William Pitkin, speaking for the American Association of Nurserymen, said that there was one point not brought out so far in the discussion which had taken place but which he hoped to see taken up as it was something in which the nurserymen were greatly concerned. He referred to the Michigan, Wisconsin and other states which have already placed quarantine on shipments from most of the eastern states within the last few days.

This activity indicated undue alarm. A copy of the Michigan quarantine of February 14th contained a longer list of quarantined material than had heretofore been mentioned and covers Connecticut and other states in which up to the present time no corn borers had been discovered.

He had hoped to see representatives from these more western states, so they could tell us just what they wanted and discuss with the authorities of New York and other states affected by the quarantine as to just what they wanted to afford them reasonable protection and to suggest something that would be satisfactory to all around.

"We are not directly interested, he said, in some of the articles it is proposed to quarantine, but we are interested in trees and shrubs. Nurserymen have booked large numbers of orders for March and April shipments and there should be an early modification of some of these state quarantines so as to permit nurserymen in unaffected districts to make shipment of these orders in proper season."

"I had hoped that we could get together today to have modification of these quarantines made and to discuss these more serious problems."

"Nurserymen are and have always been ready to cooperate with the Federal Board. We are in hearty agreement with what Dr. Marlatt has said in so far as the nursery business is concerned and feel sure that we will be very well taken care of as far as conditions will permit."

"What can the Board do to help us out when the state quarantines are now in effect. That is what the nurserymen are trying to find out and we hope that there will be no unnecessary burdens placed upon us."

Dr. Headley, New Jersey, said that the present flock of state quarantines is largely due to the lack of action by the Federal Board and that there will be more state quarantines coming right along. Federal action will help stop these state quarantines, but should cover only infested areas.

C. H. Perkins, 2nd, chairman of the Legislative Committee of the American Association of Nurserymen said "We heartily agree with Dr. Headley, we are willing and glad to cooperate with the state authorities and the Federal Board and hope that early action will be taken and plans devised so that nurserymen will be able to make shipment of their orders under reasonable regulations."

Prof. J. G. Sanders gave an outline of the work done in Pennsylvania. Only three borers had been found in one hill of corn in Erie county. One hundred and fifty square miles in that section of the state had been thoroughly gone over without further results and this same territory had been later covered by agents of the Federal authorities, who had found no infestation, nor have any borers been found in any other part of the state.

He believed that some of the western quarantines had been drawn hastily, especially those which included Pennsylvania in their quarantines. He further stated that in the field where the three borers were first discovered, he had caused the entire field to be cut and the corn carefully examined but no further traces of the borer were discovered. "Why quarantine the entire state of Pennsylvania" he said.

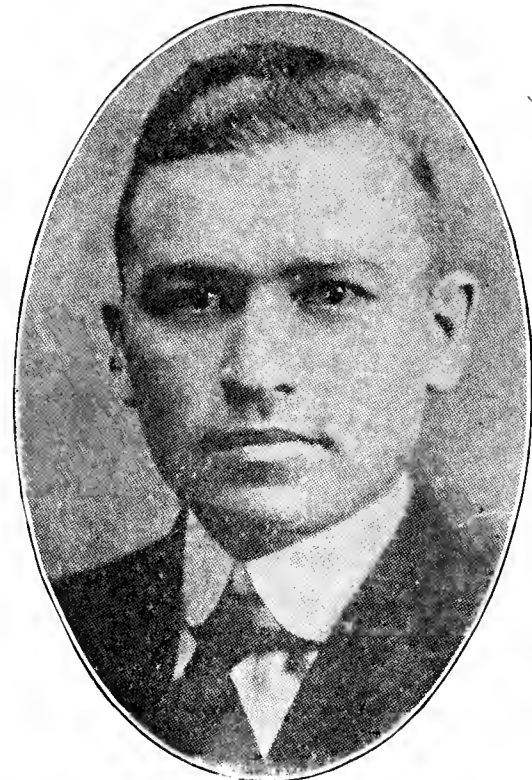
Dr. Marlatt, in closing the hearing, said that he had a feeling that there was some criticism of the Board for failing to take action before this time. Five hearings have already been held but new areas of infestation were being discovered so fast that they had felt it unwise to take any action until they had full information so that they could act intelligently.

There were many representatives present of the seed trade, vegetable growers, and florists as well as the following nurserymen: C. H. Perkins, 2nd, and William Pitkin, of the Legislative Committee and John Watson, Executive Secretary of the American Association of Nurserymen. Mr. Adams, Mr. Farquhar and Mr. Pearson, of the New England Nurserymen's Association. Thomas B. Meehan and A. E. Wolhert, of the Pennsylvania Nurserymen's Association.

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An organization of young nurserymen, founded at the annual convention held at Milwaukee, Wis., June 28, 1916.

Their object is to perpetuate the best ideals and practices of the nursery business.



Baby Rambler Clarence Perkins, Newark, N. Y.



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Code of Ethics and Resolutions adopted at their Convention at Chicago, February 11 and 12, 1920

FIRST: To consider my vocation worthy, and as affording me distinct opportunity to serve society.

SECOND: To improve myself, increase my efficiency and enlarge my services, and by so doing attest my faith in the Nursery Business.

THIRD: To realize that I am a Nurseryman and a Business man and ambitious to succeed; but that I am first



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In bookstores, The Little Pruning Book sells at 50 cents. But we have a cooperative plan of selling, whereby you can place this handy manual in the hands of present and prospective customers, at a good profit to yourself. Sending for a free volume does not obligate you in any way. It will bring you details of our plan of distributing this educational work, through nurseries.

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When writing to Advertisers please mention the National Nurseryman.

an ethical man, and wish no success that is not founded on the highest justice and morality.

FOURTH: To hold that the exchange of my goods, my service and my ideas or profits is legitimate and ethical, and that it shall be my aim that all parties in the exchange are benefited thereby.

FIFTH: To use my best endeavors to elevate the standards of the vocation in which I am engaged.

Whereas—There is an increasing National demand for plant material to be used in the orchards and for the beautification of our home grounds and parks, and for forestry purposes, and there is a need for trained men in this particular field of endeavor. And whereas, there is not at the present time, a school for the education of Nurserymen.

Therefore be it resolved—That the Nurserymen of the Illinois Nurserymen's Association in Convention assembled recommended to the Trustees of the University of Illinois, that they at once arrange for and institute such a course or courses in nursery management and practice as will properly qualify men for that industry.

A. M. AUGUSTINE, *President.*

J. A. YOUNG, *Secretary.*

NEW CLIMBING ROSES

Captain George C. Thomas, Jr., a well known rose hybridist of Philadelphia, has been awarded first prize at Portland, Oregon test gardens for the best new rose originated by an amateur and second for the best new rose in the competition.

Mr. Thomas is the author of the well known "Practical Book of Outdoor Rose Growing." He has many thousands of pedigree seedlings in his gardens at Chestnut Hill, his object being to produce a climbing rose that will bloom continuously throughout the summer.

The rose for which he was awarded the prize bloomed

from May until November, one plant giving 225 blooms in that period. It won 94 points out of a possible 100, and is known as 4-A.

Another seedling by Captain Thomas "Bloomfield Abundance" was a close second winning 93.33 points.

Captain Thomas has decided to transfer his field of operations from Philadelphia to California where the climate is so much better for carrying on his experiments.

PENNSYLVANIA ASSOCIATION OF NURSERYMEN

The annual meeting of the Pennsylvania Association of Nurserymen was held in Hotel Adelpia, Wednesday, February 4th. In spite of the blizzard weather conditions there was a good representation of the nurseries of the State present.

Robert Pyle was in the chair. In addition to the routine business of the association Mr. A. E. Wohlert of the Overbrook Nurseries read a paper pleading for uniform terms in dealing with the retail customers. Mr. Edward Moon, President of the National Association was on hand and pointed out how necessary it was for nurserymen to act in a body if they wished to accomplish anything with the Government. He made it very plain by enumerating many recent laws, rules, regulations and quarantines that while they may have been adopted with the best intentions in the world, the fact remains that the business was slowly being handed over into the power of a very few men, which conditions are not likely to work to the best interests of either the trade or the country at large. To counteract this tendency everyone should be familiar with what was going on so they may act together to counteract unwise legislation.



One Plant of the new Neverfail Everbearing Strawberry, photographed Oct. 11th, 1919. There were twelve ripe berries on the plant at this date. See adv. page 69.

The Neverfail Everbearing Strawberry

By L. J. Farmer, Pulaski, N. Y.

This new everlasting strawberry is a seedling of the Bubach strawberry hand pollinated with pollen from the famous Superb everbearing strawberry and was originated by D. J. Miller of Ohio who is the originator of the King Edward strawberry and other varieties and who also claims to be the originator of the Plum Farmer raspberry. It was produced in a lot of 500 seedlings in 1912 and was the only one of the 500 that was retained. The originator discarded all the other seedlings and also the Superb for this new No. 200, which has since been named the "Neverfail."

My attention was first attracted to the new seedling by the receipt of a letter from Matthew Crawford of Cuyahoga Falls, Ohio, who has long been known as the most reliable of strawberry growers. Mr. Crawford advised me to investigate the merits of the new seedling of Mr. Miller's, saying it was the best fall or everbearing strawberry that he had ever tested. In a later letter Mr. Crawford wrote me that after testing the new seedling No. 200 of Miller's he had no use for any other everbearing strawberry.

In the spring of 1918, I induced Mr. Miller to send me a dozen plants of his seedling to test. I set them out in early May alongside of Americus Superb, Minnesota No. 1017 and others and gave them good average care. They yielded heavily all throughout the latter part of the summer and fall and when winter closed in, there were still many large berries on the plants. They seemed so much better and more productive than the other everbearing kinds that they could be put in a class by themselves.

During the fall and early winter of 1918, I had much correspondence with Mr. Miller, with the result that I purchased the entire stock of the new seedling, which was finally named the "Neverfail" by Mr. Miller.

In the spring of 1919 these plants were dug up and shipped to me by Mr. Miller. We had quite a trade in them among growers and what plants remained, were finally set out in the field during the month of June. They made a good growth and have increased nicely, so we think that from the 6000 plants originally set, we have

about 40000 new plants. These plants bore heavily all during the latter part of the summer and fall, up to the time that the ground froze solid, about Dec. 1st. This variety fruits on the young runner plants quite freely as well as the old or parent plant. Another peculiarity about it is that it bears heavily when the plant makes many new runners and young plants. The plant shown in the illustration had twelve ripe berries on it at the time it was photographed, as well as many green berries and blossoms, and I dug this plant out from a solid matted row of plants in the thickest part of a wide row.

The berries of the Neverfail are of the Superb class like the plants. It is large and attractive like the Superb but possibly not quite so glossy and beautiful as that variety, but the fruit will pass for the Superb. Any one who has grown the Superb as long as I have, knows that its two great weaknesses are lack of productiveness in matted rows in the fall of the first year and lack of character to its flavor. The Neverfail is fully four times as productive under same conditions as Superb with us and Mr. Miller makes the claim that it is three times as productive with him. In character of flavor, the Neverfail is equal to most of the varieties of strawberries as usually grown. It has much more acid

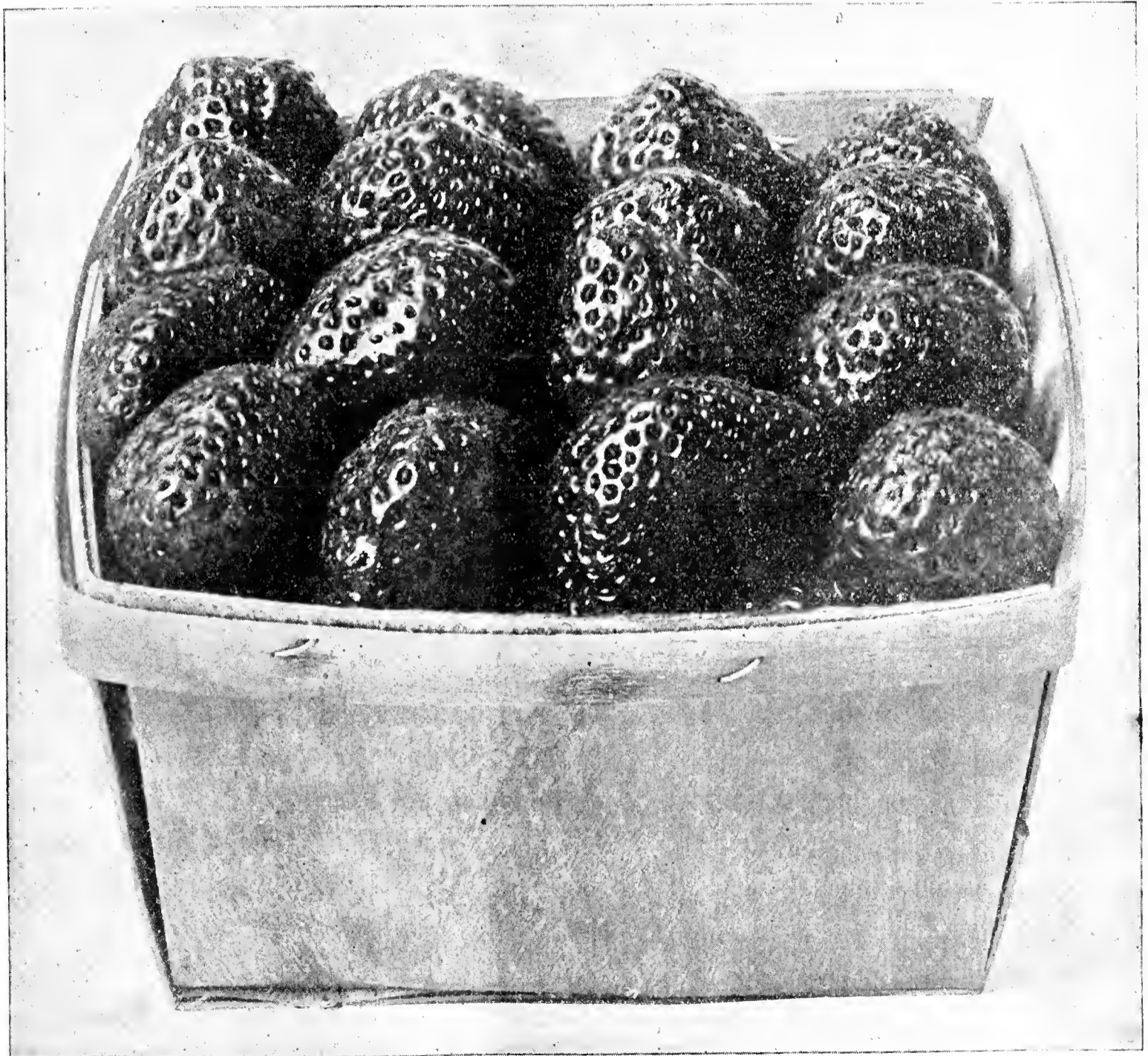
and sweetness than the Superb and you know when you are eating them that you are eating real strawberries.

On Oct 10th, 1919, we made a test of the comparative productiveness of Neverfail and the Minnesota No. 1017, which variety has always stood high with us in the line of productiveness. We had the two varieties growing side by side under practically the same conditions. On this day, the same length of rows of Neverfail picked just double the number of quarts that the Minnesota No. 1017 did and the fruit of the Neverfail is much finer and better in appearance than the Minnesota No. 1017. The basket of berries shown full life size in the illustration on this page, was picked and photographed Oct. 27th, 1919. It will be noted that exactly 16 berries top a quart basket.

We own and control all the available plants of the Neverfail strawberry. We have been handling strawberry plants for 37 years and believe we know when we have a good thing. Now is the time to stock up with the Neverfail strawberry plants. They surely will be great sellers like the Superb and Progressive have been. No one ever lost a cent by investing in our introductions, they are all successes. We were the first to recommend the fall or everbearing strawberries. We point with pride to these and numerous other strawberry varieties we have introduced; to the Plum Farmer, Idaho and Royal Purple raspberries and at present, to the new everbearing red raspberry "Erskine Park." Write for prices. Our beautifully illustrated catalogue tells all about these and our full line of nursery plants.

Address L. J. Farmer, Pulaski, N. Y.

—Adv.



One quart basket of the new Neverfail everbearing strawberry, photographed exactly natural size, Oct. 27th, 1919.

NEW POWER TREE-DIGGER

What E. A. Jackson the originator and manufacturer says of the New Power Tree Digger

The great problem of tree-digging has been solved by the machine shown in the accompanying photograph.

With three men and this machine 50,000 trees can be dug easily in a day, using about ten gallons of fuel, which is exceptionally economical, considering the amount of labor saved by it.

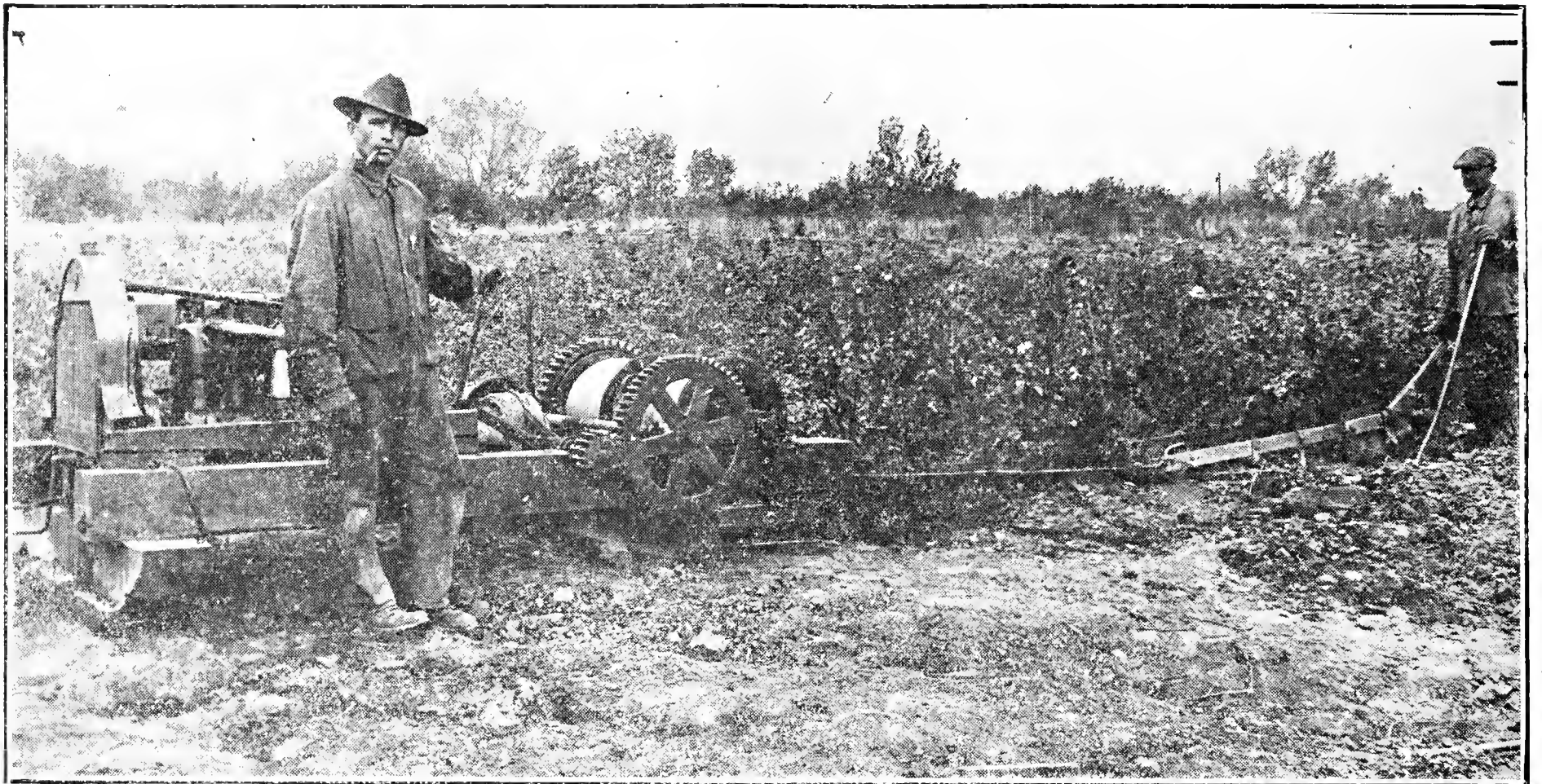
The operation of the machine is very simple, the photograph being self explanatory. The 30 h. p. engine geared to the drums, wind in the cables attached to the cutter. The heavy gear reduction gives a tremendous

draw-bar pull and pulls the cutting knife with a very large lifter, making the hand pulling of the trees easy. When one row is cut the machine moves itself over in front of the next row with its own power.

Some of the important features of the machine are that the trees can be dug as deeply as desired in the driest or wettest ground, no trees are injured, a space of twenty feet is ample for operating the machine at the end of the rows of trees.

As tractors cannot easily be used to dig trees and horses are getting to be out of the question, this machine is meeting with great favor in California, where it originated and is being manufactured.

The wear and tear is very small, being a semi-stationary outfit.



A New Power Tree Digger

February 5, 1920.

Editor National Nurseryman,
Dear Sir:—

The article published in your February issue by W. A. Ritter, of Napoleon, Ohio, reminds me that more than 50 years since it was a common complaint among the farmers of Chester County, Pa., where I then resided, that at times their grain crops were seriously injured by rust. Nobody then suspected the *Berberis* as the cause; it was attributed to weather conditions.

Barberry was not indigenous in that locality and I do not remember seeing any in cultivation. There has been no material change during the intervening years. Doubtless some barberry plants have been cultivated but the conditions in that particular are not greatly changed. The old and the new generation of farmers have pursued the even tenor of their way and in recent years are growing more wheat than they did 50 years ago and are probably unaware of the menace or supposed menace from the barberry plant.

Is it not possible, even probable, that this menace is more suppositious than real and that the F. H. B. is beating the air in an endeavor to justify their existence. They are forever discovering new insect pests and forgetting entirely the old ones that in their day of introduction were heralded as the certain harbingers of agricultural and horticultural doom. Now they leave the potato beetle and the San Jose scale to the mercies of nature and the interests of productive husbandry.

Today it is the brown tail moth and more recently the Japanese beetle that will be our undoing except these horticultural and agricultural experts are permitted to spend a lot of money for their control and extermination. The first at any rate is beyond the power of man. It is certain that very many colonies of brown tail moth are established in widely divergent territory in our country. If the experience in the neighborhood of Boston is repeated it will be some years before these colonies will develop sufficiently to be noticed and by that time these experts will likely discover a new menace leaving the



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Wholesale Nurseries
BOSKOOP - - HOLLAND

are in a position to take large contract orders for fruit tree- and rose stocks, farm and garden seeds, Lily of the Valley and all other stock which can be imported into U. S. A.

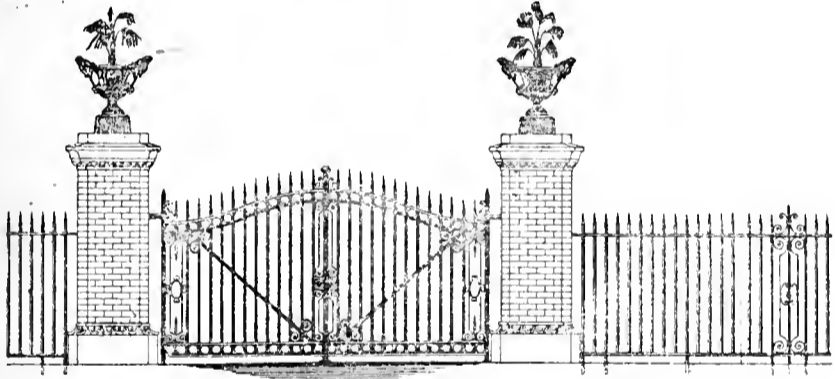
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ROANOKE, Virginia

SPECIALS

Apple Scions

Albemarle Pippin, Delicious, York Imperial, Winesap, Staymen's Winesap, Black Ben Davis, Grimes Golden.

A Few Peach and Plum Trees

Irish Junipers—The finest lot on the market at very close prices.

Let us act as a clearing house for your excess stocks. Send us your want list.

We sell to the trade only.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.
DERRY, N. H.

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people and nature to combat the old pests. And so far as man can foretell the cycle of change will run on through the ages.

Quarantine 37 has developed a great many nurserymen who believe it to their interest to support, or at any rate not to antagonize it. It is certain that some time the nurserymen and all the world will realize that "the injury of one is the concern of all." It must be conceded however, that this glad day of hope and concord is very dim if at all visible.

Yours truly,

THEO. FOULK,
Flushing, N. Y.

WANTED—An experienced traveling agent to keep track of State and Federal horticultural quarantines. Must be a live wire who can hit the high spots and go a long time without sleep or liquid stimulants. Address,—Any United States Nurseryman.

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FOR SALE

About 5,000 Apple Seedlings. Carried over from 1919. Will be large enough to bud 1920. Make an offer—Address—Box 65, In care of National Nurseryman.

- 10,000 Dwarf Box, 3-year, No. 1
 - 2,000 Dwarf Box, 3-year, No. 2
 - 2,000 2 and 3-year Field grown, Climbing Roses
Crimson Rambler, Lady Gay, Blue Rambler, Dorothy Perkins, Red Dorothy Perkins, White Dorothy Perkins, Philadelphia Rambler, Mary Washington, Everblooming Crimson Rambler.
 - 300 Roses, 2 and 3-year,
Madam Frances Kruger, Sir Thomas Lipton, Clothide Soupert, Magna Charter, Henry Martin, Baby Rambler.
 - 5,000 Linnaeus Rhubarb, 2-year,
 - 5,000 Linnaeus Rhubarb, 1-year, strong,
Packing Extra
- Shade Trees and Shrubs in large supply.
Write for prices.

J. B. WATKINS & BRO.,
MIDLOTHIAN, VA.

FOR SALE CHEAP

My Nursery and Berry Business

GARNETT NURSERY, Garnett, Kansas

NURSERY AND FRUIT FARM FOR SALE

87½ Acres within 50 miles of St. Paul. 20 years established. One of the best openings in the northwest. Modern cement block residence, storage cellar, basement barn, tenant house, etc. which cost more than price asked—\$17,000. ½ cash. Profitable vineyard and orchard. For further particulars write

STRAND'S NURSERY, Taylors Falls, Minn.

FOR SALE

A thriving and increasing Nursery Business, in a thriving Village located in the heart of the fruit belt. A thriving Farm and Garden seed store and Insurance business in connection. The Nursery work is attractive and demand high but for other reasons, we are thinking of selling.
Box 75, In care of National Nurseryman.

The many nurseryman friends of O. Joe Howard, Secretary and Treasurer of the J. Van Lindley Company, Pomona, N. C., will be interested to hear that he and his associates have organized the Howard Hickory Company, Nurserymen and Landscape gardeners, at Hickory, N. C. More than \$40,000 of the capital stock has been subscribed.

Mr. Howard does not expect to completely sever his connections with J. Van Lindley Company until after the present shipping season, so will not move his family to Hickory until that time.

Mr. J. Edward Moore advises the Gould Bill has been slightly modified from the original form, and has been presented to Congress as follows:—

"For investigating in cooperation with States or privately owned nurseries, methods of propagating fruit trees, ornamental and other plants, the study of stocks used in propagating such plants and methods of growing stocks, for the purpose of providing American sources of stocks, cuttings or other propagating material, \$20,000."

If accepted by the House, this will go before the Senate, and the officers of the Association will appear before the committee of that body, to further help the progress of the bill.

WANTED

WANTED

Young man to fill position of Sales Manager and Correspondence Clerk. A good knowledge of the Nursery business necessary. Must have had experience. Fine position for right man.

Bobbink & Atkins, Rutherford, N. J.

WANTED

Man accustomed to nursery work, getting up orders, handling nursery stock, quick good salesman. State salary, experience and references; also experienced planter wanted.

ELIZABETH NURSERY COMPANY Elizabeth, N. J.

WANTED—Married man who understands growing ornamental nursery stock. Also married man for propagating ornamental nursery stock. Opportunity for advancement in either position. State age, experience, salary expected, etc. in first letter.

Address Box A,
In care of The National Nurseryman.

WANTED

A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

WANTED—A middle aged man as nursery foreman, who understands budding of fruit and roses; can handle help and teams. We have a good opening for the right party. Please reply stating age, experience, salary expected, etc.

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Nice lot of field grown, well branched stock. Three sizes, 8 to 12 in., 12 to 18 in., and 4 to 8 in. for lining out.

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THOMASVILLE - GA.

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The most valuable and beautiful Azalea grown. 2½ in. pot plants. Write for prices. May first delivery. If you desire any of these plants, put your order in early as stock is limited.

If you have not received our spring wholesale list, write for copy.

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EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

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Blackberry, Dewberry, Forsythia Suspensa, Deutzia in variety, and other items.

Send for prices.

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We offer one of the largest stocks of Aroma and Klondike strawberry plants in the country, also have Gandy, Excelsior, and Early Ozark.

June Bud peach trees in the leading commercial sorts. Write for prices.

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Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

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Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

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SEEDSMAN

DRESHER, - Penna., U. S. A.

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10,000 Spirea Van Houttei, asst. sizes

10,000 California Privet, 3 to 4 ft.

500 Clumps Eulalia Grass, asst. varieties

Nurserymen are using this grass with great success for baling purposes.

American Elm, Norway Maple and Silver Maple in all sizes and quantities.

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One year - Number one

One year - Number two

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1920

ESTABLISHED 1893

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INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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Small Fruit Plants

200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

Strawberries
Raspberries
Blackberries
Dewberries

Iris
Privet
Spirea
Rhubarb

Asparagus
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Hardwood cuttings
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See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

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SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,
both grafted, and seedlings from grafted trees,
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ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122 1/2 GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us estimate.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



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Manufacturers of

STEEL BOX STRAPPING

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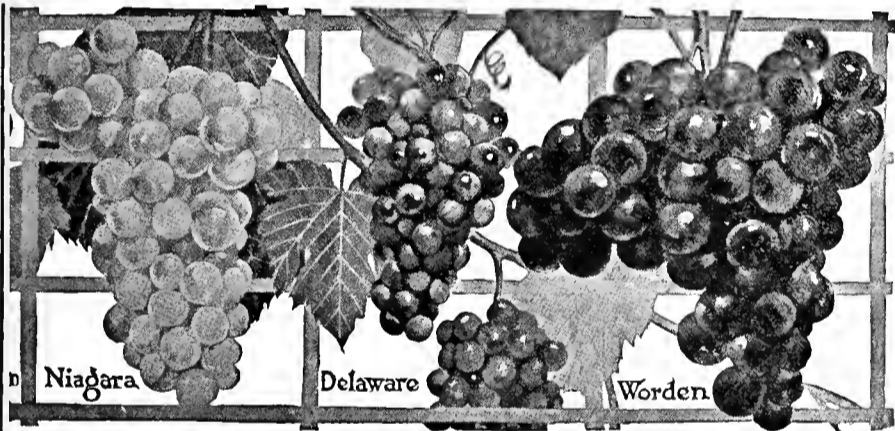
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Growers of Grape Vines and Small Fruit Plants
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Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

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Evergreen Specialists.

Largest Growers in America.

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Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

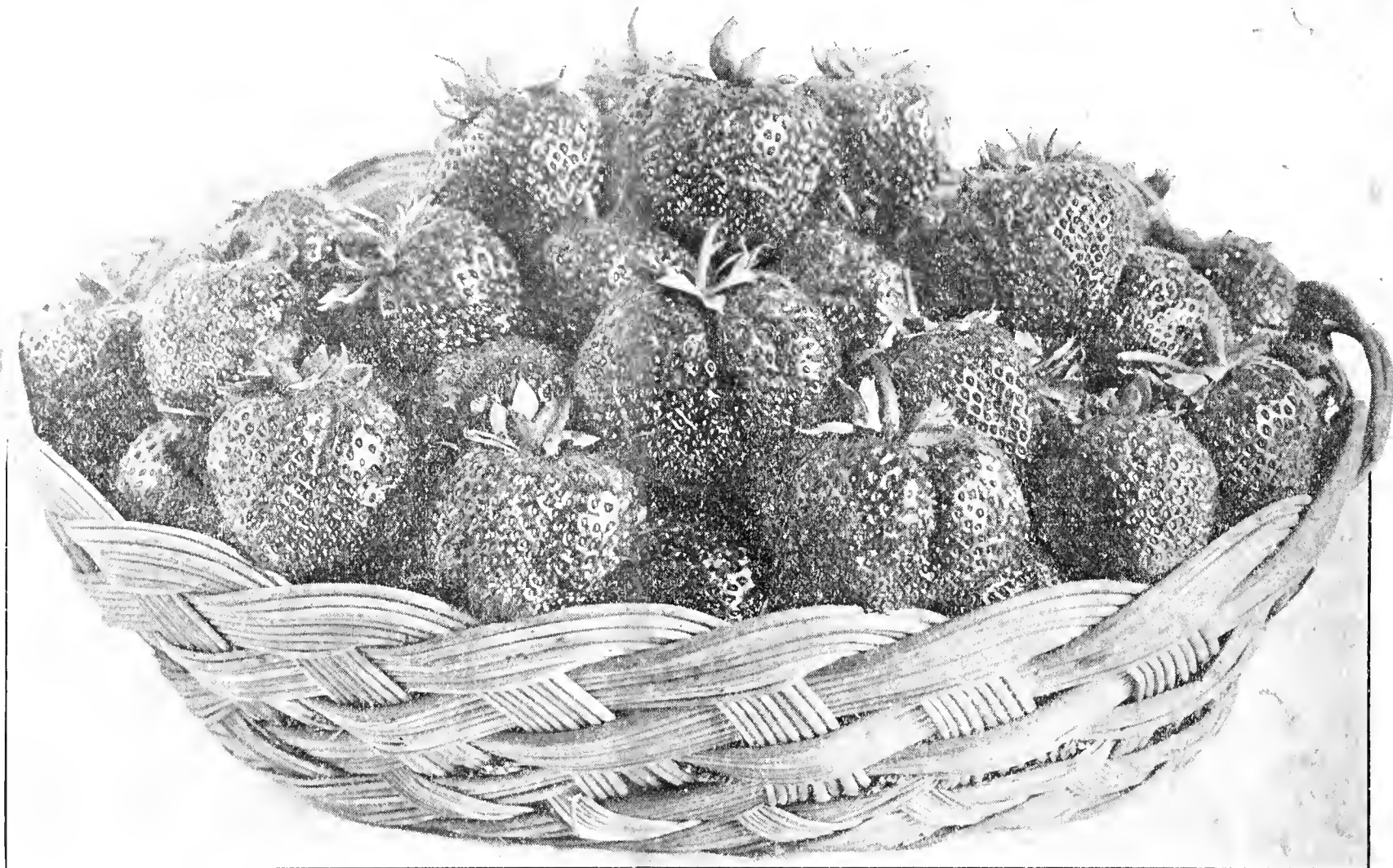
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Cannas, Dahlias and Gladioli

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Everbearing Strawberry Plants PROGRESSIVE and SUPERB

Plants will be fresh dug

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HARRISONS' NURSERIES

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THE NATIONAL NURSERYMAN



APRIL 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Will be pleased to quote on your list of wants

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Elm, American White -- Ash, Fraxinus Viridis
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The Preferred Stock



A POINT

To remember—

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Preferred Grading
Preferred Packing

and
QUICK ACTION

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We make a specialty of Ornamental stock—

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The Preferred Stock

The Preferred Stock

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

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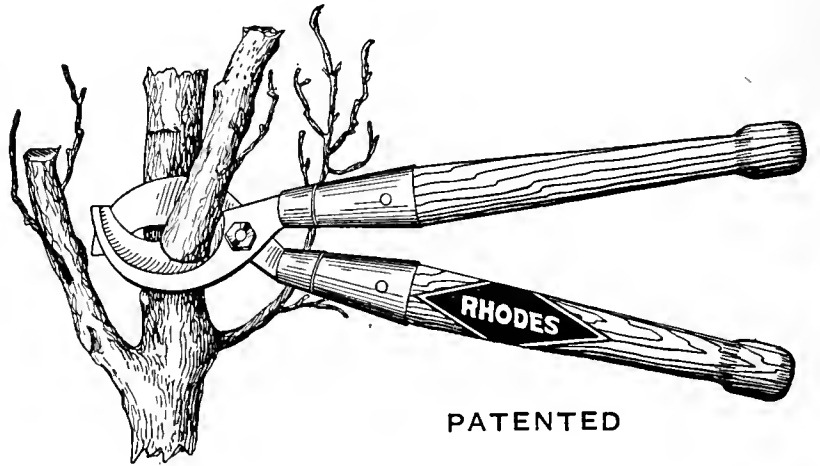
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They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

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Case lots only

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Natural from Japan in 2 ft. and 5 ft. sizes.

Dyed green in 3½ ft. and 4 ft. sizes.

Raffia

Red Star Brand XX Superior Brand
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Prices ready now on
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Shipped promptly from stock.

All of above can be shipped at once.

Write for prices specifically stating requirements.

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NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

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Seedlings—Transplants

MILLIONS OF THEM

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| Arbor Vitae—American | Concolor |
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Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
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We still have a nice lot of
SPIREA VAN HOUTTE

Selling fast. Cover your needs
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Also good assortment of

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EVERGREENS (especially nice
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All our own growing.

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Complete Line

We still have unsold a good assortment of
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Roses.

Large Supply of
Ornamental Trees, Shurbs,
Perennials,
Vines, Evergreens.

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GENEVA, N. Y.

74 Years

1000 Acres

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- 120 Linden, 10 to 12 ft.
- 12000 Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
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- 200 Tulip Tree, 1½ to 2 inch, 2 to 2½ inch.
- 150 Weeping Willow, all sizes up to 3 inch.
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- 5000 Lilac Purple, 2 to 3 ft., 3 to 4 ft.
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- 1200 Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
- 500 Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft.
- 900 Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 1600 Spirea Billardi, 2 to 3 ft., 3 to 4 ft.
- 1200 Spirea Collosa Alba, 10 to 12 inch.
- 400 Spirea Reevesi, 2 to 3 ft.
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C. M. Hobbs & Sons, Bridgeport, Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII

HATBORO, PENNA. APRIL 1920

No. 4

The Association: Its Aims and Progress

Before the Gardeners' and Florists' Club of Boston, March 16, an address by John Watson, Secretary, American Association of Nurserymen.

AS Secretary of the American Association of Nurserymen, I am interested in the nursery business. It is the most interesting thing in the world to me. But when I think of business, I think of something more than the dollars brought in by the results of our thought and labor. The money can do no more than buy us food and clothes and shelter. True, it takes quite a lot of it these days to buy even those things; but the man who has unlimited money can only buy unlimited food and clothes and shelter. Some time ago I heard a lecture by John Galsworthy who defined wealth as visible ability to buy the things a man wants. And he pointed out a great fact when he added that to want no more than one can buy is another way to express possession of wealth. I preach contentment, then; for the whole secret of happiness is to be content with what we have. We have a lot of discontent and unrest in this country and that is partly because we have taught unrest and discontent. We have taught that discontent is the spur to achievement. We have taught the doctrine of the strenuous life. Now if that means simply the spur to do more in order to have more, it is unsound; but if to work hard and well for the joy of working, yes; for no man can expect happiness from the mere coining of his labor into dollars; they will buy no more than the essentials to living. I like the old-fashioned prayer in the Anglican service that we omit in our strenuous and ambitious America; that we be given contentment in the state to which God calls us. When we teach our American boys that every one of them has the chance to be president. I say we do them injury! they can't all be president and it is lucky for them that they can't be; but the effect of that sort of teaching is to plant ideas that do not fit the station in which the majority must live. It stimulates ambition, and disappointment breeds discontent. We point to some of the great captains of finance who were poor boys and we tell young America that they, too, have the same opportunity to amass great wealth. And we give them to think that the possession of wealth is something to be desired. It is not. The thing for us to teach is that wealth is neither necessary nor desirable. The things to be desired are health and strength and work to do. Work well-done will bring whatever is required for our necessities; to be content with that and with our condition, is to be happy. When we are useful and happy and when we contribute to the happiness of others, we have fulfilled our mission.

So I want to say that our occupation as gardeners and florists and nurserymen must mean much more to us

than the money it brings us, because the money means so little. A man gives to his business eight or ten hours of every day; we florists and nurserymen give ours from ten to fourteen hours daily; if we love and respect it and find our happiness in it,—as we must to find it at all,—we give more time than that, for our evenings are largely given over to the literature of our trade. Does any man of us consume one-half of the short space of our tenancy of this beautiful world, solely in pursuit of the money we earn? If I work today only for the purpose of living to-morrow, I become altogether useless and unhappy. There must be the joy of doing the thing worth doing; doing it as well as it can be done; or as well as our ability permits. My work must be good and it must be useful; my business must be clean and wholesome and honorable. It must be that I must see that it is that; and I must see that no cause is given to have another put upon it an estimate lower than my own. It matters not what a man does; the important thing is how well he does it, provided it is something useful. Mr. Chief Justice White holds the most exalted secular office on earth; but the man that screens your potting-soil and the one that digs out in the garden or runs the mower across the lawn, if they do it properly, are surely as useful and honorable in the employment as the judge on the bench. As George Ade says, "it doesn't signify how long you stick around; it's what you put across that counts."

I take it that this is the estimate that nurserymen put upon what they are doing; the expression of their respect for themselves and their business. And when we come to fix our status, I think we should ask ourselves if we are not something more than merely manufacturers and merchants? The man who makes and builds and shears and shapes an evergreen into beautiful symmetry or trains a tree so that it will be fine and straight and handsome, is by way of being an artist. He works with living materials while the sculptor works in marble. And what should be his return? I assume that he has his reward in the satisfaction of producing well; but in money? I hear a great deal about costs. Surely nobody wants to work at a loss and therefore it is profitable to keep account of what one invests in time and money to produce the things we sell. It is easy enough to do that. And yet the figures that result are difficult of interpretation and application. If I grow a block of apple trees, I can keep such accounts as will tell me the cost of each one of those trees. But the figures obtained apply only to those particular trees; they have no bearing on last year's nor next year's trees; nor any trees grown in any

other nursery, for it is impossible to reproduce exactly the same conditions in any two places. But my cost-price on apple trees, if it shows a profit, must include what I happen to lose in growing a block of shrubs, say; because prices based on cost must yield a profit on an entire stock. And then comes the distribution of that intangible overhead expense which is so obscure and yet so ever-present. And distribution as well as production must be included in any estimate of cost as a basis for price. Nor can one year be separated from another because ours is a line in which the seasons and the weather largely determine crops and their growth; results must be varying and prices based upon cost must also prove varying and that fluctuation is unhealthy and unprofitable.

If we say that price must be based upon cost, then we put our products upon the same plane with bricks and shingles. Competition in cost and quantity-production leads inevitably to price competition and the sure result of that is deterioration in quality. I prefer to think of the better competition, the competition that is wholesome and inspiring, the effort to produce something better than anybody else can produce.

If we reject the idea of merchandizing at cost plus a profit on each article figured separately, can we not claim something of the status of the artist?—for the expert plant-grower is an artist. And may we not properly consider the matter of service as an element in price-making? If I go into one of your shops here and buy a bunch of roses for my wife—or somebody else's wife—what is my idea? Of course, I may have stayed out rather late at the Club, I may have reason to want to square myself at home! or I may possibly wish to express some sentiment that becomes eloquent when I say it with flowers. Now, do I hunt through the roses at \$3 or \$2 per dozen, if there are any such?—or do I look for what best expresses what I want to say? Why, you know as well as I do, that I would pick out those Hadleys at \$12 a dozen. Why? Because the value I put upon those roses is their value to me, to the lady who gets them, and the value of the message they carry. The important thing is not the cost to the seller, but the value to the buyer. And who shall say what is the value of a five-foot Pfitzer's juniper? What it cost to grow it? By no means; its proper price is its value to the man into whose garden it goes. Service is placing at his disposal an artistic creation that acquires value entirely aside from and in addition to the money that goes into its production.

You may be asking yourselves by this time, what all this has to do with the American Association of Nurserymen. In referring to the angles of the business and the estimate a man puts or should put upon his trade, I have had in mind to explain, what I conceive to be the motives and the purposes of the nurserymen of our Association in effecting some radical changes in the policy of our organization.

When we were organized at Chicago in 1875, you will remember that the Association was one of nurserymen, florists and seedsmen and so continued for a number of years; the rapid growth of all these interests caused the two latter groups to withdraw after a while to form separate associations. If happy is the land that has no history, could the same be said of trade associations, then

ours should have led an ideal existence during its first forty years; for during that time its even course was marked only by annual reunions, almost altogether social in character but pleasant as affording opportunity for old friends to greet each other. As the years went by, however, it became apparent that many problems required concerted action for their solving, and the necessity for a business organization for strictly business purposes caused a re-organization at Detroit in 1915. While pending for several years, the actual fact was so sudden that the old constitution had to be changed over in the short time of the meeting and while the purposes of the Association were very clear, the made-over constitution did not seem somehow to fit. It became as uncomfortable as a man trying to feel at ease in the clothes he wore as a school-boy. But in 1917, an important change was made whereby the Association so amended the constitution as to establish a code of ethics for the guidance of its members. An important addition to that was made in our last convention. I mention these two changes for I hope to have you gentlemen realize their importance to you.

They lay down a code of ethics, not in detail but very broadly and they make fair-dealing a requisite for continued membership in the Association. It is made the duty of every member to report every instance of unfair dealing or unethical practice that comes to his notice, whether between members or with the public. We have a vigilance committee whose duty it is to investigate every report and to apply or recommend such remedy as seems appropriate to the circumstances, even to expulsion from the Association. There is nothing behind that more substantial than the moral influence of the Association; but the moral effect of the opinion of one's fellows in a national trade organization of 400 members, and the possibility of losing not only that good opinion but the privilege of fellowship, is strong enough to secure observance of the rules of fair-play.

It might possibly be asked if that amendment to our constitution is by way of intimating that members of the Association need supervision. We ask the same fair dealing of others not members of our association; we ask no more of them than we are willing to do ourselves; and we give assurance of our sincerity by doing it first. The Association has been in existence forty-five years; some of its members have been in business longer than that. It means a high average of ability, a certain degree of service and the giving of real values, to continue in business so long a time. But we realize that we need some standards; that we have been without any statement of them for many years. It was only five years ago that we made membership elective. Before that, our ranks were open to all who paid nominal dues; there was no other formality required. Since then, we have investigated all applicants. New members are voted on by our Executive committee acting as a membership committee. We make observance of our rules the condition of membership. We are not exclusive. Our doors are hospitably open to all reputable nurserymen who approve of our policies and program and who care to stand with us.

If you ask why we should do this, let me point out that the nurseryman bears a peculiar relationship to his customer. In every business, confidence must be estab-

lished. Business to be profitable, must be permanent; ours is a continuing business; very often it passes down from father to son; it has the advantages and the disadvantages of permanency; it means the possession of real-estate and crops that are carried in stock for from two to ten years; once in, you are in to stay, unless, unhappily the sheriff should close you up. Now if permanency is requisite to success, the confidence of the buying public is of vital importance. The relationship of the nurseryman to the public is peculiar in this; that a larger degree of confidence has to be imposed in him than in almost any other tradesman. I can go into one of your flower shops and I see what you have; I know if it is what I want; but in the case of nursery stock it is different. We can't look at trees and tell what they are; some of them, we know at a glance; but many things do not bloom nor fruit until some years after the customer buys them. The man who invests in a piano or an automobile or a suit of clothes or any of the things of ordinary commerce, can see the goods and when he sees them can judge very accurately whether they are all right. But the man who buys an orchard of fruit trees can't look into them and tell what they are; he buys out of confidence in the seller. And his investment has to continue for some years in the case of fruit-trees, until he does know what he has bought, he must invest in land or the value of its use; the preparation of the ground; the planting, pruning, spraying and cultivation of the trees until at length they come into bearing. His investment, during those years, becomes many times the original cost of the trees. Therefore, in buying trees and plants, their very nature makes it necessary for the buyer to place great confidence in the grower. So I say our responsibility is greater because the degree of confidence must be greater. Sometimes that confidence is misplaced and they are the cases that find ready space for publicity while the many thousands of properly and satisfactorily filled orders are not advertised in the same way. It is not surprising that in an industry representing an annual turn-over of \$30,000,000 and in which hundreds of thousands of orders are filled in the short space of the fall and spring season, some errors should occur. Nor is it strange that actual imposition is not unknown in the nursery business and in other lines. And that is what we purpose to try to eliminate.

Now taking that stand and making the Association the partner of those who buy goods of any of our members, we feel that they and we are both entitled to have that fact known. And so we have just placed contracts for a series of advertisements to tell the public what the American Association of Nurserymen stands for; how our members are held to the observance of rules of fair-dealing; and how we have provided for the public to get what we promise them. We assume no "holier than thou" attitude; we realize that there are firms outside our ranks that are of unquestioned standing and responsibility; we take our stand for fair-dealing and ask others to stand with us.

That, to my mind, is the most outstanding fact in American horticulture today. We want it to benefit the buyers of trees and plants; we know it will. We are human enough to want it to benefit us, too. We think the public demand what we are doing; and we are doing it

as careful, thoughtful, business men meeting a situation that we have no wish to evade. Every business transaction affects two parties; those immediately at interest; but it affects also the general public. The business of every nurseryman affects the Association and all its members. We simply take note of that and do the obvious thing. That is all. And yet it means a great change. It is not revolutionary. To some, all change is revolution; this is merely the evolution of business standards following the lead of other lines.

Maybe we have been slow to heed the demand. We admit that. But when you come to think of it, we are tillers of the soil; and the psychology of it lies in the fact that when you dig, you look downward; our view is limited; we fail to get the broad vision and the sweep of distance. Notice "The Angelus" and "The Man With The Hoe;" they look down; every artist has painted that thought. The trouble with us is that we have kept our eyes upon our work and have failed to note what was passing around us; we lacked perspective and we have concerned ourselves too much with what we have considered our own affairs; but our affairs are not alone the things we are doing or the way we do them, but also the work and the methods of all others in the trade. And that isolation and non-intervention have encouraged some methods that have been bad. Good firms whose own methods have been above reproach, have been none the less responsible for things that have brought reproach upon us through their failure to protest and in an effective way when that was proper and necessary. We recognize that responsibility and purpose not only to trade fairly, but to insist that those associated with us do so and that those of whom we buy and to whom we sell, so conduct their affairs as not to discredit the industry that means our livelihood, the work to which we give our lives, and the standing of the business from which we take our position in the community.

We who are all connected with the growth and sale and use of trees and plants and flowers and seeds have so many interests in common that our relations should be closer. It was very kind of you to invite our Association to send a representative to this meeting; I hope it serves us to state our position frankly to you; and I certainly hope it will serve you to know what we do stand for. I should like to see your representatives in our own meetings and to have you tell us your problems where they touch our lines. We must not be so engrossed in the thing at hand as to overlook opportunity for cooperation with those who may be equally interested with us. There is, for example, a great exchange of business between us; you florists and gardeners are buyers of some of the things we grow and apparently you will presently be altogether dependent upon home products. It should advantage you to know what we have and how we are growing it; and it would surely serve us to know what else you wish us to grow for you. And in that particular, we are lame. We started growing some things at first because they were easily to be had; and we have continued to grow them for the same reason that we started; and having them, we strive to sell them. And yet many of the fruits we grow might profitably be discarded and our lists improved by limiting them to the best varieties. In the case of our ornamentals, particularly deciduous

shrubs, we got our first stock from western Europe, very naturally; and we have continued to grow many things that while excellent enough where they came from, are unsuited to our conditions. On the other hand, we have neglected almost altogether the many fine things that Mr. Wilson has brought to your Arboretum which should be quite at home here. To my mind, there is nothing so full of promise to American horticulture as the study and development of the Arboretum collection. We should by all means add to our list of broad-leaved evergreens every variety that will grow under our conditions. One thing that has served to delay the propagation of much of that valuable material has been the absence of a positive and extensive demand for its production. You gardeners can do much towards shaping the propagating lists of nurserymen. When you demand things, we will grow them for you. When the matter is left to the nurserymen, they will make their propagating lists to fit the plate-book and the easy-to-get half-tones. It will be interesting to watch for your influence upon our future development of plant-life. In Great Britain and on the Continent, the gardeners are the arbiters; here, the nurserymen are; and the æsthetic too often gives way to the commercial.

And if you can cooperate with us in determining what should be grown for American gardens, you can assist us in securing leave to ship you our stock. And in the matter of restrictions put upon the distribution of nursery stock, I think I can make the position of our Association very clear. We realize that, while our industry is very important to us, yet it is very unimportant compared with the vast agricultural and horticultural interests of the whole country; and therefore, whenever they are required for the protection of those larger interests, we readily acquiesce in all necessary and proper quarantines. But we are entitled to assurance that they are both proper and necessary; they should not be based on suspicion nor prompted by hysteria; their necessity should be determined by known facts, ascertained through thorough investigation by competent experts. Nor should nurserymen be singled out for the application of quarantines; but when quarantines become necessary, they should be made to apply impartially to all potential agencies of distribution for the pests aimed to be excluded. Some nurserymen have thought they found in the frequency of quarantines, a tendency to substitute quarantines for inspection and certification. I think no one in authority would propose that as a policy; because it would mean admitting either the insufficiency of inspection or the inefficiency of the inspecting staff. Quarantining a whole state is much more quickly done than inspecting even small lots of stock. If it should be seriously suggested that no system of inspection answers its purpose, and has to give way to a stoppage of business, the necessity to appropriate money to maintain the inspection service would be questioned. I wish to emphasize the importance—and I hope to see every one interested directly, emphasize the importance and the necessity—of thorough, efficient, inspection and to point out the danger of following the easiest way, to quarantines. We nurserymen ask just this: that our trees and plants be carefully inspected in a thorough and efficient manner by official experts competent to do the work; that all needed funds be ap-

propriated for that; that stock found to be healthy, clean and free from pests and diseases, be certified as such; that we be permitted to ship such stock and required to destroy the unmerchantable. That, I think, is altogether reasonable. If anyone competent to render judgment shall say that it is impossible to secure that, then I have no hesitation in saying that within ten years we shall see no inter-state business in nursery stock; and probably little inter-state business. And it must not be overlooked that all plant life is closely related and that farm products and food stuffs from the land fall naturally into the same class with nursery stock. The distribution almost as much as the production of food stuffs is America's most vital problem. This subject is one that concerns every one of us and the whole American people.

CROWN GALL

The effect of crown gall upon a young apple orchard, L. Greene and I. E. Melhus (*Iowa Sta. Research Bul.* 50 (1919), pp. 147-176, figs. 30).—This bulletin is a record of progress in a study of the effect of crown gall upon an apple orchard from the time it was set out until it became of bearing age. Data have been collected on the relative influence of various types of galls upon the annual growth of the trees and on the amount and position of the galls in relation to the growth and percentage of stand in the orchard. The orchard in question was planted in 1912 with 310 trees infected with crown gall and 246 normal trees. The varieties Wealthy and Jonathan were used in the experiment, and at planting time it was noted that the Wealthy trees were infected with hard gall and very little hairy root, while the Jonathan were infected with both kinds of gall.

At the end of five years it was found that more of the crown gall infected apple trees were alive than normal trees, and the experiment confirmed the general idea that the variety Wealthy is more susceptible to crown gall than the Jonathan. In the experiment, the trees infected with gall did not show nearly so rapid growth as normal trees. Data are presented which show that crown gall greatly retards the growth activities of young apple trees, as manifested by a reduction in the amount of increase in trunk diameter, and in the number, length, thickness, and weight of twigs. It is claimed by the authors that twig measurement is a much more accurate and valuable index of the effect of crown gall than trunk diameter growth. Large galls appeared to be more injurious than smaller ones. Small galls on the underground portion of the tree did not seem to injure the twig growth materially. Fruit spurs developed earlier on badly infected trees than on the normal trees. Galls occurring on stock and union appeared to be equally harmful, while those on secondary roots were less so, and hard galls were less injurious than soft ones.

The State quarantine of Minnesota with regard to the White Pine Blister rust has been amended so as to permit the shipment into Minnesota of all currant and gooseberry bushes stripped of leaves with the exception of the cultivated black *Ribes Nigrum*.

UNIFORM TERMS

*By A. E. Wohler, Overbrook-Nurseries, Overbrook, Pa.
Read before the Pennsylvania Nurserymen's Association.*

The subject which has been assigned to me is Uniform Trade Terms.

As I understand this, it is principally to cover the relation of the trade with its retail customers.

I have always felt that it would add dignity to our profession if we could have approximately uniform terms and have an organization, the members of which would act as one,—something in line with the Plumbers' Supply House that will sell only to plumbers at a special trade rate and under no circumstances at trade rates to anyone outside the plumbing trade. The Plumbers' Supply House I believe, will sell a boiler and pipe as well as fittings to a nurseryman or florist at trade rates but in all probability they will not sell us bath-tubs and such fixtures at trade prices.

To be able to buy millinery at wholesale prices, you would have to be a milliner.

The dealers in automobile tires and motor car supplies have a similar system.

Each nurseryman has his own way of doing business,—his own terms as to price, grades, guaranty, replacements and everything. I hope to have this meeting adopt some terms that may be called the Uniform Terms of the Pennsylvania Nurserymen's Association and published as such in all our catalogs. This would be a great advantage to us all in dealing with our trade as we can then confidently say that our published terms are the best any reputable nurseryman in Pennsylvania can afford to give his customers.

The fact that one or two nurserymen outside the Association would have different terms would be quite immaterial, more particularly as the membership in the State Organization would have some advertising value and it is not very likely that many would care to stay out and be considered black sheep in the flock.

I have, since I started in the nursery business, made it a rule to replace free of charge any article I sold to my customers which failed to grow. Some of my customers would probably say that I charged them enough in the first place to cover such insurance. Perhaps I have, but this system gave them satisfaction. While this, of course in a sense is an injustice to some of my customers and my competitors, as well as myself; if the prices are high enough, the cost of these replacements are easily absorbed in the business.

It is well known among the nurserymen present that under ordinary conditions, particularly dealing with flowering shrubs and similar items, that one can confidently count on a hundred percent stand, unless someone has been very careless, and we must admit that if the shrub or tree has been properly dug, kept from needless exposure to the elements until delivered to the planter, properly protected at the destination until planted, there is no reason to expect anything short of a hundred percent stand.

When it comes to larger trees, and to take some of the more difficult subjects, let us say Oaks and Pines, it may be a little more difficult, but I have had, under favorable conditions a hundred percent stand with such subjects

too, when they have been properly taken care of from start to finish.

There is hardly any doubt but that the vitality of a tree slowly ebbs away in ordinary dry weather as soon as it has been dug out of the ground, but if the air is sufficiently moist and the time of exposure is short, say a day or so, this damage may not be serious and on a percentage basis may be classified as from two to ten percent of the vitality has escaped.

My personal experience in this line has of course been as with the rest of you. We have bought several hundred thousand dollars worth of nursery stock and have had no real difficulty with any of it, but a few times when someone had been careless. Generally, it has been fairly easy to trace the difficulty.

I found at one time that a nursery had insufficient packing facilities and equipment to pack promptly and consequently was compelled to have the nursery stock lay exposed to the elements for many hours if not days, before it was packed, and the results in my case proved ninety five percent loss.

I have heard of a case where a nurseryman in Montgomery County bought a carload lot of Oak trees from a nurseryman in Ohio. These trees were planted, according to my informant, quite promptly on arrival but only two percent of them grew. A complaint was made but the seller disowned the responsibility and the buyer had to buy a second carload from the same source, because at that time, it was the only place he knew of where Pin Oaks of such a size could be bought. The results with this second car were the same as the first. This would indicate, to me, that very poor care had been given these Oaks by the Ohio Nurseryman who sold them.

We had about two or three years ago, started out a truckload of trees for delivery at a destination of about fifteen or twenty miles. The weather was quite fair when they left in the morning but before they arrived at their destination, a blinding snowstorm was raging. This was in March or April. The temperature did not fall very low. The rain, slush and snow continued through the week and the trees were lying exposed during all this time, night and day. I took the matter under consideration, concluded that in all probability they were not injured, at any rate my policy had been to replace losses and we planted them. Every tree grew, no doubt because they had not actually been frozen and they had never been dried out because the air was very moist even when we planted them.

It has often been pointed out to me by several old-time nurserymen, more particularly by Hoopes Bro. and Thomas Co. of West Chester, that it is very undignified and unbecoming for a nurseryman to guarantee the life of trees and this practise cheapened the value of our merchandise in the estimation of the public, but we have always followed the opposite course for the simple reason that I felt that with proper care there should be no losses, and I felt that this care was largely in the hands of the nurseryman and not nearly as much in the hands of the planter, afterwards. True enough, trees may be planted in utterly unsuitable places for instance: ornamental evergreens may be planted too close to a building so that they must of necessity dry up and die for want of water if not watered during the season. Hemlock Spruce may

be planted in meadow and would promptly die from the ground moisture. But as I have always supervised our planting, I have even taken responsibility for such contingencies.

In order to get the nursery business on a suitable plane, I have inquired from nurserymen in the vicinity of Philadelphia doing a retail business, asking them what their sentiments were concerning the matter of replacements, and they have been fairly unanimous in expressing the opinion that no nurseryman should guarantee the life of a tree. If you buy a horse it is yours for better or worse until death do you part. If you buy a fine dog, valued at from Five Dollars to Five Thousand Dollars, it is your risk as soon as you take the dog's lead in your hands, and frankly, there is no good reason why a nurseryman should be responsible for living things that are not in his care even admitting as I have stated in the beginning that when the goods are in proper shape on delivery, it is reasonable to expect a ninety five percent stand, and even a hundred.

We may, all of us, have accidents and I do not believe that any of us would refuse to meet a customer half way in such a case and even give him full measure running over as soon as we see that there is a possibility that particularly poor results could be attributed to our negligence, or that of our employees. But such exceptional cases need not be provided for in our terms. I feel that in order to have uniform terms adopted by this meeting, we must eliminate all guarantees as to the life of the stock and simply guarantee the delivery in good condition, true to name and up to size and specifications. If we all eliminate guarantees of the life of stock after delivery unless especially provided for in a written contract and for a consideration, we shall save ourselves a lot of argument and contention.

I have prepared a set of terms that I wish to submit to the members present, in which we give a qualified promise to replace at half price, provided the bill is paid when due—not later than thirty days after date of invoice.

UNIFORM TERMS

OF

THE PENNSYLVANIA NURSERYMEN'S ASSOCIATION

1. All orders are accepted subject to previous sales and the following terms and conditions:
2. Prices in this catalog supersede all previous lists, catalogs and quotations. Prices are subject to change without notice. Our prices are f. o. b. our shipping station, or for local delivery by motor f. o. b. customer's place if within 40 miles of our Nurseries. Arrangements may be made for distance deliveries by motor trucks of full truck loads if desired.
3. Stock specially selected by customers at the Nurseries will be charged according to the value of the trees chosen.
4. Lots of 5 and 50 will be furnished at the 10 and 100 rates, respectively.
5. All goods are thoroughly packed, insuring best protection while in transit. All packing charges are included in our list prices, except for stock of unusual size, when the packing will be a matter of special quotation.
6. We give % discount for cash with order for plants.

7. Cash with order, except to persons who satisfy us as to their responsibility, when accounts will be due in 30 days. We charge interest at 6% per annum or not less than 2% minimum from date of bill on overdue accounts.
8. All goods are guaranteed true to name, full count, up to grade, and in good condition when shipped. Any plant proving untrue to name will be replaced. Claims to receive consideration must be made within days after receipt of goods. We give no guarantee of the life of stock. Stock delivered as per order and in good condition is not returnable.
9. We are not responsible for goods damaged in transportation, other than by our own conveyance, but guarantee proper adjustment on the part of the carrier up to 50% of the bill, and will ourselves conduct the claim, when promptly informed.
10. We are anxious to please, and to treat our customers fairly. Always frankly call our attention to any apparent fault.

SHIPPING INSTRUCTIONS

Shipping season opens about March 1st in the Spring and August 1st in the Fall.

Our stock is regularly inspected and certificate will be sent with each shipment. Stock will be fumigated when requested or when the State laws require it.

Write plainly and give explicit directions as to address and mode of shipment. Shipments will be forwarded exactly as directed; but when without instructions we will use our best judgment and forward by shortest and safest route. We recommend all herbaceous plants be shipped by express.

All goods are at purchaser's risk after they are delivered to the forwarding companies and we receive their receipt for the shipment in good condition.

Claims for damage while in transit must be made to the delivering company. Have delivering agent note the damaged condition on the freight bill and promptly present your claim to the transportation company and send copies of all papers so we can help you to secure prompt settlement.

POLLEN IS LONG LIVED

The preservation of pollen for hybridizing, A. P. Saunders (*Bul. Peony News No. 6 (1918), pp. 2-9*).—A partial review of the literature on the preservation and viability of pollen of various plants which have been prepared for special use in hybridizing peonies. The author concludes that peony pollen under favorable conditions is very long-lived, and that there should be no difficulty in carrying it through the entire season from the earliest to the latest blooming species.

An examination for nut culturist to fill one vacancy in the bureau of plant industry, United States department of agriculture, has been announced by the government civil-service commission. Applicants should apply to the commission at Washington, D. C., or to secretaries of the board in other cities for Form 2448, stating title of examination, which form must be executed and filed not later than April 13, 1920.

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Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

March, 1920.



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STANDARD PEAR, 11-16 inch

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| 400 Anjou | 500 Bartlett |
| 500 Clapps | 1000 Duchess |
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STANDARD PEAR, 5/8 inch

| | |
|-------------------|------------|
| 200 Anjou | 100 Clapps |
| 200 Worden Seckel | |

STANDARD PEAR, 1/2 inch

| | |
|------------|-------------------|
| 200 Anjou | 300 Bartlett |
| 100 Clapps | 500 Worden Seckel |

DWARF PEAR, 5/8 inch

| | |
|------------------|--------------|
| 300 Anjou | 800 Bartlett |
| 400 Clapps | 2000 Duchess |
| 150 Louise Bonne | 200 Mary |
| 300 Seckel | 300 Wilder |

DWARF PEAR, 1/2 inch

| | |
|------------------|---------------|
| 300 Anjou | 1000 Bartlett |
| 300 Clapps | 100 Lawrence |
| 100 Louise Bonne | 100 Seckel |

QUINCE, 5/8 inch

| | |
|--------------|-------------|
| 460 Anger | 100 Borgeat |
| 400 Champion | 100 Meeches |
| 400 Orange | |

QUINCE, 1/2 inch

| | |
|-------------|--------------|
| 720 Anger | 300 Champion |
| 200 Borgeat | 400 Meeches |
| 400 Orange | |

QUINCE, 3/8 inch

| | |
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| 100 Borgeat | 100 Champion |
| 200 Meeches | 500 Orange |

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Get rid of your shipping troubles, just "put it
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West Chester, Pennsylvania

The National Nurseryman

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THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

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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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed. Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
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Hatboro, Pa., April 1920

Subscribers to "Nurserymen's Fund for Market Development"

CONFIDENCE NEEDED

The first sentence of a Press Bulletin from the Chamber of Commerce of the United States says: "Seeing in increase production a means of restoring normal business and price conditions, etc." The Supreme Council of London urges the world to get to work.

Editorial comments in all the leading papers seem to have come to the same conclusion, that what is needed to get back to normal conditions is more work and more production, and incidentally less talk. To accomplish this the government must do its part to bring about conditions which will encourage it. Nothing so quickly checks industrial prosperity as uncertainty as to the conduct of business and the supply and rewards of labor. Unless the business man has reasonable expectations of profitable results from an enterprise he is not likely to launch it. With this in mind what assurance has the nurseryman and horticulturist, that if he does risk his capital and devote his energy and brains in an Horticultural enterprise, the government will not interfere in some way and bring his efforts to naught.

The nurserymen are far from being confident of the future and perhaps what has done more than anything else to shake their faith is the numerous quarantines and regulations governing their business.

Government inspectors and reports regarded as ends in this transfer a democracy into an autocracy of office holders and inspectors, which are very apt to prosecute business rather than protect and develop it.

What is most needed is assurance that honest effort will be assured of the rewards of its labors.

At the present time there is no horticultural establishment doing an interstate business, whose development is not being retarded by the attitude of the Agricultural De-

partments of the different States and the Federal Horticultural Board.

If these governmental departments could get together on a policy that would foster the horticultural business interests, along national lines rather than local ones, it is a safe prophecy the business would develop by leaps and bounds and appropriations for carrying on the work of the governmental departments would be correspondingly increased and be more readily available.

NATIVE PLANTS

Much has been said and written in favor of a more general use of our native plants instead of imported or exotic kinds.

Little however, has been done to encourage the demand for them, and that little of rather a destructive nature to our native flora.

The country has been and is being ravished of such plants as the *Rhododendron maxima*, *Kalmia latifolia*, ferns, in fact any plant that has an ornamental value and is readily accessible that could be put upon the market. Nurserymen are not the least offenders in this respect, but it is to be hoped under the necessities imposed by Quarantine 37, shutting off the supply of nursery grown foreign importations, steps will be taken to propagate and improve the many fine things that are native to this country.

Even in pre war days it seemed foolish to import *Kalmia latifolia* from Holland and it was a difficult matter to explain to the layman why it was done, when there were so many growing wild in this country. The plantsman, of course knows how much more valuable a plant grown in the nursery is, when compared with a collected one.

Even the practice of collecting, planting them in the nursery, growing them for a period before selling them to the consumer is really a poor one.

It is not deserving of the name of true horticulture but rather savors of dollar chasing and about on a par with other methods of wasting the resources of the country.

It is not uncommon to see, where a large estate is being laid out, the country around scoured for suitable trees and plants, so that one man may have them in his enclosure.

One could wish for more of the spirit that considers the native plants a common heritage and the individuals right to exploit them commercially be only acquired by growing them.

Some of the rare and choice plants like some of the birds and animals are already in danger of becoming extinct, fortunately in the case of the latter the law is already operating to protect them, but with plants the interest is not very general along this line.

Apart from any sentiment whatever and looking on the subject from a purely commercial point of view, propagators and growers of native plants are the ones who will decide the extent of their use.

It remains for the American nurseryman and grower to take hold of desirable native plants, propagate and grow them, and offer the consumer well grown stock, instead of jobbing in collected plants, a practice which has little to recommend it.

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Offers for Spring 1920

- 15,000 Cal. Privets in grades, 1, 2, and 3 yrs.
- 30,000 Asparagus, 2 and 3 yr., Asst.
- Barberry Thun., 18-24 in. and 2-3 ft.
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Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

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FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

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PROPAGATING GREENHOUSES FOR THE BUREAU OF PLANT INDUSTRY

On February 20th, the Chairman of the Board of Awards, Department of Agriculture, received bids for the erection, at Bell Station, Maryland, fifteen miles from Washington, one head house, four greenhouses, three cottages, and one implement house. These buildings are to be used in connection with a Plant Detention Station at Bell Station.

Dr. Galloway, in answer to an enquiry as to what uses were to be made of these buildings, sends the following letter.

February 16, 1920.

Editor National Nurseryman,

Flourtown, Pennsylvania.

Dear Sir:—

I am glad to get your kind letter of recent date, regarding our proposed new plant station at Bell Station, Maryland.

This station is designed primarily for the use of the Office of Foreign Seed and Plant Introduction. As you probably know, the Office of Foreign Seed and Plant Introduction has several field stations where it grows, tests, propagates, and distributes the numerous seeds and plants it brings in from all over the world. One of our oldest and most extensive stations is at Chico, California. We have about 230 acres in use at this station and are well prepared for any kind of propagating work. I wish you could visit this station sometime, as we have a lot of work going on there that is beginning to show now. I refer more especially to work on stocks. Pear, plum, cherry, peach, rose, and related stocks have been under investigation there for a number of years. For the past twelve years we have maintained a station near Rockville, Maryland, about fifteen miles from Washington. The soil at this station is not entirely satisfactory. Other conditions there, furthermore, are not altogether favorable. The restrictions of the Federal Horticultural Board apply to our importations as well as those of commercial florists and nurserymen. If anything, our material is more rigidly inspected and scrutinized than the usual commercial shipments. The station at Bell is designed to take care of all those valuable things which the office is bringing in and which can not be immediately released. For example, just at the present time we are receiving many valuable seeds and plants from one of our explorers, Mr. Wilson Popenoe, in Guatemala, and another, Doctor H. S. Shantz, who is traveling in Africa. Mr. Popenoe is making a special effort to secure new and promising avocados for this country. These, of course, must all be handled under glass. We have very much felt the need of some place near Washington where all these valuable things could be assembled, studied, and propagated. We are fortunate at Bell in being very close to Dr. W. Van Fleet who has for a number of years conducted a little station there and has done some most valuable work on roses, chestnuts, and other plants along breeding lines. Mr. Darrow, another member of the Bureau of Plant Industry especially interested in breeding small fruits, is also located near Bell, so that we expect to have quite a little colony of workers there.

Under the procedure under which the Federal Horticultural Board is now working with respect to imported commercial nursery stock, all the material coming in under what is known as open permits enters as it has always come in at the ports of entry and is then sent directly to the nurserymen and others who may have ordered same. The Board, so far as I am aware, is not contemplating the detention of any commercial stock, as under the regulations such stock if clean must be immediately passed out to the owner. The method of inspection, therefore, becomes one of proper handling and care while the stock is being examined. Up to this time all stock that has entered here under Quarantine No. 37 has been very promptly handled and reshipped to the owner. Nothing has been held here more than a few hours, except and unless there was some defect in the permit, such as the applicant not properly taking care of his bond. In one or two such instances there has been a delay of a few days. I find in looking up the records that about two hundred special permits have been issued by the Federal Horticultural Board under Quarantine No. 37. These special permits, of course, are for material that may not be entered under what is called open permits. All such things as lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus; stocks, cuttings, scions, and buds of fruits for propagating purposes; rose stocks for propagation, including Manetti, Multiflora, Brier Rose, and Rosa rugosa; nuts, including palm seeds, for propagation; and seeds of fruit, forest, ornamental and shade trees, seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants, may come in without these special permits. About one-fourth of the material for which special permits have been issued has already arrived and has been inspected and passed out to the owners. Nothing, so far as we are aware, has been held or delayed here.

Reverting again to the question of stocks, we have been interested in this subject for a number of years. The Office of Foreign Seed and Plant Introduction has assembled a good store of very valuable material which is now ready for careful study and test.

We want to open up a line of effort that will point the way to securing better stocks for our apples, peaches, cherries, plums, pears, and roses, and the more common ones now in use. There is a large field here for study. We have made a good many experiments with the pear and now have some very promising things. One of the most important phases of the problem will be the development of home supplies of seeds and propagating material.

With kindest regards, I am

Very truly yours,

B. GALLOWAY, *Plant Pathologist.*

TRADE ACCEPTANCES

Mr. Henry Moon at the Convention of the National Association advocates the use of Trade Acceptance. The Commerce reports of February 2nd made a statement that a booklet entitled "Trade Acceptance, what they are and how they are used" by Robert G. Freman, former Deputy Governor of the Federal Reserve Bank of New York and published by the American Acceptance Council, 111 Broadway, N. Y. Copies will be mailed free upon application to the Council.

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well rooted, dormant summer frame cuttings ready to set direct into the nursery without further expense. Many leading catalog firms will list Box-Barberry next season.

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Our SPECIALTY

Growing evergreens for lining out on contract.

STRAWBERRY PLANTS

We have a large supply of the following varieties, and can ship promptly after April 1st.

Superb Everbearing

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Can also furnish Cumberland and Plum Farmer Raspberry plants. Our plants are fresh dug. Will be pleased to quote on your wants.

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Stevensville, Michigan.

STRAWBERRY PLANTS

For the wholesale trade, grown in the World's Strawberry Center, Plants and Service the Best.

| Varieties | Number of plants Offered |
|-------------------------|--------------------------|
| Campbell's Early | 5,000 |
| Hesslin Early | 25,000 |
| Gandy | 40,000 |
| Big Joe (Joe Johnson) | 100,000 |
| Klondykes | 100,000 |
| McAlphine | 150,000 |
| Parson Beauty | 175,000 |
| Superior | 500,000 |
| Superb Everbearing | 75,000 |
| Progressive Everbearing | 20,000 |
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Limited number of other standard varieties unsold.

I also have a surplus of 20,000 Lucretia Dewberry plants, and 15,000 Asparagus roots.

I ship to you or direct to your Customers under your own Tags. Let us figure with you on your requirements.

V. R. ALLEN,

Seaford

Delaware

PROPAGATION OF APPLE TREES BY CUTTINGS AND LAYERS

There are few published records of attempts to propagate apple trees by cuttings. Doubtless many have been made and not reported, for the uniform results on record may be described in the single word—failure.

Luke attempted to root apple cuttings of various sizes and lengths at cutting-bed temperatures of 64 degrees and 67 degrees. All failed to strike root. Luke was able to induce root cuttings to grow with fairly good success.

Attempts to root apple cuttings were made during the summer of 1912. Green wood cuttings 3 to 4 inches long were made in early August and September, and set in sand in the greenhouse. Powdered charcoal was also used as a propagating medium, both alone and a one-half inch layer over sand, with the hope that it might check disease. Bottom heat in varying degrees was used in some cases, also an enclosed propagating frame. In short, an effort was made to provide the best possible conditions for cuttings. Something over a thousand cuttings of several different varieties were made. The results were much the same in all cases. The cuttings formed a callus, varying somewhat with the variety, and the buds started out until the leaves were about one-fourth inch long. This occupied about two weeks, after which growth ceased. The final result was the same in practically all cases. Of the 1,000 or more cuttings only a single one of the Fall Pippin variety rooted, and that only a single short shoot that was broken off in removing from the sand, so that it failed to grow. Fig. 1 is a typical representation of the range of development of callus and leaf. Arranged in order of callus development the varieties are Yellow Transparent, Fall Pippin, Red Astrachan, Bough (Sweet), Ben Davis, Wagener. As will be shown later, these varieties may be induced to root from the scion, when grown by the nurse-root method, more or less readily, according to the variety. There is, however, little or no correlation between callus growth and root formation, as may be seen by comparison with the numbers rooting shown in Table 2.

One lot of cuttings was watered with a nutrient solution, using a formula in common use for growing seedlings. The only effect was a noticeable growth of green algae over the surface of the sand. The cutting growth was hindered rather than helped.

In spite of these failures it is the opinion of the writer that it is possible to grow apple trees from cuttings. To an inquiry addressed to many of the leading nurserymen of the country, thirty-five replied that they had never seen cuttings or prunings from the trees taking root, while seventeen professed to have observed such an occurrence, though none of them considered it at all common. One nurseryman reported having planted well-callused scions in a mixture of sand and soil, and that "the best stand we ever had was something less than 10 per cent of the cuttings planted." The trees were weak for a year or two. The late T. V. Munson of Denison, Tex., says: "I have often had apple and even peach switches cut from the trees in February and stuck into the ground (very sandy) for label sticks, take root and grow off well."

In the spring of 1913 a considerable number of root cuttings from young trees were planted in the nursery row.

No record was kept of them, but they made a good stand though growth was very slow the first season. It is the practice of at least one nursery firm to dig trees already established on their own roots once in two years and cut off the roots for propagation by root cuttings. The trees are then replanted and a new crop of roots grown.

In a later experience of the writer, root cuttings from the root system of bearing trees were used in an attempt to propagate the stock variety. This resulted in almost a complete failure. The roots used were from one-quarter to one-half inch in diameter, and when planted in the open, about 3 inches long. Others planted in the greenhouse were about 1½ inches long. Whether older roots propagate with greater difficulty, or whether some unfavorable conditions not readily seen interfered with success, cannot be told with certainty.

PROPAGATION BY LAYERS.

The method commonly used in propagating dwarf trees is by some form of layerage. A considerable number of attempts were made to induce root formation by air layerage. Earthen pots were split, and in early August were placed in appropriate position on growing shoots and filled with sphagnum moss. They were kept moist by frequent watering. None of these air layers showed root formation. It proved difficult with the rather small pots used to maintain uniform moisture conditions, and this may have had something to do with the failure.

In the spring of 1917 two-year-old trees growing in the nursery row were cut off 3 or 4 inches above the ground and allowed to stool. Later in the summer soil was heaped up around the new shoots to the height of 4 or 5 inches. The varieties used were Ben Davis, Bough, Rhode Island Greening and Transeendent. None of these shoots have been separated in an attempt to establish them as independent trees, but investigation in the spring of 1919 showed that most shoots of all these varieties bore small roots, coming out near the junction with the cut-off stump.

Mass. Experiment Station Bulletin 190.

THE SUBJECT OF COSTS

The opening session of the Illinois Nurserymen's Association on February 12th enjoyed an unexpected pleasure in listening to an address on "Cost Accounting" by Mr. J. L. Jacobs, Public Accountant. He complimented the association in taking up such subjects at its meetings. "The new concept is that of service. The idea of producing for profit alone, is narrow, while the wider scheme takes in not only the employe, but society as a whole. Necessarily, to accomplish this your programme must include one big thing, and that thing is cooperation. You cannot get very far if you have cut-throat competition. I am happy to know that you are connected with the A. A. N. and that you are getting down to fundamentals where you are to get some standard price basis and standard classifications.

"Cooperation, harmony, energy will enable you to make the greatest progress individually or in groups."

The speaker then developed his subject by referring to the work which had been done during the war in connection with the ship building and other trades where it was found necessary to divide both the big and little manufac-

THE
American Association of Nurserymen

ORGANIZED 1875

A Co-operative Organization of Four Hundred
 Nursery firms associated for mutual benefit.

Our aims and purpose :

- To improve conditions in the Trade wherever improvement is needed;
 - To make business between Members profitable and pleasant through observance of the ethics of fair competition;
 - To bring the Nurserymen and the Planters into closer relations and secure a better understanding of the problems of each;
 - To disseminate accurate information about Trees and Plants and to encourage and assist in their more general and more profitable use;
 - To advertise the Association in connection with our Publicity Campaign, so that the buying public can know what the Association is and what it stands for; to recommend its Members to planters as logical and dependable sources of supply; to get orders for our Members and to see that they are filled according to the Association's stated policy of fair-dealing;
 - To assist Members to avoid bad debts with reliable Credit Information;
 - To Collect Accounts for Members;
 - To Collect Freight and Express Overcharges and to advise Members regarding any Transportation problem, through Mr. Charles Sizemore, Traffic Manager;
 - To adjust all disputed accounts between Members through our Arbitration Committee;
 - To see that the rights and interests of our Members are carefully watched and protected by our Legislative Committee;
 - To secure a more accurate and complete Code of Standardized Plant Names through the work of our Committee on Nomenclature;
 - To do all and anything that will add to the prestige and standing of the American Association of Nurserymen and make the business of its members more profitable and, as representative of the Nursery industry, to advance the trade in public esteem.
- While not inviting membership, our doors are hospitably open to all reputable nursery firms who approve of our platform and care to stand with us.

EXECUTIVE COMMITTEE:

J. EDWARD MOON, President, Morrisville, Pa.
 LLOYD C. STARK, Vice-President, Louisiana, Mo.
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 J. B. PILKINGTON, Portland, Oregon.

John Watson, *Executive Secretary*.

PRINCETON, New Jersey.

turners into groups in order to get the best and most economical results.

He pointed out that the time had passed when each tradesman could gain by keeping his secrets from his neighbor because it limits and does not make for the greatest progress and returns in the industry as a whole. "Unless considerable thought has been given to these matters, the average organization is a very primitive thing.

"A man starts in a small way of business and is apt to let things go along hoping that things will turn out all right. There is no definite plan and no definite responsibility. But there are certain figures that you all ought to have as executives. It is soon realized in trade, that it is proper to specialize in certain products. Nothing will show better than keeping good records of your stock. Certain advantages in different parts of the country make it impossible for others to make a profit on some products. You must give individual attention to the various concerns of your organization.

"Many concerns are able to go along in spite of a lack of proper accounting, but the losses today are mostly owing to the fact that they have not kept cost accounts. This they find out when they reach the bankruptcy courts. A simple, but comprehensive plan of accounting would avoid all this. There are essential figures any organization must have in order to know what they are doing. It is well known that without knowing what our competitors are doing, there is danger of going wrong in the matter of price. For this reason it has been found a great help to have regular reports of prices and from them obtaining a more correct average price for commodities. If you have no standard, the tendency is to try to get by and try to undersell. Anything you sell ought to be worth the price not only to get you by, but to give you a surplus. The higher your service, the higher your price, and people are quite willing to pay. But what is a standard of quality? We don't know. The apparent lack of any standard hurts the industry as a whole. The best thing for the good of the horticultural interests of this State, is for your association to get together and arrange standards based on business methods. This will include methods of handling and paying employes. This getting together will enable you to help each other and at the same time raise the standard of your business throughout the States."

Mr. Jacob's address was listened to with great interest and as might be expected, led up to a discussion on the question which refuses to be side-tracked—that of "costs." A number of speakers took part in the discussion and some of the old difficulties were resurrected but still there was an indication that the Illinois Nurserymen's Association is gradually coming into a state of concord as to the importance of the cost question. It was pointed out that two years ago the association had decided to support the plan of engaging an expert to advise on the subject, but the financial support had not been sufficient. Now that the subject was again coming to the front, several gentlemen urged that a beginning be made, and promised to guarantee the money necessary for the purpose.



The filing of the "Trade Mark" of the American Association of Nurserymen in Washington marks a distinct advance in the affairs of the Association.

It is a climax of the thought and labors of those who have worked so hard to bring about cooperative effort to lift the nursery business on to a higher plane.

The trade has now something to "tie to." A standardized code to work by and a plan for market development that will have a cumulative force that will accomplish.

As Mr. Watson points out, this trade mark is already beginning to tap, tap into the consciousness of four million six hundred thousand customers, through national advertising, with which the fact that those using this trade mark supply the best trees and plants that are grown and can be depended upon to give them a square deal.

It will be a shortsighted business man who does not take full advantage of such an opportunity to connect up and become identified from the start with a trade mark that stands for Trustworthy Trees and Plants and a fair deal to the customer.

THE TRADE MARK OF THE AMERICAN ASSOCIATION OF NURSERYMEN



To be candid we like the trade mark adopted by the American Association of Nurserymen. It is not stereotyped. It even suggests, in its lack of the geometrical, things that grow, which it represents.

The chain has its sentimental application.

It lacks a motto, unless "Trustworthy" be it.

It is dainty and will not look out of place on any man's stationery and literature.

We do not know who approved the design but we do take off our hat to the courage that will dare so many criticisms.

There are prettier pictures than a twenty dollar bill, but lots of them do not represent that much value.

HOW HE GOT IN

If a bug should find its way
Into the cleanly U. S. A.
There is always hell to pay,
And the most that we can say
He passed the quarantine.

REACHING THE CUSTOMER

In a letter from the New Haven Nursery Co., New Haven, Conn., calling attention to their catalogue, they state "Careful compilation, sizes and prices are the three features of first importance to the purchaser who wants to buy and select for himself.

"There is however a large buying public which is not

PEXTO TOOLS

FOR USE ABOUT THE HOME AND FARM
FOR THE MECHANIC IN EVERY TRADE



Sell More Hardy Stock

This Book and Plan Will Help You

Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruits and flowers. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book

This Book Sells in Book Stores for 50 Cents

Our selling plan increases *your profits* by placing *The Little Pruning Book* in the hands of your customers *through you*. Your sales of shrubs, trees and hardy stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. The author of this book, F. F. Rockwell, is a writer of wide reputation in horticulture and formerly was manager of the Nurserymen's National Service Bureau.



THE PECK, STOW & WILCOX COMPANY

Mrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers' Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2004 W. Third St., Cleveland, Ohio

100% American for 100 years. Founded in 1819



experienced enough to select their stock, and have to be reached by other forms of publicity supplementary to the catalogue."

Most nurserymen who cater to the retail mail trade, realize the catalogue is rarely sufficient, in fact educating the public to buy is the biggest problem the nurseryman has to solve. It is really what brought the Market Development Movement into existence.

While every individual nursery must do its utmost to get new business if it wants to be successful, the real, big way to do it is by cooperative national advertising to educate the public.

THE NURSERY MANUAL

The archives of the American Horticultural World in all its branches are being kept up to date by Prof. L. H. Bailey.

His well known Nursery-Book first published in 1891 has just been rewritten being the 22nd edition of it, and reissued as one of the Rural Manuals under the title of The Nursery Manual.

Prof. Bailey's knowledge of what the practical man needs in the way of books is almost uncanny and is only excelled by his method of supplying them.

The Nursery Manual sticks closely to its subject "The Multiplication of Plants" and comes as near to being practical experience on paper as is possible to get.

It is published by MacMillan Co., New York. Price \$2.50.

THE PROFESSION OF LANDSCAPE GARDENING

Shades of Parmentier, Downing, Jefferson, Olmstead and other departed masters of Landscape Art rest easy in your graves.

The profession which brought you fame is now in the hands of a living exponent that will bring it to levels never dreamed of in the age in which you lived. A man, so versatile, that while landscape gardening is his chief interest, his genius and skill find play in other lines of art that go to make the world a better place to live in.

His business card, herewith produced, says so.

LANDSCAPE GARDENER
 WHITEWASHING, GRADING
 HOUSE CLEANING, WAITING AT DINNERS
 TREE PRUNING ETC.

We withhold his name and address for obvious reasons.

NOVEL PAMPHLETS

The Moon's Nurseries, Morrisville, Pa., are sending out pamphlets or folders offering one particular genus of plants.

For instance, the one offering Beech trees gives a list of the kinds they have for sale, a chatty description of

them, their uses and other information likely to interest the purchaser along with the sizes and prices.

It ends with one of Moon's Nursery Rhymes, of which the following are samples.

Something unusual to fill in that breach,
 Why not a Hedge of the Fern Leaf Beech?
 Graceful and bushy from the ground to the tip,
 Hundreds we have growing and ready to ship.

Acer Globosa. Had you give them a thought
 Will come in handy now Bays can't be bought,
 They're sturdy and straight with a little round head,
 Refined and quite formal. Why not use them instead?

THE JAPANESE KEAKI

A tree deserving attention from nurserymen and foresters is the Keaki of Japan *Zelkova serrata* or as it is perhaps better known under the name of Planera Keaki.

A row of them planted along one of the boundary lines of the nursery of Thomas Meehan & Sons, Germantown, Pa., about fifteen years ago, has done exceptionally well, having attained as great proportions in diameter of trunk as would be expected from the Norway Maple in the same period growing under the most favorable conditions.

It is evidently as easy to grow and as adaptable as the elm, having proved itself at least from Massachusetts to South Eastern Pennsylvania and would no doubt do well in a very extended area.

The Arnold Arboretum Bulletin says of it:—"The *Zelkova serrata* is another Asiatic tree which is still too little known in the United States. The oldest tree in this country is growing on the estate of Mr. Henry Everett in Barnstable, Massachusetts. The seeds which produced this tree were brought from Japan in 1862 by John Wilson, who gave them to Captain Frank Hinkley. Only one plant was raised from these seeds. It is now a broad-headed tree with a short, stout trunk divided into several large ascending stems. A little later seeds of the Keaki were sent from Japan to the Parsons nursery at Flushing, either by Dr. Hall or by Mr. Thomas Hogg, and the best of the trees, the result of this introduction, known to the Arboretum are in Dr. Hall's plantation in Bristol, Rhode Island. The largest of these trees are now fully seventy feet high with tall stems from two to two and a half feet in diameter. These trees have for years been producing large crops of seeds and quantities of seedlings spring up under the trees, and at long distances from them, the seeds being widely scattered by the wind. A specimen with a tall clean stem and shapely head which has been planted by the roadside in Warren, the next town to Bristol, indicates that the Japanese *Zelkova* might be successfully used as a street or roadside tree. It is as a timber tree, however, that this *Zelkova* deserves the attention of Americans. It is the most important hardwood tree of Japan and Korea. The wood is tough, elastic and durable in the ground and when exposed to the air. It is considered the best wood for building in the Empire, and furnishes the great round columns which support the roofs of Japanese temples. It is universally used in Japan in making jinrikishas, and quantities of the wood are sent from Korea into China for this purpose. The

Keaki alone has made the jimrikisha possible just as the Hickory-tree has made possible in this country the light wagon and the trotting horse. The demand for the wood has made the Keaki comparatively rare. That it was once a noble tree, however, is shown by the great specimens which have been preserved in temple gardens and by village roadsides. Such trees are often at best one hundred feet high with the trunks eight or ten feet in diameter.

Edward A. and William J. Manda have become partners with their father, Joseph A. Manda, of West Orange, N. J., and the business has been incorporated under the name of the Joseph Manda Co. Both sons saw service overseas during the war. The capital stock is \$100,000.

UNITED STATES EXPORT TRADE IN APPLES

(Prepared by the Division of Statistics, Bureau of Foreign and Domestic Commerce.)

The calendar year 1919 shows the most remarkable values in the history of the United States export trade in apples. These exports consisted of 24,704,359 pounds of dried apples, invoiced at \$4,109,828, and 1,712,367 barrels of ripe or green apples, worth \$14,471,282, or an aggregate value of \$18,581,110. This is an increase of 45 per cent in the total value, but a decrease of 36 per cent in the quantity of dried apples and 11 per cent in the quantity of fresh apples exported, as compared with the pre-war calendar year 1913, when the exports were 38,734,465 pounds of dried apples, invoiced at \$2,719,203, and 1,920,221 barrels of green or ripe apples, worth \$7,417,400, or an aggregate value of \$10,136,603.

The extraordinary fluctuations in the value and volume of this trade for the calendar years 1913-1919 may be noted in the table of exports and the average annual prices given below:

| Year. | Dried | | | Green or ripe | | |
|---------|------------|-------------|--------------------------|---------------|-------------|---------------------------|
| | Pounds. | Value. | Average price per pound. | barrels. | Value. | Average price per barrel. |
| 1913 .. | 38,734,465 | \$2,719,203 | \$0.070 | 1,920,221 | \$7,417,400 | \$3.80 |
| 1914 .. | 31,027,551 | 2,441,094 | .078 | 1,541,361 | 5,695,621 | 3.70 |
| 1915 .. | 33,908,508 | 2,671,601 | .078 | 2,176,992 | 7,686,284 | 3.53 |
| 1916 .. | 13,186,467 | 1,002,007 | .076 | 1,670,543 | 7,205,766 | 4.31 |
| 1917 .. | 7,852,773 | 691,111 | .088 | 958,104 | 4,496,707 | 4.69 |
| 1918 .. | 2,200,483 | 311,350 | .141 | 579,916 | 3,135,203 | 5.40 |
| 1919 .. | 24,704,359 | 4,109,828 | .166 | 1,712,367 | 14,471,282 | 8.45 |

Average Yearly Prices of Apple Exports.

The foregoing figures would seem to indicate that the ordinary laws of supply and demand as affecting values were inoperative during the war period and the peace year 1919. In the normal pre-war year 1913 the average annual export price of dried apples was \$0.07 per pound, and of fresh apples \$3.80 per barrel. The outbreak of the war cut off to a large extent the usual competition in European markets from the other great apple-growing countries—Australia, New Zealand, and Canada. As compared with 1913, there was a decrease in American exports of dried apples of 7,706,914 pounds in 1914 and 4,825,957 pounds in 1915, without a proportionate rise in value, the average annual export price for those years remaining \$0.078 per pound. The same paradoxical situation occurred in 1916, when the exports were 20,722,041 pounds less than in the previous year and the average annual export price dropped from \$0.078 to \$0.076. Likewise, exports of fresh apples declined 378,860 barrels in 1914, as compared with 1913, and the average price also declined from \$3.80 in 1913 to \$3.70 in 1914.

From 1916 decreasing exportation of both dried and fresh apples was a factor in the ascending scale of average annual export prices, which amounted to \$5.40 per barrel for fresh and \$0.141 per pound for dried or evaporated apples in 1918, the last year of the war, and achieved the high record of \$8.45 per barrel for fresh and \$0.166 per pound for dried apples in the peace year 1919.

Principal Markets for American Apples.

The combined fruit crops of the United States perhaps exceed in variety, quantity, and value those of any other nation. The most important of these in the export trade is the apple. This country is one of the greatest fruit-consuming as well as fruit-producing nations on the globe, yet, in addition to the domestic consumption, \$122,678,783 worth of all kinds of fruit were exported during the calendar year 1919, of which 15 per cent, or \$18,581,110, was for dried and fresh apples, not including large quantities of canned and preserved apple products also exported.

The distribution of these exports by principal countries during November and December, and for the calendar year 1919, was as follows:

| Countries. | November. | | December. | | Year ended December. | |
|-----------------------|-----------|-----------|-----------|-----------|----------------------|------------|
| | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. |
| Dried Apples. | Pounds. | | Pounds. | | Pounds. | |
| Belgium | | | | | 2,013,180 | \$366,059 |
| Denmark | 50,000 | \$11,000 | 523,396 | \$112,276 | 3,512,038 | 657,108 |
| Finland | 324,012 | 62,921 | 298,400 | 76,350 | 893,762 | 183,998 |
| France | 5,000 | 1,075 | 90,050 | 19,040 | 1,625,439 | 191,820 |
| Netherlands | 30,200 | 4,853 | 7,250 | 1,812 | 490,503 | 93,068 |
| Norway | 50,286 | 8,123 | 478,196 | 94,080 | 2,283,759 | 400,006 |
| Sweden | 1,279,568 | 238,225 | 506,573 | 89,363 | 7,309,782 | 1,296,930 |
| United Kingdom | 13,572 | 2,343 | 57,042 | 13,752 | 5,748,424 | 755,048 |
| All other | 62,596 | 15,021 | 123,854 | 27,541 | 827,472 | 165,791 |
| Total | 1,815,234 | 343,561 | 2,084,761 | 434,214 | 24,704,359 | 4,109,828 |
| Green or ripe apples. | Barrels. | | Barrels. | | Barrels. | |
| Denmark | 1,637 | 15,653 | 1,167 | 11,648 | 33,281 | 393,848 |
| Norway | 2,232 | 21,368 | 21,575 | 230,683 | 147,586 | 1,697,143 |
| Sweden | 349 | 3,625 | | | 34,950 | 457,119 |
| United Kingdom | 144,638 | 1,220,962 | 83,548 | 815,033 | 1,209,855 | 9,557,126 |
| Canada | 37,218 | 236,423 | 15,166 | 98,379 | 158,859 | 1,131,728 |
| Mexico | 4,360 | 33,417 | 3,945 | 35,251 | 23,565 | 193,541 |
| Cuba | 6,368 | 61,865 | 9,671 | 85,577 | 26,548 | 245,726 |
| Argentina | 2,510 | 33,250 | | | 15,159 | 207,822 |
| Brazil | 1,633 | 20,233 | 157 | 2,005 | 16,880 | 206,536 |
| Philippine Islands | 4,890 | 30,980 | 2,742 | 22,836 | 15,682 | 105,383 |
| All other | 7,435 | 61,521 | 4,835 | 43,066 | 30,002 | 285,310 |
| Total | 213,270 | 1,739,297 | 142,806 | 1,344,478 | 1,712,367 | 14,471,282 |

Destination of Dried-Apple Exports.

In the pre-war fiscal year ended June 30, 1914, of the total exports of dried apples from the United States, amounting to 33,566,160 pounds, valued at \$2,628,445, Germany purchased \$1,377,730 worth, the Netherlands \$702,279 worth, and Belgium \$120,395 worth, the remainder being distributed among 64 other countries.

In the calendar peace year 1919, the trade which was formerly with Germany passed to other European markets, chiefly Scandinavia and Finland. Of the total shipments of 27,704,359 pounds of dried apples, valued at \$4,109,828, Sweden received 7,309,782 pounds, valued at \$1,296,930; the United Kingdom, 5,748,424 pounds, \$755,048; Denmark, 3,512,038 pounds, \$657,108; Norway, 2,283,759 pounds, \$400,006; France, 1,625,439 pounds, \$191,820; Finland, 893,762 pounds, \$183,998; the Netherlands, 490,503 pounds, \$93,068; and all other countries, 827,472 pounds, valued at \$165,791.

Large Quantities of the Fresh Fruit Sold to United Kingdom.

Since the colonial period the United Kingdom has offered the principal foreign market for fresh American apples, to which has been added in more recent times other British dominions, particularly Canada and Australia. Prior to the war Germany also bought liberally of the fresh fruit. In the fiscal year 1914, of the total green and ripe apples exported, valued at \$6,089,701, the United Kingdom took \$3,112,956 worth, Canada \$1,040,413, Germany \$916,883, Australia \$200,847, Argentina \$156,839, and Brazil \$124,520 worth, smaller amounts being shown for other countries.

War did not seriously interfere with the exportation of fresh apples from the United States to Great Britain, but rather stimulated the demand for the American product. During the five fiscal years, 1914 to 1918, the United Kingdom took 60 per cent of the quantity and 59 per cent of the value of the total exports of fresh apples from this country. During the fiscal years 1910 to 1914 the United Kingdom took an average of 65.8 per cent of the total quantity of fresh apples exported from the United States, Canada 14.3 per cent, Germany 10.1 per cent, and all other countries 9.8 per cent.

As the Australian apples are marketed from May to August and the English crop from September to November, American exports are naturally largest from November to May, when the new crop is available at the most opportune time for marketing it in European countries. Next to the United Kingdom, Canada, Argentina, Brazil, and Australia were the best markets during the war for American fresh apples. Exports to Cuba, Argentina, and Brazil increased in value, and the Netherlands, Norway, Sweden, the West Indies, Hongkong, and the Philippines also took considerable amounts during the same period. The trade in fresh apples for that time showed an upward trend, but exports of dried apples declined in both quantity and total value each year, excepting 1915, as compared with the pre-war fiscal year, 1914.

History of Export Prices.

In the fiscal year ended September 30, 1791, 12,352 barrels of fresh apples, valued at \$12,352, or \$1 per barrel, were exported from the United States. The total exports of this commodity for the 11 years ended 1800 amounted to 90,560 barrels, for the decade ended 1810 to 59,670 barrels, and for 1811-1820 to 131,062 barrels. From 1791 until 1817 the annual valuation of these ex-

ports is not included in the official statistics. For the fiscal year 1817 the exports of 16,877 barrels averaged \$2.50 per barrel. There was an increase to 68,776 barrels in 1818, the average export price dropping to \$2.25. In 1819 and 1820, annual exports of 8,253 barrels and 6,868 barrels, respectively, averaged \$3 per barrel. By 1825, with exports of 32,354 barrels, the price had dropped to \$1.66 per barrel, and in 1828, 13,839 barrels were invoiced at \$22,700, an annual export price of \$1.15 per barrel, the lowest recorded since 1791.

It is said that Queen Victoria was so pleased with a gift from the American Minister of several barrels of Albermarle Pippins (Yellow Newtowns) grown in Virginia, during the first year of her reign, that she caused the import tax on apples to be removed, which greatly stimulated the export trade from this country. Whatever the reason, the total exports of fresh apples to all countries rose from \$344,552 for the decade ended 1830, prior to her reign, to \$370,317 or an average price of \$2 per barrel, for the 10 years ended 1840 and to 305,044 barrels, valued at \$616,273, averaging \$2.02 per barrel, during the decade ended 1850. In the next 10 years 388,600 barrels, valued at \$1,041,079, of \$2.68 per barrel, were exported. For the decade ended 1870 the total value of fresh apple exports reached \$2,554,290; and for the 10 years ended 1880 a further increase is shown to \$5,847,016 at an average export price of \$1 per bushel. In the decade ended 1890 the total valuation was \$13,973,770, and with one or two exceptions the value for succeeding years is expressed in seven figures, with only a slight upward trend in annual export values. From the pre-war calendar year 1913 figure of \$3.80 per barrel for fresh apples to \$8.45 in 1919 an increase of 122 per cent is shown in the average annual export price.

Domestic prices quoted in the New York market on January 24, 1920, on 14 leading varieties of Eastern apples ranged from \$5 to \$8 per barrel for Black Twigs and \$4 to \$6 for Ben Davis to \$9 and \$9.50 for Northern Spy and Greenings, respectively. On nine commercial varieties of Western apples the prices ranged from \$2 to \$3.75 per box. Figures given out by the United States Department of Agriculture quote an increase from August 15 to the end of 1919 in the New York price of apples from \$6.50 per barrel to \$8 and \$8.50.

Domestic Production.

Apples ranked ninth in the list of farm crops of the United States in 1919, being exceeded in total value only by wheat, corn, cotton, oats, hay, potatoes, tobacco, and cotton seed. The total value of the apple crop was approximately equal to that of rice, rye, buckwheat, and flaxseed combined.

According to the Bureau of Crop Estimates, Department of Agriculture, the total apple crop of the United States averaged for the years 1913-1917, 197,855,000 bushels, with a farm value on December 1 of \$166,140,000, or \$0.84 per bushel. In 1918 the production dropped to 169, 911,000 bushels and the farm value rose to \$225,562,000, or an average of \$1.328 per bushel. The crop in 1919 shows a further decrease in quantity to 147,457,000 bushels, with a rise in the farm value to \$275,463,000, or an average price of \$1.868 per bushel.

The commercial crop of 1919, 26,174,000 barrels, had an estimated farm value on December 1 of \$154,950,000, or an average of \$5.92 per barrel, as compared with corresponding figures for 1918 of 24,743,000 barrels, valued at \$126,684,000, or \$5.12 per barrel. The 1919 commercial crop was a pleasant surprise in that it exceeded all estimates based on early prospects, showing a gain of 1,431,000 barrels over the previous year and 3,544,000 barrels over 1917.

Leading Apple Sections of the Country.

In the States east of Colorado the commercial apple crop is packed in barrels, whereas in the western States of Colorado, Montana, New Mexico, Arizona, Utah, Idaho, Washington, Oregon, and California it is packed in boxes. Three boxes are equivalent to one barrel. The box section gained on the barrel section in 1919, furnishing nearly one-half the crop. In 1917 western boxed apples formed about two-fifths of the total commercial crop of the United States. It is said that 31,734 railroad cars were used to move the 1919 apple crop from eight leading box States, as compared with 32,116 cars required in the barrel sections. The world-wide trade in western apples has been built up within the last quarter century.

Scientific and intensive cultural methods; improved facilities for storage, distribution, and handling of commercial apples; and the modern machinery and factory methods for evaporating, desiccating, canning, and preserving have all tended to greatly increase in recent times the proportion of apples entering into the commercial crop as compared with the total production. Many apples still go to waste in noncommercial orchards throughout the country, although great quantities are canned or otherwise used in the home in making jams, jellies, marmalades, cider, vinegar, mincemeat, etc., besides the fresh eating apples stored for winter consumption.

New York produces about one-fourth the normal commercial

apple crop of the country. Its total apple crop had not been exceeded by that of other States until recent years, when the State of Washington outrivalled it. In 1919 the total Washington crop amounted to 23,190,000 bushels and that of New York to 16,800,000 bushels, as compared with 40,878,000 bushels for New York and 16,491,000 bushels for Washington in 1918. The States next in order and the total number of bushels of apples produced in each in 1919 were as follows: Virginia, 9,950,000; California, 8,640,000; Pennsylvania, 7,972,000; Michigan, 6,484,000; Missouri, 5,773,000; Illinois, 4,943,000; Maine, 4,680,000; Idaho, 4,350,000; Arkansas, 4,250,000; West Virginia, 3,478,000; Colorado, 3,418,000; Massachusetts, 3,240,000; and considerable though smaller amounts from all the other States, with the exception of Nevada, Louisiana, Mississippi, and Florida, where climatic conditions are not so favorable to apple growing. Commercial crops in Texas and South Carolina are quite small, as a rule.

Varieties Produced in Different Regions.

Although apples are produced in great variety in all the States and grown extensively on a commercial scale in all save Nevada and a few of the States far south, certain great regions are famous for particular species.

The Baldwin is the most widely produced, forming 13.4 per cent of a normal crop of all apples in the United States and 31.3 per cent of the New York State crop. Its nearest rival, the Ben Davis, constitutes 13.3 per cent of a normal average crop for the country and is perhaps brought to greatest perfection in the Ozark region, locally known as "the land of the big red apple." Its size, beauty, and keeping qualities make it a commercial favorite, particularly in British markets. Other varieties, the Delicious, for example, grown in the same region but less well known abroad, not only match the Ben Davis on these points but excel it in fragrance, texture, and flavor.

In the western New York region in 1918, Rhode Island Greenings formed 20 per cent and Baldwins 40 per cent of the commercial crop of that State, estimated at 42,000 carloads. In the Hudson River Valley region, of less importance than western New York, the Baldwin is the leading variety. The Michigan-Illinois region, like New York, has large plantings of Baldwin and Rhode Island Greenings. The New England Baldwin belt extends through Maine, New Hampshire, and Massachusetts.

The Shenandoah-Cumberland and Piedmont regions have been famous since colonial days, the latter being the home of the Albemarle Pippin, which was cultivated by Thomas Jefferson at Monticello before the Revolution. The York Imperial and Ben Davis predominate in the Shenandoah Valley.

In both the Ozark and the Missouri River regions (the latter extending up through Iowa, Missouri, Kansas, and Nebraska) are found the Ben Davis, Winesaps, Jonathans, Ganos, Grimes Golden, and other popular varieties.

Washington and California Lead Western States.

The fame of the western irrigated apple sections has gone around the world in the past 10 years. In 1917 the State of Washington passed New York as the heaviest commercial apple-producing State in the Union, showing 20 per cent of the total commercial crop of the United States. The Wenatchee and Yakima Valleys shipped more than 16,000 cars of apples in that year. Of the Western States, California is second in importance, with its highly productive plantings of Yellow Newtowns and Bellflowers; followed by Oregon, Idaho, and Colorado, all three about equally productive. The famous Hood River region of Oregon grows Yellow Newtown, Spitzenberg, Delicious, and other kinds in great perfection and quantity.

In southern Ohio is the famous Rome Beauty region, and many noted mountain sections from the Champlain district in New York and Vermont to the Brushy Mountains of North Carolina and the orchards of northern Georgia add materially to the apple crop.

The extensive demand for American fruit in British markets includes nearly all the commercial varieties of apples, but Oregon Newtowns, Spitzenbergs, Jonathans, and Ben Davis are especially popular.

Prior to the war about 10 per cent of the normal commercial crop was exported. Although increased population has stimulated the domestic demand for apples among all classes, with the further elimination of waste and improved methods of marketing and distribution, there is no reason why the commercial crop should not be increased to provide not only for home consumption, but to greatly extend the market for American apples abroad.



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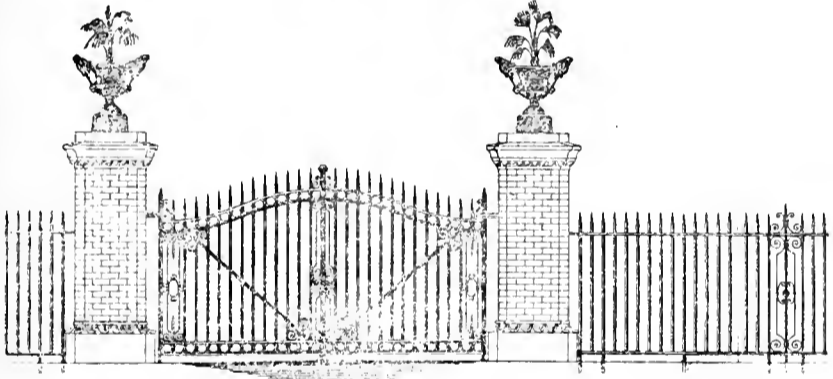
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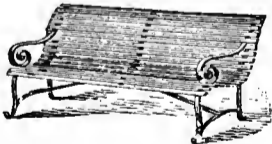


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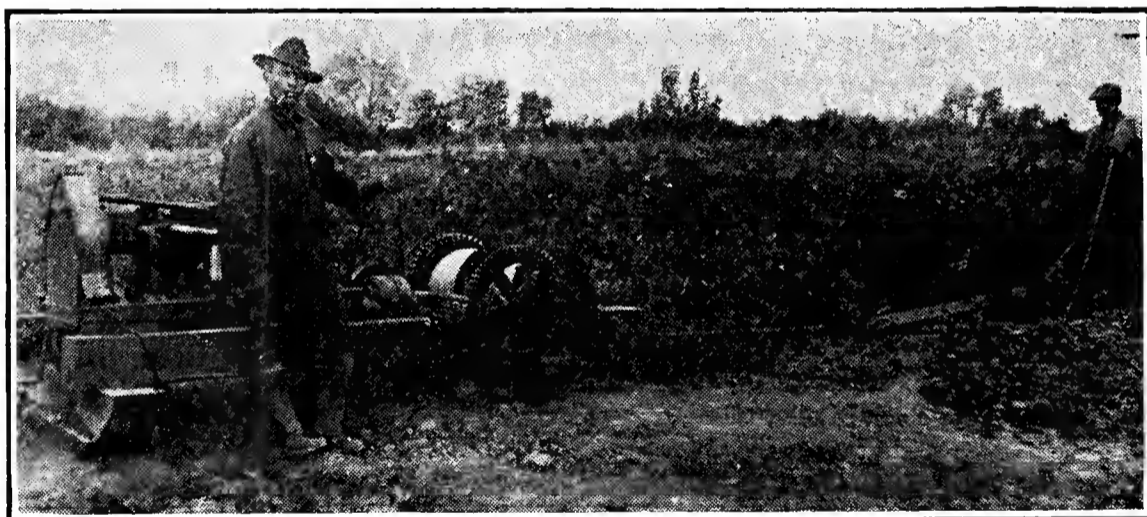
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Pulls any size lifter.
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Never breaks or injures a tree.
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ESTABLISHED 1893

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INCORPORATED 1902

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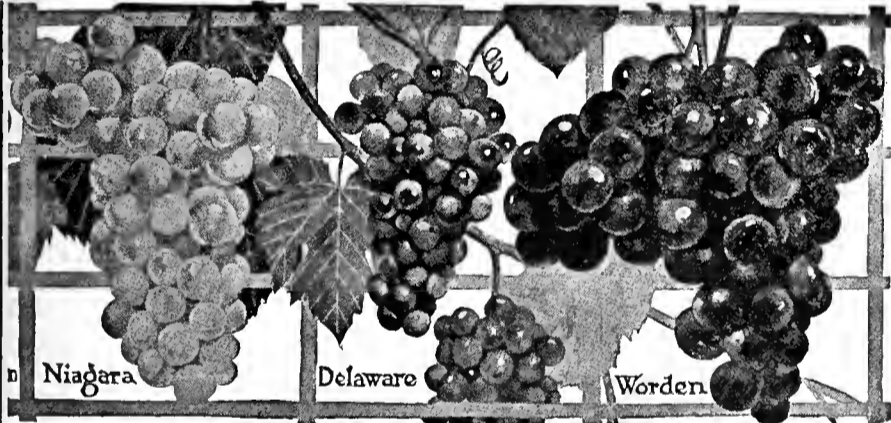
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The cream of 1200 sorts

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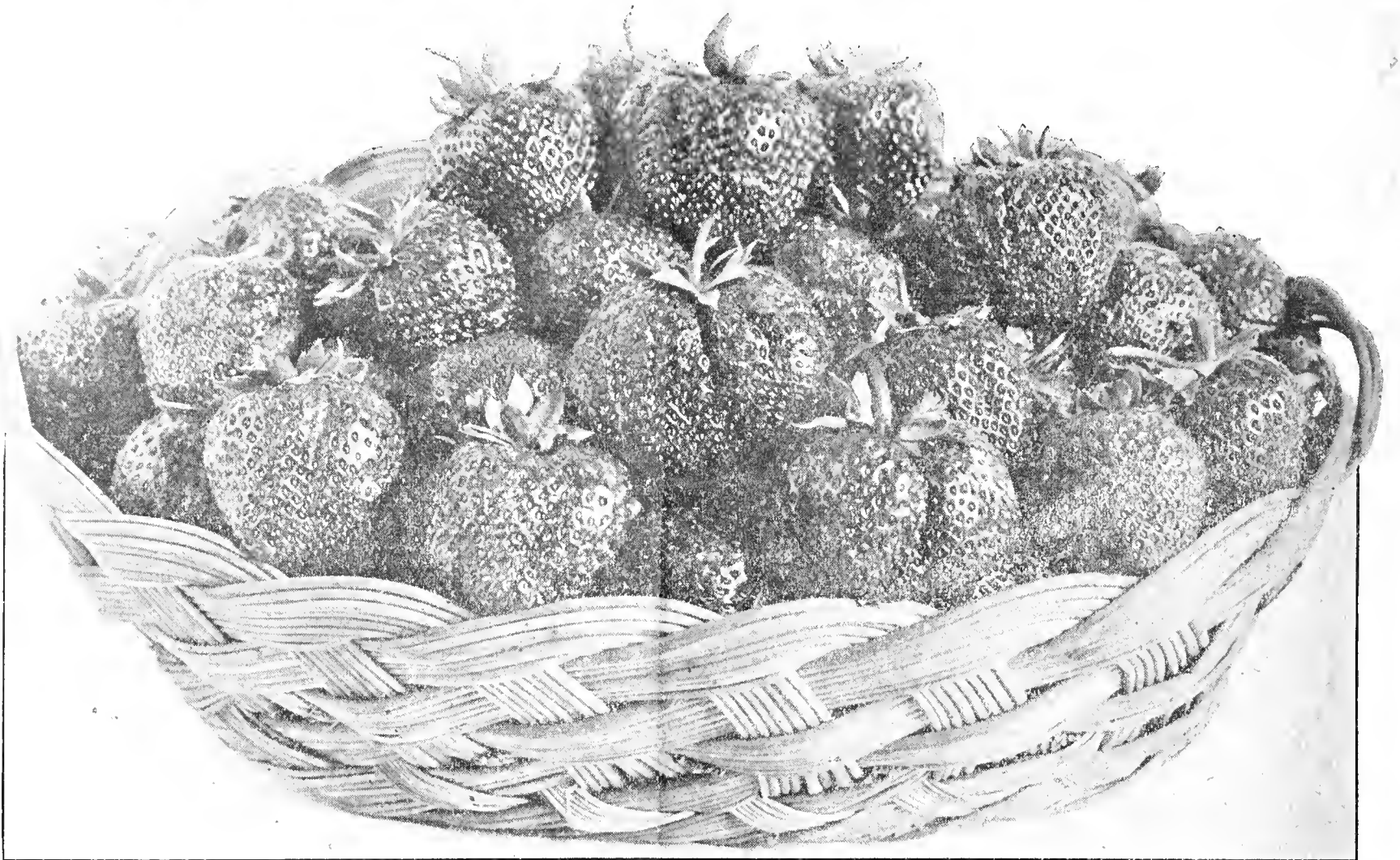
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THE NATIONAL NURSERYMAN

MAY 1920



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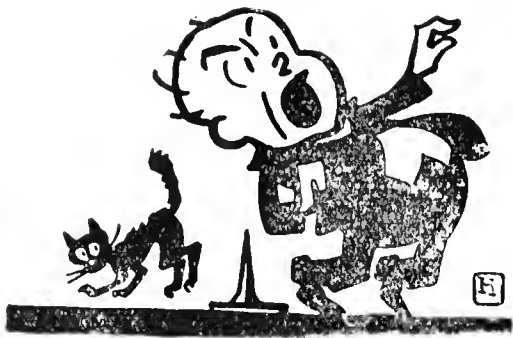


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A POINT

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Preferred Packing

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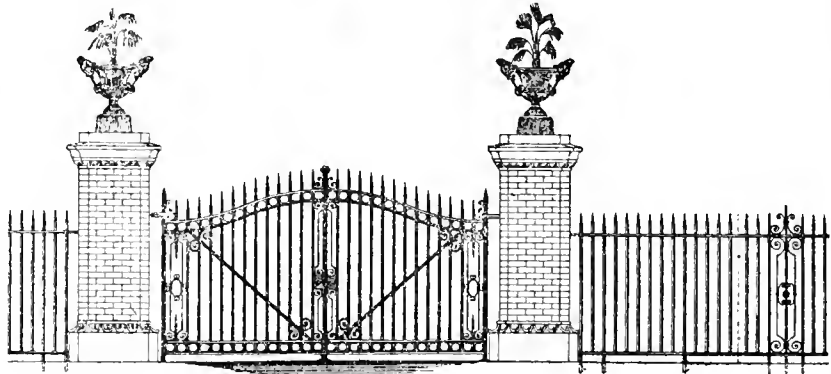
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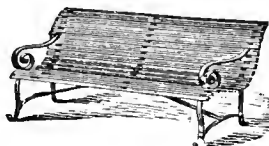


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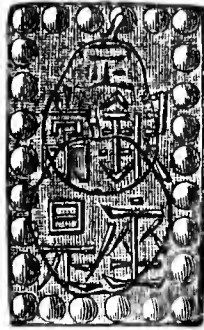
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| 120 | Linden, 10 to 12 ft. |
| 12000 | Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch. |
| 300 | Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch. |
| 5000 | Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch. |
| 800 | Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch. |
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| 150 | Weeping Willow, all sizes up to 3 inch. |
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| 400 | Spirea Reevesi, 2 to 3 ft. |
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The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

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HATBORO, PENNA. MAY 1920

No. 5

Tests of New Pear Stocks

By B. T. Galloway, U. S. Department of Agriculture.

PROBLEMS connected with the securing of suitable stocks for certain of our important fruits and ornamentals like the apple, pear, plum, cherry, and rose are becoming more acute each year. The pre-war foreign sources of supply of many of our common stocks have become uncertain and unreliable, and while there are no restrictions on importations of these types, there is every reason to believe that we must look more and more to home production to meet the future needs of American fruit growers.

We are confronted with two problems in connection with this stock matter: (1) to find ways, means, and methods of producing home supplies of the common stocks, especially the apple, pear, plum, cherry, and rose, and (2) to discover new stocks better than those commonly used, to demonstrate by experimentation and field tests their value, and to encourage the establishment of permanent sources of supply here. We are particularly interested in the second group of problems, namely, the discovery and bringing into use of new stocks that may take the place and prove superior to the old ones, and that may be economically produced by nurserymen and others in this country. To this end, we are engaged in assembling for study, tests, and experimental work collections of apples, pears, plums, cherries, and roses that have promise of value for stock purposes.

The Office of Foreign Seed and Plant Introduction in the United States Department of Agriculture has had these activities under way for a number of years. Heretofore the work has been largely confined to seeking out in foreign parts species, varieties, and types of these new fruit and ornamental plants and getting them established here, with a view to ultimate systematic study and experiments, looking toward the improvement and stabilization of horticultural practices.

There can be no question that the stock problem is one of the big problems in horticulture today. We refer especially to the problem of particular stocks for particular purposes, disease and insect resistant stocks, adaptation of stocks to our wide and varied soil and climatic conditions, congeniality of stock and scion, etc.

These notes are intended to call attention to several promising pear stocks which have been the subject of study and experimentation for some time. Out of several hundred different kinds of pears studied, there are four deserving of special notice at this time for stock purposes. We will refer to them in the order of what appears to be their value. We say "appears" because any study of stocks is a long time proposition. The work so far done

has been mainly in the nursery and the results there are encouraging and promising.

The calleryana pear (*Pyrus calleryana* S. P. I. No. 44044.) is a wild species found in many parts of China and sparingly in Japan. It is a vigorous growing tree with small, hard, inedible fruits. It fruits and seeds abundantly. A tree at the Arnold Arboretum has stood the winters for the past twelve or thirteen years. Some of these winters have been extremely severe. This tree is a prolific seed bearer. We believe it would be safe to estimate from 10,000 to 12,000 seedlings per year for each tree ten to twelve years old. Through the courtesy of Dr. C. S. Sargent, the Director of the Arnold Arboretum, we have been able to secure several thousand seedlings from this tree each year for the last two or three years. Several collections of the seed of this pear were made in China by the late Frank N. Meyer. Just prior to his death, he succeeded in getting more than a hundred pounds of the seed from central China. The seedlings of the calleryana pear are easily grown, have good roots, and hold their leaves remarkably well even where leaf blight is severe. This species is very resistant to fire blight. In comparison with French and ordinary Japanese stocks the budding season is two or three times as long; in fact, wherever tried the trees may be budded from July to September.

There appears to be several strains or types of the calleryana pear. One or two of these are from the warmer sections of China, hence, are not so hardy as those that come from farther north. Seeds are not yet commercially available. From what we know of the sources of supply in China, it will probably be difficult to secure reliable seed in quantity. It is believed, therefore, that we must look forward to the establishment of sources of supply here. With this end in view, we have been growing trees for permanent plantings. It is our desire to place these trees, of which as yet we have but a limited number, in the hands of nurserymen and others who may be ready and willing to co-operate to the end of securing home supplies of seed. We are also encouraging the top-working of other pears, preferably Kieffer, with this pear for seed production purposes. Scion wood and budwood of the tree can be furnished in season.

The Chinese water pear (*Pyrus usuriensis*, Cult. var. S. P. J. No. 44235) another promising type for stocks, was first collected by the late Frank N. Meyer in northern China. The wild *Pyrus usuriensis*, of which the water pear is a cultivated variety, is very resistant to fire blight, but not so resistant to leaf blight as calleryana. The wild *usuriensis*, furthermore, is a slow grower and, there-

fore, not so well suited for nursery work. The water pear is a rapid grower, quite resistant to leaf blight, produces good roots, and has a budding season nearly as long as the calleryana pear. Up to this time the supply of this pear is limited, owing to the fact that the original quantity of seed secured was only seventeen ounces. It will probably not be practicable to again locate this pear. The Office of Foreign Seed and Plant Introduction has a portion of an orchard worked over at Chico, California, and we expect to be securing seeds from this orchard in a year or two. We also have limited numbers of small trees and are securing others as rapidly as practicable by budding. The plan is to secure supplies of this pear to place in the hands of nurserymen and others interested for the home production of seed.

The Chinese saw-leaved pear (*Pyrus serrulata* S. P. I. 34567 and 45832) is a third promising wild species for stock purposes. Only limited experiments so far have been made with this pear as a stock. It is resistant to leaf blight and has a long budding season. Supplies of seed are not available. Like the calleryana pear and the water pear, we are developing supplies of this species with a view to establishing sources of seed. Those desiring to topwork pear trees or to develop a supply of trees through budding or grafting can be furnished with budwood or scion wood in season.

The birch-leaved Chinese pear, (*Pyrus betulaeifolia* S. P. I. No. 21982) is one of considerable promise. It has been known for some time in this country, but mainly as a botanical novelty. Trees are growing at the Arnold Arboretum which were planted nearly thirty years ago. It is a clean, strong, upright grower, quite resistant to disease, and very free from leaf blight in the nursery. According to Prof. F. C. Reimer, of Talent, Oregon, who has done a great deal of pioneer work in pear stocks, this tree is extensively used in China as a stock. Nearly all cultivated varieties of pears take readily upon it and wherever observed such trees are vigorous growers and long lived.

In conclusion it may be of interest to quote from several nurserymen to whom seed of these pear stocks were sent last year, with a view to having them tested in comparison with French and Japanese stocks. Jackson & Perkins of Newark, New York, write:

"We find the general habit of all the different types of *Pyrus* you sent us to be much more vigorous than that of French or Japanese pear stocks. The seedlings which you sent were small, being only of 3-5 m. m. caliper. These stocks were planted out beside French stocks of 6-10 m. m. and 7-12 m. m. caliper. They were larger at the end of the season than were the French stocks. We find that *Pyrus calleryana* retains its foliage until hit by heavy frost. *Pyrus usuriensis* (the water pear) drops its foliage in the autumn, probably a month or six weeks previous to the calleryana. We find this a great advantage in the extra growth which the stock attains over the French stocks. The French stocks attain practically no growth during the first season and defoliate during the summer. The same applies to Japanese pear stocks. Owing to their vigorous habit of growth and also to the lateness of season in which *Pyrus usuriensis* and *Pyrus calleryana* grow, we find they can be budded over a much longer period than can either the French or Japanese pears. Some of

the calleryana and usuriensis were budded in July with very good results and the balance were budded in September with results equally as good as the earlier budding. The stands we got on these stocks were all better than 98%, which is considered much better than the average stand on other pear seedlings."

James Mills of the James Mills Orchards Corporation, Hamilton City, California, writes:

"We noted that the growth of the seedlings sent us throughout the season was more rapid and considerably more luxuriant than the growth of any Japanese pear stocks we had; in fact, these seedlings gave us a top growth as big as two-year-old Japanese seedlings. The vigor and foliage during the season was considerably better than that of either the French or Japanese seedlings. In regard to the ability to bud them over a long period, we budded a part of them the second day in our budding work this year, and then after the red spider and cold weather made it impossible to bud our Myrobolan stock, we returned to our pear stocks and finished budding them."

It is interesting to note from Mr. Mills' reports that he got the best results from a pear listed as S. P. I. No. 45746. This is a seedling found growing near Washington, D. C., which appears to be very closely related to the Chinese water pear referred to above. We are propagating this promising number as rapidly as practicable.

Stark Brothers of Louisiana, Missouri, received two types of *Pyrus calleryana*. The seed of these plants were collected by the late Frank N. Meyer in China and the seedlings were grown at Chico, California. Stark Brothers write:

"Both numbers of pears sent us have taken buds in good shape, almost a perfect stand. S. P. I. No. 45592, calleryana pear, has retained one-fourth of its foliage to date (December 22), indicating that it would take buds over a longer period than French or Japanese stocks. No signs of any fungous disease. While it has not made as much growth as Japanese stocks, it has made decidedly more growth than the French stocks. We would consider 45592 the best of the two varieties of seedlings sent."

W. T. Hood & Company of Richmond, Virginia, received two types of the calleryana pear. Under date of January 16, 1920, they write as follows:

"We planted the pears beside about 30,000 Japanese stocks and they did very well. We think from the appearance of them now we shall have some nice trees from them. While the Japanese stocks did well, many of them lost their leaves during August and September, which causes some of the buds to push. The calleryana stocks held their leaves up to Christmas and some of them still have leaves on. The growth is sound up to the tips and shows no injury from cold."

On November 6, 1919, Mr. Hood's nurseries were visited by Mr. H. E. Allanson of our office staff, who, in company with Mr. Hood, made the following notes:

"The calleryana seedlings when received were smaller than either French or Japanese stocks, but by fall were about the same size as the Japanese stocks. The foliage throughout the season on the calleryana was better and more vigorous than the Japanese and was retained on the tree over a considerably longer period on all numbers. Mr. Hood's buds were all inserted about the same time, but from

the manner in which the trees worked, he was of the opinion that budding could be extended over a longer period than either Japanese or French and particularly later in the season. Their vigorous growth might make it undesirable to bud quite as early as on French or Japanese, but their late growth and ability to hold their leaves should extend the season into the fall. An almost perfect stand of buds was obtained on the stocks, very materially higher stand than on the other stocks, that is, ordinary Japanese stocks."

The work on pear stocks is being pushed as rapidly as means at hand will permit. The work on other new stocks is also going forward particular attention being given to the apple, plum, and rose stocks at this time.

Bureau of Plant Industry,

Office of Foreign Seed and Plant Introduction.

THE COUNTRY'S NEED

By Willard N. Clute, Editor of the American Botanist

On a recent trip across five Eastern States, I was greatly impressed by the fact that an extremely large per cent. of the houses visible from the train had absolutely no planting about them and I am convinced that the condition is pretty general in our country. This fact may not be of special significance to the nurseryman for the bulk of his patronage doubtless comes from the parks, cemeteries, orchards, and large estates, and yet it seems to me that if the owners of any considerable number of these plantless lawns should suddenly decide to begin planting, it would result in an immense increase in business for the grower of plants.

The question, then, is, can anything be done to promote and increase this business? My experience leads me to believe that there can. Although I am not a nurseryman or landscape gardener by trade, I still have many inquiries annually as to the best kinds to plant and I perceive that nearly everybody has some sense of beauty which he attempts to gratify. One's taste, to be sure, may run to flower beds of annuals, edged with beer bottles, to sections of sewer pipe filled with earth and supporting red geraniums, to butter tubs on posts in the middle of the lawn and similar atrocities but the errors are due to ignorance and even at their worst are far better than no plants at all. In themselves they show how universal is the desire for beauty and the improvement of one's surroundings.

But if the average individual desires to do some planting about his premises, who is to show him how? The owner of a large estate calls in the landscape gardener or architect but the less eminent planter possibly does not know that such a person exists or if so, feels that he cannot afford to pay for his services. In consequence he either forgoes the business altogether or he attempts the planting himself. In the latter case he is as likely to plant annuals as perennials and next year finds himself about where he was in the beginning. Even if he selects perennials, he does not know how to choose those suited to his locality.

It seems to me the remedy for all this is to make a concerted effort to educate the general public as to what and how to plant. The ordinary nursery catalogue, however well written and illustrated, will not alone serve the pur-

pose; at least it has not as yet. Apparently it will be necessary to offer the most elementary instruction. What the common people seem to want is definite information on specific questions as what plants are good to plant in the angle between the house and porch, what to use along the foundations of the house, what is good for a corner of the lawn, what to use for a hedge, for a hardy border, to discourage tradesmen from making paths across the lawn, for the curve in the walk, for a dividing line from the neighbors, for a screen to shut out disagreeable views, etc.

All these have been discussed, time after time, in the gardening magazines but they fail to hit the exact spot, partly because the people to be reached do not take the gardening magazines and partly because the information lacks practical application. What is wanted, it seems to me, is exact information as to how many plants to use for a given number of feet of space, how far apart to set the plants, when to buy them, how to plant them and, most important of all, how much they ought to cost. There ought to be definite plans for each planting suggested, and several plans with different plants for the same space. This information might well be introduced into the usual catalogue in place of much of the description of individual plants or else added as a planting manual. Several nurserymen might co-operate in printing information of such a nature as to be beneficial to all. Moreover, if this matter is properly presented with appropriate illustrations, the lay press and the press syndicates would probably be glad to use it. All must agree that there is room for a much more extended movement for planting than is now carried on. Some such plan as I have suggested seems to me likely to make things move.

EFFECT OF THE PAST WINTER ON EVERGREENS

The past winter, as every one knows, was an unusually severe one. The effect on many kinds of plants has been disastrous. Plants that in previous winters came through unscathed have suffered very much. Evergreens in the Nurseries look very much as if they had been seared by fire, rather than from the effects of a severe winter. This was especially noticeable on plants that were exposed to the northeast winds. Whole blocks of Hemlocks have been seared brown. The same is true of Arborvitaes, some of the Retinisporas, Mount Atlas Cedars, Pine and such like plants that are usually depended upon to come through the winter in good shape. They have had their foliage killed.

At this writing it is too soon to judge if the plants have been killed or if they will put out a new crop of leaves.

More tender plants such as Yews, Hollies, Rhododendrons, of course, have suffered severely. If the plants have not been actually killed, they have at least been made unsaleable for this season and it can be readily understood how much it will add to the already acute shortage, due to lack of propagation and planting during the war and to Quarantine 37. It will help to add to the shortage of available stock for the next several years, or until the recent propagation begins to come on the market.

Junipers of all kinds, spruces and firs seem to have stood better than other kinds of evergreens.

It is noted that the damage has not only been done to

the Nurseries but also to large, well matured trees on private places, trees that have evidently stood quite a number of winters without injury.

The lesson to be learned from the effects of the past winter show very conclusively the value of wind-breaks or screens for those plants that are at all liable to suffer.

It is not uncommon to see where the snow drifted around the lower parts of the plants or where they were sheltered by some other means they are uninjured, but that portion which was above the snow or exposed has turned quite brown. Winter injury to evergreens is usually attributed to the sun shining on the plants where they were in a frozen condition; this may cause the damage in many instances but from observations taken of the injuries of last winter, it seems to have been caused rather by the winds, while the roots or lower parts of the plants were incased in ice.

WILL NOT MODIFY ORCHID IMPORTATION QUARANTINE

The Federal Horticultural Board has decided that no modification of Quarantine No. 37, with regard to orchid importation, is warranted at this time. As a result of a general discussion of the orchid situation in connection with the Detroit meeting of the Society of American Florists and Ornamental Horticulturists in August, 1919, it was suggested by the chairman of the Federal Horticultural Board that if those interested in orchids in the United States, both as to the importers and as to orchid growers or propagators, would endeavor to harmonize their interests, which seemed to be more or less conflicting, and present the board with a program which these interests had agreed upon as most desirable and necessary for the development of orchid production in this country, the board would be very glad to consider their recommendations, and if such recommendations seemed to be reasonable and well founded to put them into operation so far as might be practicable. An effort was made on the part of these interests to meet this requirement, but without much success. It seemed, nevertheless, desirable to give an opportunity for a full discussion of the subject, and therefore a conference was held at the Department of Agriculture February 10, 1920.

This conference brought together the principal orchid importers and orchid growers of the United States and the needs of this industry from the production and other standpoints were fully discussed.—*Weekly News Letter*.

Arthur A. Kirchhoff, Gladioli specialist of Pembroke, N. Y., has purchased his father's entire stock of the three following Gladioli: General Pershing, Professor A. C. Beal and Gloxina. Mr. Kirchhoff has spent considerable time in the growing of standard varieties while his father, W. E. Kirchhoff, Sr., has devoted his time to producing newer kinds and has now a wonderful collection of new varieties which have not yet been named.

WHY I THINK WE ARE GOING TO HAVE BETTER NURSERY STOCK

By F. F. Rockwell

The following article by F. F. Rockwell appeared in the March issue of Farm and Fireside.

It puts the case of the nurserymen to the buying public so ably and yet in such a simple and forcible manner that we are constrained to reprint it to enable nurserymen to see what is being done for them through the medium of the press.

A few months ago I explained to the readers of FARM AND FIRESIDE what the men in the fertilizer industry are doing, and plan to do in the near future, to give us better fertilizer and better fertilizer service for our money.

A somewhat similar "internal revolution" has been going on in the nursery industry.

Many a farmer has had experiences in buying nursery stock which did not leave him fully satisfied with the results. I remember very vividly how, when I first began farming, a nursery agent hunted me up, thrilled me with a two-hour talk on the possibilities of fruit-growing and the wonderful specimens he had illustrated in his hectically colored "plate book," and got my order for a lot of stuff.

Most of the items were received in the fall after the ground was frozen, and could not be planted until the following spring. Some of the varieties, as I discovered three years later, were not at all suited to that section of the country. A number of the fruit trees, when they finally did bear, were not the varieties I had ordered.

One of my neighbors had done exceptionally well with McIntosh apples, but when my "McIntoshes" finally began to bear and I called in our local authority on apples to see what was wrong, he informed me that they were Ben Davis!

Then I read in a farm paper somewhere that the agent was not to be trusted anyway, and in the advertising section I noticed the "ad" of a concern which read something like this:

"Why pay agents prices when you can buy direct from the grower at wholesale? We save you one half to two thirds. Send for our catalogue."

Well, I sent and sure enough the prices were low—so low that I could not understand how trees could possibly be grown for such prices, although at that time I had never visited a nursery and had no idea of the amount of work and care and "overhead" which are required to produce firstclass, carefully graded, true to variety trees.

Well, to cut a long story short, I tried again—and the result was less satisfactory than before. Among the trees when they arrived were some very large ones with which I was immensely pleased, until my friend the fruit grower informed me that they were so old and overgrown that he would not care for them at any price.

And yet this neighbor of mine was a successful fruit grower who added to his plantings almost every year. I asked him how he did it, and from our conversation I gathered that he had been through the same sort of troubles I had been having, until he adopted the plan of actually visiting several nurseries, and inspecting the stock and the methods that were used, on the grounds.

"But before buying," he concluded, "you should realize that you cannot expect to get A No. 1 stock for the prices you have been paying. You told me once you considered any but the best seed you could buy expensive at any price; that 'the best seed was the cheapest, regardless of what it cost.' The same is true of nursery stock. The first consideration must be quality. Only when that is absolutely assured can you afford to give any consideration to a difference in prices."

Now, of course, it is out of the question for everyone who wants to buy nursery stock to go and visit a nursery. And, of course, that is not necessary if you know of reliable concerns from which to get stock.

But there is the rub. The fact that the inexperienced buyer has had no way of telling where to go except to learn through costly and discouraging experience such as mine has been proves in itself that something's been "rotten in Denmark." My case was by no means an isolated one. I doubt if there is a reader of this article who has not had, or known personally someone who has had similar experiences.

Now, whenever a condition of this kind exists there is always a reason for it. It is not only futile, but also foolish, for the individual consumer to get up on his hind legs and howl that

everybody in the business is a crook, and that he will never buy another blooming dollar's worth of fertilizer or nursery stock or automobile tires, as the case may be. And in this case I happen to know the reasons why your nursery stock and the services you got with it were not always satisfactory. So, if you will, come with me behind the scenes and see what those reasons have been.

But before we start, let me say right off that one of the reasons has been that most of us buyers have insisted on getting the cheapest stock we could find, and then we have kicked because the cheapest did not turn out to be the best. That is true of nursery stock, of course, just as it has been true of fertilizer and other things that we have bought.

However, the more progressive nurserymen have realized for a long time that it was their business to educate the consumer to the fact that quality was of more importance than low price in the buying of nursery stock. And that, incidentally, brings us back to the one biggest cause of nursery-stock users' troubles.

The industry has not been organized.

Organization need not mean, and in itself usually does not mean, anything like monopoly; but a total lack of organization always does mean unlimited cutthroat competition.

You dairymen and fruit growers and live-stock men who still have fresh in your memories the good old days before you had your selling organizations, do not need to be told at any great length what the result of such competition is.

It means that the buyer sets the price, and it means that, competition being almost wholly on the price basis, quality and service are at a discount. It means, too, that the fellow who fills his milk can too near the well, or uses a stovepipe to get the small apples in the middle of the barrel, or fills his orders for McIntosh apple trees with Ben Davis stock, or with stuff he has not grown himself and cannot be sure of, is going to make it impossible for the man who does not want to do these things to compete with him on a fair-for-all basis. It also means discredit to the whole dairy business, or fruit business, or nursery business in the eyes of the general public.

In addition to this, too, the good nurserymen have been up against another brand of competition which has also tended wrongly to put the emphasis on price rather than on quality—that is, the competition with foreign stock grown by cheap foreign labor. While our lawmakers, down in Washington, have seen to it that the country's "infant" industries, such as steel, cotton, and textiles, were carefully sheltered by a high and thick protective tariff, they have left the nurseryman to take care of himself.

Competition of this kind has been particularly bad for this particular business, because, in the first place, in buying nursery stock, one must, to a large extent, buy "sight unseen," and it may be years before the result of that purchase is discovered, and there are no fixed standards to go by. Quality in trees and shrubs is not altogether a matter of caliper height and breadth.

The most progressive, honest nurserymen have realized these things for many years, but as individuals they have been helpless to correct the evils which they knew existed. And, as has been the case with almost all organizations, getting the majority to agree to some of the reforms which were needed has been a long, hard job. At last, however, a substantial start has been made. The decent nurserymen who want to give their customers a square deal are organized nationally, and have the upper hand over the others now, and there is every indication, that many of the old questionable practices will be eliminated.

The progressive nurserymen realize the basic truth of the principle that the seller's obligation to the buyer does not stop when the sale is made, but that with the contract of sale there goes a certain obligation of service, which means that the seller is morally bound to see that the customer gets satisfaction from what he has bought; also, that he be shown how to use it most efficiently if it is a machine, and how to take care of it successfully if it is a plant.

With this end in view the more progressive nurserymen formed, a year ago, a voluntary national organization to carry on an educational campaign. This work was begun in a modest way during the spring and summer, and when the American Association of Nurserymen met in convention last June, they decided, in a resolution adopted almost unanimously, to take over the work of this organization, and finance it from the funds of the American Association.

This work, so far, includes the supplying of educational articles to country newspapers, the preparation of illustrated lectures, for the use of granges, schools, etc., on home fruit-growing and decorative planting; the preparation of two small books on home landscaping and fruit-growing by Dr. Bailey and Professor Hendricks, and similar activities.

But the leaders in this movement have realized that the education of the public was not the only thing needed. They are

also endeavoring to educate their own members to grow and sell stock of the highest quality. The beginning has been made toward putting these higher standards into practice by employing an executive secretary, one of whose chief duties will be to work out this problem.

It is planned, eventually, to use an association trade mark which will stand for quality and service that the consumer, no matter how small his order may be, nor how little experience he may have had in the buying of nursery stock, can absolutely depend upon.

So earnestly did the delegates to the national convention desire to make sure that the American-grown nursery stock of the future will be as good as the best that can be grown anywhere in the world, that they provided for the appointment of a committee to see to it that a course in nursery practice be included in the work of the leading agricultural colleges in the United States, so that scientifically trained men, with high ideals for their profession, may be provided for the future.

All these things, of course, are but steps in the movement to make a "more fruitful and more beautiful America." They are only a beginning, but they are a good, solid, substantial beginning which cannot fail to mean the providing of better nursery products for you and me.

As to prices for nursery stock, it is not likely that they will ever again reach the old low level. Not only does labor form such a large part of the cost of production, but it is also impossible to use machinery to offset the increasing cost of labor as has been done in so many other lines of industry.

However, prices for nursery stock in the past have often been below the actual cost of production, just as they have for many other perishable soil products. Nursery stock that is ready to sell must be sold, or be put on the brush pile to go up in smoke.

The American Association of Nurserymen has sought the aid of the Department of Agriculture to help nurserymen with statistics and data on the industry which will be of assistance, just as the crop and price reporting services of the Bureau of Markets has been of assistance to the individual farmer in his own business. The nursery industry, from its very nature, can never be "monopolized," and "profiteering" is not to be feared.

THE AMERICAN ROSE ANNUAL

The Official Publication of the American Rose Society

There is something about the American Rose Annual that makes it differ from most other reports or official publications of Societies. Generally such works are of little interest except to the few. The American Rose Annual seems to be the American Rose Society itself. It gathers up all about roses from all over the country, in fact all over the world and presents it to the reader in a concise readable form. It not only makes you acquainted with the new and unusual in roses, but the history and origin of the old favorites, about the different species from which they originated. It brings to you rose information from every angle and makes you acquainted with all the rose enthusiasts of the country, what they are doing for the development of the queen of flowers and how they are doing it.

Mr. J. Horace McFarland, the Editor has evidently the genius of acquiring the cooperation of all the leaders who are interested in the rose and having them contribute their knowledge so as to make a very complete summary of all that is happening in the rose world. As a book of rose progress it would be hard to beat.

The membership fee in the American Rose Society is only \$2.00 per year which entitles them to all publications including the Rose Annual, admission to all exhibitions and to vote at the meetings.

Apply to C. A. White, Secretary American Rose Society, Ithaca, New York.

A PLEA FOR THE JOBBING GARDENER

The National Association has set itself seriously to clean house and organize the Nursery Industry along sensible business-like lines. The consumer and potential consumer is receiving attention. Propaganda is being carried on to educate, enlighten and insure them a square deal when purchasing nursery stock from a member of the National Association.

The nurseryman of course, is being considered, in fact, that is what the organization is for.

There is, however, a middle man and the middleman is by no means a parasite on the industry, collecting tribute without rendering service, at least not the middleman that goes under the name of Jobbing or Landscape Gardener. I do not mean the landscape gardener or architect who charges his client for plans and professional service. He should be worthy of his hire and not look for profit on the stock he uses for his client except under established percentage basis.

But that big army of shirt sleeve workers that are to be found in every community, who make a business of fixing up yards, sometimes they have a few greenhouses connected with their business. With others, grading is the biggest end of their business. They are big distributors of plants and do as much as the nurseryman to encourage planting. They have varying degrees of practical landscape skill and knowledge, but they sell their labors rather than their experience. They help to fill that vacancy that exists between the nurseryman who has stock to sell and the customer who wants his place to look nice, but who has neither the inclination or ability to plant it himself.

These middlemen are a very essential vehicle of distribution and not only of distribution but of the development of the nursery industry. They should be encouraged by receiving as much consideration in the way of discounts as the trade will stand.

Most nurserymen doing a retail business allow a discount to the jobbing gardener but often it is one that does not cover his overhead of handling stock. The discounts should be standard, so the gardener will know what he has to work on, also the terms. It is hardly fair for the nurseryman to have a liberal policy towards his own customers in regards to replacements, and a very rigid one towards the jobbing gardener who is often held responsible by the customer without any ability to even share the customers loss.

Planters are an essential in market development for nursery stock and they should receive every encouragement it is possible for the trade to give them.

It is true there are many men posing as landscape gardeners and planters who are not a credit to the profession nor a profit to the trade but that is a condition found in all lines.

The dependable landscape jobbing gardener deserves consideration from the trade.

A liberal policy in dealing with them, enabling them to do a profitable business would not work to the disadvantage of the nurseryman grower even though the nurseryman be in the retail and planting business himself.

QUARANTINE ON ACCOUNT OF JAPANESE BEETLE

A certain section of the State of New Jersey has been quarantined on account of Japanese Beetle and includes the Townships of Delran, Chester, Cinnaminson, Palmyra, Mount Laurel, and Riverside and the borough of Riverton, County of Burlington, and the townships of Pensuken and Delaware and the Borough of Merchantville, County of Camden. This quarantine is applied to nursery stock, including ornamentals, greenhouse and all other plants, bulbs and cut flowers. They are not allowed to be moved interstate or to any point outside of territory quarantined, unless inspected and declared free from the Japanese Beetle. All shipments must have a permit attached and in the case of bulk shipments, Bill of Lading must have copies of permits attached. Applicants for certificates are required to assemble the articles for shipment at such point as the Inspector of Horticulture shall designate.



The Erskine Park Everbearing Raspberry Showing Typical Shape of Berries See Adv. Page 125. "This variety is a very heavy and continuous cropper, sending out bunches of fruit all down the canes."—Edw. J. Norman.

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Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

May, 1920.



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In the markets, fruits and vegetables are graded as sprayed or unsprayed—higher prices being asked and paid for the sprayed grades. This is logical with shrubs, etc.

We Manufacture High Grade SPRAYING MATERIALS—consequently our guarantee stands for something:-

Bordeaux Mixture
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(A most efficient poison for the Least Expense)

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Virulent poison combined with Bordeaux Mixture in powder form.)

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IN STORAGE Immediate Shipment

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| 400 Anjou | 500 Bartlett |
| 500 Clapps | 1000 Duchess |
| 200 Wilder | 100 Worden Seckel |

STANDARD PEAR, 5/8 inch

| | |
|-------------------|------------|
| 200 Anjou | 100 Clapps |
| 200 Worden Seckel | |

STANDARD PEAR, 1/2 inch

| | |
|------------|-------------------|
| 200 Anjou | 300 Bartlett |
| 100 Clapps | 500 Worden Seckel |

DWARF PEAR, 5/8 inch

| | |
|------------------|--------------|
| 300 Anjou | 800 Bartlett |
| 400 Clapps | 2000 Duchess |
| 150 Louise Bonne | 200 Mary |
| 300 Seckel | 300 Wilder |

DWARF PEAR, 1/2 inch

| | |
|------------------|---------------|
| 300 Anjou | 1000 Bartlett |
| 300 Clapps | 100 Lawrence |
| 100 Louise Bonne | 100 Seckel |

QUINCE, 5/8 inch

| | |
|--------------|-------------|
| 460 Anger | 100 Borgeat |
| 400 Champion | 100 Meeches |

400 Orange

QUINCE, 1/2 inch

| | |
|-------------|--------------|
| 720 Anger | 300 Champion |
| 200 Borgeat | 400 Meeches |

400 Orange

QUINCE, 3/8 inch

| | |
|-------------|--------------|
| 100 Borgeat | 100 Champion |
| 200 Meeches | 500 Orange |

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Painesville,

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Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

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The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.

Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., May 1920



THE SENSATIONAL

ment experts are accused of giving out, as a result of experiments by them, "That plant life depends more on light than temperature" and the discovery of this law will revolutionize the culture of plants especially under glass. is not likely to cause greenhouse men to scrap their heating plants or even ease their minds about their future coal bills.

Possibly the Government experts have discovered something hitherto unknown, but in presenting it to the unscientific public have not guarded against the sensational presentation of their discoveries.

As a cub at Kew Gardens the writer well recalls the damage done to the tender exotics in the stove house by two continuous weeks of London fog. Each morning more leaves came off or turned yellow until pot and stems seemed more conspicuous than foliage. He also recalls the controversy about tinted glass. The scientific men decided glass of a green tint was the right thing with which to glaze the large Palm house to prevent the summer sun from scorching the plants. Later science proved it was the worst color they could have used, and that clear glass was the best.

Nature seems to have a fair idea what she wants and the limits or laws governing her needs are fairly well known. It does not take a very experienced greenhouse man to know when the temperature has fallen too low in the houses under his care during the night, and it is just as obvious by the effect on the plants when it gets too high.

Light, heat, moisture and food are all necessary to the growth of plants. The proportion must necessarily vary with each kind of plant.

A brief study of Geographical Botany will reveal the type of plant nature has produced under different conditions. The cactus or that type plant that presents the least surface to the sun will be found to dominate in the localities of intense sunlight and little moisture. In the more humid or cloudy portions of the earth, the type follows along that of presenting the greatest surface to the light, but moisture and temperature seem to be the great dominating factors in the growth of plants, providing there is enough light for them to function.

My observations have not been made scientifically, but sad experience has taught what absence of sufficient light will do to growing plants and I have failed to note any appreciable difference in the growth of plants growing in the vicinity of electric arc lights. Until we get more information we shall have to follow old practices to enable us to pay the taxes to carry on the experiments.

Whatever may be the results of scientific experiments made by experts, the practical grower who has lived with his plants night and day, year in and year out, comes pretty near knowing to a nicety the effects of light and heat on the various plants under his care.

REAL WORK BY SECRETARY JOHN WATSON

The long, severe dragging winter, very late spring and shortage of help combined to make conditions of spring business very unpromising for the nurserymen. To add to his troubles spring business had no sooner began, before everything shut down tight. The Railroads and Express Companies refused to accept shipments.

At this writing, the strike has practically been broken and conditions are fast becoming normal but there being such an accumulation of freight, it will naturally be some time before transportation will arrive at that condition that is essential to successfully carry perishable goods. The value of the American Association of Nurserymen under such conditions will begin to be appreciated when it is known that the executive secretary, John Watson immediately got busy, went to Washington to see what could be done to relieve the situation. He sent out calls for assistance to numbers of the members of the association, asking them to write their senators and representatives, interviewed government officials, Bureau of Markets, Bureau of Plant Industry, Interstate Commission, and any other power that might help to relieve the embargo and hasten the handling of the Nurserymen's shipments. The results of this work may be seen on separate page. When through the efforts of Mr. Watson, he succeeded in having nursery stock given preference over all other shipments next to food and fuel. Anyone who is at all familiar with the way things are done in Washington, will realize it takes a man of very exceptional ability to locate the men, obtain interviews with them, to say nothing of marshalling the forces and have them act upon his plea. It is one of the many proofs that show how invaluable a man of Mr. Watson's calibre is to the association and how deserving of support from all nurserymen are the efforts of the National Association as the results of its work benefit all.

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Offers for Spring 1920

- 15,000 Cal. Privets in grades, 1, 2, and 3 yrs.
- 30,000 Asparagus, 2 and 3 yr., Asst.
- Barberry Thun., 18-24 in. and 2-3 ft.
- Lombardy Poplars in grades 6 to 16 ft.
- Oriental Planes in grades 6 to 12 ft.
- Tulip Poplars, 6-8 ft.
- Horse Chestnuts in grades 7 to 12 ft.
- Catalpa Spec in grades 8 to 12 ft.
- Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

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Sold out on Pear, Plum and Cherry
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to offer in light grades

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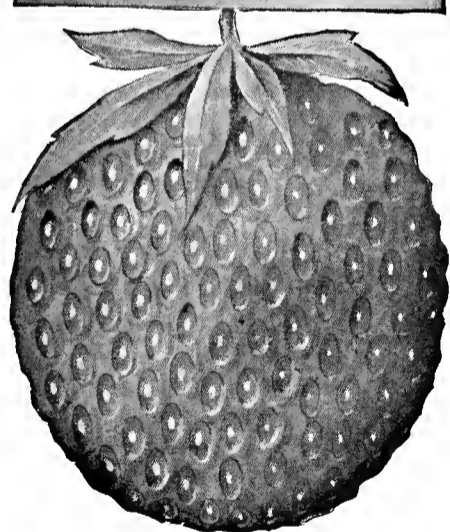
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BUCKBEE

The New Hybrid Strawberry

The culmination of thirty-five years successful Hybridizing. THE FINEST EVOLUTION IN STRAWBERRIES. Excels all others in size, quality, quantity and flavor.

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This variety is the result of special hybridization for over a period of years by Tice C. Kevitt, and under normal conditions plants set out make a growth of 14 in. high with berries that measure 3 in. in a straight line passing through the center of the berry.

STANDARD VARIETIES

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The New Black Strawberry

The plants are extremely vigorous and healthy and give an abundance of very dark red luscious fruits of exquisite flavor and giant size, well above the ground. Mid-season to late. Perfect flowering.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
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FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

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Send list of your requirements for lowest prices. Trade list ready.

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For FUMIGATION With
HYDROCYANIC ACID GAS
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WHAT THE AMERICAN ASSOCIATION IS DOING FOR ALL NURSERYMEN

The National Association is working for the interests of the Nursery Trade as a whole. No Nurseryman can conscientiously receive the benefits without becoming a member

To All Members:
TRANSPORTATION.

April 17, the following was issued and distributed to all railroad officials:

AMERICAN RAILROAD ASSOCIATION
COMMISSION ON CAR SERVICE
718 EIGHTEENTH STREET NORTHWEST

WASHINGTON, D. C., April 17th, 1920.

W. C. KENDALL, Chairman
W. L. BARNES,
A. G. GUTHEIM,
W. J. MCGARRY.

File 516-142.

Complaints in considerable volume are reaching us and the Interstate Commerce Commission as well, from nurserymen in various parts of the country, indicating that there is little uniformity among the various roads with respect to exempting nursery stock, a highly seasonal and semi-perishable commodity, from embargoes.

To establish a uniform practice, it appears to be important at this season, and it is therefore suggested, that whenever general embargoes are placed which exempt food, feed, perishable freight, live stock and fuel, that such seasonal articles as field and garden seed, seed grain, and nursery stock, be considered next in order of importance to receive preference in transportation.

W. C. KENDALL, *Chairman.*

Since the roads were returned to private ownership and control on March 1, the American Railroad Association has occupied the only position of central direction and while it acts in an advisory capacity, its suggestions have the weight of orders.

It will be noticed that the urgency of the situation gives Nursery Stock a far more favorable rating in priority than did Circular CS—A1 of the former classification under Government control.

Also, it gives special emphasis to Nursery Stock by making it the sole subject of a general circular.

This action was taken as the result of conferences with the Secretary of Agriculture, the Interstate Commerce Commission and at the request of various Members of Congress.

Prompt handling of Nursery Stock now depends only on the physical ability of the roads to move their freight; our goods are given preferential handling after only such vital necessities as food and fuel.

Yours truly,

JOHN WATSON,

Secretary American Association of Nurserymen.
Princeton, N. J., April 19, 1920.

LETTER FROM SECRETARY JOHN WATSON

Princeton, New Jersey, April 26, 1920.

To the Members of the A. A. of N.:

If this reaches the Editor in time and if he has still some unoccupied space, I want to make just a short report to you. We have all been so busy with this transportation situation that we have had little time to think of much else.

On my return from Washington the first of the week, I mailed each of you a report including the Circular issued by Chairman Kendall of the Car Service Commis-

sion of the American Railroads Association. After the return of the roads to private ownership and control on March first, it was difficult to find the central head of authority in transportation matters. It appeared that under paragraphs 15 and 16 of the Esh-Cummins Bill that turned the roads back, very broad powers had been given to the Interstate Commerce Commission and so I went to Secretary McGinty. While it was admitted that the I. C. C. could act, it declined to do so. I judged that the Commission did not wish to embarrass the roads just at this time and under the distressing circumstances, by taking action that would be in effect placing the roads where they were under the Director General of Transportation. And as the railroads did not want that, the effective urging to action relieving our situation had to come through the Interstate Commerce Commission to whom, as you know, our appeals were directed through Senators and Congressmen. Dr. Taylor of the Bureau of Plant Industry, Mr. White and Mr. Livingston of the Bureau of Markets and Secretary Meredith himself were all very active in our behalf, the Secretary writing out and personally delivering to the I. C. C. a statement of the urgency of the situation. The promptness of members in wiring their representatives was an example of the effectiveness of team-work.

If stuff does not now move at once, it will be because the roads are still handicapped by the congestion of accumulated freight, the lack of rolling-stock, none having been bought during government control, and by lack of men. The latter have not returned to work. Many have but many thousands are still out.

The express company has been tendered much more than it can carry with its equipment of cars and men. The express people ask our co-operation to the extent that we depend on them only for transportation of express, leaving the freight to the railroads. Everybody is willing to pay express charges to get quick transportation but the situation is beyond the physical ability of the roads and the express to handle all the traffic. We have assurances from all sides that we will get the best service possible with the equipment. If shipments are refused it is because in such cases, to accept what cannot be transported in fair time is to invite claims. If we chafe under these restrictions, we can bear in mind that Washington is full of early-fruit and vegetable growers from the South, whose stuff is rotting in the field for lack of cars to carry it.

BADGE BOOK—I will mail you a circular on that in a few days. On account of the situation in the printing industry all over the country, we have to hand in our copy early to get it out on time. Will you be getting your advertisement written up for the Badge Book so as to send it to me as soon as you hear from me?

EXHIBITS—You might pack up some of that good stock and put it in storage for showing at the Convention. Write A. M. Augustine, Chairman Arrangements Committee, Normal, Illinois. He will tell you about cold-storage facilities in Chicago.

DINNER—There will be an informal get-together dinner Tuesday night, the 22nd at the Congress Hotel with everybody and his family and the neighbors on hand. It is a good idea for everybody to get acquainted with everybody else in preparation for the Big Meeting. Mem-

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

Landscape Photographs

Good landscape views are vitally necessary to the nurseryman. Get our view work in the hands of your agents. We know positively they make sales. It is time now to order for spring.

We offer to send a set for your approval.

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Our SPECIALTY

Growing evergreens for lining out on contract.



Garden Bordered with Box-Barberry Electro of this illustration free with each order for 1000, if requested.

Box - Barberry

well rooted, dormant summer frame cuttings ready to set direct into the nursery without further expense. Many leading catalog firms will list Box-Barberry next season.

Send for Trade Bulletin.

THE ELM CITY NURSERY CO.,
WOODMONT NURSERIES, INC.,
NEW HAVEN, CONN,

STRAWBERRY PLANTS

We can supply the following varieties, DELAWARE NEW-LAND grown.

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| Big Joe | Wm. Belt | Lupton Late |
| Brandywine | Tennessee | Parsons Beauty |
| Aroma | Mascot | Gandy |
| Sample | Premier | Klondike |
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| New York | Success | Haverland |

PROGRESSIVE AND SUPERB Everbearing

We are located in the largest strawberry center in the world, our soil and climate conditions enable us to grow the best strawberry plants.

Would be pleased to quote you.

BUNTINGS NURSERIES

G. F. BUNTING & SONS.
Selbyville, Delaware.

JACKSON POWER DIGGER

(patented)

60,000 trees per day.
Three men, two horses and 10 gal. fuel will dig 60,000 trees per day.
Cost is \$750.00 without cables.
Pulls any size lifter.
Can be used in mud or dry ground.
Never breaks or injures a tree.
20 feet sufficient for machine at end of row.
Ground is not packed for replanting same season.
Can be used for subsoiling or stationary engine.



Address EDGAR A. JACKSON, Box 152, R. F. D., Santa Clara, California

bers are earnestly requested not to make other engagements for dinner Tuesday night; if we can do business together and belong to the same Association, we can sit down and eat together and in a thoroughly democratic way, with no special tables and no little parties on the side. It will be what we used to call a "Dollar Dinner," now extinct at that price. And the nervous need not be nervous; it will be dry. Anybody who thinks he can contribute wit or wisdom to the occasion will be given a try-out under the supervision of a Vigilance Committee. Let's all plan to be in Chicago Tuesday night for the Dinner. And let's all bring our wives and make it a pleasure trip as well as a business meeting.

Mabel has left a lot of letters on my desk for me to answer. I want you to know that this Transportation situation has taken me to Washington and New York and Philadelphia and kept me stepping sideways. I will get to the letters right off now.

Mr. Sizemore wires that his trips to Chicago and St. Louis have served to bring matters to a head there and that the situation is rapidly clearing up in the West.

Yours truly,

JOHN WATSON, *Secretary.*

A NEW FLAGSTAFF ERECTED IN KEW GARDENS

An interesting account of the securing and erection of a giant flagstaff, from the Journal of the Kew Guild

One of the most interesting events of the year 1919, at Kew Gardens, England, has been the erection of the giant flagstaff to replace the old Douglas fir spar erected in 1861 on the site of the former Temple of Victory.

The old spar had been deteriorating for many years and, in addition to surface patches required to make good diseased areas, it became necessary in 1896 to replace 20 feet of the base owing to dry rot. Despite every care however, the new wood and a further section of the spar became infected with the fungus, and in 1913 it was deemed advisable to lower the spar to the ground for a thorough examination. This resulted in the decision that it would be unwise to re-erect it.

The idea of Kew without her most conspicuous landmark was not to be thought of, and the sympathy of the Agent-General for British Columbia was enlisted. He approached the Government of British Columbia, and orders were issued to the forest officials to secure one of the most perfect Douglas fir trees available, for presentation to the Royal Botanic Gardens, Kew.

How the tree was found and prepared for a flagstaff is described in a pamphlet entitled "How the Big British Columbia Tree became a Flagstaff," published at the Office of the Agent-General for British Columbia. Twelve trees were felled near Gordon Pash Lake before one was found to fulfill the requirements of the forest officials. This, after the removal of the head, measured 220 feet in length and was 6 feet in diameter at the base and 18 inches inside the bark at the small end. It was hauled ten miles on a logging railway to the sea and was then towed by a tug to Vancouver. The tree was there trimmed into its present shape and dimensions. The length was reduced to 215 feet, the lower 15 feet being squared with a diameter of 33 inches. From that point to a height of 157 feet the shape is octagonal and the remainder round. When actually raised the pole was a few inches short of 215 feet. The age of the tree is not recorded, but on arrival the base showed 360 annual rings. It was ready for shipment during the summer of 1914, but a difficulty arose in getting a steamer with sufficient deck space to take the load; then the war broke out and delayed matters still more, and it was not until the autumn of 1915 that the owners of the S. S. Merionetshire agreed to accept the tree and transport it to London for the sum of 100 guineas. On reaching the Thames it was unloaded into the water and hauled by a tug to a position opposite the Syon Vista. It was there moored to the bank until, when a favorable tide occurred a few days later, it was possible to float it out of the river on to the towing path. This was accomplished on January 4th, 1916. A few days later it was rolled over the Ha Ha into the gardens and taken on planks and rollers to a position near its present home. It was there cleaned and creosoted, but owing to the shortage of labour,

due to the war, it could not be raised. Eventually it was decided that the Canadian Forestry Corps should be entrusted with the work of erection, but later on, owing to the difficulty experienced in procuring the necessary appliances and material, before the demobilization of the Corps, the work was placed in the hands of Messrs. Coubro & Scrutton, London riggers. They began work during last summer by building a gangway to the top of the mound along which the pole was carried on rollers. A gantry 100 feet high was erected near the position the pole was to occupy, and that, with the aid of three powerful hand winches, was used to raise the pole into position. Altogether the work occupied a period of between three and four months, the final work of erection commencing on October 17th, the pole becoming perpendicular about 3 o'clock in the afternoon of the following day.

In order that the risk of dry rot may be reduced to a minimum and no part of the pole shall be hidden, it has not been lowered into a chamber beneath ground as was the case with the old spar. Instead, a steel axle has been inserted through the base of the pole, the ends fitting into sockets fixed into a reinforced concrete platform. It is held in position by eight strong wire ropes which are secured to two well protected, galvanized iron bands at different heights on the pole, and to strong iron staples embedded into deep concrete in the earth. A flag 36 feet long and 18 feet wide is ready for hoisting on some important public occasion, but so far it has not been flown.

Although not intended as a war memorial, visitors have christened it the "Victory Flagstaff," and the mound on which it stands is now spoken of by visitors as "Victory Hill;" thus the position of the old Temple of Victory has regained its lost honor and glory.

Editor National Nurseryman:

One thing that you might stir up with advantage to buyers of nursery stock is the packing question.

Today I received a package of plants.

These plants weighed about 40 pounds.

They were first dipped in heavy mud, then put in a box so large that it was cleated in the center and upper half left vacant, heavy cardboard, then sawdust the whole box weighing 60 pounds with contents and then expressed.

They could easily have been wrapped in waterproof paper and cloth and been mailed for less than half the charge.

The waterproof cloth paper would not have cost one-half what the box did.

Now this firm spends many thousands of dollars advertising every year.

Yet these methods of shipping make it hard for a buyer to find a profit after he has paid such outrageous unnecessary express charges.

A man that had some idea of the ultimate cost of such packing should be in charge of every shipping room.

I will sign myself

GROUCH.

The stock was mostly privet.

FARMER ON THE STRAWBERRY

The new Strawberry Culture, by L. T. Farmer, Strawberry Specialist, Pulaski, N. Y., is an unpretentious book of 112 pages, 50 illustrations and no advertising. It differs from the majority of horticultural works, being his own experiences written in his own way and not a compilation of the experiences of others. It is brimful of practical information about the strawberry, from growing, to marketing, exhibiting and preserving, it is a book that can only be written by a specialist who knows his subject from A to Z and adds much of value to the recorded information to the subject upon which he treats. The price of the book is 50 cents.

THE
American Association of Nurserymen

ORGANIZED 1875

A Co-operative Organization of Four Hundred
 Nursery firms associated for mutual benefit.

Our aims and purpose :

- To improve conditions in the Trade wherever improvement is needed;
- To make business between Members profitable and pleasant through observance of the ethics of fair competition;
- To bring the Nurserymen and the Planters into closer relations and secure a better understanding of the problems of each;
- To disseminate accurate information about Trees and Plants and to encourage and assist in their more general and more profitable use;
- To advertise the Association in connection with our Publicity Campaign, so that the buying public can know what the Association is and what it stands for; to recommend its Members to planters as logical and dependable sources of supply; to get orders for our Members and to see that they are filled according to the Association's stated policy of fair-dealing;
- To assist Members to avoid bad debts with reliable Credit Information;
- To Collect Accounts for Members;
- To Collect Freight and Express Overcharges and to advise Members regarding any Transportation problem, through Mr. Charles Sizemore, Traffic Manager;
- To adjust all disputed accounts between Members through our Arbitration Committee;
- To see that the rights and interests of our Members are carefully watched and protected by our Legislative Committee;
- To secure a more accurate and complete Code of Standardized Plant Names through the work of our Committee on Nomenclature;
- To do all and anything that will add to the prestige and standing of the American Association of Nurserymen and make the business of its members more profitable and, as representative of the Nursery industry, to advance the trade in public esteem.

While not inviting membership, our doors are hospitably open to all reputable nursery firms who approve of our platform and care to stand with us.

EXECUTIVE COMMITTEE:

J. EDWARD MOON, President, Morrisville, Pa.
 LLOYD C. STARK, Vice-President, Louisiana, Mo.
 T. B. WEST, Perry, Ohio.
 E. W. CHATTIN, Winchester, Tenn.
 C. R. BURR, Manchester, Conn.
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 E. S. WELCH, Shenandoah, Iowa.
 J. B. PILKINGTON, Portland, Oregon.

John Watson, *Executive Secretary.*

PRINCETON, New Jersey.

NEW PEACH SIZER

Perfected and given for public use by workers in the United States Department of Agriculture

This year a part of the peach crop may be better graded at less expense than heretofore by use of a new sizer developed by Government workers. Two machines were built last year and tested under commercial conditions at Leesburg, Va., and Mayfield, Ga. Information gained through these tests was used in perfecting the present machine, drawings of which are now available to all growers or manufacturers interested, according to announcement by the Bureau of Markets, United States Department of Agriculture.

The machine has several unique features and advantages over existing types of sizers which make it possible to handle fruit with less bruising, while its construction permits 10 to 15 packers to work at one time, thus making possible a run of from two to three carloads of peaches a day from each machine, the amount depending on the average quality of the fruit. The overall dimensions of the machine are 24 by 15 feet. It requires an electric motor of less than one horsepower capacity, or a small gas engine, to operate it, and it can be run at half capacity if desired. Under commercial conditions it should be sold at a price not to exceed \$450, according to estimates of the designers.

HOW IT WORKS

The peaches from the orchard are delivered on an inclined roller conveyor, on each side of which sorters stand and pick out culls and damaged fruit. The rotation of the peaches on this conveyor, which is obtained without bruising, enables the sorters to see the entire surface of the fruit without touching it. From this roller conveyor the peaches are delivered to two sets of ropes running over pulleys. A simple lever arrangement permits the adjustment of the spaces between these ropes to accommodate any size fruit it is desired to grade. Although the ropes diverge from each other under ordinary operating conditions, they may be set nearly parallel to facilitate the distribution into the bins of fruit which runs almost uniform in size. This control is made possible by a perfected hat-rack movement which is one of the unique features of this machine.

As the peaches come off the roller conveyor they roll down a slight incline to the ropes on which they travel until dropped through into canvas bins. It is impossible to congest the machine, because the peaches are fed one at a time to the moving ropes. Some objections to former rope sizers have been overcome through the use of a special coupling device, an idler which serves to keep the proper tension on the ropes and the mechanism which quickly widens or reduces the space between the ropes. The machine, which was devised particularly for six-basket carrier packing, can be used equally well for bushel packs with a slight modification of the bins.

POSSIBILITIES FOR OTHER FRUITS

In announcing the perfected machine, which is the work of the grades and standards project and the technological laboratory of the Bureau of Markets, it is stated that the machine has possibilities for grading other fruits such as apples, pears, and oranges, while it may be possible to modify it to handle sweet potatoes.

An application for a public patent on this sizer is pending in the Patent Office, but the department can give no assurance that a patent will be allowed on the machine or that some of the elements covered by the application are not already protected by existing patents. The bureau has applied for patents on parts of the machine in order to make them available to all, and is ready to furnish a set of working drawings to growers or manufacturers for \$2, which is intended to cover merely the cost of labor and materials.

John Watson, secretary of the American Association of Nurserymen, addressed the convention of the Agricultural Editors' Association in Chicago, April 6, on "Keeping the Boys on the Farm by making Rural Homes attractive." Mr. Watson told of the educational publicity work being done by the Association and outlined the standardization program under way. It is significant that the activities of the Association should have attracted attention that brought an invitation to have the Association's Secretary take part in the program of a convention of Editors of Farm Papers. In the evening, Secretary Watson met some of the local nurserymen at the Hamilton Club, guests of Mr. Alvin Nelson.

A CURE-ALL

If your chickens get the pip,
Or there's a blister on your lip;
Blame it on a little worm
Or a pesky little germ,
Try a quarantine.

If your fruit trees miss a crop,
Or unripe plums begin to drop;
Do not spray or fuss and fume,
Or mumble out a doleful tune,
Use a quarantine.

If the rust gets on your wheat,
Or the growing corn is cut by sleet,
Put the blame on some other plant
Try and get the "bugman's" slant,
Find a quarantine.

If your trees are struck by blight,
Or your house is robbed at night;
Don't let this your thoughts alarm,
To protect you from all harm,
Trust a quarantine.

For brown rot that is on your peach,
The use of bordeaux some will teach;
Avoid such trouble and expense,
And use a little common sense,
Its a quarantine.

Don't dig and plow and reap and mow,
Or prepare the ground with seed to sow;
There's a better way to do the deed
Than the time worn one of sowing seed.
By a quarantine.

If a flood destroys your crop,
And your house you have to prop;
Square your shoulders remove the hump,
Give Miss Fortune another thump
With a quarantine.

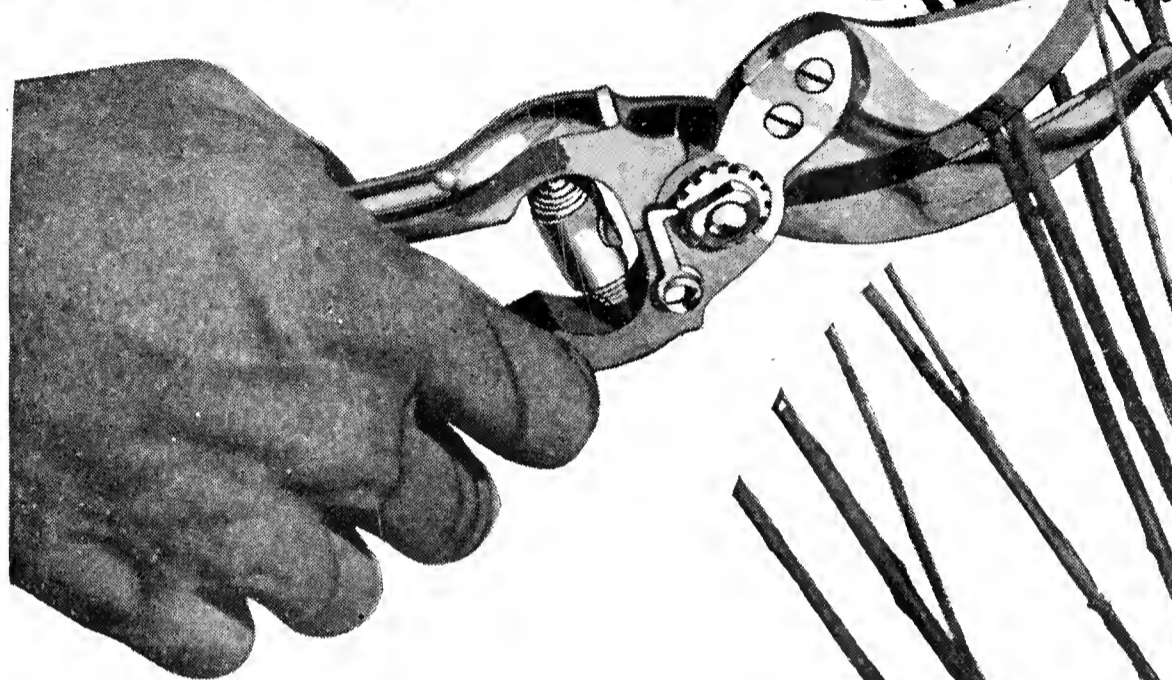
WATCHING PLANTS GROW

The latest scientific wonder is the crescograph, which has been invented by a remarkable savant from Calcutta, Sir Jagadis Chandra Bose. A correspondent who was at the India Office found one of the spacious rooms had been locked for 48 hours and two Indians were guarding the door. With a little coaxing they admitted him, and he was shown the strange instrument, which magnifies plants to such a size that when flashed on a screen you can see them grow "visibly before your very eyes." The value of the crescograph lies in its application to agriculture and horticulture. It can easily be shown which of the artificial manures have the swiftest effect upon growth. Sir Jagadis has also discovered that plants can receive Marconi messages as well as the orthodox wireless apparatus.—*The Horticultural Trade Journal*.

PEXTO

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Sell More Hardy Stock

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Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruits and flowers. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book

This Book Sells in Book Stores for 50 Cents



Our selling plan increases *your* profits by placing *The Little Pruning Book* in the hands of your customers *through you*. Your sales of shrubs, trees and hardy stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. The author of this book, F. F. Rockwell, is a writer of wide reputation in horticulture and formerly was manager of the Nurserymen's National Service Bureau.

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BABY RAMBLERS

An organization of young nurserymen, founded at the annual convention held at Milwaukee, Wis., June 28, 1916.

Their object is to perpetuate the best ideals and practices of the nursery business.



Hort. Bowden, Geneva, N. Y.



Maxwell M. Scarff, New Carlisle, Ohio

DIGEST OF LAWS AND REGULATIONS AFFECTING THE INTERSTATE SHIPMENT OF NURSERY STOCK

This digest has been prepared by Mr. D. M. Rogers, assistant in charge of gipsy moth quarantine and inspection, to meet the need for condensed information relative to the Federal, State, and Canadian laws and regulations governing the interstate shipment of nursery stock, or the entry of such stock into Canada. The information made available in this bulletin is to meet almost daily requests from nurserymen throughout the country for information as to such requirements. Mr. Rogers has submitted his digest of these laws to the chief inspectors of the several States of the United States, and it has been corrected by them. This digest is, therefore, undoubtedly substantially accurate, but the department can assume no responsibility for such accuracy, inasmuch as these laws and regulations are sub-

ject to frequent modification and change. This analysis, therefore, should be used merely as a guide to shippers of nursery stock and not in any sense as taking the place of the full text of Federal or State quarantine laws and regulations with respect to the movement of nursery stock.—C. L. MARLATT, Chairman, Federal Horticultural Board.

GENERAL INFORMATION FOR SHIPPERS OF NURSERY STOCK

This digest is compiled in order to reduce within the smallest compass for convenient reference the laws and regulations affecting the shipment of nursery stock. It does not give the text of the laws. This may be obtained, together with such detailed information as may be required, by addressing the proper official in each State.

To illustrate the use of the digest, assume that you have plants to ship to Delaware; referring to Delaware on the list of States, it is seen that requirements 1, 7, 26, and 31 must be complied with if there is expectation of delivery of the shipment without delay.

Through ignorance or neglect of regulations many shipments of valued if not valuable plants are destroyed each season. Such shipments are usually "condemned and burned."

In most States the shipment of plants from one place to another within the State is restricted. It is assumed that shippers are familiar with local regulations. Dealers and agents (who are not growers) must file affidavits, pay for license, and are otherwise restricted in many States.

As commonly used the term "nursery stock" includes all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products for propagation, except field, vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs, and roots.

Shippers should see that nursery stock is securely packed. Some States require packages tight enough to prevent escape of any pest—insect or disease.

Be sure that tags are securely attached to packages, as the presence of certificates is a condition of entry in most States.

In many States transportation companies are required to notify State inspectors of each shipment of nursery stock brought into the State and in several States shall not deliver to consignee until examined. In some States the consignee must notify the State inspector of receipt of nursery stock from another State or county.

Nursery stock may be admitted to the mails only when accompanied by a certificate from a State or Government inspector to the effect that the nursery from which such stock is shipped has been inspected within a year and found free from injurious insects, and the parcel containing such stock is plainly marked to show the nature of the contents and the name and address of the sender.

Parts of each of the New England States which are infested with either the gipsy moth or the brown-tail moth are quarantined by the Federal Horticultural Board. Notice No. 33 and map issued define areas. Nursery stock and other products are forbidden to be moved out of the areas until inspected and certified.

Federal Horticultural Board Quarantine No. 26 prohibits the interstate movement of five-leaved pines, currant, and gooseberry plants from all States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana to points outside of this area; prohibits further the interstate movement of five-leaved pines and black currant plants to points outside the area comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York on account of the white-pine blister rust.

Imported nursery stock is entered under regulations requiring a permit, foreign certification and marking, reporting arrival and distribution, and inspection at destination. Importation by mail is forbidden.

Many foreign countries prohibit or restrict the entry of nursery stock, seeds, bulbs, fresh fruits, and vegetables; the barrels, boxes, sacks, and packing material used with such shipments also come under the ban in some countries. Owing to the difficulty of keeping posted regarding all such decrees, shippers should be careful to inform themselves before forwarding.

KEY TO REGULATIONS.

- Alabama: State horticulturist, Auburn. 1, 7, 9, 10, 14, 16, 27, 29.
 Arizona: State entomologist, Phoenix. 1, 7, 8, 19, 20, 23, 29, 30, 37, 38.
 Arkansas: Chief inspector, Little Rock. 1, 7, 8, 9, 10, 14, 16, 19, 20, 24, 36.
 California: Horticultural quarantine office, Ferry Building, San Francisco. 5, 7, 8, 9, 15, 19, 23, 29, 30, 31, 38.
 Colorado: State entomologist, Agricultural College, Fort Collins. 1, 3, 19, 20, 23.
 Connecticut: State entomologist, New Haven. 1.

New Everbearing Raspberry--"Erskine Park"

By L. J. Farmer, Pulaski, N. Y.

This new everbearing red raspberry originated at "Erskine Park," the estate of George Westinghouse, the inventor of the air brake, etc., at Lee, Mass., several years ago. It was found near a Cuthbert raspberry plant and is undoubtedly a seedling of that famous variety. It attracted the attention of Mr. Edward J. Norman, who is superintendent of another estate in that locality and who secured some plants of it. Mr. Norman is really the one who is responsible for its introduction, as he tested out the variety and was the first to demonstrate what it would do. It is the practice of owners of these estates to come down from Boston at the end of the week to spend Sunday at their estates and there was much rivalry among the superintendents to get up the best dinner for

the proprietors on this occasion. Mr. Norman has been able to out-class all his rivals, because he could serve these red raspberries in the fall, after the usual season for raspberries was done. The variety was kept in that locality in this way for several years. Finally a well-known landscape gardener and nurseryman who resides on the Hudson was attracted to the new berry while on a visit to the estate for the purpose of laying out new grounds, etc. He induced the gardener to give him 100 plants. These plants were sent to a well-known propagator of plants and it has been our good fortune to acquire all the new plants propagated from these 100 plants during the past few years.

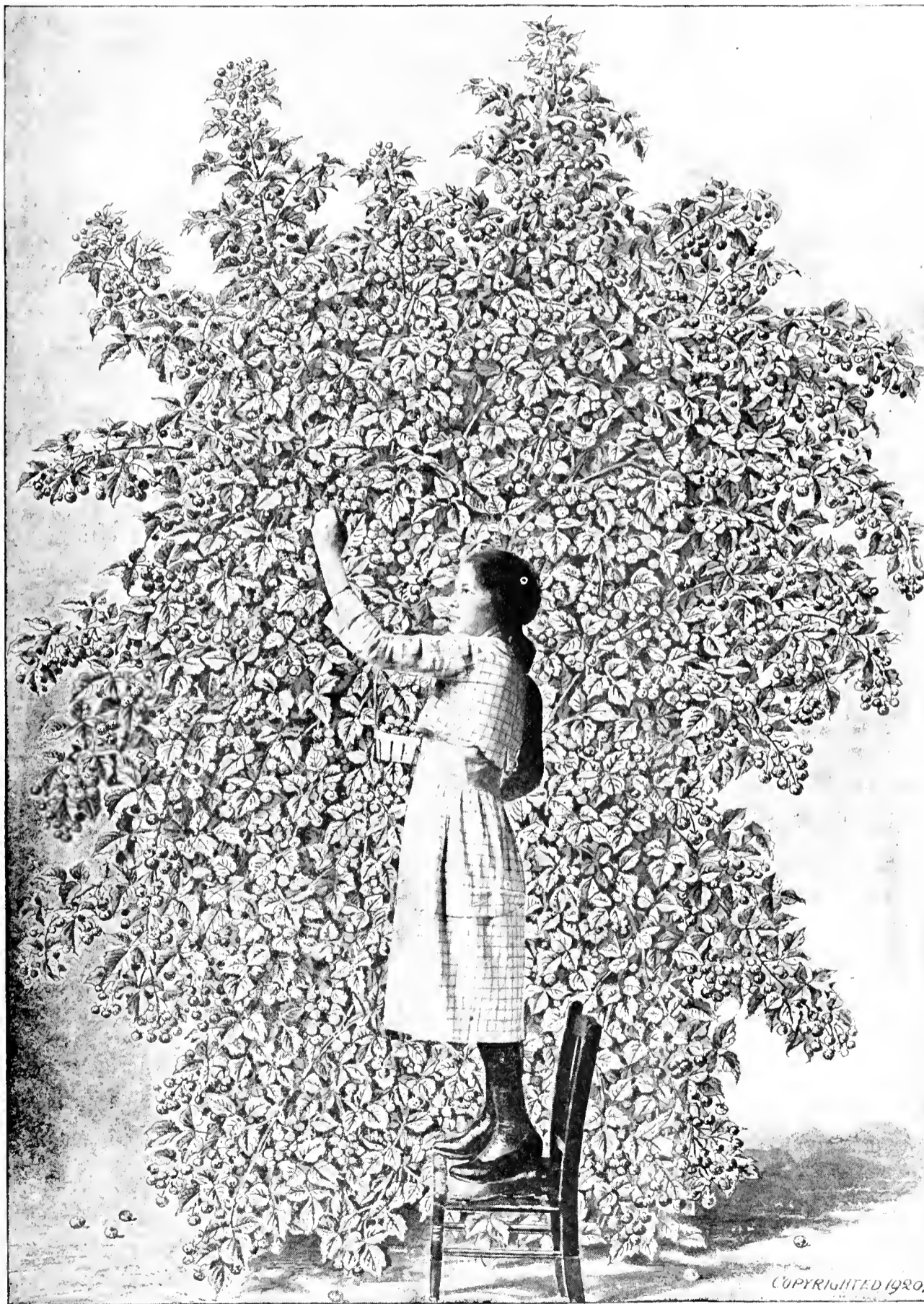
Mr. George M. Darrow, of the U. S. Dept. of Agriculture visited the estate of Mr. Westinghouse in 1916 and writes as follows "I have seen the Erskine Park at Mr. Norman's. It seems very hardy, having stood the winters in Eastern New York, Massachusetts and Southern Vermont without injury. The berries are very large for a red raspberry, tart, of good quality and conical in shape. In quality of fruit and quantity produced on young canes in the autumn, in places where I have seen it, the Erskine Park surpasses the St. Regis or Ranere."

Mr. Burt Baker, a large raspberry grower of Eastern N. Y., writes us that 100 plants of the Erskine Park bore more fruit with him in the fall than several acres of St. Regis, under the same conditions of culture.

Mr. Edward J. Norman writes us as follows under date of Lee, Mass., Aug. 22, 1919:

"Mr. L. J. Farmer, Dear Sir:—Yours concerning Erskine Park everbearing raspberry received. I find best treatment for fall fruit is to cut down canes after frost and to fruit on the new canes. This variety is a very heavy and continuous cropper, sending out bunches of fruit all down the canes, and a very heavy feeder, likes lots of manure; and a few good waterings (if it does not rain) during July helps out. Your description in pamphlet just received is about right, but a few errors should be corrected. This berry originated at Erskine Park, the estate of George Westinghouse, the inventor of the air brake, not a Mr. Norton. Where his name crept in I do not know. Tell your customers not to expect big results until they get good strong canes. I am getting lots of berries now and expect to continue till hard frost.—Edward J. Norman."

Those who are familiar with the small fruit plant game know that the demand for everbearing strawberry and raspberry plants is almost unlimited, and growing from year to year. The St. Regis has been in great demand; and for the past year or so, the demand has been far beyond the supply, at extravagant prices. The fruit of the Erskine Park is large, while the St. Regis is only medium; the plants are very strong and vigorous, the strongest growing cane of any red raspberry ever known. They are fully three times as productive as the St. Regis at its best. We have fruited the Erskine Park for two years and it simply out-classes the St. Regis as the Neverfair everbearing strawberry outclasses the old Pan American. We own all the available plants of the Erskine Park for sale, at wholesale, in the world. Our supply is ample to meet the demands. Fortunes were made in the Columbian and St. Regis raspberries. Now is the time to stock up with the new Erskine Park. Write for prices. Address L. J. Farmer, Pulaski, N. Y.—Adv't.



Drawing Showing L. J. Farmer's Youngest Daughter Picking Erskine Park in October

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- Delaware: State board of agriculture, Dover. 1, 7, 26, 31.
 District of Columbia: U. S. Department of Agriculture, Federal Horticultural Board, Washington.
 Florida: Nursery inspector, Gainesville. 1, 4, 7, 8, 9, 10, 11, 15, 19, 20, 21, 22, 26, 29, 36, 37, 38.
 Georgia: State entomologist, Atlanta. 1, 9, 10, 13, 23, 33, 36.
 Idaho: State horticultural inspector, Boise. 4, 7, 8, 14, 16, 17, 19, 23, 30, 31.
 Illinois: Chief inspector, office State entomologist, Urbana. 1, 7, 8, 31.
 Indiana: State entomologist, Indianapolis. 1, 9, 14, 16, 32.
 Iowa: State entomologist, State College, Ames. 1, 9.
 Kansas (north): Entomologist, Kansas Agricultural College, Manhattan. 1, 31.
 Kansas (south): Entomologist, University of Kansas, Lawrence. 1, 31.
 Kentucky: State entomologist, Experiment Station, Lexington. 1, 4, 7, 20, 33.
 Louisiana: State entomologist, Baton Rouge. 1, 9, 10, 15, 20, 21, 22, 29, 33.
 Maine: State horticulturist, Augusta. 1, 19, 26, 32.
 Maryland: State entomologist, College Park. 1, 7, 20, 31.
 Massachusetts: State nursery inspector, Statehouse, Boston. 19.
 Michigan: State inspector of nurseries, E. Lansing. 1, 3, 4, 7, 9, 19, 22, 26, 31, 35.
 Minnesota: State entomologist, St. Anthony Park. 1, 3, 4, 7, 9, 14, 16, 17, 19, 31, 35.
 Mississippi: Nursery inspector, Agricultural College. 1, 4, 7, 8, 9, 10, 11, 21, 22, 23, 26, 28, 29.
 Missouri: Entomologist, University of Missouri, Columbia. 1, 4, 7, 9, 10, 15, 19, 20, 25, 26.
 Montana: State board of horticulture, Missoula. 5, 7, 11, 12, 14, 16, 17, 19, 28, 31, 37, 38.
 Nebraska: State entomologist, University of Nebraska, Lincoln. 1, 7, 31.
 Nevada: Director, experiment station, Reno. 1, 7, 31.
 New Hampshire: State nursery inspector, Durham. 2, 31.
 New Jersey: Chief nursery inspector, New Brunswick. 1, 6, 19, 24, 33.
 New Mexico: Horticulturist, Experiment Station, State College. 19, 31.
 New York: Chief, Bureau of plant industry, Albany. 19, 32.
 North Carolina: State entomologist, Department of Agriculture, Raleigh. 1, 9, 20, 33.
 North Dakota: Director, experiment station, Agricultural College. 1, 31.
 Ohio: Chief inspector, department of agriculture, Columbus. 2, 7, 19, 25.
 Oklahoma: State entomologist, Stillwater. 1, 9, 15, 17, 23, 26, 31, 37.
 Oregon: State board of horticulture, Portland. 4, 7, 8, 19, 30, 31, 34, 37.
 Pennsylvania: Chief nursery inspector, Harrisburg. 1, 9, 14, 32.
 Rhode Island: State nursery inspector, room 129, Statehouse, Providence. 1, 9, 19.
 South Carolina: State entomologist, Clemson College. 9, 10, 22, 24, 33.
 South Dakota: Entomologist, State College, Brookings. 1, 9, 16, 19, 31.
 Tennessee: Entomologist, University of Tennessee, Knoxville. 1, 3, 7, 9, 13, 15, 19, 20, 22, 26, 27, 31.
 Texas: Chief inspector of nurseries, Houston. 1, 9, 10, 14, 16, 20, 26.
 Utah: State crop pest commission, Salt Lake City. 7, 12, 14, 16, 17, 18, 19, 20, 31.
 Vermont: State nursery inspector, Burlington. 1, 7, 32.
 Virginia: State entomologist, Blacksburg. 1, 9, 10, 14, 16.
 Washington: Commissioner of agriculture, Olympia. 14, 19, 31, 38.
 West Virginia: State entomologist, Morgantown. 10, 14, 16, 31.
 Wisconsin: State entomologist, State capitol, Madison. 1, 9, 14, 26, 32.
 Wyoming: State board of horticulture, Laramie. 4, 7, 9, 10, 12, 14, 16, 17, 31.
 Canada: Dominion entomologist, Ottawa. 4, 7, 8, 12, 18, 19, 20, 31.

ANALYSIS OF REGULATIONS.

1. Each shipment must bear a valid certificate of inspection issued by the State from which shipment is made. (Federal inspectors' certificate is sufficient in some States.)
2. Each shipment must bear either a valid certificate of inspection or an affidavit that stock has been fumigated.
3. Each shipment must bear a certificate of fumigation. (Usually refers only to stock subject to attack of San Jose scale.)
4. Each shipment must bear a statement of nature and quantity

- of contents.
5. Each shipment must bear invoice of stock therein.
6. Each shipment must bear statement whether or not stock has been fumigated.
7. Each shipment must be plainly marked with name and address of both shipper and consignee.
8. Each shipment must bear statement showing State in which plants were grown.
9. Shipper, before sending stock, must file with proper official of this State a signed copy of his State certificate (and affidavit in a few States).
10. Shippers must secure tags from proper official of this State and attach one to each shipment sent here.
11. Shippers must send duplicate invoice to proper official of this State.
12. Shippers must notify inspector of this State in advance of shipment, stating kind of stock, probable date of delivery, name, and railroad station of consignee.
13. Shippers must file signed agreement to fumigate all stock shipped into this State.
14. Shippers must take out nurseryman's or dealer's license before shipping into this State.
15. Shippers must secure permit to ship stock into this State.
16. Shippers must pay license fee.
17. Shippers must file bond.
18. All nursery stock will be disinfected or treated on arrival.
19. All shipments of living plants are subject to inspection on arrival. If infested or infected may be destroyed or returned.
20. Shipments which do not comply with regulations may be returned or destroyed.
21. All nursery stock which will stand it must be defoliated before shipment.
22. All fruit stock and host plants of San Jose scale must be fumigated with hydrocyanic acid gas before shipment.
23. Nursery stock includes all living plants or parts of plants for propagation, except field, vegetable, and flower seeds.
24. Nursery stock includes all field-grown plants except herbaceous annuals.
25. Nursery stock includes all plants except vegetables and greenhouse stock.
26. Strawberry plants are nursery stock.
27. Entry prohibited of all citrus stock for planting or propagation unless completely defoliated and fumigated with hydrocyanic acid gas. Inspection certificate must state that stock has been defoliated and fumigated.
28. Entry prohibited of nursery stock from localities infested with alfalfa weevil. (Only restricted in Montana.)
29. Entry prohibited of citrus nursery stock. (Also olive in Arizona.) (May get permit for entry in Louisiana; stock other than citrus from nurseries where citrus canker exists is prohibited in Louisiana.)
30. Entry prohibited of peach, nectarine and apricot stock from localities where peach yellows and peach rosette are known to exist.
31. Entry prohibited of all five-leaved pines, currants, and gooseberries. (Illinois issues permits for entry from some sections.)
32. Entry prohibited of all five-leaved pines. (Maine issues permits for entry from some sections.)
33. Entry prohibited of all five-leaved pines and black currants.
34. Entry prohibited of all nursery stock from gipsy moth and brown-tail moth areas.
35. Entry prohibited or restricted of *Berberis vulgaris*.
36. Sweet potato quarantine. Write for particulars.
37. Do not ship fruit, seeds or vegetables to this State without making inquiry of State inspector.
38. Following provisions adopted. Any State may, to prevent the introduction or dissemination of pests injurious to agriculture through the mails, provide at State expense for terminal inspection of plants and plant products as shown in a list submitted by the State and approved by the Secretary of Agriculture. It is unlawful (fine not more than \$100) to deposit in the United States mails packages of plants or plant products addressed to any place within a State maintaining such inspection without marking so that its contents may be known from the outside. Clean products or those disinfected may be remailed after inspection to destination. If infected and incapable of disinfection, they may be returned to the sender at his expense or destroyed by State. (See Postal Laws and Regulations, Order 8760, sec. 478 $\frac{1}{4}$, Apr. 2, 1915.)
 Nursery stock may enter Canada only at:
 Vancouver, British Columbia, from October 1 to May 1.
 Niagara Falls, Ontario, from October 1 to May 15.
 St. John, New Brunswick,



Fruit Tree and Rose Stocks
Farm and Garden Seeds
Lily of the Valley

FELIX & DYKHUIS
Wholesale Nurseries
BOSKOOP - - HOLLAND

are in a position to take large contract orders for fruit tree- and
rose stocks, farm and garden seeds, Lily of the Valley and all
other stock which can be imported into U. S. A.

WRITE US TO-DAY

We have no agents, write to Boskoop direct

RAFFIA

Red Star Brand XX Superior Brand
AA West Coast, also in 20 colors

Bamboo Stakes, Dutch Bulbs, Hardy Lily Bulbs

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

AZALEA HINODIGIRI

ONE OF OUR SPECIALTIES

The most valuable and beautiful Azalea grown. 2½ in.
pot plants. Write for prices. May first delivery.

If you desire any of these plants, put your order in early
as stock is limited.

If you have not received our spring wholesale list, write
for copy.

THE ELIZABETH NURSERY COMPANY,
ELIZABETH, NEW JERSEY.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

N. C. Mtn. Peach Pits

If they can be supplied, we can get them for you. Late
frosts have done considerable damage. Of course you can
wait and see later, but our suggestion is that you "get
your name in the pot," subject to crop and price adjust-
ment.

Howard -- Hickory Co.

O. Joe Howard, Secretary & Treasurer

Hickory - - N. C.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

CALL'S NURSERIES

PERRY, - OHIO

We have the following stock in surplus:

10,000 Spirea Van Houttei, asst. sizes

10,000 California Privet, 3 to 4 ft.

500 Clumps Eulalia Grass, asst. varieties

Nurserymen are using this grass with great success for
baling purposes.

American Elm, Norway Maple and Silver Maple in all
sizes and quantities.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.

DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

Winnipeg, Manitoba, March 15 to May 15 and
 North Portal, Saskatchewan, October 7 to December 7.
 Digby, Nova Scotia, For N. S. only, March 15 to May 15
 Truro, Nova Scotia, and October 7 to December 7.
 Windsor, Ontario, March 15 to May 15 and September 6
 St. Johns, Quebec, to December 7.

Shipments of nursery stock for Bristish Columbia which enter at any port, except Vancouver, shall be forwarded in bond for inspection at that port.

Importation of nursery stock through the mails is forbidden.

EXPERIMENTAL NURSERIES IN UTAH

The Department of Horticulture of the Utah Agricultural Experiment Station is this year establishing ornamental nurseries on two of its experimental farms in different sections of Utah. The plan is to set out this year, ten plants each of 123 varieties of deciduous trees and of 171 varieties of deciduous shrubs. The work will later be enlarged to include numerous evergreens as well.

As a result of this work, it is hoped to stimulate the planting of a greater number of plants and of more varieties than heretofore thruout the State. Especially important will be the fact that the Department of Horticulture will have information available as to which of the many desirable varieties do best under Utah conditions.

Quotations on this order are now being solicited from nursery companies.

QUARANTINE VIOLATIONS

Three violations of the Federal quarantine prohibiting the shipment of currants, gooseberries, and white pine from States east of and including Minnesota, Iowa, Missouri, Arkansas, and Louisiana to the Western States were discovered by agents of the United States Department of Agriculture during the fall of 1919. It was ascertained upon investigation that the nurseries making the shipments did not willfully violate the quarantine, but were ignorant of the regulations. Violations of the Federal quarantines are punishable by a fine not exceeding \$500 or by imprisonment not exceeding one year, or both.

The purpose of this quarantine is to prevent a destructive disease of the five-needled pines, commonly called the white-pine blister rust, from reaching the Western States and attacking the extremely valuable western white-pine and sugar-pine forests. This disease may be carried from one State to another upon five-needled pines or upon any species of currant or gooseberry bushes. All nurserymen, therefore, are urged to cooperate with the Department of Agriculture in enforcing this quarantine and thus prevent the disease from reaching the western forests.

ALIEN PLANT ENEMIES CAUGHT

The European corn borer may be present in sections of the country where it has not yet been discovered—but it may not. And it certainly would shortly have been in many sections where it does not exist if the United States Department of Agriculture, the other day, had not stopped a shipment of foreign broom corn at the port of New York. The broom corn came from Venice and there were 97 bales of it—enough to scatter pretty well over the United States. And it was infested with the European corn borer. Inspectors of the Federal Horticultural Board, however, were on hand. They intercepted the broom corn and prevented a further scattering of the corn borer over the country. That was just before the Secretary of Agriculture promulgated a quarantine denying entry to the United States from all other countries of the stalks of various plants that serve as hosts to this pest.

The work of determining present distribution of the corn borer is going forward. It is now known to exist in Massachusetts, New Hampshire, New York, and Pennsylvania. But portions of

the shipment of broom corn in which the insect was originally brought to this country went to various States besides those now known to be infested. Efforts are now being made to trace possible infestation through the broom factories. It has been found that there are such factories in 43 of the 48 States. The names are being supplied to State entomologists and other State officials, who are cooperating with the department in determining the distribution of the corn borer.

Dear Sir:—

Am sending herewith my check to pay subscription to your valuable and interesting magazine for the coming year. I certainly appreciated its timely articles the past year and always look forward to its visits with much pleasure. As you well know I am one of your oldest subscribers and have many prized copies of your paper on file in our office.

Very truly yours,

JOHN M. WISE,
 The Wise Nurseries, Freeport, Ill.

Dear Sirs:—

Inclosed please find check for \$1.50 for another year's subscription to your paper. I like it very much, so much that I cannot do without it.

Yours truly,

J. M. JACKSON.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912
 Of the NATIONAL NURSERYMAN, published monthly at
 Hatboro, Pa., for April 1, 1920.

Publisher—THE NATIONAL NURSERYMAN PUBLISHING
 CO., INC., Hatboro, Pa.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—None.

Business Manager—THOMAS B. MEEHAN, Dresher, Pa.

Owners:

Mrs. C. L. Yates, Los Angeles, Calif.

James McHutchison, Jersey City, N. J.

Thomas B. Meehan, Philadelphia, Pa.

Albert F. Meehan, Philadelphia, Pa.

Penrose Robinson, Hatboro, Penna.

3. Known bondholders, mortgages and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 7th day of April, 1920.
 Victor Paul, Notary Public.

(My commission expires January 21, 1923.)

North Carolina Peach Pits

We are accepting orders for
 Fall Shipments.

J. Van Lindley Nursery Co.

Pomona, N. C.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER, Penna., U. S. A.

WANTED

WANTED—Summer employment in Floriculture, Greenhouse, Landscape, Nursery or general horticulture for six to ten horticultural graduates, beginning June 15. State salary with particulars and give reference. Apply to

MR. GEORGE P. HOFFMAN,
Acting Chief of Horticultural Division,
CLEMSON COLLEGE, S. C.

WANTED

A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

WANTED

We desire to secure competent man to take charge of the growing end of a Nursery located in the Middle-west. Party must be competent to superintend the packing out of a season's orders to a high class retail trade. We have packed this spring over \$100,000.00. Party must have a fair education, not afraid of work and capable of keeping all necessary records. Good salary to the right party, also opportunity to buy interest in business on account of poor health of one member of Company. Business in a good, healthy, profitable state. Man under forty preferred. Must have A No. 1 references. None other will be considered.

Box 48, Care of National Nurseryman.

THIS SPACE RESERVED FOR

Thomasville Nurseries

Thomasville, Ga.

Nothing to offer the trade at present

The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

A. B. KATKAMIER,

MACEDON, N. Y.

FOR SALE

FOR SALE—Established northern Nursery doing good business and with established clientele. Will sell stock with or without the land. Good terms. Reason for sale, retiring from business. Address, **NORTHERN NURSERY, Box 66, Care of National Nurseryman.**

FOR SALE CHEAP

My Nursery and Berry Business

GARNETT NURSERY, Garnett, Kansas

FOR SALE—On account of other business interests, I wish to dispose of the Alabama Gulf Coast Nurseries, which are doing a Wholesale as well as Mail-order business in both ornamentals and fruit; our Pecan stock and trade alone would pay the property off; your chance to get into a moderate climate, with an established trade; terms

ALA. GULF COAST NURSERIES,

GRAND BAY, ALA.

NURSERY BUSINESS *For Sale*

Established 15 years, with an annual retail business aggregating about \$30,000, including Office and equipment, Packing House 50x150 ft., located two blocks of two main line Depots in middle west.

Live Crew of Salesmen, etc. Reason for selling, desire to change climates on account of family's health.

Inquire Box 55, Care **NATIONAL NURSERYMAN, Hatboro, Pa.**

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 6½d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

- | | | |
|--------------|---------|-------------------|
| Strawberries | Iris | Asparagus |
| Raspberries | Privet | Horseradish |
| Blackberries | Spirea | Hardwood cuttings |
| Dewberries | Rhubarb | Volga Poplar |

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St. Boston, Mass.

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,
both grafted, and seedlings from grafted trees,
and

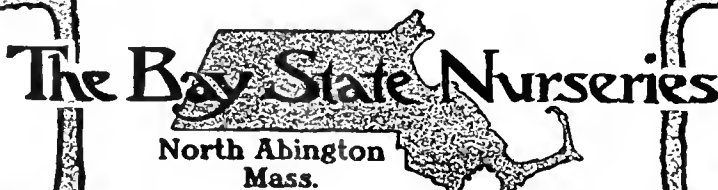
ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122½ GRAND AVENUE - PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.



SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

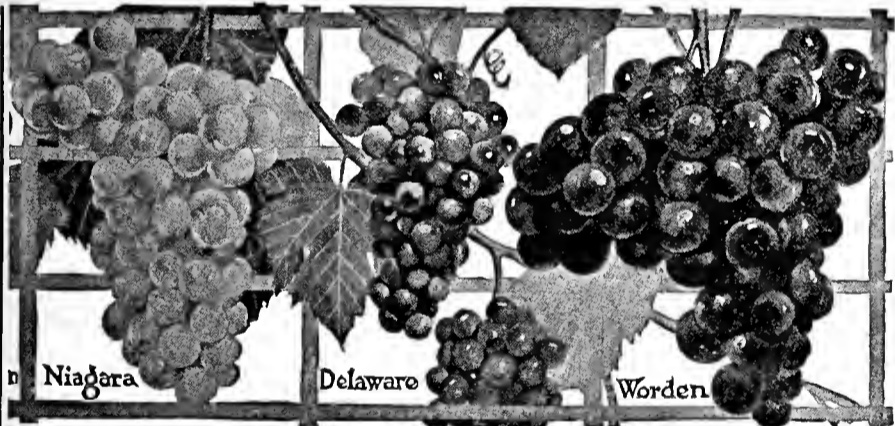
WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arbor Vitaes, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree Seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

PERHAPS

You use **RAFFIA** for budding

If so, it will be to your interest to have a copy of our

MAY FIRST PRICE LIST

which will be mailed to you on request

Thomas B. Meehan Co.

Direct Importers of Raffia

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Peonies

A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

Harrison' Strawberries



Everbearing Strawberry Plants PROGRESSIVE and SUPERB

Plants will be fresh dug

- | | |
|--------------------------|----------------------------|
| Aroma. (Per.) | McAlpin. (Per.) |
| Bubach. (Imp.) | Missionary. (Per.) |
| Brandywine. (Per.) | Mitchell's Early. (Per.) |
| Big Joe. (Per.) | New York. (Per.) |
| Big Late. (Imp.) | Nick Ohmer. (Per.) |
| Big Valley | Parsons' Beauty. (Per.) |
| Campbell's Early. (Per.) | Premier. (Per.) |
| Chesapeake. (Per.) | Progressive. (Per.) |
| Dr. Burrill. (Per.) | Sample. (Imp.) |
| Excelsior. (Per.) | Senator Dunlap. (Per.) |
| Gandy. (Per.) | Sharpless. (Per.) |
| Glen Mary. (Per.) | Superb. (Per.) |
| Haverland. (Imp.) | Tennessee Prolific. (Per.) |
| Klondyke. (Per.) | Warfield. (Imp.) |
| Lupton. (Per.) | Wm. Belt. (Per.) |
| Matthews. (Per.) | |

HARRISONS' NURSERIES

Berlin, - - Maryland



THE NATIONAL NURSERYMAN



JUNE 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



A large supply of:-

Elm, American White -- Ash, Fraxinus Viridis
Maple, Silver Leaved, Norway, Sugar
Poplar, Carolina, Lombardy, Norway, Silver Leaved, Golden
Catalpa, Speciosa, Bungei -- Balm of Gilead

Shrubs

Cornus, Siberica, Stolonifera, Floridus Rubra
Lilac, Purple and White
Spirea, Aurea, Billardi, Rosea, Douglasi, Opulifolia,
Van Houtte
Philadelphus, Coronarius, Gordon's, Grandiflorus, Lemoine
Viburnum, Opulus, Sterilis, Lantana
Ampelopsis Engelmanni

Always pleased to quote on your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

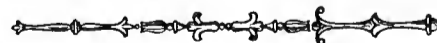
We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company
Strawberry Specialists,
Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

BULLETIN, BULLETIN

Containing a long list of scarce items will be mailed frequently throughout the season. If you are not on our mailing list, or do not read them carefully, you will lose a whole lot of time and money. Remember the orders you place with us **Get Service.**



C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The Preferred Stock

The Preferred Stock



WHY WORRY

The kinds of nursery stock previously obtained from Europe are just those in which we have always specialized, and fortunately our stocks available for this season are considerably larger than ever before.

ROSES

Field grown

ARISTOLOCHIA SIPHO

Dutchman's Pipe

CLEMATIS

Large flowering and Paniculata

AMPELOPSIS VEITCHII

Boston Ivy

HARDY PERENNIALS

Large assortment

DIELYTRA SPECTABILIS

Bleeding Heart

PEONIES

Including Officialis types

ORNAMENTAL SHRUBS

Including scarce varieties

HYDRANGEAS

Bush and Standard

FRENCH LILACS

Bush and Standard

FRUIT AND SHADE TREES

all staple kinds

Convention Representatives

George C. Perkins
Charles H. Perkins
Clarence G. Perkins
Paul V. Fortmiller

JACKSON & PERKINS COMPANY

Wholesale Only

Newark, New York State

The Preferred Stock

The Preferred Stock

STRAWBERRY PLANTS

For the wholesale trade, grown in the World's Strawberry Center, Plants and Service the Best.

| Varieties | Number of plants Offered |
|-------------------------|--------------------------|
| Campbell's Early | 5,000 |
| Heflin Early | 25,000 |
| Gandy | 40,000 |
| Big Joe (Joe Johnson) | 100,000 |
| Klondykes | 100,000 |
| McAlphine | 150,000 |
| Parson Beauty | 175,000 |
| Superior | 500,000 |
| Superb Everbearing | 75,000 |
| Progressive Everbearing | 20,000 |
| King Autumn Everbearing | 30,000 |

Limited number of other standard varieties unsold.

I also have a surplus of 20,000 Lucretia Dewberry plants, and 15,000 Asparagus roots.

I ship to you or direct to your Customers under your own Tags. Let us figure with you on your requirements.

V. R. ALLEN,

Seaford

Delaware

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

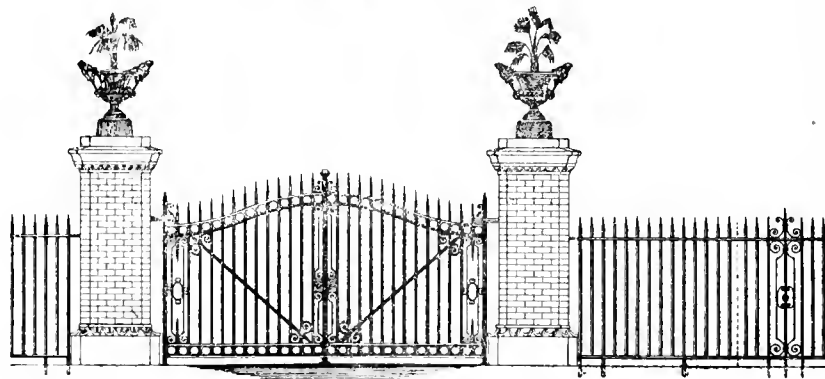
Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please

300 Designs



Send for Catalogue

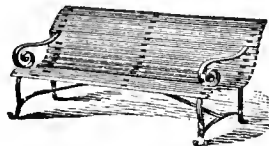


IRON-FLOWER-VASES WITH RESERVOIR

VASES



VASES



IRON SETTEES WRITE FOR CATALOGUE.

HUNDREDS of designs of plain and ornamental iron fence and entrance gate for parks, cemeteries, schools, private residences, country estates, town houses, suburban homes.

AGENTS WANTED

The Stewart Iron Works Company
770 Stewart Blk., Cincinnati, Ohio

mention the National Nurseryman.

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

- | | |
|------------------------------|--------------------------|
| Arbor Vitae—American | Concolor |
| Arbor Vitae—Compacta | Englemans Spruce |
| Arbor Vitae—Douglas Golden | Jack Pine |
| Arbor Vitae—Gibbosa | Norway Spruce |
| Arbor Vitae—Hoveys Golden | Norway Pine |
| Arbor Vitae—Pyramidalis | Pinus Mugho |
| Arbor Vitae—Siberian | Pinus Flexilis |
| Arbor Vitae—Tom Thumb | Pinus Ponderosa |
| Arbor Vitae—Orientalis | Pitch Pine |
| Arbor Vitae—Orientalis Aurea | Red Cedar |
| Arbor Vitae—Orientalis Pyr | Retinispora, 3 varieties |
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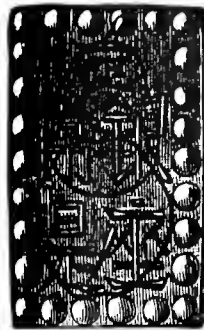
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FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

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No. 6

QUARANTINES

The epidemic that is stifling the nursery industry in the United States.

By J. Edward Moon, President of the National Association of Nurserymen.

The calamity there would be if pests and diseases destructive to horticulture were not restrained by the science of the entomologists or plant pathologists is appreciated by every right thinking person engaged in the nursery industry. Recognition is due, and must be accorded, the scientists who have studied the life cycles and habits of insect pests, and the cause and development of plant disease, and then have found ways of controlling or preventing them.

The difficulty lies in that zeal of science which sees in every pest or disease a potential source of danger to our vast horticultural resources, whether forest, orchard, landscape, or lawn. This zeal to prevent the possible ravages of such pests, when manifesting itself in Quarantines that restrict the shipment of nursery and fruit or farm products, has already retarded the progress of the nursery industry and will retard commercial horticulture generally, if the practice of establishing State and Federal Quarantines is carried to the extent towards which it seems inclined.

The State Quarantines are now giving the nursery industry the greatest concern, though prior to the present epidemic of these there was a Federal Quarantine preventing the entry of most plants from Foreign Countries. For some years previous to 1919, when this "plant exclusion act" became operative, many scientific and practical persons were of the opinion that danger from pests and disease, lurked in the admission of this foreign stock. Their agitation led to what is popularly known as "Quarantine Order No. 37," which prevents entry of nursery products—excepting in very limited amount for propagation and under highly restrictive conditions.

This "plant exclusion act" imposes a tremendous responsibility upon the nurserymen of the United States to produce here, the plants now excluded. The industry does not shrink from this responsibility. There is the talent in the nursery industry of America to grow all the stock that the nation needs. Somewhere over our broad land, we believe there can be found soils capable of producing every plant wanted. Labor, of course, will not be had as cheaply as heretofore in Europe, and in as much as from 40% to 60% of a nursery's operating costs are labor, nursery products will cost more than when foreign growers provided much of the supply.

The chaotic condition brought on by the International Quarantine can perhaps be adjusted in time. It is the Interstate Quarantines, with their increasing frequency and sweeping drastic provisions that stifle the industry

now. "Well," do you ask, "what of it?" "Isn't it necessary to prevent ravages upon our plant life?" Yes, but I would add, isn't it just as necessary to encourage the production of new plant life to replace the existing, whether it shall die from the ravages of pests, or eventually, from other causes, as all plants will?

The importance of the nursery industry, and the seriousness of handicapping it by quarantine can be appreciated if one pictures what would happen if the nurserymen struck? Would nature unaided supply enough little trees to perpetuate our forest resources? Where would the necessary young trees come from to meet the nation's increasing demand for fruit or nuts as food? How about the trees and flowers for lawns, parks, and landscape plantings generally? Like so many others, this industry is absolutely essential to our civilization.

As an example of Interstate Quarantines stifling the vitally important nursery industry take those issued on account of the European Corn Borer. This pest came in at the Port of Boston on broom corn. Later, at places in Massachusetts and New York the borer was observed. S. O. S. signals were sent out by entomologists. Publicity was given the discovery. Large appropriations of money were made to combat the pest, and a corps of scientists engaged. After opportunity for study and observation of this corn borer, the announcement was made in a bulletin of Service and Regulatory announcements by the Federal Horticultural Board, issued December 12th, 1919, that

"In relation to corn, however, there are some hopeful features which indicate that early prognostications of injury from this insect may not be warranted. For example, it (the corn borer) has been found to be single-brooded in New York State, and probably will be single-brooded throughout the northern area of corn production. As a single-brooded insect in New York, its damage to corn has been absolutely negligible. In coastal Massachusetts, where it is double-brooded on account of favorable climate, due to ocean current, its injuries have been practically limited to sweet corn and dwarf flint corn. A few fields of the coarser and stronger types of corn, such as characterize the principal corn crop of the United States, have been practically free from injury."

Despite such authoritative announcements, publicity continues to spread alarm, and the States of Illinois, Michigan, and Wisconsin threaten Quarantines against admitting from New England or New York many horticultural products, including certain varieties of nursery

stock. Of course the corn-belt States must guard their staple crop, but if an official bulletin, under date of December 12th, 1919 says

"the corn-borer probably will be single-brooded throughout the northern area of corn-production, and as a single-brooded insect its damage to corn is absolutely negligible"

why is it necessary that Quarantines by these States should be issued?

The result is that while broom corn, upon which this pest was introduced, continues to be admitted into the United States, and most nursery stock is not, the nurseries of New England and New York have ruthlessly been denied the market for their products which they have been accustomed to enjoy in these mid-western States. Further, the publicity given the pest and the Quarantines has prejudiced buyers in other States against nursery stock from corn-borer areas, yet the stock that nurseries so located sell is rigidly guarded and inspected, so that the possibility of disseminating the corn-borer on plants thus grown and shipped is so remote as to be negligible.

Pine Leaf Blister Rust is the pest that in some quarters caused alarm for the safety of the White Pine timber. Forestry planting had been encouraged, especially of very young White Pine, so nurserymen were growing the tree extensively. Currant and Gooseberry plants were found to harbor the pest at one stage of its life cycle. Alarm spread, and a whole brood of Quarantines followed that shut the door of one State against another to the admission of what are termed "five needled Pines," and to Gooseberry and Currant bushes.

Nurseries well stocked with White Pine, grown to perpetuate America's forests and to continue these noble trees in our landscapes, found their product denied a market. With inter-state shipments of five-needled Pines prohibited, the intra-state shipments declined as well, for publicity had "tabooed the most generally useful of timbers." Think of what it means to future generations for this generation to practically cease perpetuating White Pine.

From the "Pine Leaf Blister Rust" Quarantines alone, nurseries free of the pest, and with no out-breaks of it anywhere near them, suffered losses approximating one million dollars. One nursery, specializing in trees for re-forestation reports a loss of \$100,000 and two other firms doing a business in lawn trees claim to have suffered from the same cause losses totaling \$40,000. I fear that in view of the huge figures to which the public is accustomed these losses of ours may appear trifling, but let me assure you that in the nursery industry they are staggering, and to some would mean financial ruin.

I might cite other instances of Quarantines, effecting the nursery industry, for they are numerous. There is no section of the United States free from them, and new additional ones aimed at the control of this or that pest are constantly threatening. The two that I have outlined are, in their operation and effect, examples of the rest.

If, after experience with such quarantines, they had been found generally effectual as a means of pest control, there might be reason for a continuance of the policy. Then, too, if a Quarantine meant only a temporary embargo, while remedial measures were being applied to de-

stroy a pest or check a disease, horticulturists would no doubt suffer the inconvenience without protest, but with many Quarantines ineffectual and apparently of permanent nature, and so inclusive as to embrace nursery stock that is not, and never has been infested with the pest or disease covered by the Quarantine, nurserymen, and many others, are alarmed at the arrested position of the industry.

Millions of dollars of additional capital are required now in the nursery industry of America to produce in adequate supply here the plant materials that have formerly come in from Abroad. A year has already elapsed since "General Quarantine Order No. 37" was announced, and yet only a relatively few thousands of dollars have been invested to grow the plants in America that the Act excludes from foreign shores. *The reason is found in the fact that an investor requires to know in advance that there shall be a market for his products, once they have been produced.* Capital has not this assurance in the nursery business. How can it have, in view of the epidemic of Quarantines that shackle it now and threaten to stifle it even more? The importance of producing additional plant life at the same time we are protecting that which exists, I am sure is appreciated. In such a crisis what then is the remedy? Not wholesale condemnation of entomologists and plant pathologists, as some might expect me to urge; not complete relinquishment of pest control; not even the substitution of a policy that nurserymen might suggest, for it would be subject to the same criticism of bias that the present policy of the scientists is subject to.

The necessity for remedial measures is urgent, and the release of the nursery industry from its shackles of such vital national importance, that an inclusive conference of representatives of all the interests concerned should be called together by the Secretary of Agriculture, to propose to Congress legislation that, if enacted, would not only safeguard plant life from wanton destruction by pest or disease, but at the same time assure to nurserymen and horticulturists generally the freedom to sell their products in the market of every State in the Union.

KEEP THE U. S. D. OF A. EFFICIENT

Agriculture and Horticulture are so fundamental to the welfare of the country in fact to our very existence that a stingy cheese paring policy towards the United States Department of Agriculture will serve to react to the great disadvantage of the country.

It would be far better to restrict appropriations in almost any of the government departments rather than that of Agriculture.

The most is not too much and the best is not too good for a department that, in the words of Secretary Meredith, makes a profit of several times 1000 per cent for the people of the United States. While perhaps the Secretary is appropriating all the percentages in sight, the work the Department is doing is invaluable and yearly becomes more so.

The people of the country should demand and be willing to pay for the very highest degree of efficiency in all that pertains to the development of its agriculture and

horticulture. It is an investment that cannot show a loss except by niggardly and insufficient appropriations.

During the war we heard much about essential industries. The Department of Agriculture with its numerous bureaus is the one department essential to the development of the country's resources.

Nurserymen are aware how the war and its effects have depleted the trained personnel of their private businesses. Exactly the same conditions have been experienced by

the Agricultural colleges, Experiment Stations and Bureaus of the U. S. D. of A.

Our legislature should be alive to the condition and not allow ideas of false economy to influence them and permit the efficiency of the Department of Agriculture to deteriorate.

It takes generations to build up a trained personnel such as comprise the U. S. D of A. and to permit such an organization to become disintegrated through parsimony is anything but good statesmanship.

45th Annual Convention of the American Association of Nurserymen

The Convention will be held June 23rd, 24th and 25th, 1920, with Headquarters at the Congress Hotel, Chicago, Ill.

Meetings will be held each day at 10.00 A. M. in the Florentine Room on the second floor of the Hotel.

ROOMS

Rooms should be reserved at once because all hotels are apt to be crowded this summer.

PROGRAM

There will be no set program but rather a series of business meetings to give all members an equal opportunity to express themselves rather than allot the convention's time to a few.

ROOMS

The Congress Hotel gives the free use of a large convention hall and three committee rooms and appreciation of these courtesies, no less than the comfort and convenience of members, will prompt them to stop at the hotel selected for the Convention by the Committee on Arrangements.

RATES

The following rates are quoted by the Congress Hotel:
 Rooms with bath for one person. . . . \$5 per day and up.
 Rooms with bath for two persons. . . . \$7 per day and up.
 Rooms without bath for one person. . . \$3 per day and up.
 Rooms without bath for two persons. . \$5 per day and up.
 Write promptly to THE CONGRESS HOTEL, Chicago, Illinois and tell them what sort of room to reserve for you.

EXHIBITS

Members who wish to make exhibits should notify Mr. A. M. Augustine, Normal, Illinois, Chairman Arrangements Committee, who will be glad to see that exhibits are taken care of and properly placed.

Every member should attend the convention, feeling that it is being held for his special benefit and if he has any problem, resolution, amendment or action to propose to the convention, he should lay his proposition before the membership in advance to insure it being brought up before the meeting.

SECRETARY'S OFFICE

The Secretary's office will be on the second floor of the hotel, adjoining the convention hall, where members are requested to call immediately on arrival to register and receive their badges and badge books. Arrangements have been made to make the Secretary's office the headquarters of all visiting nurserymen where stationary, writing materials and stenographer will be available.

DINNER

The big get-together dinner will be held on Tuesday evening, the 22nd, 7.00 o'clock. That evening should be kept open. Tickets for the dinner can be had at the Secretary's office.

LADIES

The hotel management has generously placed at the disposal of the ladies, a large and pleasant room, adjoining the convention hall, where they can arrange to make up their parties for sight seeing or meet their friends or any other program they wish to carry out. Every provision will be made for their comfort.

NO FORMAL PROGRAM

To the Editor,

I am sending you with this a copy of the Announcement respecting arrangements for the Association's Forty-fifth Annual Convention sent to all members.

You will notice that no formal program has been arranged. The Association, since becoming a business organization, has each year found it more and more difficult to give its business the time necessary for full discussion and mature deliberation, both very important where action affects policies and programs that touch upon and put into new channels the business of its members. We have many very interesting and important subjects to discuss and determine at Chicago, and instead of devoting the three days to prepared essays, it has seemed more serviceable to the members' interests to leave the track clear for business. Some of those subjects undoubtedly will be: Market Development, Business Ethics, Advertising, Publicity, Costs, Credits and Collections, Surplus and Shortages, Seedlings and raw materials, Inspection and Quarantines, Replantations with professional Landscape Architects, the professional Landscape Gardener, Cooperation with Seedsmen and Florists, Exhibits with allied industries, Standardization of Plant Names, Standardization of Grades, The Planter's View-Point, The Agricultural and Horticultural Press, Storage, Packing, Transportation, Express weight limits, Nursery training in Agricultural Colleges, Tariff, Arbitration, State Competition, Compensation for Stock destroyed as a precautionary measure, Provision for Planting Federal Grounds.

That makes a rather formidable list of subjects and yet there will be other matters, undoubtedly, that members will want to bring before the convention. It is clear,

then, that if essays and addresses were read on these and other subjects, there would be little time for business. And every program committee has been embarrassed at what seemed to some to be preempting the time of the meeting and parcelling it out in advance. This plan of leaving it to the members themselves to handle the meeting just as they want to, is worth trying.

The Dinner is at 7 o'clock Tuesday evening the 22nd. Be on hand for it. Tickets for the Dinner can be had any time Tuesday in the Secretary's office on the second floor of the Congress Hotel.

Letters received to date indicate that the attendance will be the largest in a number of years.

Yours truly,

JOHN WATSON, *Secretary.*

American Association of Nurserymen.

Princeton, N. J., May 24, 1920.

ANNOUNCEMENT BY THE EXECUTIVE COMMITTEE

To All Members:

There seems to be some doubt and confusion about our dues and the period they cover.

In response to several requests for a ruling, we wish to say that it is the opinion of the Executive Committee that dues paid last year entitle members to all the rights and privileges of the floor and the right to vote until such time in our next Convention as the gavel shall be passed on to the next elected President as symbolic of the beginning of a new administration.

The Executive Committee has no authority to change the Constitution nor alter the action of the Association taken in convention. It can, however, constitute itself a committee on credentials to determine who under the Constitution are entitled to vote, or when one fiscal year ends and another begins. It is in the capacity of such a committee that we make this announcement.

In doing this, it is the idea to list all present members in the Badge Book as such throughout the June Convention so that all can participate in shaping the future along lines that all can agree upon.

If members assembled in Chicago—and it is expected that there will be a record attendance this year—will view the nursery industry in its national aspect, bearing constantly in mind the fact of our varied products and varied methods of conducting our business, submerging personal interests where they conflict with the interests of the whole, and displaying that capacity for cooperation which recognizes that no successful efforts in any direction can be made without yielding certain of our prerogatives, we can reach the point of putting the trade upon a more profitable footing for all and make the American Association of Nurserymen the recognized and authoritative spokesman for the great nursery industry which is fundamentally and vitally important to the health, the wealth and the happiness of our country.

Signed: J. EDWARD MOON, *President,*
LLOYD C. STARK, *Vice-President,*
E. S. WELCH,
C. R. BURR,
T. B. WEST,

E. W. CHATTIN,
J. B. PILKINGTON,
C. C. MAYHEW,

EXECUTIVE COMMITTEE.

May 13, 1920.

WHERE WILL THE CONVENTION OF 1921 BE HELD?

Possibly there are advantages in holding the convention in one place every year, but judging from the discussion that took place at the 1919 convention, a good portion of the membership seem to favor the idea of having it in a different part of the country each year. There is much to be said in favor of this arrangement and many will regret if Chicago or any other place, for that matter, is adopted as a permanent place for the convention. Since the re-organization, there has been a tendency to drop the social side of the convention and allow business to dominate. This may, in time, have a tendency to reduce the attendance, as lots of nurserymen, after the strenuous spring shipping season, are only too glad to get away for a few days for a rest and recreation and take advantage of attending the convention largely for this purpose, aiming to kill two birds with one stone, as it were. It is a pity if this idea is entirely overlooked in deciding where the next convention is to be held.

There are those, no doubt, who wish that it be taken to the west, others to the south, others east, and so on. The city that suggests itself as a change from Chicago would be the capitol of the nation, Washington, D. C. For several years, Washington has been in the head-lines; it has been the source of great news; from Washington went the call that caused armies to spring up only laying down their arms when the world's map had been changed; from Washington, went the demand for a new order among nations and whether we acknowledge it or not Washington is, today, in fact, the center of the civilized world, leader and guide of the nations.

It is an inspiration to visit Washington. Surely, every American wants to see the Capitol, the Washington Monument, the White House, the Memorial at Arlington, Mount Vernon, the Smithsonian Institution, the Library of Congress. Washington is by far the most beautiful American city with its public buildings and monuments, its wide streets, its parks, its handsome homes and the things that make a national capital different from other cities.

And the many attractions for the nurserymen! The Department of Agriculture, with its wonderful collection of artificial fruit, its hand made illustrations of flowers and fruits, the Botanic Garden, the Rose Garden at Arlington, etc.

After these years of war and anxiety, after the turmoil and travail, what more appropriate and healthful to our patriotism than for our National Association to journey to the National Capital and refresh ourselves spiritually in its historic atmosphere? And Washington in June is at its greenest and freshest, before the summer heat comes, with an abundance of good hotels grown up like mushrooms in late years, with opportunity to meet, possibly the new President and certainly all the Department officials with whom we are in such close business touch?

Washington, of all places, would tend to emphasize our place and position as a *national* Association. No

other city offers so many things to see: so many things that every American *should* see. So, why not Washington?

CLASSIFICATION OF PLANTS ACCORDING TO THEIR RELATIVE COMMERCIAL VALUE

Mr. A. E. Nelson, Chicago, in an address before the Illinois Nurserymen's Association, advocated classifying evergreens, trees and shrubs to simplify the pricing and be a guide to determine their commercial value. He spoke as follows:—

A great many factors enter into the attempt to determine the commercial value of plants. Let us enumerate some of these factors:

- (1) The ease or difficulty with which a plant can be propagated.
- (2) The amount of labor involved in its care, and the space occupied in the nursery during the period from its propagation to its saleable condition.
- (3) The few, or many times a plant must be transplanted in order to obtain a proper root system for a saleable nursery plant.
- (4) The average casualties which occur by reason of transplanting, thereby diminishing the number of saleable plants.

The factors just mentioned have to do with the producing of plants. There is also a fifth factor to be considered: Namely "distribution." Some shrubs, especially those used for hedges, have a very large sale, and may be safely produced in large numbers. Whereas other plants not more difficult to grow, have a limited sale, and if grown in too large numbers, are sure to find their way to the brush pile.

The same is true with trees. Shade trees which are used only for avenue planting, are in far greater demand than those for merely ornamental purposes. I am not familiar enough with the subject to speak with authority as to fruit trees, but I imagine the same condition exists with regard to them.

With the above factors in mind, it can be seen how difficult it is to make exact classifications. It is especially so in a country as large as the United States with its varying climatic conditions in different localities. It is therefore not very surprising that nurserymen have practically side-stepped this matter and have followed the easier method of basing their prices on someone else's catalogue, and thus letting the blind lead the blind.

There has however, been some development in recent years which seems to indicate an approach to more uniformity in the pricing of nursery products. An analysis of many of the catalogues published recently, will show, that to a certain extent, classifications more or less consistent, are acknowledged by all nurserymen. For example: no one would put a Poplar and a Sugar Maple in the same class as to their commercial value. Neither would they place together a Norway Spruce and a Colorado Blue Spruce; nor a Bush Honeysuckle with a Viburnum.

Mr. Nelson named a list dividing them into groups, according to the factors specified above.

The suggestion is well worthy of consideration by the National Association.

Actual cost data being impractical when growing most nursery stock. The law of averages worked out under such a classification is more likely to give a correct comparative value than following a custom that has just happened.

SECRETARY WATSON "PASSES THE BUCK"

May 5, 1920.

Editor National Nurseryman,
Flourtown, Pennsylvania.

Dear Sir:—

It was very kind of you and more than generous to refer to my efforts in the transportation matter in the way that you did in the National Nurseryman just at hand. And I thank you very sincerely.

I wish to make a point of this prompt acknowledgment in order to attach to it a request that you make it clear upon opportunity that the reason for my going to Washington was because of my nearness to railroad and government headquarters; Mr. Sizemore, our Traffic Manager, has been actively and effectively on the job in both St. Louis and Chicago, looking after the situation at that end. I wish to make sure, through your columns, that Mr. Sizemore has full credit with the members for his prompt efficient work in their interests. My being near Washington simply brought me quickly into touch with conditions there and the outcome would doubtless have been quite the same. I happened to be on hand when action was taken. The cooperation of members in writing and wiring their Congressmen was merely an example of what good team-work can accomplish.

Yours very truly,
JOHN WATSON, *Secretary.*

SHOULD THE ILLINOIS NURSERYMEN'S ASSOCIATION CERTIFY TO SALES MADE BY MEMBERS?

By Alvin E. Nelson, Chicago.

The question, "Should the Illinois Nurserymen's Association Certify to sales made by its members" really includes two questions. First, Should any Nurserymen's Association certify the sales by its members? and second Should the Illinois Nurserymen's Association be the body which certifies to such sales?

I am inclined to answer the first question in the affirmative because by such means we can most effectually combat the harm that has been done to the nursery business in general, by the bad practices of a few unscrupulous men. These bad practices have thrown discredit on our trade, and unless the nurserymen as a body clean up their house, the government will do it for them. The public is certainly entitled to protection from some source and it is the duty of the government to furnish that protection wherever necessary.

Do not suppose that the nursery business has been singled out as specially in need of government control. The government has safeguarded the public from possible abuses in many other businesses. Banks are controlled for the safety of the depositors.

Investment companies are under government supervi-

sion. Many of the professions are required to take up licenses after passing rigid examinations. Among such are Doctors, Dentists, Lawyers, Insurance Companies, Architects, Engineers, Plumbers and others. Industries such as the packing industries are rigidly inspected and then licensed for the benefit of the public.

In the case of the banks the government safeguards the public's deposits; in the case of investments, the public's investments; and in insurance, the government practically guarantees that the assured is protected from loss and that the beneficiary will certainly receive payment. In the case of the packers, the object of government protection is the wholesomeness of the product. They have to certify as to the health of the animal slaughtered, and to the sanitary conditions under which it was packed. In fact, every manufacturer of food commodities operates under the pure food laws of the United States.

Now the question arises as to what protection the purchaser is entitled to against possible abuses in the nursery business.

- (1) He is entitled to the assurance that he is getting the variety of plant which he orders.
- (2) He is entitled to be safeguarded against receiving plants that are diseased or infested with insect pests.
- (3) He is entitled to receive plants furnished with sufficient roots and which are handled with sufficient care to make them grow.

Certain States have passed laws intended to safeguard the purchaser in the particulars just mentioned, but the framers of those laws in their eagerness to protect the public, made them so drastic for the nurserymen, that they are unable to operate under them.

Now it is believed that if the nurserymen in one of their own associations could furnish ample protection to the public, such drastic laws would not be made in the future, and that those now on the statute books might be annulled; and what is of greater importance, the confidence of the public would be strengthened, and the planting of trees would greatly increase.

How shall we as nurserymen accomplish this. As the conditions are national and not local, it seems to me that it ought to be dealt with nationally and not locally. We are all members—or at least should be—of both our State association and our National Association. I therefore believe that the Illinois Association of Nurserymen ought not to enter this work, but that we ought to heartily support such a movement for this purpose which is already being discussed in the National Association.

A suggestion has been made that the National Association certify to the genuineness of every purchase from any of its members, and to this I would add that it certifies that it will return money back for any plant sold which is not true to name, or which is diseased in any way, or has insufficient roots.

It might be objected that the association would be involving itself in a very large financial obligation to so certify the sales of its members; and I agree that it ought not to undertake this responsibility without previously having received a bond from each of its members, to make good any loss which may be incurred by the association on his business. If this is done, there ought not to be any great danger in making the experiment, and certainly

a national body could exploit by means of publicity campaign, this service to the public, in such a way that each member will receive full benefit from it. This can be done by the national body at far less expense than if each individual nurseryman attempted to do it for himself.

It has been objected that certifying to the genuineness of all sales would be a boon to the crooks in the nursery business at the expense of the honest nurserymen. This objection is partly met by the bond which I suggest the national body should require from each of its members to indemnify it against loss, but supervision should not end there. The officers of the association know full well who the crooks are, and as there are very few of them, would be able to give them special supervision. If they continue to abuse the good name of the association they could be dropped from membership. The mere dropping from membership, however, would not effect much if such outlaw concerns were able to buy stock from our members: so there would probably have to be an agreement such as exists in many other trades, to sell stock at wholesale prices to firms of good standing only. This agreement being on the face of it for the benefit of the public and not for the sake of profiteering, I feel sure would be endorsed by our government. It is in line with the best practice in many other industries which have had to contend with similar conditions, and it would thus make our industry thoroughly respected and put it on a firm business basis.

Until I was assigned this subject, I was not aware that it had been suggested that the certifying of nursery stock should be done by a State organization. I cannot think of any argument in favor of a State organization undertaking this service and there are many obvious reasons why it could not serve as well as a national organization. The object desired is to enforce square dealing, and to assure to the public that it will receive a square deal. In other words, we wish to reinstate all nurserymen into the good opinion of the public; and it is no advantage to us to have all Illinois Nurserymen on the square, if crooks from other States come in, and by bad practices bring discredit upon the industry. We wish to accomplish a nation wide reform and in order to do so it must be done by a national association.

The whole object of the plan suggested above is to fix definitely the responsibility for certain acts on the right persons, and it is readily admitted that this is a difficult thing to do. It may be that the whole scheme is impossible to carry out because of the difficulties involved; if so, some other plan must be devised. If no plan on this or similar lines can be found, we must fall back on government supervision. I would suggest that we do not wait until such supervision is thrust upon us, but instead devise a law which will accomplish the purpose of protecting the consumer and at the same time develop and strengthen the nursery industry.

Common sense tells us that the laws controlling other industries must have been drawn up by parties who knew all the details of the business to be controlled. For instance, laws on banking must have been drawn up by bankers, laws on insurance by insurance men, etc., and these industries have flourished more since laws were passed than in the old days of wild cat banking.

It matters little if we have to change our mode of doing

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

JUNE 1920

THE NURSERY-MANUAL

by L. H. Bailey

Most exhaustive and up-to-date manual ever published, covering all the most recent improvements in the care of nurseries and in the practice of plant propagation.

CONTENTS

Description of all the various methods of plant propagation.

Diseases and insects taken up in detailed manner.

Two hundred page nursery list. Hundreds of plants listed by their common as well as the botanical names with description of methods of propagation.

A large number of full page plates, line drawings and descriptive figures.

Although founded on Mr. Bailey's former work "The Nursery Book" which ran through 21 editions, "The Nursery Manual" has been entirely rewritten with a wealth of new material and wholly new set of illustrations. Price \$2.50.

The National Nurseryman

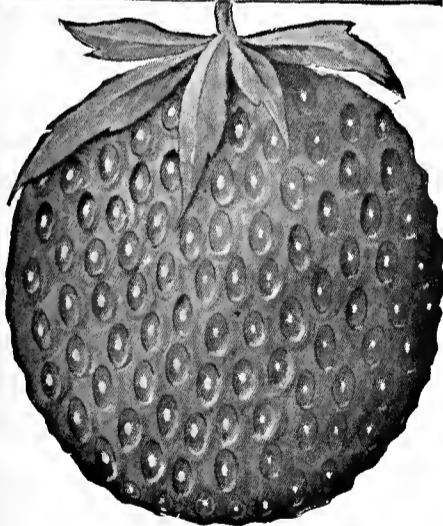
Hatboro - - - Penna.

Strawberries! Strawberries!

Extra Strong Plants



The Season's Best Novelties



BEAL

This variety is the result of special hybridization for over a period of years by Tice C. Kevitt, and under normal conditions plants set out make a growth of 14 in. high with berries that measure 3 in. in a straight line passing through the center of the berry.

Kevitt's Jubilee

The New Black Strawberry
The plants are extremely vigorous and healthy and give an abundance of very dark red luscious fruits of exquisite flavor and giant size, well above the ground. Mid-season to late. Perfect flowering.

BUCKBEE

The New Hybrid Strawberry

The culmination of thirty-five years successful Hybridizing. **THE FINEST EVOLUTION IN STRAWBERRIES.** Excels all others in size, quality, quantity and flavor.

Write for special prices.

Sole Distributors

WILLIAM M. HUNT & COMPANY

148 CHAMBERS STREET, NEW YORK

STANDARD VARIETIES

Marshall, Nick Ohmer,

Brandywine

and all other sorts supplied
Spring and Summer delivery

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

business. If the business itself grows we are sure to individually profit even though we have to entirely reconstruct our methods. One plan that suggests itself to me, is a law prohibiting the rehandling of fruit trees. There might be as many selling agencies as necessary for selling the trees to the ultimate consumer, but when the sale is made, the tree itself goes direct from the grower to the consumer. The consumer then knows whom to make responsible. This plan would involve advertising the name of the producer rather than the selling organization. There are many precedents for this and from an advertising point of view, it has advantages. Practically all clothing is sold in this way. The name of Schaffner and Max and other brands of clothing are advertised from one end of the country to the other, and the stores selling those brands, although entirely independent of the manufacturer still have the advantage of the advertising. The point I wish to make is that if we have a condition, let us study and solve it one way or another and not wait to have a solution made by others. Nursery Associations have for years had legislative committees. These committees it seems to me have merely been watch dogs for the purpose of opposing and modifying legislation, but it is now time for us to have a legislative committee which will propose constructive measures for the benefit, not only of the public, but for the nurserymen as well.

NO CAUSE FOR ALARM

The issuance May 1st of the notice of public hearing called for May 7 for the purpose of revising the existing quarantine in New England on account of the gipsy and brown-tail moths has, through a misunderstanding of the purport of this notice, occasioned some alarm on the part of nurserymen, florists, and others who jumped to the conclusion that some new and drastic quarantine was about to be placed which would seriously affect the sale for interstate movement of ornamental and other plants from the States covered in the proposed quarantine. In explanation, it may be stated that this quarantine is a mere revision of the quarantine which has been in force since 1912. It is, therefore, not a new quarantine and will impose no new restrictions on the territory which has hitherto been covered by the quarantine. This territory involves approximately the coastal half of New England and practically all of the large nursery and floral establishments of that district. The purpose of this quarantine is merely to make such changes of the exterior border line as the spread of the moths during the year have necessitated. Such changes, either in the form of extensions or reductions, have been made annually. It may be pointed out, furthermore, that this quarantine does not prohibit the movement of nursery stock, florists' stock and other products covered, but that movement of all such products is provided for under inspection and certification. Nurserymen, florists and others interested have been working under this quarantine for some eight years and the efficiency of the inspection and certification under this quarantine has permitted the interstate trade in ornamental and florists' stock to proceed without restriction—trade which, without the endorsement of such inspection and certification, would probably have been brought to an abrupt termination by drastic quarantine action on the part of surrounding States.

The only serious effect of any extension of this quarantine is to cause a greater expense of supervision and certification to the Department of Agriculture and the States concerned.

To avoid the necessity of these annual revisions and the notices of public hearings which these revisions require, together with the misinterpretation of these notices which is likely to follow, it is now proposed, in connection with the revision of this year, to so word the quarantine as to make it possible to effect the additions or reductions in the quarantined territory from time to time without the necessity of annual public hearings. In conclusion, it may be repeated that the existence of this quarantine and the guarantee which is given by the inspection and certification of nursery and other ornamental stock as well as other products leaving the territory is the very condition which makes interstate movement of these products and the continuance of the enterprise concerned possible.

THE U. S. D. OF A. CONDUCTING EXPERIMENTS AT HARRISON'S NURSERIES

Co-operative experiments are being carried on at Harrison's Nurseries, Berlin, Md., by the U. S. D. of A. with Professor M. B. Waite, Pathologist, in charge and Dr. E. A. Siegler, Scientific Assistant.

The idea is to continue a series of experiments with budded and grafted apple trees for several years.

Harrison's Nurseries furnishing the trees, the land, labor and paying for all spraying material, etc., involved in the work.

The experiments will be under the direct supervision of the Department of Agriculture.

It is hoped that information of much value to American Nurserymen will result from applying scientific knowledge under practical conditions such as exist on a nursery.

COMMERCIAL FRUIT CROP REPORTS DISCONTINUED

A notice just received from the Bureau of Crop Estimates, Washington, D. C., advises it has been necessary to discontinue, until further notice, the special reports on the commercial crops of apples, peaches, and pears.

There will not be sufficient funds to carry on this work for the fiscal year beginning July 1, 1920, and that both the Fruit Crop Specialists of the Bureau have just resigned.

It does seem as if the government offices were working under exactly the same conditions, and having the same kind of troubles as a private business.

Statistics that are essential to the proper distribution of perishable food products of the country should not be allowed to stop for lack of funds.

BEAUTIFYING THE FARMSTEAD

The U. S. D. of A. has issued Bulletin 1087, treating on the subject of Beautifying the Farmstead, by F. S. Mulford.

It is an excellent work and should be an efficient help to the nurserymen's campaign to encourage planting.

**J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland**

(Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.

FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.
ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,
116 Broad Street - New York City

THIS SPACE RESERVED FOR

Thomasville Nurseries

Thomasville, Ga.

Nothing to offer the trade at present

The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

A. B. KATKAMIER,

MACEDON, N. Y.

**Look for Us
At the Chicago Convention**

We will have our new collection of Landscape Views. This will give you the chance to see all our views and to order what ones you desire.

B. F. CONIGISKY

416 N. Jefferson Avenue - Peoria, Ill.

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Sold out on Pear, Plum and Cherry
Have limited number of Peach and Apple
to offer in light grades

Raspberries and Blackberries

WRITE FOR PRICES
Grafted Hardy Northern Pecans

Seedling Pecans

Tree Seeds

WRITE FOR PRICE

T. Sakata & Co.

Kanagawa, Yokohama,
Japan

We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

**THE
Westminster Nursery**

J. E. Stoner, Prop.

WESTMINSTER - MARYLAND

Offers for Fall 1920

California Privets, Asparagus,
Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars,
Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks,
Horse Chestnuts, Butter Nuts, Norway Maples,
in grades from 6 to 16 feet.

Cumberland and St. Regis Raspberry,
Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses.

Can supply in quantity. Write for prices.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

709-717 Sixth Avenue - New York, N. Y.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., June 1920



DOES A NURSERYMAN VALUE HIS OWN PRODUCTS?

It is very doubtful if the average nurseryman properly values the plants he raises. The present shifting of values on all commodities and the shutting off of the foreign supply maybe, will help to make him stop, look and listen, and compare values. He produces goods that take from one to twenty years to manufacture, if we may use the term. What would he have to pay for a hat that took ten years or even one, to manufacture? Would it be \$10.00 or \$100.00 or over.

If in the manufacture of an article the liability of failure in production was from 10 to 100 per cent, is it likely the article would be low priced? If it were next to impossible to arrive at actual cost data, would the manufacturer be likely to underbid job lots and surpluses offered by others. The nurseryman has too long been influenced by the crop idea of the farmer in the production and distribution of his stock when he should really associate his products with the live stock of the farmer when putting a value on them. A bushel of potatoes, ton of hay, bushel of wheat and such like field crops have arrived at their value when they are marketable.

The nurseryman's trees and plants, like the farmers live stock have also arrived at a saleable value but also have a potential value. The apple tree may eventually produce an annual income many times the original price to the purchaser, and the small grafted ornamental tree grow into a specimen that will add hundreds of dollars to the property upon which it is planted.

It is not intended to suggest that foolish and fictitious values should be placed on nursery stock, but that actual cost of production, skill, should be covered by its selling price. In no line of manufacture or production are there so many unprofitable side lines that have to be carried at a loss by the business. The groceryman used to have one, sugar, and everyone knew about it. The nurseryman has many and does not even know which they are himself. One year he makes money on his peach trees, but loses on his roses and the next year it is reversed, but the failures are never added to the cost of the successes. He thus is forced to offer low wages, poor culture and instead of a constant improvement and a process of building up he does business along the lines of a gambler, hoping each year for a killing which seldom comes. The present high cost of labor will teach the nurseryman better than any other thing, the value of his products, because labor enters so largely in the production and he will likely begin to do a little figuring and compare his turnover with other lines of merchandise.

If he figures long enough he may come to the conclusion those trees he grew for eight years and sold for two dollars or less were raised at the expense of some other item, or paid for by income from some other source.

PREVENTION OF WASTE

When a big man expresses an opinion it is listened to because he can take an involved problem analyze it and come to a synthetical conclusion that is more than likely to be a sensible one.

One of the strongest points made by Secretary Meredith speaking before the Chamber of Commerce at Atlantic City on the work of the U. S. Department of Agriculture was on the subject of Prevention of Waste.

The nursery business is so closely connected with agriculture every word Secretary Meredith spoke applies with equal force to the nurseryman as well as farmer and after reading his address one cannot help but come to the conclusion that homely remedies are the cure for the present state of affairs.

Mr. Meredith pointed out the valuable work the Department of Agriculture was doing to prevent the huge, actual losses in fruit, vegetables, cotton and other products of the farms from various causes.

If waste could be eliminated entirely there would be enough of everything for everybody. Even to bring about a possible reduction or in other words if Americans practiced thrift to a similar degree that is common to some of the older countries that have not such a wealth of national resources, the results would be astounding.

For nurserymen to grow less stock, grow it better, sell it all and get a better price for it would be one way of practicing thrift by preventing waste.

John Rice, of Rice Bros. Co., Geneva, N. Y., made a hasty trip through Pennsylvania, Maryland and Delaware, this month, visiting nurserymen.

Mr. Rice reports exceptionally good business this spring and sees no surplus of nursery stock in sight next year.

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices. We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

Have you seen a garden bordered with *BOX-BARBERRY* this spring? Every plant bright and green,—not a dead one. A strong contrast to the northern *Buxus* bordered garden, now either dead or sadly winter injured, brown and dejected looking.



Garden Bordered with Box-Barberry
Electros of this illustration free with
each order for 1000, or more, of re-
quested.

Mr. Siebrecht, the veteran plantsman, on seeing the garden the other day shown in accompanying illustration, exclaimed with his characteristic enthusiasm, "magnificent, there is a fortune in it for the nurserymen."

We offer you well rooted dormant summer frame cuttings ready to set out direct into the nursery without further expense to you, *all sold out of larger sizes.*

Many of the leading catalogue firms have already contracted with us for their supply for the ensuing season, and others are buying these *frame grown plants* for their own planting preparing for the enormous demand which is sure to follow.

It is a safe statement that *BOX-BARBERRY* will soon be the plantsman's best seller.

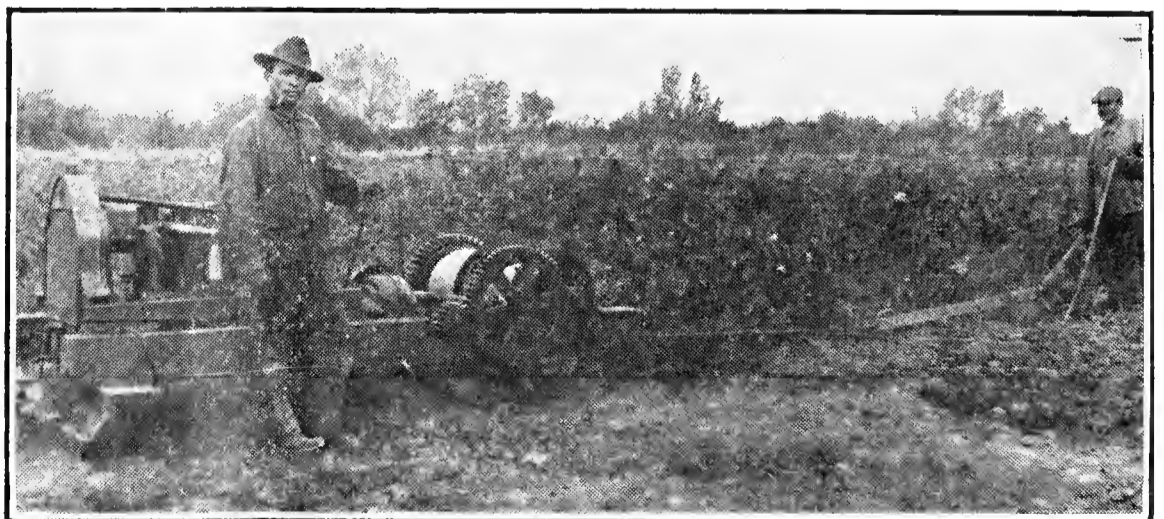
The Elm City Nursery Co.
New Haven, Conn.

Woodmont Nurseries Inc.
Introducers

Send for Trade Bulletin.

JACKSON POWER DIGGER (patented)

60,000 trees per day.
Three men, two horses and 10 gal.
fuel will dig 60,000 trees per day.
Cost is \$750.00 without cables.
Pulls any size lifter.
Can be used in mud or dry ground.
Never breaks or injures a tree.
20 feet sufficient for machine at end
of row.
Ground is not packed for replant-
ing same season.
Can be used for subsoiling or sta-
tionary engine.



Address EDGAR A. JACKSON, Box 152, R. F. D., Santa Clara, California

No. 319

UNITED STATES CIVIL-SERVICE EXAMINATION.
PLANT BREEDER

JUNE 22, 1920.

The United States Civil Service Commission announces an open competitive examination for plant breeder. A vacancy in the Bureau of Plant Industry, Department of Agriculture, for duty at Blissfield, Mich., at \$2,000 to \$2,400 a year, and vacancies in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The entrance salary within the range stated will depend upon the qualifications of the appointee as shown in the examination. Appointees whose services are satisfactory may be allowed the temporary increase granted by Congress of \$20 a month.

All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles.

The duties of the appointee will be to carry on experiments in the growing of sugar-beet seed and in the production of improved strains of sugar-beet seed secured by various methods of breeding, with special reference to correlated characters; and to determine the best means of keeping sugar-beet roots over winter for seed production, the best time and method of planting the roots, harvesting the seed, and other points in connection with experimental and commercial sugar-beet seed.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

| Subjects | Weights |
|--|---------|
| 1. Education, training, and experience | 70 |
| 2. Thesis (to be filed with application) | 30 |
| Total | 100 |

Under the first subject competitors will be rated upon the sworn statements in their applications and upon corroborative evidence.

Applicants must have graduated from a college or university of recognized standing in a course embracing the subject of botany with special reference to plant breeding, together with thorough training in plant physiology, and a course or courses in chemistry and plant pathology. In addition, the applicant must have had some experience in plant breeding. Additional credit will be given for advanced work leading to a master's or doctor's degree and for experience in the growing and breeding of sugar beets.

Under the second subject applicants must submit with their applications a thesis containing 3,000 to 5,000 words on some subject bearing upon plant breeding or plant physiology, showing the writer's ability to do independent investigational work.

Applicants must have reached their twenty-fifth but not their forty-fifth birthday on the date of the examination. Age limits do not apply to persons entitled to preference because of military or naval service.

Applicants must submit with their applications their unmounted photographs, taken within two years, with their names written thereon. Proofs or group photographs will not be accepted. Photographs will not be returned to applicants.

Applicants will be admitted to this examination regardless of their residence and domicile; but only those who have been actually domiciled in the State or territory in which they reside for at least one year previous to the examination, and who have the county officer's certificate in the application form executed, may become eligible for permanent appointment to the apportioned service in Washington, D. C.

Applicants should at once apply for Form 2118, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii; Post Office Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco Calif.; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights, Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical certificate, and must be filed with the Civil Service Commission, Washington, D. C., with the material required, prior to the hour of closing business on June 22, 1920.

An act of Congress approved July 11, 1919, provides:

"That hereafter in making appointments to clerical and other positions in the Executive branch of the Government in the Dis-

trict of Columbia or elsewhere preference shall be given to honorably discharged soldiers, sailors, and marines, and widows of such, and to the wives of injured soldiers, sailors, and marines who themselves are not qualified but whose wives are qualified to hold such positions."

Applicants entitled to preference should attach to their applications their original discharge, or a photostat or certified copy thereof, or their official record of service, which will be returned after inspection by the Commission.

Issued May 1, 1920.



Obituary.

JOSEPH A. DAVIS

Just as we go to press we are advised of the death of Joseph A. Davis, of the Franklin Davis Nurseries, Baltimore, Maryland. He was ill but one week.

Mr. Davis held the respect and esteem of nurserymen throughout the country. He was loved for his kind and genial disposition, and will be sadly missed in the gatherings of nurserymen.

The National Nurseryman extends its sympathy to his family.

E. W. REID

Word has just been received that Mr. E. W. Reid, manager of the Nursery Department of Holm & Olson, St. Paul, Minn., died May 26 after an illness of about a week.

CALIFORNIA NURSERYMEN ARE PROGRESSIVE

The California Nurserymen and Fruit Growers are planning to try and measure up to the gigantic fruit industry of their State.

It is estimated the economic value of the fruit and ornamental plants of California represent an annual turnover of \$175,000,000.

For a long time it has been realized pedigreed trees were just as essential as good breeds of cattle and other animals if the best results are to be expected.

Fruit trees of a given variety are known to vary greatly in quality and production even under the same conditions, to say nothing of worthless and unprofitable kinds that are often planted because nothing better is available.

The establishment of a mother orchard under the care and management of a thoroughly experienced man who will have the cooperation of all the leading growers and who will be able to put to use the knowledge that has been gained by specialists on the subject, will be a long step towards standardizing the industry, and put to profitable use the scientific knowledge gained in the past.

Definite plans have been made to negotiate for the location and purchase of a prominent farm upon which will be planted the most approved types from which buds and grafts may be obtained for propagating purposes so as to bring up the standard of producing trees.

The California Nurseryman's Bud Selection Association has been formed with a Board of Directors consisting of Wm. T. Kirkman, Jr., Fresno; J. E. Bergholdt, Newcastle; H. A. Hyde, Watsonville; J. S. Armstrong, Ontario; J. W. Barnicott, Newcastle; George C. Roeding, Fresno. The manager who has been selected to take

American Association of Nurserymen

Forty-fifth Annual Convention

THE CONGRESS HOTEL, Chicago, Illinois

June 23, 24 and 25, 1920

PROGRAM:

Market Development,
Publicity,
Credits & Collections
Seedlings and raw materials,
Inspection and Quarantines,
Professional Landscape Gardeners,
Standardization of Names,
The Planter's View-point,
Cooperation with Pomological
and Horticultural Societies,
Legislation,
Express Weight Limits,
Tariff,
Storage,
Reimbursement by the Government for stock destroyed as a precautionary measure.
Provision for Plantings around Government Buildings.
Reports of officers and committees.

Business Ethics,
Advertising,
Costs,
Surplus and Shortages,
Relations with professional
Landscape Architects,
Cooperation with Seedsmen
and Florists,
Standardization of Grades,
The Agricultural and Horticultural
Press,
Nursery Training in Colleges,
Transportation,
Packing,
Arbitration,
State Competition,

These subjects have not been allotted to any particular speakers. There will be no formal program of prepared addresses. Every member will have equal opportunity to be heard and will be expected to take part in the discussion of these and any other subjects of interest to the Trade.

The broad policy of the Association in fixing The Fair Deal as its standard between members and with the public, naturally advantages its members; and yet the Association will welcome the cooperation of all reputable nurserymen willing to stand on the same platform with the Association.

Application for membership should be made promptly to enable the Committee to investigate and act in good season.

For any information regarding qualifications, dues, rules, etc., address:

John Watson, Secretary

American Association of Nurserymen,

Princeton, New Jersey.

June 1.

charge of the farm. L. B. Scott, is a well known expert in this line, graduating from the Michigan Agricultural College in 1911. He has been connected since that time with the Department of Agriculture and has done much original research and work in the improvement of citrus plants and fruits.

MISLEADING STATEMENTS

Ridiculous and misleading statements are to be expected in the daily press, especially if they deal with the bizarre and unusual about plants, but Nursery or Florist trade papers should at least, avoid reprinting them as facts. In a recent issue of a Nursery Trade Paper, the following statement appeared, presumably in support of the embargo against the importation of orchids:

"Orchids are not plants for millionaires only and that by and by the children of the poor may gather these orchids in our woods and meadows without money and without price."

It is true there are a number of indigenous orchidaceous plants growing wild in our woods and always has been, but they are very rare, especially the showy kinds like the *Cypripediums* that are dug up and destroyed as soon as seen by thoughtless, but perhaps well meaning flower lovers.

The paragraph, however, did not refer to these, but the exotic kinds that were exhibited at the Horticultural Hall, at Boston.

The children of the poor will have ceased to exist and our woods and meadows too, long before exotic orchids such as were exhibited at the Boston show will live in our climate without the protection of a greenhouse and artificial heat.

A NATIONAL FLOWER GROWERS' ASSOCIATION

A new society is being organized by the florists under the title of The National Flower Growers' Association. The objects of the Association as given in Article II of the constitution are as follows:

"The advancement of commercial floriculture under glass; devising ways and means for the best and most economical way of producing and marketing stock; discouraging unfair competition and encouraging cooperation; to more perfectly combat insects and diseases; to bring about uniform working conditions for labor; uniform grading of flowers and plants; to procure uniformity and certainty in the customs and usages in the trade; to educate floriculturists to better business methods; to devise and carry out ways and means of bettering selling conditions and eliminating the present cause of waste in marketing flowers; to secure a uniform basis of credit and collection of accounts; and to promote the interests of commercial floriculturists."

The by-laws call for the first annual meeting to be held at Cleveland, Ohio, in August, 1920.

Copies of the constitution and by-laws are being sent to the secretaries of the florists clubs throughout the country, requesting them to send delegates to represent their particular communities.

The proposed annual dues are based on the amount of glass owned or controlled by the members of the local

associations and it will be the duty of each local organization to have an annual invoice made of the amount of square feet of ground under glass that each member owns. Also, the number and kind of plants grown on the premises. This is to be done once each year between the dates of October 1 and December 31. One copy of such invoice shall be mailed to the office of the national association not later than January 15, following such invoice, and one copy is to be kept on file in the office of the local secretary.

SOMETHING NEW.

Novelties or "something new" is what the whole world is looking for. The nurseryman even with a big collection of plants or a big variety of one kind is often at a loss to know what to feature in his catalogue or advertising. He will visit other nurseries, search the magazines and often invest in plants he does not know much about with the hope he will find a money maker, or something new on which to specialize.

It is an old and trite saying, "There is nothing new under the sun," and very often he has something growing on his own grounds that would be a regular gold mine if properly exploited.

We are all too apt to think because a plant is well known to ourselves it is considered common to everyone else. Such is not the case. Some of the common native plants, if properly grown and handled, would be a revelation to many people who would gladly buy them.

There are a host of plants grown in the nurseries of real merit that only need to be better grown and their qualities made known to insure a large sale. Even some of the old timers such as Periwinkle, *Vinca minor* or Lily of the Valley have possibilities as big sellers if grown in sufficiently large quantity to advertise their fitness for certain purposes.

Among fruit trees how many retail buyers will ask for an Elberta Peach because it is the only variety they know. Or a Baldwin Apple because they do not know the merits of some of the choicer kinds.

Old nurserymen can look back over their experience and recall that most of the popular and widely distributed plants of garden origin owe that popularity to some enterprising nurseryman advertising them.

There are a great many more just as deserving waiting to be introduced to the buying public.

The florists seem to be more enterprising than the nurserymen in this respect.

At one time there were few kinds of flowers handled by the florists' stores except Roses, Carnations, Chrysanthemums, Violets, Orchids, Lilies and bloom from choice exotic plants. Now the humble Pot Marigold, Asters, Daisies, Pansies, in fact any kind of bloom that has merit as a cut flower is grown and offered to the public and finds a ready sale.

"Something new" consists rather in bringing out the best there is in old things in the plant line than in novelties.

What is needed in nurseries more than anything else is good growers to bring out the best in the old things that have merit.

It is perhaps not every genus of plants that have the



FELIX & DYKHUIS.
HIGH GRADE BOSKOOP NURSERY STOCK
BOSKOOP - HOLLAND.

*Beautifully
illustrated
Price-list
free!*

FROM HOLLAND FAR, DUTCH LADY HANDS,
TO UNCLE SAM HER FINEST BRANDS.

**Fruit Tree and Rose Stocks
Farm and Garden Seeds
Lily of the Valley**

FELIX & DYKHUIS
Wholesale Nurseries
BOSKOOP - - HOLLAND

are in a position to take large contract orders for fruit tree and rose stocks, farm and garden seeds, Lily of the Valley and all other stock which can be imported into U. S. A.

WRITE US TO-DAY

We have no agents, write to Boskoop direct

CHAMPION NURSERIES, Perry, Ohio
Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

F. & F. NURSERIES
Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.

PEACH PITS

All old Pits are cleaned up. Those who want early shipment 1920 crop would do well to get order placed without delay. Send it in by mail, or be sure to have it ready for us at the June Convention at Chicago. While there is evidence of a fair crop, it must be remembered that nearly every one must get their supply from the coming crop.

The Howard -- Hickory Co.

O. Joe Howard, Secretary & Treasurer
Hickory - - N. C.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

STRAWBERRY PLANTS

We can supply the following varieties. DELAWARE NEW-
LAND grown.

| | | |
|-------------|-----------|----------------|
| Big Joe | Wm. Belt | Lupton Late |
| Brandywine | Tennessee | Parsons Beauty |
| Aroma | Mascot | Gandy |
| Sample | Premier | Klondike |
| Early Ozark | Dunlap | Glen Mary |
| New York | Success | Haverland |

PROGRESSIVE AND SUPERB Everbearing

We are located in the largest strawberry center in the world, our soil and climate conditions enable us to grow the best strawberry plants.

Would be pleased to quote you.

BUNTINGS NURSERIES

G. F. BUNTING & SONS.
Selbyville, Delaware.

RAFFIA

Red Star Brand XX Superior Brand
AA West Coast, also in 20 colors

Bamboo Stakes, Dutch Bulbs, Hardy Lily Bulbs

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.
DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

possibilities of the Rose, Canna, Carnation, Sweet Pea, Lilaes, and those kinds that have been developed, but if one cares to search back into their origin and see what they have been developed from there is inspiration and promise in almost every roadside weed.

ORCHARDS SUPPLANT FRENCH WHEAT FIELDS

The land around Peronne, France, that once yielded great quantities of wheat, will now be planted only to orchards. For a radius of twenty miles around Peronne not a spear of wheat has been grown for more than four years. This sector of the front saw some of the fiercest fighting of the war. The land is pitted with millions of shell holes and is crossed and recrossed in a bewildering maze of hundreds of miles of crooked trench lines.

Farming was impossible during the past year. The disinterring of the dead and the clearing away of thousands of tons of debris have occupied all the time of the government reconstruction agents and the returned peasants. The latter, unable to make the scantiest living from their once fertile fields, have been fed and clothed largely by the American Red Cross.

Government agricultural experts who have examined the land have pronounced it unfit for wheat growing.

Stark Brothers Nurseries & Orchards Company, who have been at Louisiana, Missouri, in the nursery business one hundred and four years are preparing to get into the seed game and will issue their first seed catalog this summer.

This firm has built up a large organization in conducting the nursery business and this organization will be materially increased to take care of the seed end of the business. A large and modern seed house will be built adjoining the nursery office and they will operate on rather a large scale.

C. S. Barto, of Painesville, Ohio, an experienced seedsmen, will become a member of Stark Brothers' organization and will devote his entire time to the seed end of the business.

Many of us will have sympathy with the business man, who according to the Philadelphia Bulletin had a form letter prepared to send in reply to the numerous requests for donations:

"For the following reasons I am unable to enclose my check: I have been held up, held down, sand-bagged, walked on, sat on, flattened out and squeezed.

"First by the United States Government for Federal War Tax, the Excess Profits Tax, the Liberty Bond Loans, Thrift Capital Stock, Merchant's License and Auto Tax and by every society and organization that the inventive mind of man can invent to extract what I may or may not have in my possession.

"From the Society of John the Baptist, the G. A. R., the Woman's Relief, the Navy League, the Red Cross, the Black Cross, the Purple Cross, the Double Cross, the Children's Home, the Dorcas Society, the Y. M. C. A., the Y. W. C. A., the Boy Scouts, the Jewish Relief, the Belgian Relief, and every Hospital in town.

"The government has so governed my business that I

don't know who owns it. I am inspected, suspected, examined and re-examined, informed, required and commanded, so I don't know who I am, or why I am here. All that I know is that I am supposed to be an inexhaustible supply of money for every known need, desire or hope of the human race, and because I will not sell all I have and go out and beg, borrow or steal money to give away, I am cursed, discussed, boycotted, talked to, talked about, lied to, lied about, held up, hung up, robbed and nearly ruined—the only reason I am clinging to life is to see what in H—— is coming next."

On April 1st, 1920, the firm of H. M. Simpson & Sons, Vincennes, Ind., was dissolved by mutual consent. Two partnerships were formed as its successors.

The Knox Nursery & Orchard Co. has taken over the nursery end of the business, and will here-after conduct the nursery business. The members of this partnership are Harry D. Simpson, Robert A. Simpson and Luther McDonald. Mr. McDonald is manager of the Company.

The Simpson Orchard Co., a partnership consisting of Harry D. and Robert A. Simpson, will conduct the orchard part of the business.

We bespeak for the new Companies the business of all our friends, and assure you that the business will be conducted in the same business-like way, that has been our policy heretofore.

YOUR LIBERTY BOND

The United States Government borrowed money from you to finance the War. You hold the Government's promise to pay you back. This promise is called a Liberty Bond or Victory Note. On this Bond is stated the conditions under which the Government borrowed the money from you.

For instance: If you hold a Bond of the Third Liberty Loan, it states that on April 15th and October 15th of each year until maturity, you will receive interest on the amount you paid for the Bond. Other issues bear other rates of interest and other maturity dates, all of which are clearly stated on the Bond.

Now, if you keep your Bond until the date when the Government pays you in full for it, you do not need to worry if, in the meantime, the price is low one day or high the next. You and Uncle Sam are living up to your agreement with each other, and neither will lose by it.

On the other hand, if you sell your Liberty Bond now, you will find that the man you sell it to will not give you a dollar for every dollar you paid for it. The price has been brought down because so many people are offering to sell their Bonds. If the market is flooded with tomatoes, you can buy them cheap, but if everyone is clamoring for tomatoes and there are few to be had, the price goes up. The same is true of Liberty Bonds. Short-

sighted people are dumping them on the market, and wise ones are buying them.

The best advice that can be given to the owner of a Liberty Bond is this: Hold the bond you bought during the war; it is as safe and sound as the United States Government itself.

WANTED

WANTED

A man thoroughly conversant with the fruit and ornamental branch of the business to take the position of sales and office manager of the California Nursery Company. Prefer to have a man with field experience although this is not an essential factor. Nursery plant covers five hundred acres. Residence on grounds will be supplied rent free. Nursery adjoins town of Niles. A good opportunity for the right man. Give references and state salary expected. Address

GEO. C. ROEDING,
President and Manager California Nursery Company,
NILES, CALIFORNIA.

WANTED

A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

WANTED

We desire to secure competent man to take charge of the growing end of a Nursery located in the Middle-west. Party must be competent to superintend the packing out of a season's orders to a high class retail trade. We have packed this spring over \$100,000.00. Party must have a fair education, not afraid of work and capable of keeping all necessary records. Good salary to the right party, also opportunity to buy interest in business on account of poor health of one member of Company. Business in a good, healthy, profitable state. Man under forty preferred. Must have A No. 1 references. None other will be considered.

Box 48, Care of National Nurseryman.

Buy as many more at the present low rate as you can afford. If you hold them to maturity, you are bound to make the difference between what they sell at now and their face value. You will also receive good interest on your investment.

Hold on to your Liberty Bonds and buy more.

We will accept orders for N. C. Mountain natural peach seed collected from sections where diseases are not known. These seed are screened and graded. They are the best that there is. Try us.

E. W. JONES NURSERY CO., Woodlawn, Va.

FOR SALE

FOR SALE—Established northern Nursery doing good business and with established clientele. Will sell stock with or without the land. Good terms. Reason for sale, retiring from business. Address, **NORTHERN NURSERY, Box 66, Care of National Nurseryman.**

FOR SALE CHEAP

My Nursery and Berry Business

GARNETT NURSERY, Garnett, Kansas

FOR SALE—On account of other business interests, I wish to dispose of the Alabama Gulf Coast Nurseries, which are doing a Wholesale as well as Mail-order business in both ornamentals and fruit; our Pecan stock and trade alone would pay the property off; your chance to get into a moderate climate, with an established trade; terms

ALA. GULF COAST NURSERIES, GRAND BAY, ALA.

NURSERY BUSINESS *For Sale*

Established 15 years, with an annual retail business aggregating about \$30,000, including Office and equipment, Packing House 50x150 ft., located two blocks of two main line Depots in middle west.

Live Crew of Salesmen, etc. Reason for selling, desire to change climates on account of family's health.

Inquire Box 55, Care NATIONAL NURSERYMAN, Hatboro, Pa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

North Carolina Peach Pits

We are accepting orders for Fall Shipments.

J. Van Lindley Nursery Co.

Pomona, N. C.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

- | | | |
|--------------|---------|-------------------|
| Strawberries | Iris | Asparagus |
| Raspberries | Privet | Horseradish |
| Blackberries | Spirea | Hardwood cuttings |
| Dewberries | Rhubarb | Volga Poplar |

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 6½d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

A Fine Stock of Norway Maple, Silver Maple, European Sycamore and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.
Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST
Maple Bend Nursery Perry, Ohio

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.
147 Summer St. Boston, Mass.

TO THE TRADE ONLY

A general assortment of nursery stock for delivery Fall 1920 or Spring 1921.

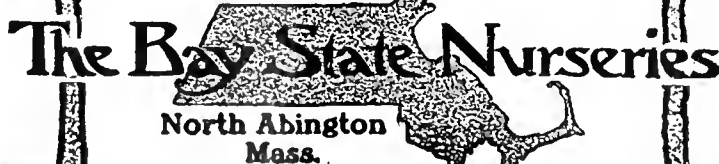
We also have some fine blocks of Peach Seedlings, a portion of which we offer to bud on contract for delivery fall 1921. Correspondence invited.

Headquarters for Nursery Supplies

Portland Wholesale Nursery Co.
122½ GRAND AVENUE PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.



SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

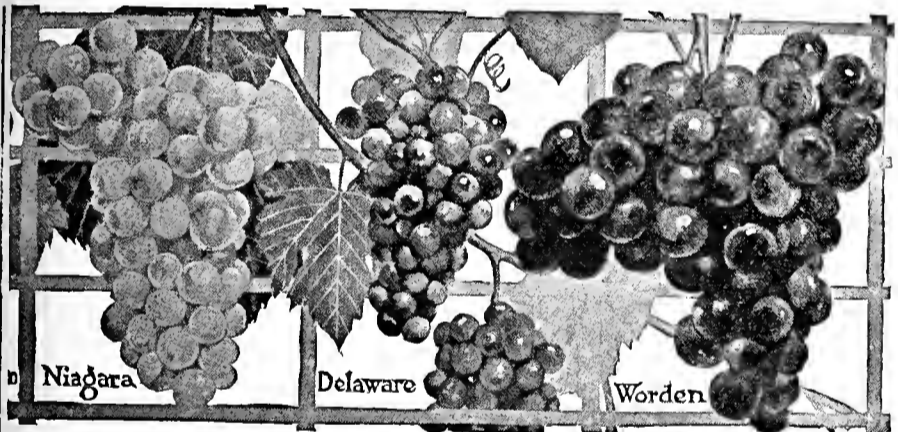
WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

PERHAPS

You use **RAFFIA** for budding

If so, it will be to your interest to have a copy of our

MAY FIRST PRICE LIST

which will be mailed to you on request

Thomas B. Meehan Co.

Direct Importers of Raffia

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arbor Vitaes, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree Seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

When writing to Advertisers please mention the National Nurseryman.

Harrisons' Strawberries



Everbearing Strawberry Plants PROGRESSIVE and SUPERB

Plants will be fresh dug

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|--------------------------|----------------------------|
| Aroma. (Per.) | McAlpin. (Per.) |
| Bubach. (Imp.) | Missionary. (Per.) |
| Brandywine. (Per.) | Mitchell's Early. (Per.) |
| Big Joe. (Per.) | New York. (Per.) |
| Big Late. (Imp.) | Nick Ohmer. (Per.) |
| Big Valley | Parsons' Beauty. (Per.) |
| Campbell's Early. (Per.) | Premier. (Per.) |
| Chesapeake. (Per.) | Progressive. (Per.) |
| Dr. Burrill. (Per.) | Sample. (Imp.) |
| Excelsior. (Per.) | Senator Dunlap. (Per.) |
| Gandy. (Per.) | Sharpless. (Per.) |
| Glen Mary. (Per.) | Superb. (Per.) |
| Haverland. (Imp.) | Tennessee Prolific. (Per.) |
| Klondyke. (Per.) | Warfield. (Imp.) |
| Lupton. (Per.) | Wm. Belt. (Per.) |
| Matthews. (Per.) | |

HARRISONS' NURSERIES

Berlin, - - Maryland



THE NATIONAL NURSERYMAN



JULY 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Cuthbert Raspberries

Spiraea Van Houtte

Other Ornamentals

Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



A large supply of:-

Elm, American White -- Ash, Fraxinus Viridis
Maple, Silver Leaved, Norway, Sugar
Poplar, Carolina, Lombardy, Norway, Silver Leaved, Golden
Catalpa, Speciosa, Bungei -- Balm of Gilead

Shrubs

Cornus, Siberica, Stolonifera, Floridus Rubra
Lilac, Purple and White
Spirea, Aurea, Billardi, Rosea, Douglasi, Opulifolia,
Van Houtte
Philadelphus, Coronarius, Gordon's, Grandiflorus, Lemoine
Viburnum, Opulus, Sterilis, Lantana
Ampelopsis Engelmanni

Always pleased to quote on your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

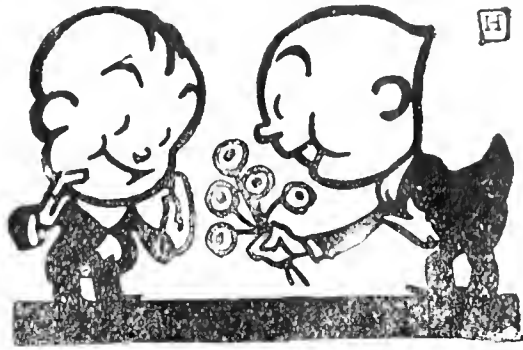
C. R. BURR & CO.

Manchester, Conn.

Let us talk to you in large or small quantities on the following:

- AMPELOPSIS VEITCHII, Heavy 2 yr.
- " " 1 yr. seedlings
- BARBERRY THUNBERGII, 3 yr.
- " " 1 yr. seedlings
- CALIFORNIA PRIVET 2 yr. in carlots
- APPLES, 2 yr. buds, fine stock
- PEACHES, in carlots, largely Elberta and assorted varieties
- H. P. and CLIMBING ROSES. New England grown. None better.
- Assorted Shrubs. Long on HYDRANGEAS P. G. and SPIRAE VAN HOUTTE
- RHUBARB, graded 1 and 2 yr.
- ASPARAGUS Plants, strong 2 yr.

The Preferred Stock



The Preferred Stock

... Appreciation ...

Our sincerest thanks are offered to our many good friends in the trade for the generous amount of business given us during the season just past. It has exceeded our utmost expectations and has been deeply appreciated.

For 1920-1921 we shall have usual, or somewhat increased supplies in all our special lines. Write us about your needs in—

| | | |
|------------------|------------------|------------|
| ROSES | CLEMATIS | AMPELOPSIS |
| FLOWERING SHRUBS | ORNAMENTAL TREES | |
| PAEONIAS | PERENNIALS | CONIFERS |
| FRUIT TREES | SMALL FRUITS | |

Write us also about those scarce, hard-to-locate articles. If we haven't them ourselves maybe we can "put you next" to them. We gladly will if we can.

Please use printed stationery, or enclose business card. We quote to "the trade" only.

Jackson & Perkins Company

The Preferred Stock

Newark, New York

The Preferred Stock

105 Years in the Nursery Business

GENERAL STOCK:—Our propagation includes apple, peach, pear, plum, cherry, apricot, quince, grape vines, all small fruits, shade trees, shrubs, climbers, roses, garden roots, and etc.

—Special—

A BIG STOCK OF QUALITY SHRUBS

Everything is grown in large quantities. Our grades are dependable and we are generally prepared to quote to nurserymen nearly everything we offer to the retail trade, and prices are always in line with those of other reputable growers.

We will be glad to have a list of your requirements for the coming season. Doubtless there are some things that you can use that we have in surplus. Can also ship from our branch plants—Marionville, Mo., Farmington, Ark., Dansville, N. Y., North Girard, Pa., and Vincennes, Ind.

STARK BRO'S
Nurseries and Orchards Co.
Louisiana, Mo.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS



THE

North-Eastern Forestry Co.

CHESHIRE
...Connecticut...

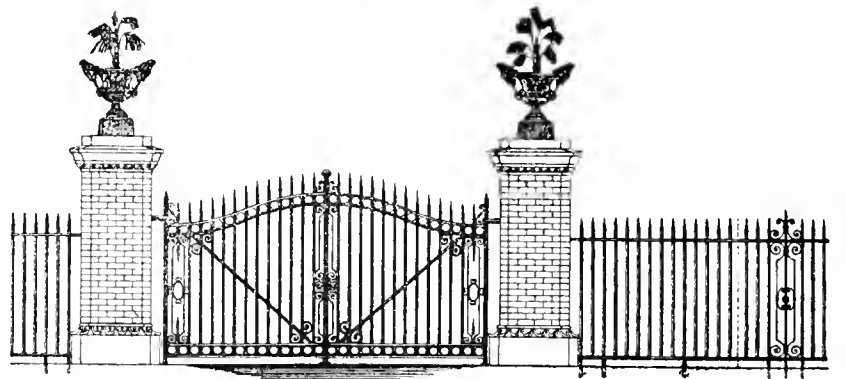
Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please

300
Designs

Stewart
Iron
Fence
STANDARD OF THE WORLD

Send for
Catalogue

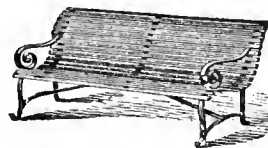


IRON-FLOWER-VASES
WITH RESERVOIR

VASES



VASES



IRON SETTEES
WRITE FOR CATALOGUE.

HUNDREDS of designs of plain and ornamental iron fence and entrance gate for parks, cemeteries, schools, private residences, country estates, town houses, suburban homes.

AGENTS WANTED

The Stewart Iron Works Company
770 Stewart Blk., Cincinnati, Ohio

mention the National Nurseryman.

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

JAC SMITS & CO.

Naarden, - Holland

Growers of stock for Apples and Pear; Mazzard Cherry, Prunus Myrobolana, Mahaleb and communis; Doucin, Paradise and Quince.

Rosa canina, rubiginosa, rugosa and Manetti, also stems of Rugosa for topgrafting.

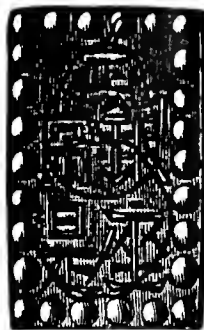
The catalogue contains also a general list of Nursery-stock, specially young plants to line out, which can be imported by special permit. Mr. Jae Smits is in the States now, his New York address is care of

Knauth Nachod and Kuhne
120 Broadway

He will send you a copy of the catalogue on demand and is open for business.

Heikes—Huntsville—Trees

General line Nursery Stock



We still have a nice lot of
SPIREA VAN HOUTTE

Selling fast. Cover your needs
by wire collect

Also good assortment of

SHADE TREES

SHRUBS

EVERGREENS (especially nice
lot of Irish Juniper and English
Juniper)

Need any Lonicera Fragrantissima? We have
them in all grades.

All our own growing.

Ask for latest list.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of
Fruit Trees, Small Fruits and Hybrid Tea
Roses.

Large Supply of
Ornamental Trees, Shurbs,
Perennials,
Vines, Evergreens.

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

A Complete Variety of Nursery Stock



60000

Norway and American Elm
fine stock in car load lots or less



C. M. Hobbs & Son
BRIDGEPORT - - Indiana

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

JULY, 1920.

Peterson's Guaranteed Peonies and Iris

Our Guarantee

We will replace with three every plant
blooming untrue to description.

Send for descriptive price-list just issued.

Peterson Nursery

30 N. La Salle St.

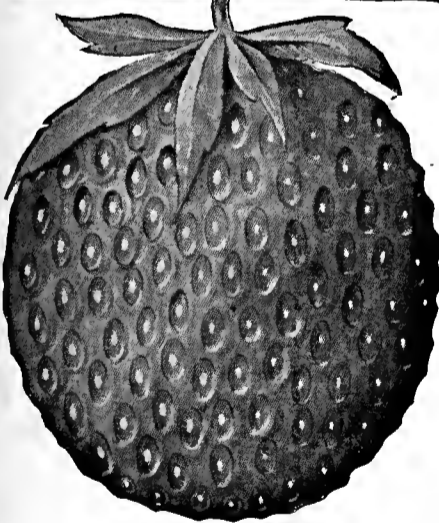
Chicago - - Illinois

Strawberries! Strawberries!

Extra Strong Plants



The Season's Best Novelties



BEAL

This variety is the result of special hybridization for over a period of years by Tice C. Kevitt, and under normal conditions plants set out make a growth of 14 in. high with berries that measure 3 in. in a straight line passing through the center of the berry.

Kevitt's Jubilee

The New Black Strawberry
The plants are extremely vigorous and healthy and give an abundance of very dark red luscious fruits of exquisite flavor and giant size, well above the ground. Mid-season to late. Perfect flowering.

BUCKBEE

The New Hybrid Strawberry

The culmination of thirty-five years successful Hybridizing. THE FINEST EVOLUTION IN STRAWBERRIES. Excels all others in size, quality, quantity and flavor.

Write for special prices.

Sole Distributors

WILLIAM M. HUNT & COMPANY

148 CHAMBERS STREET, NEW YORK

STANDARD VARIETIES

Marshall, Nick Ohmer,

Brandywine

and all other sorts supplied
Spring and Summer delivery

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland
 (Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.
FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.
ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,
 116 Broad Street - New York City

THIS SPACE RESERVED FOR
Thomasville Nurseries
 Thomasville, Ga.
 Nothing to offer the trade at present

The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

A. B. KATKAMIER, **MACEDON, N. Y.**

“A good picture is worth a million words.”
25000 true-to-type negatives to choose from, with a special landscape service.

THE NATHAN R. GRAVES CO.
Horticultural Photographers
 84 Exchange Street
ROCHESTER - - NEW YORK

Vincennes Nurseries
 W. C. Reed & Son, Prop., Vincennes, Ind.

Sold out on Pear, Plum and Cherry
 Have limited number of Peach and Apple to offer in light grades

Raspberries and Blackberries
 WRITE FOR PRICES
 Grafted Hardy Northern Pecans
Seedling Pecans

Tree Seeds
 WRITE FOR PRICE

T. Sakata & Co.
 Kanagawa, Yokohama,
 Japan

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.
 TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
 Sparta, Ky.

—THE—
Westminster Nursery
 J. E. Stoner, Prop.
 WESTMINSTER - - MARYLAND

Offers for Fall 1920

California Privets, Asparagus, Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars, Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks, Horse Chestnuts, Butter Nuts, Norway Maples, in grades from 6 to 16 feet.
 Cumberland and St. Regis Raspberry, Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses.
 Can supply in quantity. Write for prices.

For FUMIGATION With
HYDROCYANIC ACID GAS
“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
 709-717 Sixth Avenue - - New York, N. Y.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA. JULY 1920

No. 7

Report of the Forty-Fifth Annual Convention of the National Association of Nurseryman

If the weather had been made to order for the convention, it could not have been better, bright yet cool, perhaps best describes it.

Quite a contrast to the usual sizzling experiences of the old timers of former conventions. As early as Sunday nurserymen began to drift into Chicago from all parts of the country and register at the Congress Hotel.

Monday and Tuesday, committees were busy framing up their reports and getting ready for the sessions of the convention.

In the lobby old friends were meeting and talking over happenings of the past year. Satisfaction over the past season's business seemed very general, in fact not a few expressed themselves as having stripped their nurseries and were more inclined to worry about restocking than sales.

All agreed the transportation difficulties of the past season had been extreme and there did not seem to be promise of great improvement for the fall. The motor truck saved the situation in many instances, and would very likely in the future have much to do in prescribing the limits of the nurseryman's business.

The advantages of delivery by motor truck and the disadvantages of quarantines would both tend to localize business.

By Tuesday evening upwards of 250 members had registered and it began to be evident the meeting would be an interesting one.

Too much credit cannot be given to the officers of the Association in the selection of the hotel and the arrangements made for the comfort and convenience of visiting members.

Executive ability was evident on every hand.

Tastefully printed posters, quoting from the editorial pages of the "Farm Journal," "Minnesota Horticulturist," and the "American Fruit Grower" added to the decorative beauty of the convention hall and lobby of the hotel, calling attention to the prestige already accumulating in the public mind in favor of a National Nurseryman's Association that stood for integrity in its dealings with the consumer.

THE DINNER

The get-together dinner was well patronized and President Moon took the opportunity to call on various speakers who had been actively interested in the affairs of the Association, to give an account of their sins of commission and omission during the past year.

Among these were Paul Lindley, chairman of the Vigilance Committee who tactfully confessed his own guilt against the laws of this tribunal and admitted the committee had only been cleaning spark plugs and had not

monkeyed with the magneto.

P. J. Lovejoy, correspondent for the "Country Gentleman," who in his writings for that journal has been rather severe on the nurserymen as a class, was called upon to retract or explain. In a very clever and humorous speech he drove home his point in many minds, that where there was so much restrictive legislation, quarantines, etc., there must be a cause for them and advised the nurserymen to stick together, as a body, so as to separate the competent from the incompetent and the honest nurseryman from the sealawag.

Mr. Tuttle of the Tuttle Advertising Agency supplemented by Mr. Rockwell told the Association with such remarkable showing as they have already made in advertising the Association and the Market Development, they cannot let go, the work must go on.

David N. Mosessohn, Executive Director of the Associated Dress Industries of America, who had been instrumental in organizing the leading dressmakers into a cooperative body urged the nurserymen to get away from the small town idea. Success will only attend a broad generous policy, where honesty and square dealing govern every action of an associated body.

This was supplemented by John Watson who likened the organization to a poker deck of cards. A single ace could not do much unless there was another associated with it, and cooperation to work so as others could work with you.

Wednesday, June 23

The opening sessions of the convention was unusually well attended when President J. Edward Moon called the meeting to order and asked for a few moments of silent prayer.

PRESIDENT'S ADDRESS

When entering upon the duties of President of this Association I remarked that it would be gratifying to hear from members frequently during the year and doubt if ever a President has heard from you as often as correspondence has come to me. These letters have been encouraging and stimulating—most of them were intended to be—a very few were disagreeing in some particular with the activities of the Association, yet they were encouraging, too, for the members were interested, and without individual member interest an Association is on the down grade. With the interest displayed here, ours is not headed that way.

Another remark made upon assuming office was that my predecessor had set an example that I would do well to follow—and let me say right here that a great many times during the past year it was realized that the progress we

are making is due in very considerable extent to Mr. J. R. Mayhew's efforts in heading us in this direction. We might not have had the initiative to engage a capable executive secretary to direct and manage the business of a great commercial organization like ours, if Mr. Mayhew had not prepared the way.

There have been so many contributing factors assisting in whatever measure of success and progress has been attained in my administration, that I can claim but very little credit personally. Principally has the administration been favored with an Executive Committee prompt in their attention to Association matters, and cordial in all their relations. All the Committees have been Committees that worked, and fortunate is that President whose Committees function.

The Horticultural Press generally; the Trade Press especially; and the two Nursery Trade Papers in particular; have supported us actively, and given space liberally for Association topics.

These, then, are contributing factors in the progress made, and it would be ungrateful indeed, if there was not accorded them that full measure of acknowledgment and appreciation to which they are due or entitled.

The several Committees, the Executive Secretary, and the Traffic Manager will make separate reports to you at this Convention. There are certain of my activities, as your representative, not covered by these reports, of which you should be cognizant.

Nine times during the past year this Association has been recognized by my having been invited to address Horticultural meetings of varying importance, to tell those meetings about the American Association of Nurserymen, who composes it, why we are dependable, what we are doing, and how the Laws restraining and controlling us make nursery stock more difficult to get and higher in price. The meeting of the American Society of Landscape Architects in Boston was an occasion of especial note, as was also the Banquet of the "Own Your Own Home" movement, and the meeting of the Garden Club of America, both held in New York City.

Four times I have been to Washington upon Association business, and as your representative received a considerate and respectful hearing—once in August last it was primarily for Crop reports; twice during the winter for the so-called "Gould Bill" and recently to appear at a Senate hearing to endorse the establishment of a more adequate National Botanic Garden.

While Secretary Watson was in Kansas City the past winter, there was a hearing in Washington regarding the exclusion of all plants from Asiatic countries. This appeared of especial interest to Pacific Slope nurserymen. Our membership there was communicated with, and my assistance at the hearing tendered. It later developed that it was not necessary to be present, but these circumstances are mentioned to show that this Association affords facilities for nurserymen as far away as the Pacific Slope to have prompt, interested representation at the Nation's seat of Government, from which centre much that affects us collectively emanates.

The New England Association asked our assistance with their difficulties over the Corn Borer Quarantines. Fortunately I could attend their meeting in Boston. On other occasions, when emergencies arose, I have been in

long distance telephone communication with the Chairman of the Federal Horticultural Board, with the President of the New England Association, the Chairman of the Legislative Committee, and others.

There has been a very considerable amount of correspondence to which I have endeavored to attend promptly. Then, too, I have written a few articles on topics which were felt to be of general interest.

The opportunity which I have thus had of serving the industry may, in the sum total of accomplishment, be far short of what you have desired, but I have striven earnestly and diligently, insofar as time and ability permitted, in the promotion of Association interests everywhere.

THE OUTLOOK

It is general knowledge that nurserymen have had about as much business the past season as could be handled with available labor. Prices were higher than previously, mostly yielding a fair profit.

Plantings, due to labor shortage and other causes, have, in recent years, been reduced, until an insufficient supply in many lines now exists. These conditions, indicate that there should be no reduction in prices. In fact, the peak in plant prices has not been reached, even though it seems to be falling slowly in general merchandise lines.

If we can secure the reliable Crop reports now, which are needed as a guide in determining our future plantings, the ruinous surpluses that follow scarcity and high prices can be avoided. The association should, to a good degree, control market conditions in the future.

Of course the public must be adequately supplied, but our capital is entitled to at least a clear net profit equal to the interest rate on a Government security, and this is more than some nurserymen have had in past years. A reasonable profit in the nursery business—considering the hazards of the industry, the restrictions and restraints of the Law, and the slowness of the turn-over—should not be less than 20% per annum. Until such earnings are shown with a good degree of regularity, we can not hope to attract capital which now buys gilt-edged mortgages and Government securities yielding over 6%—with industrials a plenty, without quarter the hazards of our industry, declaring from 7% to 10% after paying handsome salaries to Executives and unprecedented wages to labor.

Nurserymen with equal ability receive far less than in other occupations. To those young men, for whom we are endeavoring to secure the assistance of a college training, the industry has not offered salaries that would justify them in such expensive preparation.

This Association may do much to improve our opportunity for securing a better profit and larger salaries from the business. Dependable crop reports, intelligently utilized will help to stabilize production, and equalize distribution.

If the policy of the Association, to discourage the sale of nursery stock to consumers "at prices that do not adequately protect the retail nurserymen in their sales and distribution costs," becomes effective, the retail nurserymen will be prosperous, and without their prosperity the wholesale branch of the industry can not enjoy the volume or the profit from business which it should have, and which it does not have when it retails at wholesale prices. The retail nurserymen hold the clue to the situation, for

if they demand to know the grower's policy, and then decline to purchase from the firm that doesn't protect them in sales and distribution costs, then the protection will be forthcoming.

TRAFFIC OR FREIGHT SITUATION

The traffic situation has handicapped us all the past Spring, as indeed it has in recent years. This, in its larger aspect, is the Nation's problem. Our Traffic Manager in his report will enlighten us on the phases of the question most effecting us.

Success in securing preferential movement of our freight the past Spring—thru the efforts of Vice-President Stark and Traffic Manager Sizemore at mid-western terminals, and Mr. Watson's presentment of our situation at the office of the Inter-State Commerce Commission in Washington—is an instance of Association service worth the amount of his dues to any member. Volunteer Committees could not have done this work in April—we were too busy—but capable, salaried members of our organization were available at call, and we must continue such a staff for future emergencies.

MARKET DEVELOPMENT

This Association took this movement over from the subscribers association, who had supported it prior to last year's Convention, upon a very definite contract in which the A. A. of N. is obligated to carry the work forward, and in consideration of which the subscribers association relinquished pledges payable in five annual installments approximating \$50,000, and did pay into the treasury of the Association \$10,297.15.

A very capable committee, experienced in sales promotion work, has carried on the movement in fulfillment of the obligation of the Association to those subscribers. They realized at the outset that this sales campaign, like every sales campaign, must, if it is to succeed, be built upon a trustworthy product, otherwise the effort and the expenditure would be in vain.

They knew that membership in the Association was supposed to be a symbol of reliability; they knew that references of all new applicants were investigated to make certain that the firms or individuals applying were reputable; they knew that Article No. 9 of our Constitution made it a duty of every member of this Association "to report any character of dealing on the part of the Association members not in accord with established business ethics," and they had faith that our membership would do its duty; they knew that early in the present administration the President had received numerous complaints of new articles condemning nurserymen, and asking the Association's efforts in stopping the talk of "mowing-machine budded peach trees," which caused in one State at least, an official proclamation to be issued warning buyers to beware of nurserymen. There were other blanket indictments of our industry and whether they are true or not, they lower the standard of integrity in which public opinion holds a nurseryman.

Out of this demand that something be done to "put us in right" with the public, and the well known fact that our Constitution makes this Association an uncongenial refuge for unscrupulous nurserymen, the Committee employed the Trade Mark to which, in fact, every one of us had all along asserted our products conformed, that is "Trustworthy Trees and Plants."

This Trade Mark in advertisements throughout the United States reaching six million people at an issue, makes membership in this Association a symbol of dependability to planters of trees, as it indeed always had been to members of the Trade. It has had the effect of quieting those careless indictments in the Press, and there has arisen in only a few months, commendation for nurserymen, where before there was condemnation.

Buyers are asking agents if they represent firms that are members of the Association; inquiries are being received for a list of members that orders, may be placed with Trustworthy firms. Itinerent dealers, with no capital to protect, and no reputation to maintain have always gotten dependable firms into illrepute. These men will feel the competition of reliable dealers. Wholesale growers can begin now to control their products through to the consumer, under the Association's Trademark.

This campaign is fraught with possibilities that make membership in the Association necessary to a nurseryman of reliability. It should enable members' products to sell for more on the open market, because of such an insurance of trustworthiness; it should raise permanently the tone and standing of the whole industry. But, Gentlemen, just as the campaign is fraught with great possibilities, so is it fraught with great responsibilities. To advertise "Trustworthiness" is easy, to live up to it—that we may enjoy the reputation of doing business scrupulously, and the higher prices and consequent profits that come from such a reputation—requires, first—honest intentions; second—efficient executive control of our businesses; and third—the application of the Golden Rule in all those complaints and adjustments, that are an inevitable backwash of business.

This Convention is being watched by State and Government officials; by the Agricultural press, and Horticulturists generally to see if we really are serious in this matter of making ours an Association of nurserymen which can be trusted for fair, honest dealing. From such a stand not one of us can retreat—not one of us wants to retreat—but all desire the accumulative advantages of such publicity, and must assume individually the responsibility of keeping our products to a standard which can be trusted. It must be realized, too, that repeated, deliberate, or malicious failure to do this on the part of any member, will weaken the success of the entire effort.

LEGISLATION

To-day nurserymen are obliged to operate under Laws that threaten to destroy our inter-state Commerce; that put in jeopardy the capital invested in our businesses, and that place upon us legal requirements that add a heavy burden to operating costs. In fact, if our banks knew, as we do, that the presence of a few suspicious bugs on our plants, may, under the Laws in some States, be reason enough for an official of that State to restrain us from shipping even pest free plants from our nurseries, we would not get the accommodations that some seasons are necessary.

We cannot give up our vigil upon Legislation—but we must have an open mind upon the subject. We must be reasonable. There is need for pest control in this Country. Recognizing that, let us lend our assistance in framing that legislation under which we are to operate, and see at the same time that adequate protection is afforded to

other horticultural and agricultural interests.

There will be presented for your consideration at this Convention a number of planks, out of which it is hoped the A. A. of N. may construct with unanimity a legislative platform. Then we must go forth and use our influence and our efforts to have these planks built into the Laws of our States, and our Nation. Some of them may have to be altered a little before they will fit; some may even have to be forced in; but let's get them in, in as nearly the shape framed as we can.

Consider the strength this Association has when, as in the past winter, it goes before a Congress pledged to reduce expenditures and which did cut \$6,000,000 off the appropriation for the Department of Agriculture and yet gets \$20,000 for a new item to help our industry.

Mr. Watson's speech in advocacy of the appropriation "for investigating in co-operation with States or privately owned nurseries, methods of propagating fruit trees, ornamentals, etc., for the purpose of providing American source of supply," was convincing, and ably presented. But it was not his speech—it was the fact that many of you had written Congressman Gould you wanted this appropriation—a number of you had written your own Congressman as well—and not one single nurseryman had written in opposition. That is an obstacle with which some former Committees have been confronted.

Later, when the item appeared on the floor of the House, Congressmen scrutinized it. Here was something new—\$20,000, among other things to assist "privately owned nurseries?" The Congressmen could not explain the necessity for an appropriation for a technical work like this as well as a nurseryman might. Finally in their controversy Representative Chindblom, who represents some of our Illinois members, said, in effect, that he didn't know much about it, but every Congressman that had a nurseryman in his District, knew there was a demand for this item, and he was going to favor it.

Here was an example of co-operation—not a single member knifeing your officers in the rear,—and while \$20,000 may be insufficient, it was a good deal to get for a new item from this Congress. If now we may only continue to show this capacity for co-operation, our influence will modify the Laws of this land, so that we may protect the capital invested in the nursery industry, obtain more with which to develop it, and enter upon the propagation of plants, confident that the markets for them will be open when the product is ready.

Know our strength and use it. Trustworthy nurserymen, if we make good the claim, will have the support of the Agricultural Press, a potent influence in any campaign. Will those papers allow our businesses to be shut up within a single State? Of course not, for what nurseryman would then advertise in a publication of national circulation?

Send out Trustworthy trees, and support the American Association, that the influence of our advertising will make us known, and give us access to every legislative hall. Gentlemen, unscrupulous practices on the part of some nurserymen have brought many of these obnoxious Laws upon us; our tolerance of those practices has weakened our ability to oppose such laws; and strength for the future lies alone in our capacity for co-operation and fidelity in living up to our standard of Trustworthy Trees

and Plants.

INVENTORY VALUES OF NURSERY STOCK

When ready for new avenues of service, this Association should seek to make the inventory of nursery stock the bankable asset that inventories in other businesses are. Banks and share-holders in nursery companies recognize the inventory value of our real estate. They know approximately whether we are right in the estimates we place on our horses, our hogs, and our grain. Yet even after tens of thousands of dollars have been invested in the growing stock that we have on hand, the inventory is of very little assistance in securing banking accommodations. Then, too, in these days of Income and Profit Taxes, the nurserymen require a very definite inventory that the gain or loss through this source may be known. Financial statements, showing substantial cash balances may be a source of generous taxes for our Government, until, with all propriety, we charge off the value of plants killed by winter conditions, or that are destroyed by pests, or denied a market by Quarantines.

If our various formulæ were submitted anonymously to the Association's office, a compilation of the practices now employed could be made. The Executive Secretary, with the assistance of an Auditor, could then, no doubt, prepare and submit to this Convention next year, a formulæ for arriving at inventory values. Surely the very fact that our inventories were arrived at in accordance with a uniform and accepted method, would make them more convincing and valuable. We could do this much without crop reports, though a knowledge of supply and demand of any plant would be of great help in determining inventory values.

IN CONCLUSION

Membership in this Association has always been necessary to broad-minded, progressive nurserymen, desiring to assist in improving and promoting the industry. In recent years it has rendered an increasing amount of definite, actual service, exclusively for members, that we could not dispense with. Now, in addition to all these other advantages, our National advertising makes membership the hall-mark of a Trustworthy Nurseryman.

Following the reading of various reports Mr. David N. Mosessohn addressed the meeting on Organization and brought out the point that overproduction was another name for lack of cooperation in distribution, also that the national inclination was along the line of least resistance and that no business could succeed unless honest in intent.

Afternoon Session, Wednesday 23

In the lobby and outside the convention hall the feeling had become very pronounced that a considerable body of members were not in accord with the executives of the association or as one member described it the air seemed full of electricity threatening a storm.

The question of dues, the Vigilance Committee, the question of Guarantee were among the things that were causing the reaction from the forward movement started when the association was reorganized.

Every effort was used to bring the dissatisfied ones out in the open to express themselves in open meeting.

A resolution requiring dues be paid before a member could vote was defeated on the grounds that a member could not be denied his vote until the close of the con-

vention when the new president went in office.

Mr. J. R. Mayhew made a strong plea for adherence to the forward policy laid down.

At this session was adopted the platform in regard to legislation printed on another page.

During the Thursday morning session Mr. F. Crane-field spoke on behalf of the American Pomological Society suggesting the Nurserymen's Association become an affiliated member.

The affiliation of all allied industries with such an old and honorable body whose head is Prof. L. H. Bailey would give much weight in those matters in which all were interested such as the registration of new fruits, nomenclature, legislation, etc.

The resolution to become an affiliated member was approved.

The movement encouraging the planting of memorial trees originated by Mr. J. Edward Moon was generally endorsed by the convention.

REPORT OF COMMITTEE ON COLLEGE TRAINING

To the American Association of Nurserymen:

Your committee on College Courses of Nursery Training, appointed at the convention of 1919 has interviewed members of the Association and the heads of college faculties and finds enthusiastic support of the proposition for establishment of courses in colleges designed to fit young men especially to engage in the nursery business. It is recommended:

I. That a full four year's course be considered; also a short course, the latter in behalf of foremen and apprentices in nurseries who have not the time for the longer course.

II. That on account of many conditions such courses should be provided in four sections of the country: The Middle Atlantic States; the Great Lakes region; the Pacific Coast region and the Southern region.

III. There is a ready market for employment of graduates in such courses, in the growing and selling departments of nurseries and at wages comparable to those paid in Agriculture, Forestry, Civil Engineering, etc., for training of a similar nature.

IV. The most headway in definite plans has been made in the cases of Cornell University in New York state and the University of Illinois, the heads of which have submitted for consideration tentative outlines for four year courses of study covering development in natural history and the sciences upon which the nursery industry is based, coupled with business training. It is suggested that students be encouraged to specialize in both fruit and ornamental nursery practice. As showing the interest in this subject on the part of young men, members of this committee have been asked where training approaching the nature of that discussed in this report can be had at the present time. Inquirers have been referred to the Bussey Institute of the Arnold Arboretum and to the Cornell and Illinois Universities because of courses already established there bearing upon the general subject.

V. Special lectures upon special trade subjects should be a feature of the courses; and nurserymen are urged to be ready to aid in this work. Nurserymen, too, should encourage students to work in nurseries for prac-

tical experience during their vacations, thus aiding in payment for tuition; provision may also be made for employment in season at institutions like Arnold Arboretum, Highland Park in Rochester, N. Y., and the Missouri Botanical Garden in St. Louis.

VI. Scholarships to encourage young men who have not necessary funds should be created by nurserymen and the committee strongly recommends scholarships for travel and study in technical schools of Holland, France, and England, the Kew gardens, etc.

VII. Nurserymen will need to cooperate actively with the universities in procuring from state legislatures the necessary appropriations of funds to provide such courses.

VIII. It is recommended that the short courses referred to be made available in the immediate future—as early as in the coming fall if practicable.

Your committee suggests that its work thus far be regarded as of a progressive nature and that such work be continued.

HENRY HICKS, *Chairman.*

WEIGHT OF EXPRESS PACKAGES

Mr. E. H. Stevens, vice president of the American Express Companies, told the convention of the work and difficulties under which the Transportation Companies had been laboring during the last few years and asked the nurserymen to limit the size of express packages to 300 pounds as heavier packages had a tendency to disrupt the service and cause delay.

Upon the understanding that the 300 pounds be the approximate limit rather than the actual limit, the resolution was adopted by the convention.

Mr. Donnelly, President of the American Associated Advertising Clubs of the world gave an interesting address, and convincingly explained that the Association's trademark and slogan—*Trustworthy Trees and Plants*, advertised and lived up to, could not but fail to pay in every phase and in every sense the words imply.

O. Joe Howard, chairman of the Market Development committee made his report with dry southern humor that did much to clear the atmosphere and bring the reactionary sentiment to express itself.

Mr. Tuttle of the Tuttle Advertising Agency, with long ribbons of covers of publications pasted together graphically showed how 24 million readers had been told about *Trustworthy Trees and Plants* and what the National Association has done in the interests of the consumer, at a cost of about \$4,500.

Upon motion of J. R. Mayhew it was resolved not to go into executive session behind closed doors as had been customary heretofore.

This was almost unanimously approved.

Upon legal advice the Report of Committee on Policy adopted June, 1919 was rescinded and committee appointed to look into the advisability of having the Association of Nurserymen made a corporate body.

A committee was appointed to make the necessary investigations. Members will have the committee's findings placed before them before the next convention to enable them to vote intelligently on the subject.

The discussion on Market Development failed to bring the reactionaries to their feet to any great extent and the opposition, which had seemed so ominous during the con-

June 15, 1920.

vention dwindled to six against ninety-three when the vote was taken.

The vote was taken on a proposed amendment to the constitution, qualifying membership in the Association by changing Article I Section I to read:

Active or voting members, who shall be actively engaged in the nursery business, *bearing reputations for trustworthiness, that must be maintained as a condition of membership.*

Article 7:—Revising the schedule, based on the annual volume of business, the membership fees will be as follows:—

| | |
|------------------------------|----------|
| \$400,000 or more | \$500.00 |
| \$350,000 to \$400,000 | \$450.00 |
| \$300,000 to \$350,000 | \$400.00 |
| \$250,000 to \$300,000 | \$350.00 |
| \$200,000 to \$250,000 | \$300.00 |
| \$150,000 to \$200,000 | \$250.00 |
| \$100,000 to \$150,000 | \$200.00 |
| \$ 75,000 to \$100,000 | \$150.00 |
| \$ 50,000 to \$ 75,000 | \$100.00 |
| \$ 25,000 to \$ 50,000 | \$ 75.00 |
| \$ 25,000 or less | \$ 50.00 |
| Associate members | \$ 10.00 |

The schedule as above is to be retroactive instead of the fees being based on a ¼ of one per cent. as adopted at the 1919 convention.

CHICAGO SELECTED AGAIN

It begins to look as if Chicago was going to be adopted as permanent place for holding the convention of the National Association.

There was little if any sentiment expressed in favor of any other place for the next one and Chicago was un-animously adopted.

Chicago has its advantages but many nurserymen will regret missing the opportunity the "movable convention" gave them.

REPORT OF THE COMMITTEE ON RELATIONS WITH LANDSCAPE ARCHITECTS

J. Edward Moon, President,
American Association of Nurserymen:—

The Committee on Relations with Landscape Architects has held several meetings in New York since its appointment, now some two or three years ago.

These meetings have been held jointly with Committees of the American Association of Nurserymen, Ornamental Growers' Association, The Society of American Landscape Architects, and the Garden Club of America.

At these several meetings the various phases of the business between the Landscape Architects and the Nurserymen were discussed, and the results embodied in the following report.

By request of President Moon, we have had this report printed in pamphlet form, and a copy mailed to each member of the Association, which no doubt you have received. This copy was mailed you to enable you to go over it and be prepared to discuss it now. I have extra copies here if you wish them.

I will read to you the following letter which I received from Mr. Ferruccio Vitale, Chairman of the Committee of Landscape Architects.

Thomas B. Meehan, Esq.,
Dresher, Pa.

My dear Mr. Meehan:—

Your letter of June 14th is just received. The report of our joint committees of February 19th, 1919, together with the memorandum in regard to the payment of bills for nursery stock ordered by Landscape Architects on account of Clients, and the draft of obligations which are normally implied by the placing and acceptance of an order for nursery stock in the absence of specific stipulations to some other effect, was submitted to the Board of Trustees of the American Society of Landscape Architects on January 6th, 1920. The Board approved it, and voted that it be submitted to the members of the Society at the Annual meeting which was being held on the same day.

The discussion at the Annual Meeting of this subject, brought about only one objection to the report, and that was that the majority of the Landscape Architects present thought that thirty days was too short a period to allow for the approval of nursery bills after the receipt of the planting stock. I do not know of any decision on the part of the Society to come to an agreement as to the number of days they are willing to consider adequate, but I presume that this is a minor consideration which will not prevent your presenting the report as substantially acceptable to the A. S. L. A.

I have been ill for the last four months, and have not seen Mr. Dawson who has been appointed in my stead as Chairman of the Committee on relations with Trades. I also find that the files of this Committee have not yet been turned over to Mr. Dawson, but I shall endeavor to do so at the earliest opportunity. Will you therefore be so kind as to place yourself in touch with Mr. Dawson. I am quite sure that he will carry on the work efficiently and enthusiastically.

I take this opportunity of thanking you and the members of your Committee for the cordial cooperation always given me in our relations of the last five years.

With kind regards,

Yours very sincerely,

(Signed) FERRUCCIO VITALE.

A few days ago I was in New York, and had the opportunity of seeing Mr. Dawson, but he had not the opportunity at that time to take up the matter further.

We discussed the thirty day clause to which he had objected, and I think it likely that he will raise no further objections to that clause.

I will now read you the report:—

Memorandum of Agreement as Prepared by the Joint Committee of the American Association of Nurserymen, and the American Society of Landscape Architects.

Obligations which are normally implied by the placing and acceptance of an order for nursery stock, in the absence of specific stipulations to some other effect.

A. On the part of the nurseryman.

1. That the stock shipped shall be true to name.
(The standard names are those of the American Joint Committee on Horticultural Nomenclature,

G. A. H. BUISMAN & SON.

ROSE SPECIALISTS

Heerde, Holland

GROWERS also of Rosa Canina, Apple and Pear Seedlings

CATALOGUE on Application

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

We will accept orders for N. C. Mountain natural peach seed collected from sections where diseases are not known. These seed are screened and graded. They are the best that there is. Try us.

E. W. JONES NURSERY CO., Woodlawn, Va.

Fruit Tree

Apple, Pear, Mahaleb, Maz-zard Cherry, Sour Cherry, My-robolan, Mariana Plum, Quince, Walnut, etc. —

and Rose

Manetti, Grifferaie, Dog-rose, Polyantha (multiflora), laxa, Sweet Briar, Rugosa. —

STOCKS

The price list concerning these articles will be distributed to our usual buyers by the end of July. If you are not a customer of ours, ask for a copy of our list.

BARBIER & CO.

Nurserymen, 16 Route d'Olivet,
Orleans, France.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

**THOMAS J. LANE
SEEDSMAN**

DRESHER,

Penna., U. S. A.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.

DERRY, N. H.

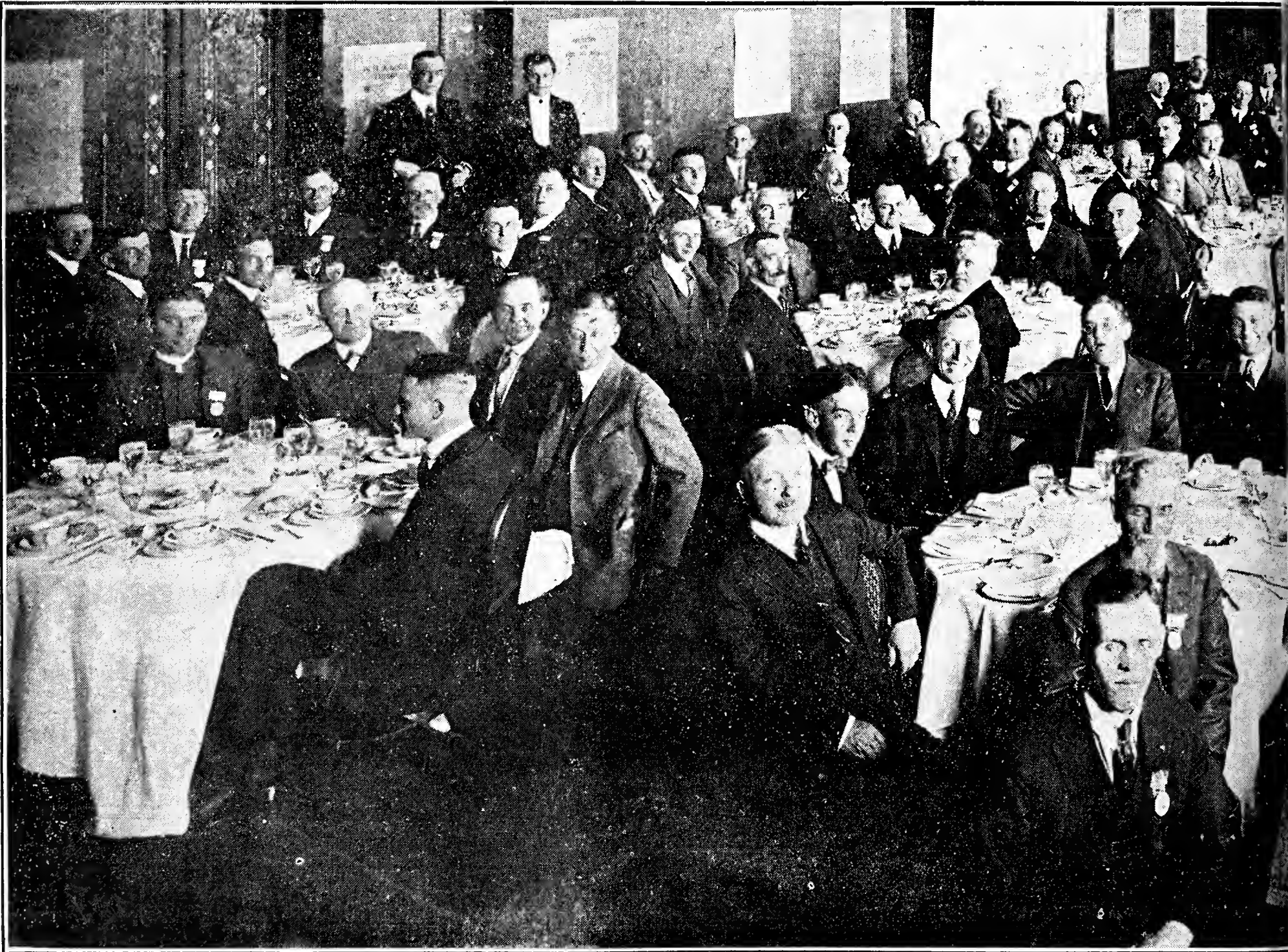
When writing to Advertisers please mention the National Nurseryman.

The plants corresponding to these names are those described in Bailey's Cyclopedia, as per references in the check list of the American Joint Committee on Horticultural Nomenclature.)

2. That the stock shipped shall be of the size and quality represented by the nurseryman.
(An attempt to standardize and define terms descriptive of size and quality is being made by the nurserymen.)
3. That all reasonable care and skill shall be exercised in digging, handling, and packing the stock;

stating time and method of shipment, number and kind of containers, (boxes, bundles, carloads, etc.) name of transportation agency, name and address of consignee, and whether transportation charges are prepaid or collect.

- B. Upon the part of the person placing the order, or of others acting under his instructions.
 1. That arrangements shall be made for the prompt receipt of the consignment upon notice from the transportation agency that it is ready for delivery at point of destination.



The Get-together Dinner at the Congress Hotel, Chicago. H

having due regard to the species, size, and character of the plants, to the climatic conditions at the time and place of digging, of transit and of delivery, and to the normal time consumed in transit and method of handling in transit by the transportation agencies selected, and that all precautions which are customary in good trade practice shall be taken to ensure that the plants will arrive in good condition for successful growth unless culpably delayed or mishandled while in charge of the transportation agencies.

4. That notice of shipment is to be sent in due season to the person placing order and to consignee,

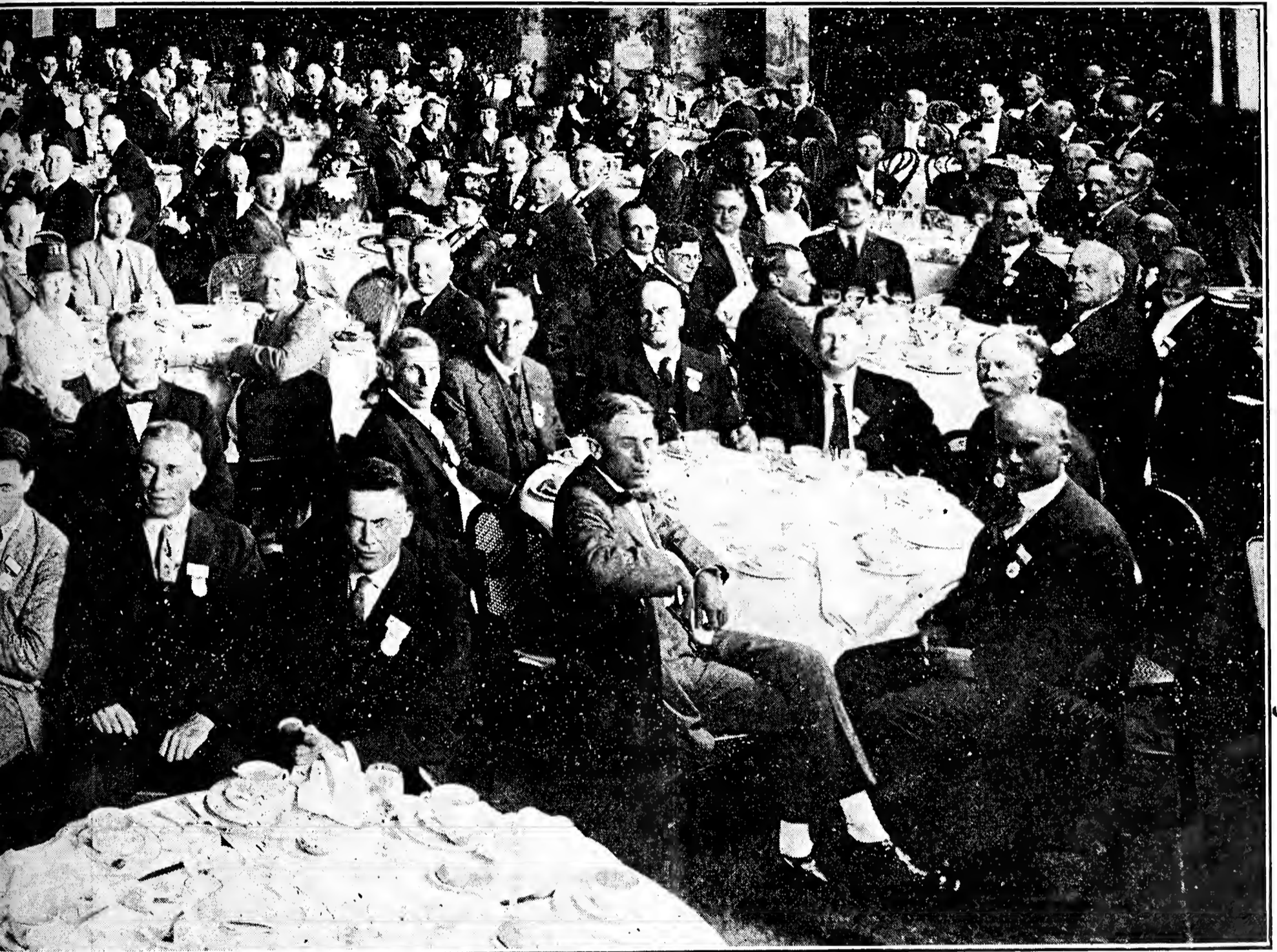
2. That if at the time of delivery there is evidence of damage during transit, or if there has been serious delay in delivery, the waybills shall be signed "under protest."
3. That a notice of the receipt of stock shall be sent to the shipper within two days of their receipt from the transportation agency, stating whether waybill was signed "under protest" and whether goods have been unpacked and inspected; and that failure to send such notice within two days of the receipt of the stock shall be prima facie evidence of its acceptance.
4. That all reasonable care, skill, and despatch shall

be used in the unpacking and inspection of the stock.

5. That if the stock shall appear, at the time of inspection on delivery, to be defective from any cause other than the fault of the transportation agency, a complaint to that effect shall be sent to the shipper, either with the notice of receipt of goods specified under No. 3 above, or within one week thereafter. Said complaint should specify explicitly the nature of the defect or defects.

transit, the consignee or the person placing the order shall be responsible for making the proper claim upon the transportation agency, the shipper being under obligation to assist by furnishing any information needful in establishing the claim against the transportation agency.

- C. *Payments*: In the absence of special agreements to some other effect payments for nursery stock are expected to be made within 30 days after delivery both of consignment and bill for same.



ing the Convention of the National Association of Nurserymen.

6. That in case a complaint of defective stock is thus made to the nurseryman, the stock in question shall be heeled in or otherwise properly protected from deterioration, and shall not be destroyed or otherwise disposed of until the nurseryman shall have had reasonable time to state whether he wishes to have the stock jointly inspected or what action he proposes to take concerning the complaint.
7. That if the stock shall appear at the time of inspection upon delivery to be defective, partly or wholly because of delay or mishandling while in

Memorandum in Regard to Payment of Bills for Nursery Stock Ordered by Landscape Architects on Account of Clients

The practice of many landscape architects of withholding nurserymen's bills from recommendation for payment until they have verified the bills from several different nurserymen for all plants shipped on their orders to a given client throughout a whole planting season, when taken in connection with the fact that the clients often delay payment after receiving the bills with the landscape architect's recommendation for payment, sometimes works serious financial hardship on the nur-

serymen and ought to be kept within close limits. Where the bills from individual nurserymen are small it may be reasonable to hold some of them as much as thirty days for the sake of sending in a group of bills at one time to a client for the latter's convenience; but in no case is it good practice to hold any bill in this manner for more than a month after the receipt of goods.

Landscape architects ordering plants from nurserymen for clients are recommended by the American Society of Landscape Architects to follow the practice of issuing, within thirty days after the receipt of both bill and goods from the nurseryman, a certificate of payment due, as in the case of certificates of payment due contractors, sending copies both to the client and the nurseryman. In any case, the landscape architect should notify the nurseryman promptly by some means, as soon as he has verified the bill and recommended the client to make payment. In the opinion of the American Society of Landscape Architects there is no reason why the nurseryman, after the receipt of such notice, should not address himself directly to the client with regard to payment of the account. Furthermore, if the landscape architect should delay sending such notice to the nurseryman for more than sixty days after the receipt of both bill and stock from the nurseryman, (unless in the interval he shall have requested the nurseryman to agree to an adjustment of the bill on account of error in the bill or defect in the shipment.) The American Society of Landscape Architects recognizes that the nurseryman may properly notify the client direct that the bill has been sent the landscape architect for verification and that payment is overdue.

For the protection, both of the landscape architect and the nurseryman, from possible misunderstanding on the part of the client, the American Society of Landscape Architects recognizes it as entirely proper that a nurseryman, when accepting a large order from a landscape architect on account of a client, should send a copy of the acceptance direct to the client so as to put the latter on notice.

Respectfully submitted,

THOMAS B. MEEHAN, *Chairman*,
HENRY KOHANKIE,
THEODORE J. SMITH,
RICHARD M. WYMAN,

Committee on Relations with Landscape Architects.

The above report was accepted as the standard of practice by the National Association of Nurserymen.

TRANSPORTATION AND TRAFFIC MANAGER'S REPORT

By Charles Sizemore

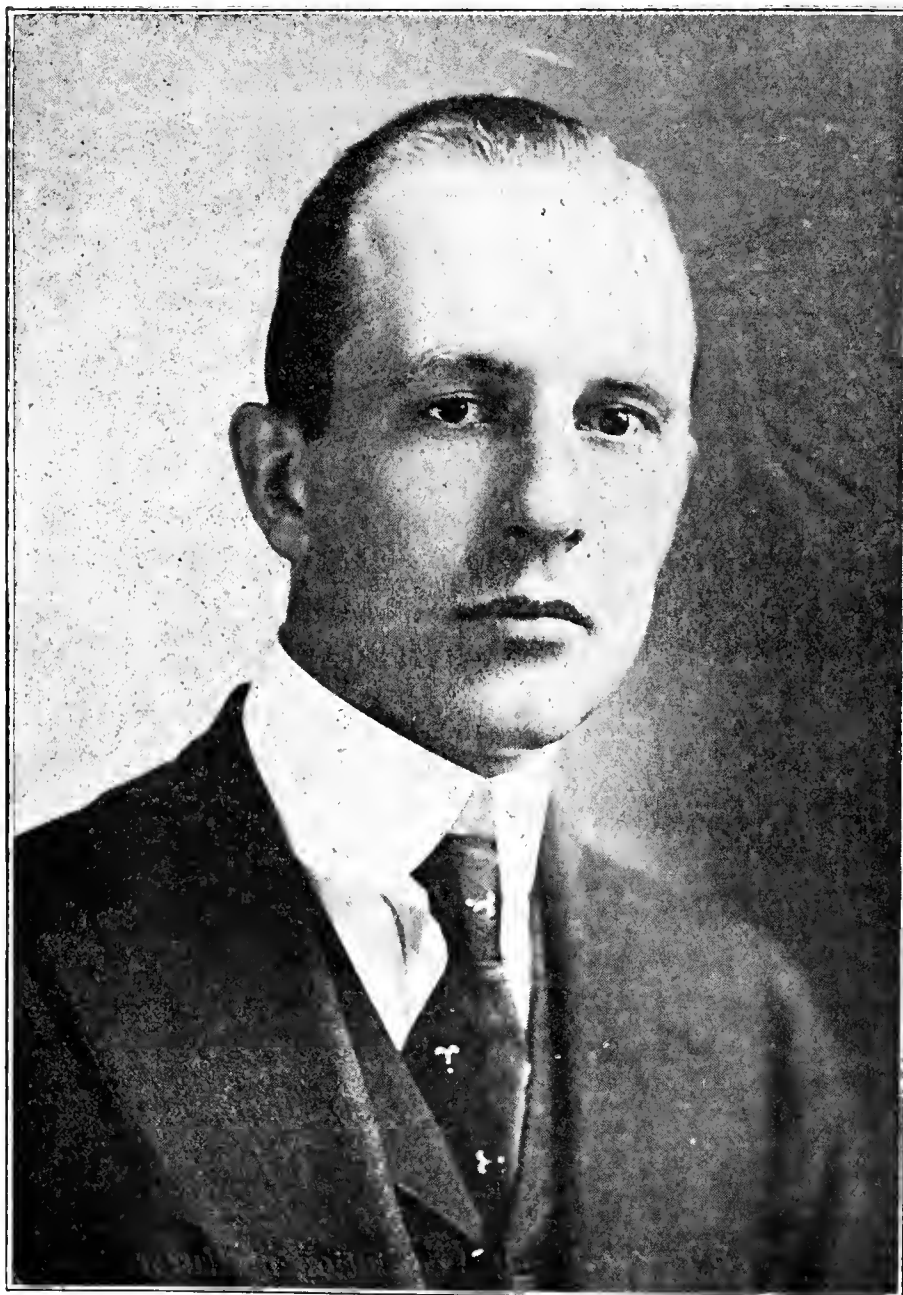
CONSOLIDATED CLASSIFICATION.

This Classification took the place of the Official, Southern and Western classifications and was submitted for approval by the carriers to the Interstate Commerce Commission in January 1919.

In this classification the carriers proposed to raise the C. L. rate on "Nursery Stock" in Western Classification territory from Class "B" or "7th" Class to Class "A," which would have made from between 25 to 30% increase. The hearing in Chicago was attended and protest made against this change and evidence submitted

showing why it should not be done and the burden it would place on the nursery business. When the classification went into effect on December 30th, no change was made which shows that our efforts were successful, although some of the assistants for the Commission had suggested that the rate should be raised to 4th Class to agree with that in the Official and Southern Territories. If this last change had been made it would have been an increase of about 50%.

In January 1909 the carriers endeavored to change rating in the Western territory from Class "B," to Class "A," but Mr. W. C. Reed and myself protested same and with the result that it was not done. Several times since this change has been considered but so far we have been able to prevent it but we feel that some day they are going to put it through as the Classification men claim that



Lloyd C. Stark, Louisiana, Mo., Elected President of the National Association of Nurserymen. This is the second time Major Stark has been elected to the President's Chair. On a former occasion he resigned to serve his country.

Class "B" or "7th," class with a 16000 lb. minimum is too low for a perishable commodity.

EXPRESS RATES AND WEIGHT OF PACKAGES

The American Railway Express Company has petitioned the Commission for a general advance in rates and in addition want to make some changes in the classification, one of these being to change the rating on nursery stock from second to first class which would mean exactly 33 1/3% increase on top of the general increase or

a total increase of about 60%. The following is an exact copy of their petition to the commission:

"There is a heavy movement of this traffic by express" and in many instances, bales or boxes are of such size and weight as to make them difficult to handle on tracks and in trains, and we believe the shipping of this class of matter by express should not be encouraged by special rating. Nursery stock is neither food nor drink and should pay the First class rate.

The change from Second to First Class was protested and the position taken that such change would only add to the burdens of the Nurserymen and would not decrease nursery shipments by express as nursery stock was very seasonable and it was absolutely necessary for all small bales to move by express on account of the One Hundred Pound minimum of the railroads and poor freight service, etc. Also late fall shipments on account of the cold and late spring shipments on account of the warm weather made it necessary to ship large quantities of nursery stock by express regardless of the rate.

However we did agree with the express people that 600, 800 and 1000 pound bales or boxes were too heavy for express shipments and when asked what maximum size package should be allowed for express shipments advised them that from nurserymen consulted it appeared that a 400 or 450 lb. package would answer the purpose generally. I think this question should be discussed here and a resolution passed stating what size package this Association thinks should be sent by express and this information be given the express companies and the commission, otherwise if these large packages continue to move by express its only a short time when they will raise the rates and prohibit such packages altogether.

Believe a favorable impression was made with the commission, but will not know until some time in July or August.

EMBARGOES

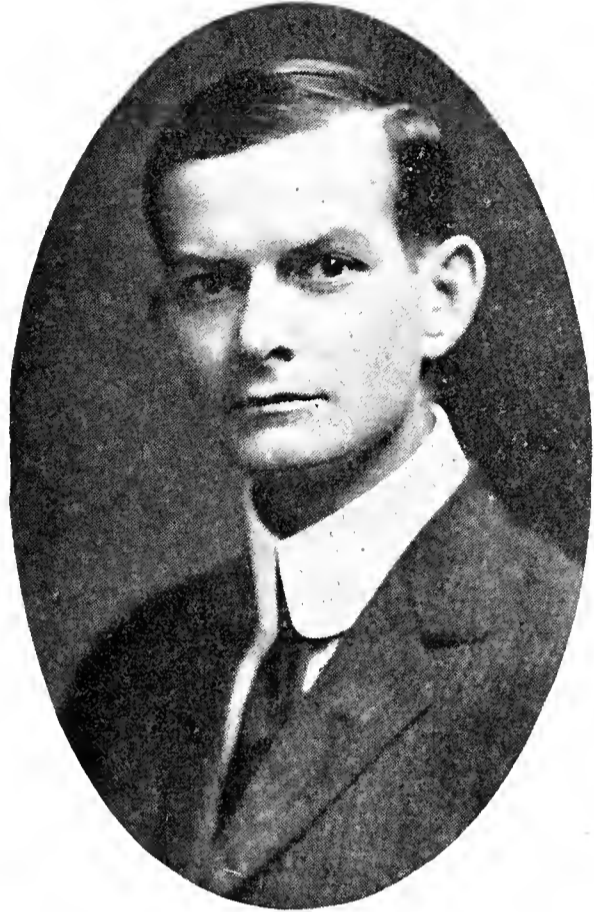
For nearly four weeks your Traffic Manager was working between Chicago and St. Louis with the embargo situation and while everything was not accomplished that was desired by the nurserymen, feel confident that those gateways would have been completely tied up if it had not been for such efforts as were put forth and it was on the first trip that we learned of the ruling of Mr. Kendall of the ear service commission that nursery stock was not perishable freight and should be classed with wheat, corn, oats, etc. Do not think it is necessary here to mention this further as all of you no doubt are familiar with the whole proceeding so thoroughly explained in the American Nurseryman and other trade papers.

CLAIMS

290 Loss, Damage and over-charge claims have been collected during the year amounting to: \$6567.65.

\$7700.00 in claims are still pending. Several of these are tied up by the R. R. Administration Red Tape who have ruled that all claims of \$500.0 or more must be submitted and approved by them before the carriers can make payment. Feel confident that 85% of this \$7700.00 will be collected. The

increase in number and amount of claims this year over last shows that the membership is gradually taking advantage of this service.



Executive Secretary John Watson, whose activities were endorsed and efficiency appreciated at the Convention

PLATFORM ON LEGISLATION ADOPTED BY THE NATIONAL ASSOCIATION OF NURSERYMEN AT THE CHICAGO CONVENTION

Preamble or General Statement of Position

The members of the American Association of Nurserymen realize the necessity as fully as any persons in the United States for preventive and remedial measures, under government direction, to control and arrest the spread of insect pests or plant diseases, capable of injury to the nation's Agricultural and Horticultural interests. As a group we have a fuller appreciation of the necessity of efficient, economic control of such pests in relation to Horticulture than can any other; for in our industry of propagating and rearing young plant life, we can appreciate with fuller comprehension in the event of annihilation, the utter inability of replacing in any one generation our vast timber orchard and landscape resources.

We appreciate, too, and acknowledge gratefully the indefatigable efforts of many capable entomologists and plant pathologists who have labored with an integrity of purpose to prevent or arrest the spread of pests or diseases, injurious to plant life.

As an Association and individually we do, however, protest against certain laws, both State and Federal, designed to protect plant life and the industries dependent upon it, but which in their execution, place greatly increased demands upon the nurserymen for production, while at the same time these laws have put in jeopardy the capital already invested in the nursery industry; have prevented the securing of sufficient additional capital with which to expand our business to meet existing demands upon it, and further they have stifled that fondness and enthusiasm for plant breeding and propagation that is necessary to develop anything requiring a decade or more to produce and market.

The American Association of Nurserymen propose the following articles as a general outline of requirements felt necessary for the safe-guarding and promotion of its industry, without conflicting with the protection and encouragement that may be requisite for other branches of Agriculture. For the securing of these ends, it instructs its officers to use their efforts and the facilities of the Association, and members will individually assist as may be required, or as opportunity affords.

Inspection and Certification Advocated for Pest Control.

For the control of injurious insect pests and plant diseases, nurserymen advocate the policy of inspection of nursery stock, and

plant products, by competent constituted authority, with certification permitting either intra-state or inter-state shipment when found free of infestation.

(a) The A. A. of N. should lend its support in securing appropriations sufficient to provide competent, adequate inspection of nursery stock, with certification that will permit freedom in inter-state shipments when found free of pests or disease.

Regular thorough spraying and clean tillage are advocated as further necessary measures in the control of pests or diseases, and we pledge ourselves to the accomplishment of these to the extent of our facilities.

QUARANTINE FOR PEST CONTROL OPPOSED.

Opposition to Quarantines

That nurserymen view with alarm the employment, with increasing frequency, of the Quarantine as a measure for the control of pests or disease, and oppose it as ineffectual in its accomplishment and disastrous to our industry.

(a) The record of Quarantines restricting the shipment of nursery and horticultural products generally is not one of efficient control; for while commercial interests are thereby restrained; the passage of traffic, the flight of birds and the movement of other agencies through the quarantined area impossible of control, do disseminate pests.

(b) Quarantines are given wide public notice, principally by the governmental agencies imposing them, and thereby they bring into disrepute, even the "pest-free" products of the Quarantined area, with consequent loss of sales and prestige and the shrinkage of realty values.

(c) Quarantines in their frequency are hampering now and threaten annihilation of inter-state commerce of nursery stock. Jealousy is felt to exist among States regarding the e quarantines. Retaliatory quarantines appear to have been passed; train loads of fruit carrying infestations of injurious pests move constantly out of states that prevent entry therein of any nursery stock excepting under regulations that are tantamount to exclusion.

(d) Quarantines put in jeopardy, capital and labor engaged in the nursery industry. They make impossible the securing of additional capital, at a time when millions of dollars are needed to develop and expand the nursery industry, to meet the orchard and landscape requirements of the nation. They discourage initiative in plant-breeding and the production of trees or shrubbery requiring a decade to rear and prepare for sale.

QUARANTINES FOR AN EMERGENCY AND REGULATIONS FELT NECESSARY TO BE COMPLIED WITH BEFORE ENFORCEMENT

Necessity for Must Be Presented

That when inspection and other measures for pest control have in any instance been inefficient and an emergency arises that in the opinion of authorities requires the placement of a Quarantine; nurserymen urge that no such contemplated quarantine may be placed, until a public hearing has been held and evidence showing the necessity for such quarantine produced.

At present the necessity for usch quarantines of insect pests or disease, should sit as commissioners at any such hearings or be empowered to declare Quarantines. But rather should the commission in the case of proposed Federal Quarantines, be composed of three persons, two of whom shall be appointed by the Secretary of Agriculture and one of whom shall be a Secretary of Agriculture for the state or one of the states within the area that is proposed to be quarantined. In the case of State quarantines such hearings might be presided over by the Secretary of Agriculture of the Commonwealth in question.

With proposed Federal Quarantines the Secretary of Agriculture should continue to have the power to declare such quarantine, upon receipt of the recommendations of the commissioners suggested in paragraph above.

In the case of State Quarantines, the Governor of the Commonwealth should declare their enforcement, when in receipt of the evidence and recommendation arising out of the hearing.

Place of Hearing.

That whenever the Federal Government proposes a Quarantine the commission conducting the necessary hearing, preliminary thereto, shall sit for the purpose of hearing evidence and taking testimony at some convenient place, within the proposed Quarantine area.

(a) It has been the practice heretofore of Federal Authorities to conduct all hearings in the City of Washington, thus handicapping greatly interested persons desiring to be heard when Quarantine measures are under considerations that affect a distant part of the U. S.

Quarantines For One Year Only.

That Qaurantines shall be for no longer period than that in which the emergency exists, and in no event for a longer period than one year. If it should be felt necessary to continue the quarantine or to modify it, a hearing should be held as in the case of inaugurating it, to show necessity for its continuance or equal opportunity to testify to the emergency having ceased.

(a) Quarantines on the part of officials of their inability to control a pest of disease, by inspection, or by preventive or remedial measures. And this inability ought not to exist for a longer period than one year, during which time other measures of control less destructive to commerce should be found.

PROPOSED LEGISLATION, ADVOCATED BY THE WESTERN PLANT QUARANTINE BOARD, REPRESENTING THE STATES OF CALIFORNIA, OREGON, WASHINGTON, ARIZONA, NEVADA, IDAHO, MONTANA, WYOMING, UTAH, NEW MEXICO AND COLORADO.

Fumigating Cars at Destination.

"That freight cars be fumigated at destination and if no facilities are available for fumigation at small stations, then the car shall be returned to some central point and fumigated there."

As nurserymen are in the practice of shipping in bulk to one destination, and there reconsigning car with partial contents to another point, securing by this practice lower freight rates, this Association desires a fuller proof that such fumigation of car at destination is necessary for the control of insect pests or disease, before it can be expected to willingly acquiesce in such a measure.

(a) There would seem to be no safety secured by fumigation at destination that could not be better secured by careful inspection and certification in the nursery before shipment.

(b) The inevitable expense of the detention of cars, the fumigation and the longer haul to a fumigation station would all be added to the freight charges and consequent cost of nursery stock to the planter.

Consignee or Consignor to Pay Expense of Inspection.

That the proposal to secure a bill in the several states represented at this Conference, to require that the expense of inspection, be paid by either consignor or consignee of a shipment of nursery stock, is strongly opposed by the American Association of Nurserymen.

(a) As pest control is administered for the public good it should be paid for by public funds.

(b) The poor planter, just about to establish an orchard should not be discouraged by the expense of a requirement that makes him pay for the protection of the prosperous orchardist already established with a revenue producing property. It would appear just as reasonable to require a few unfortunate smallpox patients to bear the burden of the Health Board.

(c) The expense of inspection, whether paid by the nurserymen or his customer, would have to be added into the gross cost of the purchase of nursery stock and would serve as a deterrent to many would-be planters, thus retarding greatly the planting of orchards and the general adornment of home grounds, both of which are a requisite in our present day civilization.

Inspection at Central Point.

The contemplated effort for the passage of a bill requiring inspection at a central depot will place such handicaps upon the nursery business, that the possibility of supplying "Trustworthy Trees and Shrubs" will be entirely beyond the control of any nurserymen, and we oppose the proposition strenuously, believing it would bring disaster upon the industry.

(a) This proposed measure would of course facilitate inspection from the entomologists or plant pathologists view point, but appears to have been suggested without any consideration for the requirements of a plant's life in process of transplanting.

(b) Nursery products should be gotten quickly as possible from the nursery to the place of planting. This assembling of such shipments at a central depot for inspection will inevitably delay plants in transit, to their injury.

(c) Should shipment be unpacked at such central depots for inspection or fumigation, the shipper loses all control over his products and cannot be responsible for claims, for poor packing on arrival at destination, for shortage, damage or even truthfulness to name.

(d) Is there any safety that a central station affords, which inspection of the plant in the nursery during the growing season, and certification in case of its freedom from pests, doesn't afford?

COMPENSATION FOR NURSERY STOCK DESTROYED.

That laws shall be sought, providing compensation to nurserymen, orchardists, timber-owners and others, when their trees or plants of value are condemned to destruction by officials, in an effort to arrest the spread of insect pests or diseases, subject to provisions of which the following are suggested:

(a) That the owner of such trees or shrubbery shall have evidenced his appreciation of their value to him by maintaining the generally accepted treatment or culture, required to keep such plants in health. No owner should be expected to receive compensation for trees and plants, that he has neglected and which in consequence are a menace to the health and vigor of all surrounding plant life, because of their susceptibility to infestation by insect pests or disease. It may even be found advisable to enact in every state, laws similar to those now had in some, which compel attention to neglected orchards on lands within one-half mile of any nursery in order to avoid an existing menace in proximity to nursery products awaiting dissemination.

(b) That compensation should be arrived at by appraisal, adequate to reimburse the grower for the money expended upon the plants up until the time of their destruction and with regard also for the probable income from them in the event of their being allowed to grow into a more productive age. Yet it is advocated that the award of damages, should not be as much as would lend encouragement to a wilful person, to permit infestation in order to secure condemnation and consequent compensation.

(c) Laws similar to the ones urged in this article, are now in most states to secure the capital invested in animal industry —i. e.—compensation for the condemnation of cattle affected with tuberculosis or "foot and mouth disease." Plant industry should have similar protection.

Until such time as compensation may be secured, it is suggested

that nurserymen may with propriety claim deductions upon their Income and Profit Tax Returns, for the amount of all losses sustained from insect pests or diseases in any one year. Pest-free stock denied a market because of Quarantines, might with equal propriety, it would seem, be changed off in our reports under the heading entitled "Obsolescence."

CROP REPORTS

Crop estimates reported at least annually that will show with reasonable accuracy, how many trees or shrubs of different species or varieties in certain ages or sizes are being grown in any one county, state or group of states, are felt by nurserymen to be of incalculable value.

(a) This information will give the knowledge requisite to govern wisely our propagation and young plantings. It should after it has been in operation a few years, stabilize supply so that ruinous surpluses and equally disastrous shortages, can to great extent be avoided.

(b) Such data will enable nurserymen to move stock that is surplus in one region toward an area of shortage, prior to opening of the general shipping season and distribution as well as propagation will thus tend to stabilization.

(c) In the event that nursery stock shall continue to be admitted in the U. S. by permit only, then crop estimates become a vital necessity, if such permits are to be issued wisely, for a knowledge of approximately how many plants of a variety, there are already in the U. S. their size and location, will assist officials in recognizing a threatened shortage, in time to honor nurserymen's requests for permits to import, before an exhaustion occurs.

(d) The requisite data upon which to base such crop estimates can probably best be secured by questionnaires sent out by the Bureau of Crop Estimates, to nurserymen everywhere. The supplying of the information would be voluntary on the nurserymen's part, and the final reports later available to everyone would not reveal the names of any individual nursery, but rather the aggregate quantity of the varieties and sizes reported upon, that are under cultivation in the different states or counties.

To secure the valuable knowledge that such Crop Estimates will provide, we therefore reaffirm our action of one year ago, and instruct our officers to continue efforts to secure an appropriation from Congress that will enable this service to be undertaken by the Bureau of Crop Reports of the Department of Agriculture.

Further, we pledge ourselves to make such estimates as nearly accurate as possible, by providing promptly and voluntarily the information that shall be asked for with as great accuracy as is possible, and that we will also urge on nurserymen not members of the Association, their compliance with the request of the Government when it shall be made, in order that the annual census of trees and shrubs in the nurseries of the U. S. may when available be of dependable assistance to the Nursery Industry.

APPROPRIATION TO ASSIST NURSERYMEN AND OTHERS TO CARRY ON EXPERIMENTS FOR THE PRODUCTION OF FRUIT AND OTHER STOCKS.

The securing of an appropriation for \$20,000 from the 66th Congress for investigating in co-operation with States or privately owned nurseries, methods of propagating fruit trees, ornamental and other plants, the study of stocks used in propagating such plants and methods of growing stocks, for the purpose of providing American sources of stocks, cuttings, or other propagating materials, is acknowledged. It is felt that nurserymen cooperating with the Department of Agriculture can now secure much needed assistance in their experimental efforts to grow new stock or that which was not heretofore commonly and readily grown.

The Department will, however, have to ask Congress another year for an appropriation to continue this work; therefore, be it Resolved, that the Association shall assist the Department in securing an appropriation, by joining in the appeal to Congress for necessary financial support to carry this service on.

SOUTHERN NURSERYMEN.

The action of the Southern Association of Nurserymen in endeavoring to secure a uniform law for the South Atlantic group of States and to secure a modification of the laws now existing in certain States, compelling a numbered tag on each and every individual order, also on each individual bale or box; also a copy of each order on day of shipment is inflicting double and unnecessary work, especially on the retail nurserymen. The American Association of Nurserymen will cooperate in assisting to secure these modifications.

(a) The number of varieties of plants suspected as hosts of injurious pests is inconsiderable, so why compel the entire Southern tier of States to be governed by a law made in some States primarily to control Citrus Canket.

(b) Would not adequate inspection and certification to which policy the American Association of Nurserymen subscribes, be capable of securing all the safety, which expensive enumeration of names and tags would provide?

PUBLICITY TO DISCOURAGE HOME PLANTING OF FRUITS.

There has been observed during recent years a tendency on the part of some state officials and the press, to discourage by publicity, as conspicuously observed in the St. Louis Globe-Democrat, an effort to discourage the planting of fruit trees for one's domestic use, alleging that such small plantations are apt to be improperly cared for or even neglected, and that they tend to en-

courage the spread of pests. That they yield insufficiently of inferior fruit and in consequence fruit should only be grown by those engaged commercially in its production.

We believe such efforts to confine the planting of fruit trees to commercial interests to be undemocratic in its denial to the family the luxury of luscious, fresh fruit; produced upon the home grounds. Further, it is our belief after observation that the fruit trees of the average lot owner or on the farmstead, are quite as apt to be cared for as are those in the commercial orchard. We pledge our efforts to oppose propaganda or influences that discourage such plantings of fruits and acknowledge gratefully an editorial encouraging the planting for home consumption by Dr. Liberty H. Bailey in the Bulletin of the American Pomological Society, Vol. 1, No. 1.

NATIONAL BOTANIC GARDEN

The action of this Association taken at its Convention in 1917, pledging its efforts for the securing of a national Botanic Garden at Washington, D. C., or for a chain of such gardens throughout the country for the promotion and dissemination of horticultural knowledge is reaffirmed, and our officers instructed to bring the Association's influence promptly to bear in the action now pending before Congress for the establishment of one such National Botanic Garden in or near the District of Columbia.

STATE OR MUNICIPAL NURSERIES.

There would appear to be no more reason for a government entering upon the production of nursery stock for its own consumption or for the encouragement of planting for forestation or other purposes by individuals or corporations, than for it to produce other commodities for its needs or to disseminate them in order to promote the use of the commodity.

(a) Tax paying nurseries are thereby denied markets, which the community or state that receives the taxes used to establish their own nurseries with.

(b) The dissemination of trees grown in States or Municipal nurseries, might be endured without objection by the industry, if the plants from such nurseries were used exclusively on publicly owned land. The practice, however, is to sell cheaply or even to donate, under mild restrictions; the trees for planting on privately owned properties. Trees available for wide dissemination under such favored terms are an instrument in the hands of officials for the establishment of prestige, that should not be possible in the public service.

(c) The argument that the state or city by the establishment of such nurseries gets its trees at cost is true, but valid only if that cost is less than trees of similar character can be purchased for on the open market.

(d) There are nurseries growing in large quantities and of high quality trees suited for the purposes that State and Municipal trees are usually grown for, so that a supply is available and a greater quantity soon would be if the industry did not have these public nurseries to succumb to.

THE BABY RAMBLERS

The Baby Ramblers maintained their reputation for service and prettiness during the convention. The original stock is becoming a little overgrown and it is high time a few more were brought out of the propagating house, hardened off, and planted where they can be admired.

The present stock is getting a bit leggy.

JAMES McHUTCHISON

A resolution was adopted at the Chicago Convention expressing sympathy for James McHutchison, who has been ill for several weeks. Mr. McHutchison is a much esteemed associate member and has heretofore been a regular attendant at previous conventions and his absence was much regretted.

Upon motion it was decided the convention send its regards to him, and to "Say it with Flowers."

WHAT IS THE REASON?

It is claimed the ladies are becoming more prominent in business, politics, and all other activities. This did not hold good at the Chicago Convention.

With the exception of a number at the banquet it did seem as if the visiting nurserymen had left their wives and daughters at home.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

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THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
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Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., July 1920



THE SPIRIT OF THE CONVENTION

It is doubtful if a convention was ever held at least by the National Association of Nurserymen that so truly revealed the spirit which is urging the nurserymen along the pathway of progress. During the two first days suppressed excitement was everywhere evident, and no one seemed to be able to define the line of cleavage or to specify just what was threatening to divide the Association into two factions. Every effort to bring those not in accord with the progressive policy of the Association, out in the open, met with defeat.

Dissatisfaction vaguely expressed itself in the form of a reaction against the program of Market Development. The adopted trade mark, work of the Vigilance Committee, Expenditures, etc.

The last named item perhaps being the one around which the whisperings focussed. While nothing definite was given out the impression got around that the dues to which the members had committed themselves at the previous convention were not equitable, one-fourth of one per cent. of the gross business, that it created a condition whereby one-third of the members furnished the revenue and the voting power of the other two-third controlled the expenditures.

At the close of the second day the feeling of uncertainty was so pronounced that many had doubts of the Association being held together with the necessary harmony to carry out its progressive program.

The executive and other committees worked heroically

far into the night, on measures to clear the atmosphere, with the result that the closing session was almost dramatic in its results and the sense of relief was clearly perceptible, when it became obvious that the members were of one mind in adhering to the progressive policy.

The reactionary element dwindling down to a few conservative members whose stand will prove to be more beneficial than otherwise in acting as a curb to too reckless spending and the assumption of obligation not fully appreciated.

Considering the very divers interests of the members forming the National Association the spirit revealed at the convention gives promise of big things in the future.

MIS-DIRECTED ECONOMY

The greatest need of the country after the orgy of spending due to the unusual conditions produced by the World War is undoubtedly retrenchment and to get back to common sense business principles. This retrenchment however, should not be allowed to interfere with production or retard progress, but rather those unnecessary things that we could do just as well without, or at least, could do without them until such time as the country is in better condition to support them. It is unfortunate the retrenchment put in operation by Congress should be applied on the Agricultural Appropriation bill which reduces the appropriation by \$2,185,000 less than the amount provided for the current fiscal year and \$6,000,000 less than the estimate made by the department for its needs. The department of Agriculture is the one department that is profitable to the country. In other words, it has to do with the essentials of life and the development of the natural resources. Good business would suggest increasing the appropriation in the productive departments but decreasing expenditures in the non-productive departments. It would seem that it should be increased rather than reduced, and if any reduction or retrenchment in expenditures is necessary, it should be in those departments that are not so vital to the whole country's welfare. There must be millions of dollars that could be saved in other Bureaus or departments which are not essential. It is unfortunate that a country cannot be run on a business basis and very much under the same lines as a corporation, where it would be possible to list out the budget when retrenchment is necessary and take those out that were least essential. While we know a government is not organized and run for financial profit, there is no reason that it should not be efficient in all the word implies and it should be economical in the true sense of the word. The governments are run mainly by politicians and politicians have ethics of their own.

The Department of Agriculture has not always worked in harmony with progressive, work-a-day practice in horticulture and for this reason has estranged a good deal of sentiment in the horticultural world. They have appropriated to themselves all the knowledge and have made rules and regulations that have defeated their own ends and have estranged others who are anxious to cooperate with them. The scientific college man has been impatient of the opinions of the men who have devoted their whole lives to their work and who at least, should

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Most exhaustive and up-to-date manual ever published, covering all the most recent improvements in the care of nurseries and in the practice of plant propagation.

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A large number of full page plates, line drawings and descriptive figures.

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receive respectful consideration. To really accomplish the best for the country, the Department of Agriculture should get in closer touch with its farmers and horticulturists, not so much by having the latter come to them as by going to the practical man and learning from him. The country needs both the scientist and the worker, but one ought not dominate the other, or at least, not suppress the other. If the Department of Agriculture had not made so many hampering restrictions of doubtful value, they would receive much more co-operation from the horticultural world. At the last analysis the people hold the purse strings and while propaganda intended to encourage popular or political support is all right, the hearty support and co-operation that would come from the florist trade, the nursery trade, the fruit growers and farmers is what the Department really needs to accomplish things.

The following officers were elected to serve for the ensuing year.

EXECUTIVE COMMITTEE { J. Edward Moon, Morrisville, Pa.
E. M. Chattin, Knoxville, Tennessee

PRESIDENT
Major Lloyd C. Stark, Louisiana, Mo.

VICE PRESIDENT
Michael R. Cashman, Owatonna, Minn.

TREASURER
J. W. Hill, Des Moines, Iowa.

At the close of the Convention Mr. Wyman said:—

Those who have crossed the Atlantic or Pacific, and have had a stormy passage, appreciate something of what it is to sail into port calmly and peacefully. There comes a feeling in the heart of the passenger, a profound feeling of thankfulness that there was on the bridge an old rugged seaman, who faced the gale and brought the vessel to destination. At this time I feel it is eminently fitting that we express our appreciation of the work done by our retiring President. I think in the history of the Association that there has never been a President with as stormy a passage through which to sail a ship, as Ex-president Moon, and I know that no man has done his work better, and I move you that we express to our retiring President by a rising vote of thanks, our appreciation of his faithfulness, diligence, and impartiality in service.

Seconded and carried.

Mr. Moon:—I can not find words to express my appreciation.

Mr. Roeding:—It very often happens that the man who is always at the wheel, always ready to assist in every way, be it in troubles, or matters that redound to the credit of an organization like this, may be forgotten. I am not going to talk long, but I want to say that I have had considerable experience with Secretaries, but it has not been my pleasure in the experience I have had in public matters to find a man who has so ably filled this position as our good friend, John Watson. I offer this resolution—that we give a rising vote of thanks to Mr. Watson for the splendid work he has accomplished in behalf of the Association.

Seconded and carried.

Mr. Moon:—I want to say that when the history of the

past administration is written, it will be recalled that the biggest thing we did was to get John Watson to work for us. I would be selfish to take the full measure of that tribute which you paid me a few minutes ago, without dividing with him. I fortunately have been able to be in close communication with him, and have received much of my inspiration from him, and while I had the honorary position, he was the man in the organization who made it go.

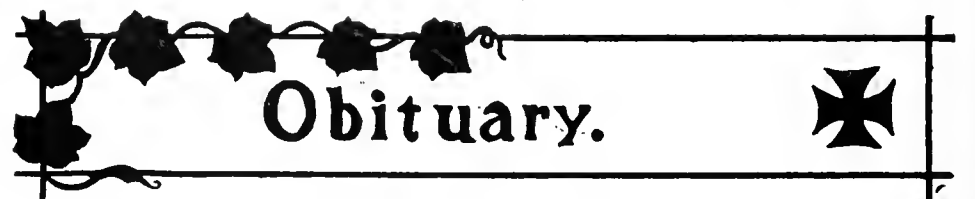
Mr. Watson:—You know how I appreciate it, for you know me, and if you didn't know my appreciation I couldn't convince you of it by anything I said, so I won't spoil the occasion by trying to thank you.

Meeting adjourned.

AMERICAN ASSOCIATION OF NURSERYMEN ADOPT TRADE MARK

It is an encouraging sign to see such notes as the following clipped from the Minnesota State Horticultural's Report. Such statements breed confidence in the purchaser and increase the prestige of membership in the National Association of Nurserymen.

This Association is very active and doing things of great importance to the nursery business. It is rather a simple task for the Association to have an artist to design a neat attractive trade-mark and have it duly registered for the exclusive use of the members. The fact that there is a vigilance committee back of it with power to investigate complaints puts a much higher value on it. It means that the nurserymen stand behind their slogan "Trustworthy Trees and Plants." Fair-dealing has won a new convert. It is believed that the readers of this Magazine will appreciate the value of this forward step and do their part in taking better care of the trees grown and distributed under these new conditions. The Secretary, Mr. John Watson, states: "That it is the most out-standing fact in American horticulture to-day. It means a new relationship between the nurserymen and the planter. It places this Association in line with progressive business, it establishes new standards. The basic idea is in the Association's amendment to its constitution adopted in convention as Article IX, providing for Fair Dealing as a condition of membership."—R. S. Mackintosh.



Obituary.

M. HENRY LYNCH

M. Henry Lynch, president of the Dingee & Conard Co., rose growers, at West Grove, Delaware County, died on June 28, at St. Vincent's Hospital, Indianapolis, following an operation.

Mr. Lynch had gone to Indianapolis to visit his brother, President Judge P. J. Lynch, of the Supreme Court of Indiana. He was taken ill soon after his arrival. He was 49 years old, and is survived by his widow and a daughter. The funeral was held from his home in West Grove, Pa.

J. Hale Harrison says: "The Hale Peach has not proven a good commercial variety. It seems to lack constitution and is not so dependable as Elberta and some of the other older varieties, in its fruiting habits. Even in favorable years the crop is uneven having a large proportion of middle size and culls and curiously enough these run very even. The Hale Peach trees may be said to constantly bear three grades with not an over large proportion of jumbos."

BAILEY'S STANDARD CYCLOPEDIA OF HORTICULTURE

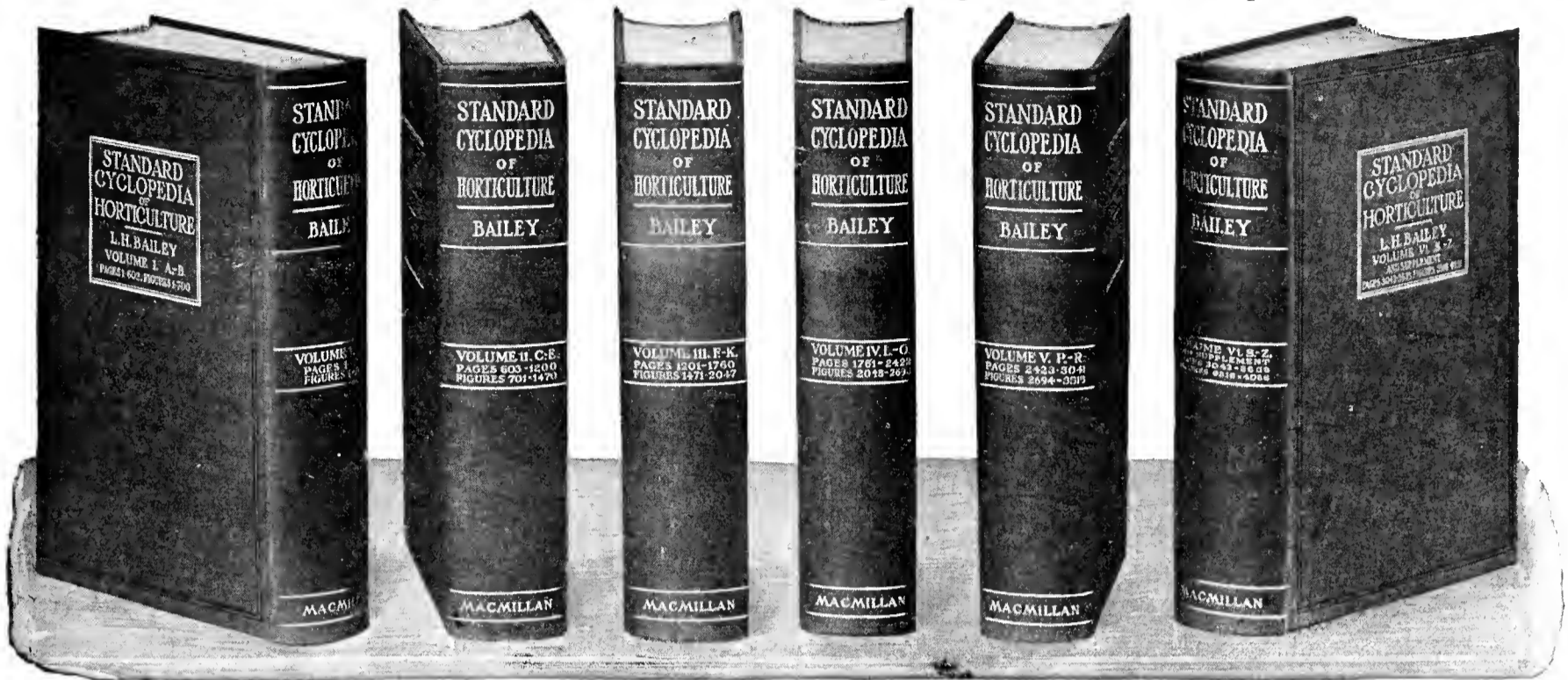
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A FEW OF THE MANY IMPORTANT NEW FEATURES

Key to Identification of Plants

This is a device to enable one to find the name of a plant. The name thus found is quickly referred to under its alphabetical location, where full information will be found in regard to it.

The key is so simple that it is useful to the veriest amateur and to the botanist or commercial expert.

Synopsis of Plant Kingdom

This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

The publishers of THE NATIONAL NURSERYMAN have made arrangements with The MacMillan Company to supply a limited edition of this set to their readers on monthly terms—see coupon—and we can unqualifiedly recommend the work.

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This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

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In Volume I is inserted a list of between 2000 and 3000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles

Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

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The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The National Nurseryman, Hatboro, Pa.

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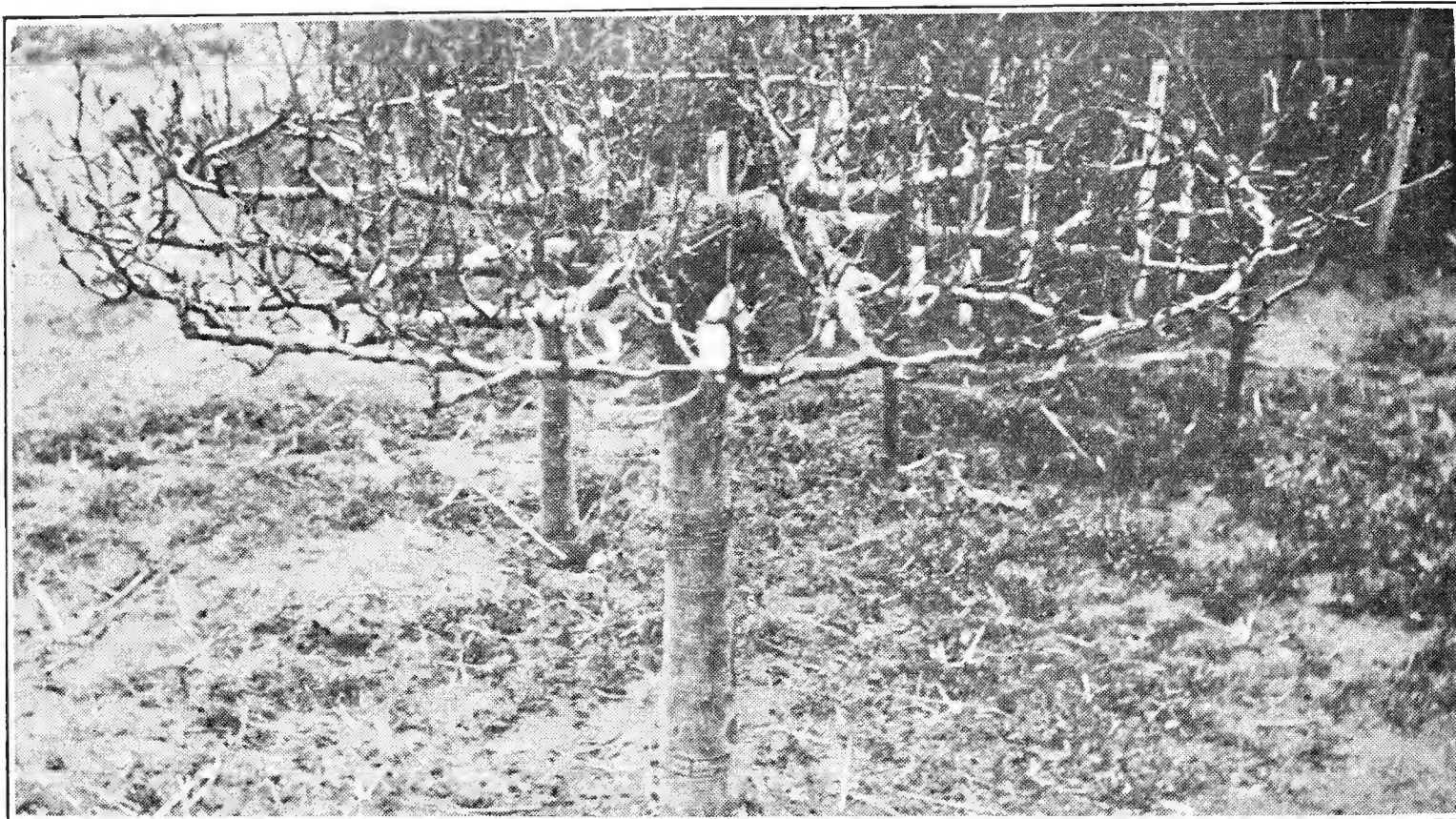
Reference

A PEAR TREE TRAINED IN AN UNUSUAL WAY

THE above photograph is a pear tree trained in a very unusual manner. Fruit trees trained as Espaliers or fan shaped, cordon, goblet or vase shape are not unusual, but to see healthy well growing specimens trained as a table form, is to say the least, unusual. This specimen is at the Nurseries of Bobbink & Atkins and excites much attention and comment.

also to keep them in good condition. One season's neglect is sufficient to spoil them.

I find it has been the experience of many Americans visiting Europe and seeing the wonderfully trained fruit trees in the well kept gardens of the Old Country, naturally desire the same for themselves at home and go to a great deal of expense in getting trained trees, only to have them spoiled within a few years on their hands for the lack of a trained gardener to give them attention.



Pear tree trained in table form

We are indebted to Mr. H. J. Hohman for the photograph. Visitors naturally think it is the greatest thing they have ever seen. The picture was taken while the plant was in a dormant state that the work of it might be better seen. With the foliage, flowers or fruit it is naturally much more attractive. Such a specimen means gardening skill in every sense of the word. It not only takes skilled gardeners to train fruit trees, but

That trained and dwarfed fruit trees can be successfully grown in this country, has been proven in quite a number of instances, but due to the hot summer's suns and extremely cold winters, they require perhaps even more attention than those where the climate is more equable. Patience, skill and a long-lived interest are the essentials for well trained fruit trees, as well as in almost any other line of gardening art.

IS CROWN GALL INJURIOUS TO APPLE NURSERY STOCK?

The results of observations by S. B. Fracker regarding the effect of crown gall on apple trees in Wisconsin as related to the size of nursery stock and to fruit production, in the Journal of Economic Entomology.

Mr. Fracker says in three out of four nurseries discussed, it was found that without respect to variety, the infected trees, if their sale were permitted, would yield (on account of their indicated classification) 47 or 48 per cent less gross returns than would a similar number of

noninfected trees, since the infected nurseries show a much larger number of seconds. Although in many cases there seems to be a tendency for the infection to decrease the vigor of the plant without forcing its size below the commercial value, there is a great diminution in the number of first-grade trees when infected and in increased number of seconds, not a single nursery or variety showing as great a proportion of trees of salable size among those having crown gall as in those free from that disease. This reduction in size of apple trees in Wisconsin nurseries is thought to be the direct result of crown gall infection.

Richard M. Wyman has purchased the Framingham Nurseries from his father, W. H. Wyman, North Abington, Miss.

"Dick" has been managing these nurseries for some time but in July will have complete control.

The Framingham Nurseries are well known as having a pretty full line of good specimen ornamental stock. Mr. Wyman has a weakness for Cews and aims to give special attention to them.

We offer to the Trade for Late Fall or Early Spring Delivery:-

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WANTED—Reliable man familiar with names and habits of ornamental trees, shrubs, evergreens, and roses, with practical knowledge of landscape work and a Salesman, must be able to sell quality stock at quality prices. Salary \$100.00 per month with board and lodging and a commission on business in addition to salary, position permanent. If you are a landscape man and SALESMAN, write us, we will pay you all you are worth.

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14 miles west of Portland, near paved highway

60 Acres in Grain and Hay

40 Acres in Nursery Stock,

estimated as follows:—

Seedlings planted this spring ready for budding this summer—

- 20,000 Apple
- 20,000 Cherry
- 150,000 Peach
- 20,000 Pear
- 20,000 Myrobolan

Seedlings from seed, estimated—

- 250,000 Apple
- 250,000 Cherry
- 50,000 Privet Cuttings
- 10,000 Carolina Poplar cuttings
- 600,000 Pear

15 Acres Strawberries, ten best varieties, planted spring of 1920, from which to raise plants.

(If any orders for Seedlings are booked before sale is made, they will be turned over to the buyer.)

Price, including land, \$100,000.00; or I will sell the Nursery Stock as it stands and include a two years lease of the one hundred acres of land for \$60,000.00. Terms cash.

JOHN HOLMASHAN,

BEAVERTON

OREGON

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

North Carolina Peach Pits

We are accepting orders for Fall Shipments.

J. Van Lindley Nursery Co.

Pomona, N. C.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

- | | | |
|--------------|---------|-------------------|
| Strawberries | Iris | Asparagus |
| Raspberries | Privet | Horseradish |
| Blackberries | Spirea | Hardwood cuttings |
| Dewberries | Rhubarb | Volga Poplar |

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 6½d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

HORTICULTURAL ADVERTISER, Ltd.
Lowdham, Notts, England

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.
Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

TO THE TRADE ONLY

A general assortment of nursery stock for delivery Fall 1920 or Spring 1921.

We also have some fine blocks of Peach Seedlings, a portion of which we offer to bud on contract for delivery fall 1921. Correspondence invited.

Headquarters for Nursery Supplies

Portland Wholesale Nursery Co.

122½ GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.



SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

Bunting's Nurseries

G. E. BUNTING & SONS.

Selbyville - Delaware

Offers for delivery fall 1920

Grape Vines, 1 yr.

Asparagus Roots, 2 yr.

Strawberry Plants

Barberry Thunbergii, 2, 3, and 4 year

California Privet, 1 and 2 year

Silver Maples, 8-10 and 10-12 feet

Apple Trees, 1 and 2 year budded

Flowering Shrubs

Dorothy Perkins Roses

Would be pleased to quote you.

PERHAPS

You use RAFFIA for budding

If so, it will be to your interest to have a copy of our

MAY FIRST PRICE LIST

which will be mailed to you on request

Thomas B. Meehan Co.

Direct Importers of Raffia

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arbor Vitaes, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree Seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

Harrisons'

Specimen Norway Maples



Nature seems to have provided no other tree so valuable and adaptable. For lawns, for streets, for parks, it has no superior. We offer:

| | |
|-------|--|
| 2000 | 7 to 8 ft. lin. |
| 5000 | 8 to 10 ft., 1 $\frac{1}{4}$ to 1 $\frac{1}{2}$ in. |
| 10000 | 10 to 12 ft., 1 $\frac{1}{2}$ to 1 $\frac{3}{4}$ in. |
| 10000 | 12 to 14 ft., 1 $\frac{3}{4}$ to 2 in. |
| 10000 | 14 to 16 ft., 2 to 2 $\frac{1}{2}$ in. |
| 10000 | 2 $\frac{1}{2}$ to 3 in. |
| 5000 | 3 to 3 $\frac{1}{2}$ in. |
| 3000 | 3 $\frac{1}{2}$ to 4 in. |
| 1000 | 4 in. |

Prices on application.

HARRISONS' NURSERIES

J. G. HARRISON & SONS, Prop.

Berlin,

Maryland



THE NATIONAL NURSERYMAN



AUGUST 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

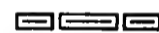
Subscribers to "Nurserymen's Fund for Market Development."

Good Trees For The Trade

PAGE COUNTY, IOWA, has long been famous as a nursery center. We are in the heart of this famous belt, and are growing in this favorite area, a fine assortment of high grade nursery stock.

Our thorough knowledge and acquaintance with this business, coupled with years of experience, enables us to offer with confidence a good assortment of high grade stock.

Send us your requirements. It will be a pleasure for us to give you full information.



MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

C. R. BURR & CO. Manchester, Conn.

Let us talk to you in large or small quantities on the following:

- AMPELOPSIS VEITCHII, Heavy 2 yr.
- " " 1 yr. seedlings
- BARBERRY THUNBERGII, 3 yr.
- " " 1 yr. seedlings
- CALIFORNIA PRIVET 2 yr. in carlots
- APPLES, 2 yr. buds, fine stock
- PEACHES, in carlots, largely Elberta and assorted varieties
- H. P. and CLIMBING ROSES. New England grown. None better.
- Assorted Shrubs. Long on HYDRANGEAS P. G. and SPIRAE VAN HOUTTE
- RHUBARB, graded 1 and 2 yr.
- ASPARAGUS Plants, strong 2 yr.

The
Preferred
Stock

The
Preferred
Stock



... Information ...

about where to obtain scarce, hard-to-locate articles will be gladly furnished to our good friends in the trade, so far as we have it available. If we haven't the articles ourselves we are always glad to "put you next" to them when we can.

Of our own stocks we can offer usual supplies in about all our regular lines. We especially solicit your inquiries for—

- | | | |
|------------------|------------------|------------|
| ROSES | CLEMATIS | AMPELOPSIS |
| FLOWERING SHRUBS | ORNAMENTAL TREES | |
| PAEONIAS | PERENNIALS | CONIFERS |
| FRUIT TREES | SMALL FRUITS | |

Please use printed stationery, or enclose business card. We quote to "the trade" only.

Jackson & Perkins Company

The Preferred Stock Newark, New York The Preferred Stock

105 Years in the Nursery Business

GENERAL STOCK:—Our propagation includes apple, peach, pear, plum, cherry, apricot, quince, grape vines, all small fruits, shade trees, shrubs, climbers, roses, garden roots, and etc.

—Special—

A BIG STOCK OF QUALITY SHRUBS

Everything is grown in large quantities. Our grades are dependable and we are generally prepared to quote to nurserymen nearly everything we offer to the retail trade, and prices are always in line with those of other reputable growers.

We will be glad to have a list of your requirements for the coming season. Doubtless there are some things that you can use that we have in surplus. Can also ship from our branch plants—Marionville, Mo., Farmington, Ark., Dansville, N. Y., North Girard, Pa., and Vincennes, Ind.

STARK BRO'S
Nurseries and Orchards Co.
Louisiana, Mo.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

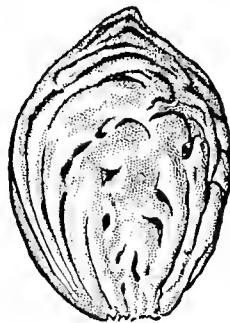
COLLECTORS OF TREE SEEDS



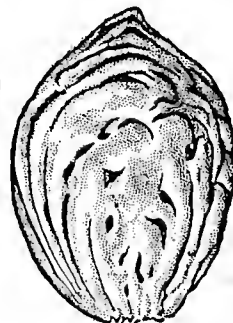
THE
North-Eastern Forestry Co.

CESHIRE
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."



PEACH SEED



1920 Crop

California Grown Seed

Selected from the Best Orchards

Properly gathered and cured

Sacked ready for shipment

We will quote F. O. B. Kansas City, Mo.

Write us at once for prices either for small or large quantities.

California Nursery Company



NILES,
Alameda County,
California



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PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

JAC SMITS & CO.

Naarden, - Holland

Growers of stock for Apples and Pear; Mazzard Cherry; Prunus Mahaleb, Myrobolana and communis; Doucin; Paradise and Quince.

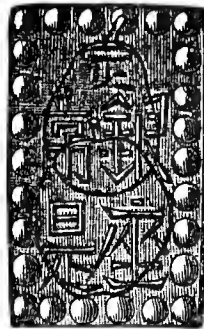
Rosa canina, rubiginosa, rugosa and Manetti also stems of Rugosa for topgrafting.

The catalogue contains also a general line of Nursery-stock, specially young plants to line out which can be imported by special permit.

Catalogue free on demand.

Heikes—Huntsville—Trees

We offer the following for Fall 1920 and Spring 1921:



**FRUIT TREES
SHADES
ROSES
EVERGREENS
SHRUBS
HEDGE PLANTS
ABELIA GRANDIFLORA**

AND OTHER ORNAMENTALS

All of our own growing. Prices on application.

Address

**HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.**

A Complete Line

We still have unsold a good assortment of Fruit Trees, Small Fruits and Hybrid Tea Roses.

**Large Supply of
Ornamental Trees, Shrubs,
Perennials,
Vines, Evergreens.**

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

A Complete Variety of Nursery Stock



60000

Norway and American Elm
fine stock in car load lots or less



C. M. Hobbs & Son
BRIDGEPORT - - Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII

HATBORO, PENNA. AUGUST 1920

No. 8

Advantages of the Trailer in the Nursery Trade

Doubles or Triples Load Capacity at Small Additional Expense—Eliminates Loss of Time in Waiting—Is Efficient and Economical

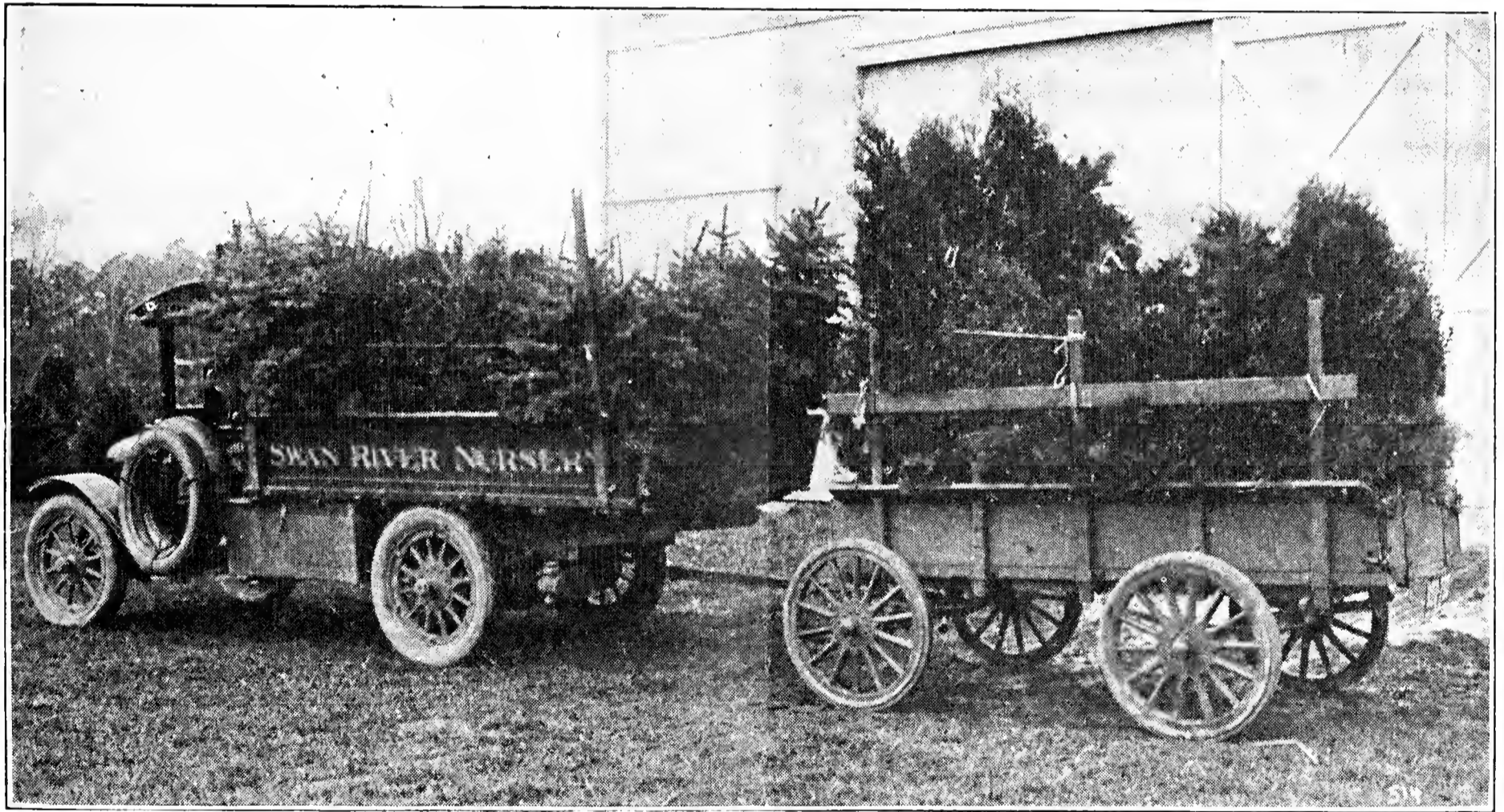
In the nursery business, as in other lines, economy of transportation is a highly important factor for success, but frequently the ability to transport nursery products quickly and without delay is even more important. For these reasons, progressive nurserymen are using trailers in connection with automobiles, tractors or motor trucks.

The Swan River Nursery, of Patchogue, Long Island, N. Y., has for several years been using a trailer with entire satisfaction in conjunction with a one-ton truck for

planting season, covering the period of January, February and March, this company transported, with the help of a trailer, more than 4,000 trees, having an aggregate weight of 40,000 pounds.

Special Advantages to Nurserymen

Since weather conditions play an important part in the nursery business, as they do in all agricultural and horticultural pursuits, the matter of a few hours may often make a great difference. Every nurseryman has had the unpleasant experience of being compelled to stop plant-



Showing the Trailer in use

hauling nursery stock. In many instances, if the trailer had not been available, it would have been necessary for the truck to make a special trip, thus considerably increasing the transportation cost. That the saving effected totaled a large sum may be realized from the fact that the trailer has been used principally for long hauls from 40 to 100 miles.

A Mississippi nursery company operating a branch at Memphis, Tenn., finds trailers highly efficient and economical for hauling pecan trees. During the delivery and

ing or other operations before they were completed, either because of a sudden spell of cold weather or a long rainy period. Sometimes the expediting of the job by the saving of a few hours' time would enable him to finish before unfavorable weather sets in. These few precious hours may often be gained by the use of a trailer, which not only enables a double load to be carried, but permits the truck to be in use while the trailer is being loaded or unloaded.

Then again, trees, shrubs, or other nursery stock may

be loaded on the truck while the trailer carries fertilizer, manure, cement, soil, lumber or anything else. Where a planting job is to be done at a distant place, not easily accessible by railroad, the truck and trailer may be employed for transporting not only the stock and other material but also the men who are to do the work, thus gaining several hours' time which would otherwise be lost in waiting for a railroad train. Even on the nurseryman's own grounds the trailer may be used efficiently in transferring stock that is to be set out or taken up, since the trailer may be detached and loaded or unloaded while the truck is making another trip. Similarly, large shipments may be hauled from freight cars in a short time.

Moving Large Trees

It is possible, by means of a trailer, to haul large trees where it would be out of the question to move them by truck alone, for it is impracticable to transport satisfactorily by truck any object longer than 25 feet.

Almost every nurseryman is called upon at times to move such trees, as when some customer wishes a favorite specimen transplanted or desires full-grown trees set out to produce an immediate effect. The difficulties involved in doing such work by teams and wagons or motor trucks are many, and the expense is great, whereas, by the aid of properly equipped trailers, the operation may be carried out with facility and at low cost.

There is no doubt of the ability of the trailer to handle large and cumbersome objects far more unwieldy and heavy than anything the nurseryman is called upon to transport. It is a common practice for steel beams or girders from forty to sixty feet long, and weighing many tons, to be transported by means of trailers. During the World War trailers were employed by the Government for hauling spruce logs cut in the Oregon and Washington forests for ship building and other purposes. A trailer and truck can easily handle three or four spruce logs totaling 6,000 feet of lumber and weighing 24 tons.

Another remarkable example was the moving, last year, of a still weighing 30,000 pounds from Casper to Salt Creek, Wyoming, a distance of 50 miles. A five-ton truck and two 2¾-ton trailers were used, besides a 2-ton truck as a "pusher," on steep grades. Part of the trip was over virgin soil, where there were no roads. The transfer required 19½ hours. In striking contrast to this, a still of the same size had, a short time before, been taken over the same ground by means of teams, 36 horses and 10 men being required, and the job consuming 30 days.

Low Cost and Operating Expense

The low cost of the trailer, as compared with that of a motor truck, is a point of special interest. Since the cost of a four-wheel trailer is only one-fourth to one-third that of a truck of equal capacity, it follows that depreciation and interest on the investment are less in the case of the former. The price of a one-ton trailer ranges from about \$300 to \$600; that of a two-ton, \$500 to \$900; three-ton \$850 to \$1500; five-ton, from \$1200 to \$1700.

It is remarkable that, although the use of a trailer with a truck or automobile greatly increases the load capacity, the additional operating expense for running the truck is usually not more than 25 per cent, of which from 15 to 20 per cent represents the cost of additional gasoline

consumed by the truck. A second driver is, of course, not required.

The upkeep of the trailer is also considerably less than that of a truck, as there is no complicated mechanism to get out of order. Expensive storage facilities are unnecessary as the trailer may be kept under an open shed or even left outdoors if protected with a cover. The charge due to tire wear is low; in fact, the total expense for repairs is usually remarkably small. A striking instance of this is embodied in the experience of a firm using a fleet of ten trailers in a line of business in which they are subjected to hard and rough daily use. For a period covering thirteen and a half months the total expense for repairs averaged only \$16.27 per trailer, or about \$1.20 each per month.

In many States the law does not require the registration of trailers and even where such registration is required, the fee is usually nominal. Insurance and tax charges are also correspondingly low on trailers.

An Example of Trailer Economy

A concrete example will bring out the saving effected by the use of a trailer. Suppose a nurseryman had a one-ton truck, and that his occasional maximum load requirements increased to two tons. He could obtain this increased load capacity either by adding a one-ton trailer to his equipment or by purchasing another one-ton truck.

In the first case his operating expense would increase about 25 per cent, at the most; in the second, it would jump 100 per cent. Moreover, since the second truck would cost from two to three times what a trailer of the same load capacity would cost, he would lose much more on his investment with the former standing idle than if he had a trailer which was not being used. On the other hand, if he exchanges his one-ton truck for a two-ton truck, the cost per ton-mile will mount rapidly when the truck is not used to capacity, whereas he might use his one-ton truck to capacity most of the time and suffer comparatively little loss on account of the trailer standing idle part of the time. In other words, if he uses a one-ton truck, with a trailer, he will have the advantages of the two-ton truck with little more operating expense than the one-tonner would entail, and considerably less than it would cost to operate the two-ton truck. A one-ton truck, with semi-trailer, would give him the advantages of a three-ton truck at greatly reduced cost.

Types of Trailers in Use

The principle of the trailer has, of course, been made use of since the earliest times, being embodied in the horse-drawn wagon, for it was found that a horse could haul much more than he could carry. However, it is hardly more than ten years since specially designed trailers began to be built. It was early realized that the ordinary wagon would not stand the severe strain of constant use over rough roads at high speed behind an automobile or motor truck. The unyielding iron-tired wheels and the absence of adequate devices to overcome the jarring resulting from rattling and bumping over roads, soon causes the ordinary wagon to rack itself to pieces. The most approved types of trailers are therefore made with anti-friction bearings in the wheels and embody the best features of automobile and motor truck construction, besides such other features as are necessary to meet special conditions.

There are three types of trailers in common use; the two-wheeler, the semi-trailer, and the four-wheel trailer, with various modifications of each to adapt them to the special work of particular industries.

The two-wheel trailer is generally light, being intended to be used with passenger cars, and having a capacity of 500 to 2000 pounds. It is much used by farmers for miscellaneous hauling.

Semi-trailers run in size from one to fifteen tons capacity. The smaller sizes, from one to two tons capacity, are meant to be operated with automobiles while the larger sizes are constructed for use with trucks or tractors. When a semi-trailer is used with a truck, the body of the latter is removed and the front end of the semi-trailer is supported on the rear platform of the truck, the semi-supported on the rear platform of the truck, the semi-trailer and the truck being joined by a "fifth wheel," similar to the "fifth wheel" of an ordinary wagon. This construction enables the trailer to follow the track of the truck, and to turn corners with facility. The semi-trailer, of course, has only one axle and two wheels.

Four-wheel trailers are commonly built on the principle of the motor truck, but since the weight of the engine, etc., is dispensed with, they are much lighter. The more common type has steering knuckle axles with the tie-bar linked to the drawbar, enabling the front wheels to steer as a unit with the drawbar. This construction allows the trailer to follow in the tracks of the motor truck or automobile and to make turns without "cutting corners." Those up to one-ton capacity are built so that they may be used with automobiles, but the larger sizes, which go up to ten tons or more, are intended for combination with motor trucks. The larger sizes are also manufactured in reversible styles. These are useful in congested places or where it is desired to avoid turning or to use several trailers in a train.

Load Capacity Doubled

It has been found in practice that by using a four-wheel trailer with a truck, where the road surfaces are hard and fairly level, the load capacity of the combination is twice that of the truck alone. In other words, the truck, besides carrying its own full load, is able to haul a trailer with an equal load. The reason for this is that the engine of the truck is designed and built to be powerful enough to enable the truck to haul its full load up steep grades and through heavy mud. It is seldom called upon to meet these unusual conditions, however, so that ordinarily only a small part of its power is utilized, leaving a considerable portion available for hauling a trailer. The latter is naturally much lighter than a truck, as it has no engine, transmission and other heavy driving mechanism, which makes it possible for a truck and trailer to haul a load of shrubs, trees or flowers, at a lower cost per ton-mile than could two trucks of the same load capacity as the truck and trailer combination.

When a semi-trailer is used with a truck, the total load capacity of the unit is about three times that of the truck alone. An important advantage of the semi-trailer is that the weight is distributed between the two, each bearing its share, so that there is no danger of overloading the truck.

Trailers are now produced in so many styles and types that there is scarcely an industry that cannot find use for

them in solving its transportation problems and materially reducing the cost of transporting goods. The nursery trade is beginning to recognize their value and just as the nurseryman has substituted for the horse-drawn vehicle the far more efficient and economical motor truck or automobile, so in time he will consider his motor equipment incomplete without its proper complement of trailers.

SUCCESSFUL ADVERTISING

The Elm City Nursery Co., New Haven, Conn., reports so large a demand for their Box-Barberry that everything is cleaned up in saleable sizes. There is no better proof of the value of consistent and persistent advertising.

The Box-Barberry is a plant that might have remained unknown to the general public until a shrewd far-seeing nurseryman saw its possibilities, took it in and propagated and made its value known to the public. As a plant it does not differ greatly from the ordinary *Berberis Thunbergii*. In fact to the casual observer, it would pass unnoticed as being the common barberry. Yet it has qualities that make it extremely valuable for a definite purpose: namely, to be used as edging for formal gardens and positions where a neat low plant is desired and to take the place of the box, which has been used for generations for that purpose, but which in many localities proves so uncertain during severe winters.

The Elm City Nursery organized and acted upon their conviction, propagated it and exploited it and certainly deserve the success it has made. There are hosts of plants equally good that are still unknown to the public, due to their not being taken hold of by some live firm and demonstrated to the public. We often think because we know the qualities of a plant that everyone else does and we wait for the demand to encourage us to work up a large stock. Those who wait will wait forever or else get the tail end of the demand created by some one else. The first essential is to decide on a really worthy plant, figure out the possibilities in demand for it, that can be created. It is useless to expect a very great sale of a plant that no one would wish to plant more than a single specimen, but take a plant that could be used in quantities and that is a good thing, the demand is sure to be large when it is well known.

There are many varieties of roses that have qualities that would guarantee very large use if properly exploited and the same may be said of numerous other plants that are listed in many catalogues, yet it is for the nurseryman himself to decide and then go ahead with all the strength of his conviction, which will invariably meet with success.

Reports received by the Missouri State Fruit Experiment Station indicate that the commercial apple crop of 1920 in the United States will probably equal or exceed last year's crop, which was estimated at 26,174,000 barrels. Report covers conditions to June 15.

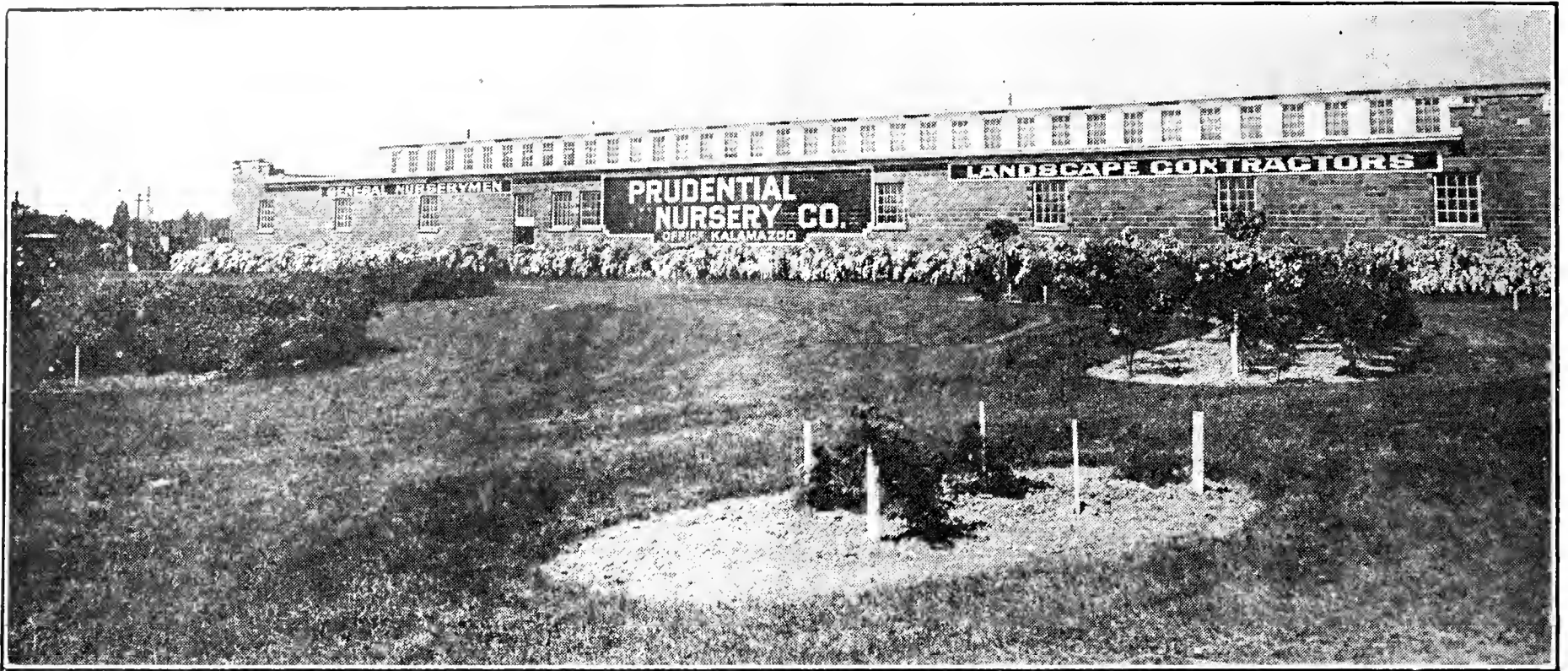
The Prudential Nursery Company

The Prudential Nursery Co., does a general nursery business, growing a full line but specializing in ornamentals.

Koster's Blue Spruce and other conifers, Norway, Schwedleri and Silver Maples and flowering shrubs being among the things of which they grow a big stock. Selling is done through agents.

The Packing House shown in the cut below is built of hollow tile, containing five air spaces and has a double roof of matched flooring with two air spaces, the whole being covered with asbestos roofing.

A private switch from the G. R. & I. Railroad permits of loading freight directly into the cars.



Packing House and Show Grounds of the Prudential Nursery Co., Vicksburg, Michigan, situated about 12 miles south of Kalamazoo, where the general offices are located

VEGETABLE GROWERS' ASSOCIATION OF AMERICA TWELFTH ANNUAL CONVENTION

The Vegetable Growers' Association of America will hold its twelfth annual convention at Columbus, Ohio, August 25th to 28th inclusive.

This organization is made up of some of the most progressive gardeners in the United States and Canada. A good program has been arranged which will include side trips and entertainment. There will also be a trade exhibit held in connection with the meeting. Both will be held in the Horticultural Building of the Ohio State University; headquarters will be at the Southern Hotel.

Any gardener who can possibly get away from home for this meeting will find it well worth his while. It combines an opportunity to have a brief vacation with a period of contact with co-workers and a chance to get posted on the latest developments along various lines affecting the industry.

Anyone wishing to reserve rooms in a private home should write Professor L. M. Montgomery, Ohio State University, Columbus, Ohio, and those wishing to receive a copy of the program should write Samuel W. Severance, Secretary, Louisville, Kentucky, care of the Market Growers' Journal. Anyone interested in making a trade exhibit should write C. W. Waid, East Lansing, Michigan.

THE JAPANESE BEETLE

The Japanese beetle, a pest which has done much damage in New Jersey, has crossed the Delaware and invaded Pennsylvania.

This beetle attacks fruit trees, vegetables and vines. Report of the invasion is made by the bureau of plant industry of the Pennsylvania Department of Agriculture.

State and Federal zoology experts will work along the Delaware in the vicinity of Philadelphia in an effort to prevent the spread of the pest, which was discovered at Torresdale.

J. Hale Harrison, of Harrison's Nurseries, Berlin, Md., writes, "July 16th, we packed a carload of Red Bird Cling Peaches. This car arrived at the market on the morning of July 19th in excellent condition and brought a good price.

We are also handling several carloads a day of Irish cobbler potatoes.

The price on potatoes last week was very high but is declining this week.

FRENCH FRUIT STOCKS

Judging from the following extract from a letter from the Stark Bros. Nurseries and Orchards Co., Louisiana, Mo., to a New York importing firm the fruit stock situation is further complicated by the action of the French Syndicate controlling the export prices.

Between the action of our own government in establishing Quarantine 37 and the back action of the French growers in putting up the prices, the American nurserymen and fruit-growers will feel very much like seeking other outlets for their energy and capital.

"We feel that the French Syndicate prices are most unreasonable and we absolutely refuse to buy at those prices. We hope all American nurserymen will do likewise.

"Of course, we realize that last year seedlings of all kinds were scarce—almost no crop on account of the war and bad season; but this year's crop is a good one. We have confidential information from reliable French sources that there is a big crop, practically all lines, except plum and there are more plum than there were last year. There was excuse for paying \$39.00 last year, but there isn't any excuse for a price of \$250.00 this year. This same plum which they are asking \$250.00 for, used to sell for \$7.00—only one-thirty-fifth as much.

"On pear for example, we have just received a letter from France saying that pear can be bought in France for 220 to 225 francs per thousand, at the present rate of foreign exchange, about \$19.00 per thousand, whereas the French quote a price of \$70.00 a thousand. Quince for which the French are asking \$50.00, can be bought in France for 180 to 200 francs, or about \$17.00. This shows what the French Syndicate is doing to the American Nurserymen.

"As to the Louis Leroy prices, young Lavavassour who now owns the Louis Leroy business, is Secretary of the French Syndicate and evidently his efforts to hold the prices up at a prohibitive figure, have prevailed in the Syndicate of which he is Secretary. Perhaps this is the French Nurserymen's idea of recompense for the assistance rendered by America during the war.

"If the Frenchmen insist on sticking to their exorbitant prices, we, and most other American Nurserymen, will certainly feel like letting the French Syndicate keep their high-priced fruit stocks.

"Regretting our inability to place orders with you for French stock on account of prices, etc., we are

Yours very truly,

LLOYD C. STARK, *Vice-President.*"

On June 10th, Mr. Howard Neff Scarf, son of Mr. and Mrs. W. N. Scarf, New Carlisle, Ohio, was married to Miss Dorothy Catherine Zweiker, of Toledo, Ohio. The bride and groom left for a two weeks honeymoon trip to Loon Lake in the Adirondaeks. Many friends and acquaintances in the nursery business will join with the National Nurseryman in wishing long life and happiness to the young couple.

SUMMER OUTING OF THE PENNSYLVANIA NURSERYMEN

The Pennsylvania Nurserymen's Association held its summer meeting July 22nd.

The members met at the nurseries of A. E. Wohlert, Narberth, Pa., which are famous for their fine collection of Japanese plants. After looking over these with envious eyes especially on a fine stock of *Azalea Hano de Giri* and some of the newer kinds, Japanese cherries, etc., the party proceeded to the estate of Mr. Alba Johnson, one of the show places of the Main Line, from thence to that of J. R. McFadden Estate. After looking over the collections of plants on these two fine places, they proceeded to Valley Forge. After dinner at the Hotel, a meeting was held in the open, near the observatory. About forty members were present, President Robert Pyle, in the chair. A committee was appointed to see if something could not be done to protect the nurserymen. Unlike the builder, he cannot claim a statutory lien for labor or material supplied under the constitution of the State of Pennsylvania.

It was also proposed the nurserymen in the vicinity of Philadelphia and New York combine to do some co-operative advertising to encourage fall planting.

A CORRECTION

We wish to confess an error published in our last issue.

Among the officers elected by the National Association of Nurserymen to serve for the ensuing year as Executive committeemen.

It should have read:—

E. W. Chattin, Winchester Nursery Co., Winchester, Tenn., instead of

E. M. Chattin, Knoxville, Tenn., as printed.

KEYSTONE STATE NURSERIES

The Keystone State Nurseries, Beaver Falls, Pa., formerly of 419 Jackson Bldg., Pittsburgh, Pa., have purchased near Beaver Falls, Pa., the large estate of Dr. James P. Kerr, president of Council, Pittsburgh, consisting of 175 acres with two complete sets of modern buildings. We have been growing stock on this estate for over a year and have found it exceedingly well adapted for nursery purposes. They are just a short distance from the railroad and have splendid shipping facilities on the main line of the Penn. System, and have also purchased from Mr. G. H. Poe of Kenton, Ohio, his entire nursery interests including his "mammoth grape" which he has tested out in twenty-eight states.

The D. Hill Nursery Company, Dundee, Ill., is bringing its mailing list up to date.

When a business house spends money to obtain information about its customers it points to progress along modern lines.

Classified indexes are costly things to compile and maintain up to date, but necessary to large success.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year In Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., August 1920



THE NURSERY BUSINESS

We are getting the sore spots exposed. THE RURAL NEW YORKER, THE COUNTRY GENTLEMAN, and perhaps other papers are doing their best to expose and acquaint the public that all those engaged in the nursery business are not honest men. The government has published far and wide the disasters brought on the country by the introduction of disease and pests on imported nursery stock and the necessity of stringent quarantines.

The layman will begin to think we are a bad, dangerous lot and a Volstead act is due to suppress the business or give it over entirely to governmental supervision.

Foreigners are apt to judge us by what they read in our newspapers. They do not always remember that it is the unusual, the sensational, the bizarre and the exception that forms the bulk of the reading matter, add to this the ability of the irrepressible American reporter to serve it up in his characteristic style what he considers news and you have a view of the great majority of the American people exactly opposite to a sober, industrious, moral, God-fearing people.

The real truth is these qualities are so common they are not worth mentioning.

Is it not somewhat the same with our business?

The muck rakers delight in the unusual and sensational and always find the doings of a crook make more interesting reading than honest achievement.

Away back in 1909 before there were so many laws, rules and regulations to keep the crooked nurserymen

in check, when pests and diseases were being imported without so many restrictions, the country was one grand harvest field for the tree agent without a conscience.

The nurserymen of the country were directly or indirectly responsible for an annual crop of

| | |
|-------------------|---------------|
| Apples, valued at | \$83,231,000. |
| Pears | 7,911,000. |
| Plums | 10,299,000. |
| Cherries | 7,231,000. |
| Small Fruits | 29,974,000. |
| Grapes | 22,028,000. |
| Nuts | 4,448,000. |

or a total value of all fruits and nuts in the United States of \$222,024,000.

Nursery products \$21,051,000.

Flowers and plants \$334,872,000.

This is merely a census valuation in dollars, of a decade ago. We shall have to wait for the returns of the recent census to find out how much it was in 1919.

Even when the figures are available they will say nothing about the value in health and happiness derived from our gardens, parks, and those riches derived from the nurseryman's products that are beyond computation.

That we are being muck raked and investigated and quarantined is truly a healthy sign, anything is better than being ignored but we ourselves must not be stampeded by false conclusions, and what is more important we must not countenance any practice unworthy of such a calling.

We have the finest business in the world.

The health and happiness of the people depend upon us.

It is the least parasitic of any occupation.

It does not slaughter, consume or destroy natural resources, but builds them up.

It is the one occupation along with farming where man, in his finite way begins where God left off.

One of the most promising signs of progress in the nursery business is the fact that the NATIONAL ASSOCIATION appointed a committee on College Training, whose report read at the Convention we published in our last issue.

When the time comes that chairs of Horticulture are established in the universities it will not be necessary to employ professors of entomology to regulate the growing and handling of plants, we shall have men with a broader knowledge and more in sympathy with nursery interests sitting in the high places.

There is however, a horticultural education, the schools and colleges are not equipped or fitted to give and that is the training and experience that will take the place of the indentured apprentice.

There are many who will not agree with this statement, claiming the experiment stations and horticultural schools give practical training as well as book knowledge.

There is no doubt they do splendid work and turn out men who are a credit to them but they are invariably what Kipling designates as Sons of Mary. What the nursery business needs is Sons of Martha, Skilled

Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

AUGUST, 1920.

A Few Good Items, Choice Nursery Grown at our Nursery in Western Springs, Illinois. We should be pleased to show this stock to anyone interested.

| TREES | | Height | Caliper |
|-------|---|--------|---------|
| | | Feet | Inches |
| 1,000 | American Elms | 10-12 | 2-2½ |
| 100 | " | 20 | 6-10 |
| 500 | Scotch | 10 | 2½-2 |
| 500 | " | 10-12 | 2-2½ |
| 300 | " | 10-12 | 2½-3 |
| 300 | " | 12-14 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 4-5 |

These Elms are extra fine stock, straight Stems, Bushy, Symmetrical heads. The best trees for city, estate and avenue planting.

SHRUBS

| | | |
|-------|----------------------------------|------|
| 250 | Berberis Ilicifolia, Specimens | 2½-3 |
| 200 | Crap Bechtels Dbl. fl. Specimens | 7-8 |
| 1,000 | Cydonia Japonica, Extra Bushy | 2½-3 |
| 250 | Elegans Angustifolia, Specimens | 7-8 |
| 500 | Rhamnus Catharticus | 6-7 |
| 3,000 | " | 7-8 |
| 3,000 | Salix Discolor (Pussy Willow) | 6-7 |

VINES

| | |
|--------|---------------------------------------|
| 20,000 | Clematis Paniculata 2 in. Pot Grown |
| 1,000 | Wistaria Magnifica 4 yr. extra strong |

We also have a fine block of Koster's Blue Spruce from 6-12 ft., every plant a specimen

VAUGHAN'S SEED STORE

New York - Chicago

Nursery: Western Springs, Illinois

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania



Box-Barberry Bordered Garden

MAKE A LEADER OF
BOX-BARBERRY
in your 1920 Catalogue

Many of the leading firms already have booked with us for their stock.

Write for terms.

THE ELM CITY NURSERY CO.

WOODMONT NURSERIES, INC.

New Haven

Conn.

workers and experienced growers rather than educated workers.

The boy who goes through the grammar school and then to college reaches the age of 18 to 20 years before beginning real work, misses something the indentured apprentice gets, which cannot be gained in any other way.

The ideal plan would be for the boy upon leaving the grammar school to work in a nursery for three or four years and then take a course at a seat of botanical or horticultural learning.

We may camouflage it as we will, he who would be a successful grower must work in the soil and with the soil.

If nurserymen want skilled workers they must train them themselves. The schools and colleges train the mind in an academic way rather than along business lines. What is needed is a body trained to work with a mind educated enough to know why it does things.

The indentured apprentice is too foreign to American ideas of freedom, but similar results might be obtained by putting a premium on nursery experience.

Possibly the National Association can work out some scheme to encourage nursery training as well as college training.

MICHAEL R. CASHMAN

The success of any organization depends largely on the personnel of its officers and the kind of men it draws to its employ. The National Association has been very fortunate in selecting capable business men to manage its affairs. Men who have given generously of their brains,



Michael R. Cashman, Owatonna, Minn.
Newly elected Vice President of the American Association

time and experience. The selection of Mr. Cashman for vice-president promises a continuation of the aggressive policy and the efficient carrying out of the plans of this organization. Mr. Cashman goes to the office of the vice chairmanship with an established reputation as an organizer and an efficient executive. He has made an enviable record in building up the business of the Clinton Falls Nursery Co., Owatonna, Minn., and there is not the slightest doubt that he will use his characteristic push and good judgment in carrying out the policies of the National Association.

AN ATTRACTIVE TREE

The most attractive tree in the nursery at this writing, is a sour-wood or *Oxydendrum arboreum*. It is now covered with its beautiful flowers. This interesting tree belongs to the Heath family and therefore is partial to acid soils, although it does not seem to be so impatient of lime-stone soils as are plants of the same family, such as Azaleas, Rhododendrons, Heaths, etc., but like them, it cannot be said to be a vigorous grower. Like most other things that are good, it is not particularly easy to grow and propagate and the nurseryman has to carry them in the nursery very much longer than the average tree or shrub before they are suitable for market. It is another of those things which finds ready purchase among those who know the plant, but by those who select their plants in the nursery during the dormant season, it is very likely to be overlooked, but when in leaf and flower, it is one of the richest things possible to imagine. The leaves are oblong, green and very lustrous. The white flowers are huge and flowers are erect on the branches of a terminal having a slightly drooping habit, the clusters being seven or eight inches long. They retain their beauty for a very long time. The fall coloring of this tree is unexcelled by any being a brilliant scarlet. Although a slow grower, it is free from the attack of insects and is not subject to disease. It is a splendid subject to plant along with Rhododendrons, and calneas, where a larger growing subject is wanted to give height to the plant.

SOME OF THE EFFECTS OF THE WAR UPON FERTILIZERS.

L. L. Van Slyke, New York Experimental Station, Geneva, N. Y.

SUMMARY AND EXTRACT FROM BULLETIN No. 471.

A study of data regarding commercial fertilizers, collected during the years 1914 to 1919 inclusive, reveal facts showing some of the effects of the war upon commercial fertilizers.

1. Effect upon kinds. The number of complete fertilizers decreased each year, going from 614 in 1914 to 171 in 1919. The mixtures of phosphoric acid and potash practically disappeared by 1919, while mixtures of nitrogen and phosphoric acid appeared in relatively large numbers in 1916 and the following years. Acid phosphate brands increased while nitrate of soda decreased, and potash salts entirely disappeared. Bone, blood and tankage decreased.

2. Effect upon composition. In complete fertilizers

- - - The - - -
American Association of Nurserymen

ORGANIZED 1875

Office: Princeton, New Jersey

A Co-operative Organization of Four Hundred Nursery firms associated for mutual benefit.

Our aims and purposes:

To improve conditions in the Trade wherever improvement is needed;

To make business between Members profitable and pleasant through observance of the ethics of fair competition;

To bring the Nurserymen and the Planters into closer relations and secure a better understanding of the problems of each;

To disseminate accurate information about Trees and Plants and to encourage and assist in their more general and more profitable use;

To Advertise the Association in connection with our Publicity Campaign, so that the buying public can know what the Association is and what it stands for; to recommend its Members to planters as logical and dependable sources of supply; to get orders for our Members and to see that they are filled according to the Association's stated policy of fair-dealing.

To assist Members to avoid bad debts with reliable Credit Information;

To Collect Accounts for Members;

To Collect Freight and Express Overcharges and to advise Members regarding any Transportation problem, through Mr. Charles Sizemore, Traffic Manager;

To adjust all disputed accounts between Members through our Arbitration Committee;

To see that the rights and interests of our Members are carefully watched and protected by our Legislative Committee.

To secure a more accurate and complete Code of Standardized Plant Names through the work of our Committee on Nomenclature;

To do all and anything that will add to the prestige and standing of the American Association of Nurserymen and make the business of its members more profitable and, as representative of the Nursery industry, to advance the trade in public esteem.

All Nurserymen who approve of our aims and purposes are invited to join with us. Any further information wanted will be gladly furnished by the Secretary.

The ASSOCIATION BULLETIN will resume regular publication and a copy will be mailed on request.

EXECUTIVE COMMITTEE:

Lloyd C. Stark, President,
 Stark Bros. Nurseries & Orchards Co.,
 Louisiana, Missouri.

M. R. Cashman, Vice-President,
 Clinton Falls Nursery Co.,
 Owatonna, Minnesota.

E. W. Chattin,
 Southern Nursery Company,
 Winchester, Tennessee.

J. B. Pilkington,
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J. W. Hill, Treasurer,
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Charles Sizemore, Traffic Manager,
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E. S. Welch,
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 C. R. Burr & Company,
 Manchester, Connecticut.

C. C. Mayhew,
 Texas Nursery Company,
 Sherman, Texas.

J. Edward Moon,
 The Wm. H. Moon Company,
 Morrisville, Pennsylvania.

Address:

**JOHN WATSON, Secretary,
 PRINCETON, New Jersey.**

the average percentage of nitrogen decreased appreciably after 1915, while that of potash decreased greatly after 1914, and still more after 1916. The average percentage of available phosphoric acid increased considerably after 1914, but with some variation from year to year. The total percentage of available plant-food decreased continually after 1914.

3. Effect upon cost. The average retail cost of one pound of plant-food increased year by year continuously after 1914 in the case of complete fertilizers, going from 8.8 cents per pound in 1914 to 33.1 cents in 1919, an increase of nearly four fold. In the case of acid phosphate, nitrate of soda, bone, dried animal manures, etc., there was an increase in the retail cost of plant-food, but not relatively as great as in the case of complete mixed fertilizers.

RETAIL PRICES OF COMPLETE FERTILIZERS

In Table IV we give for each year the average selling price of one ton of complete fertilizer, the number of pounds of plant food per ton, the average cost of one pound of plant-food, and the relative cost based on the cost in 1914.

TABLE IV.—COST OF PLANT-FOOD IN FERTILIZERS

| Year | Average retail price per ton of fertilizer. | Amounts of plant-food in one ton. | Average retail price of one lb. of plant-food. | Relative cost of one pound of plant-food. |
|------|---|-----------------------------------|--|---|
| | | Pounds | Cents | |
| 1914 | \$28.53 | 324.8 | 8.8 | 100 |
| 1915 | 30.87 | 278.6 | 11.1 | 126 |
| 1916 | 35.00 | 254.8 | 13.7 | 155 |
| 1917 | 34.40 | 252.4 | 13.6 | 154 |
| 1918 | 47.70 | 241.8 | 19.7 | 224 |
| 1919 | 80.22 | 244.0 | 33.1 | 376 |

An examination of the figures in Table IV shows: (1) That the selling-price of fertilizers increased gradually thru 1917, then in 1918 there was a marked advance, and then in 1919 a great upward leap; (2) That, while there was increase in the ton price, there was at the same time a marked decrease in the amount of plant-food per ton, and therefore the only proper basis of yearly comparison is the price of plant-food per pound as shown in the fourth column of Table IV, in which we see that the cost of one pound of plant-food increased from 8.8 cents in 1914 to 33.1 cents in 1919; (3) That, taking the cost of one pound of plant-food in 1914 as 100, the relative increase year by year is shown in the last column of Table IV. The results show that in 1915 there was an advance of 25 per cent; in 1916 and 1917, about 55 per cent; in 1918, 225 per cent, and in 1919, 376 per cent. Therefore, during the year of 1919 the average cost of plant-food in complete fertilizers was nearly four times what it was in 1914.

A SPLENDID LAWN TREE

There is no tree more deserving of attention by nurserymen than the Japanese Varnish tree, *Koelreuteria paniculata*. It is not a large growing tree, or suitable for street planting, or even to be considered as a shade tree, although it does attain a height of thirty-five to

forty feet, possibly larger. It is, however, more customary to see it about the size of a full grown flowering dog-wood. Its peculiar value and attractiveness is due to the erect clusters of bright yellow flowers which are borne profusely in the early part of July, at a time when all other trees are somewhat monotonous as regards color. The flowers are followed by conspicuous bladder like fruits. It is one of the most attractive lawn trees that can be imagined. It originally came from China where it is largely cultivated in the gardens of Peking and is common to Western China in the hot valleys. This should make it especially suitable for positions that are not uncommon on many lawns and where other trees do not thrive on account of the poor soil and dry conditions. It will withstand well both heat and drought and is apparently quite hardy. The tree is not an easy one to sell to a customer coming to the nursery to select trees before they are in leaf and flower. A straight one is abnormal, as they are usually very crooked and somewhat unattractive during the winter, but the summer beauty more than makes up for this.

It should be a splendid plant for the nurseryman to take hold of, work up and get stock and exploit it, as it is not at all common and may be said to be almost unknown to the average planter.

CONTROL OF DANDELIONS IN LAWNS

Experiments made at the Geneva Experiment Station, New York, during the past eight years show that dandelions may be eradicated from lawns by proper spraying with a solution of iron sulfate. The treatment is comparatively inexpensive, and does not materially injure the grass. Usually, four or five applications are required, using one and one-half pounds of iron sulfate to each gallon of water. The first spraying should be made in May just before the first blooming period of the dandelions. One or two others should follow at intervals of three or four weeks; and, finally, one or two more in late summer or fall. During the hot, dry weather of midsummer the spraying should be discontinued because of the danger of injury to the grass. A conspicuous blackening of the lawn which follows each spraying soon disappears if the grass is growing vigorously. Of the other common lawn weeds some are killed while others are but slightly injured by spraying. Unfortunately, white clover, also, is killed.

Tests of certain methods of supplementary treatment, such as reseeded, liming of the soil, and the use of commercial fertilizers and stable manure, were made in conjunction with the spraying experiments. The results obtained warrant the strong recommendation that spraying be supplemented by the use of fertilizers and the application of grass seed in the spring and fall of each year. With proper management a lawn may be kept practically free from dandelions by spraying every third year.

The cutting-out method of fighting dandelions is laborious and ineffective unless the greater part of the root is removed. Shallow cutting, unless done frequently, is worse than none at all, because each cut-off root promptly sends up one or more new plants.

A full account of these experiments has been published in Bulletin No. 466.

**J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland**

(Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.

FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.
ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,

116 Broad Street - New York City

"A good picture is worth a million words."

25000 true-to-type negatives to choose from, with a special landscape service.

THE NATHAN R. GRAVES CO.

Horticultural Photographers

84 Exchange Street

ROCHESTER - - NEW YORK

**THE
Westminster Nursery**

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

Offers for Fall 1920

California Privets, Asparagus, Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars, Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks, Horse Chestnuts, Butter Nuts, Norway Maples, in grades from 6 to 16 feet.

Cumberland and St. Regis Raspberry, Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses.

Can supply in quantity. Write for prices.

Soft Yellow Pine Box Lumber

Dry, bright stock 7-16x6 inches and wider, all 10 ft. lengths tied in bundles of 10 pieces each. Other lengths if wanted. Box framing random lengths 1⁵/₈x1³/₄ inches surfaced.

Write or wire us for delivered prices.

**The Dimension Company,
Lockhart, Ala.**

ENGLISH NURSERY STOCK

Manetti Rose Stocks, a good quantity, 1 year splendidly rooted from sandy loam, none better imported. Also

Seedling Briar.

Polyantha Stocks.

Fruit Tree Stocks for budding and grafting.

New and Rare Chinese Plants.

Other General Nursery Stock grown in large quantities.

Glad to answer your enquiries—Write for Catalogues.

WALTER C. SLOCOCK,

GOLDSWORTH NURSERIES,

Woking, Surrey

England

310 Acres devoted to business

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Offer for Fall 1920

Cherry, 2 Year XX ⁷/₈ up 5 to 7 feet

Cherry, 2 Year ¹¹/₁₆ up 4 to 6 feet

Cherry, 2 Year ⁵/₈ to ¹¹/₁₆, 4 to 5 feet

Cherry, One Year, Sweets and Sours, all grades

Peach, One Year all leading Varieties, strong on Elberta

Apple, 2 Year, leading varieties

Standard Pear, One Year, 4 to 6 feet and 3 to 4 feet

Japan Plum on Peach, One Year

Hansen Hybrid Plum, One Year on Peach roots

Hardy Northern Pecans, Grafted Varieties

Please submit List of wants for prices

We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

709-717 Sixth Avenue - - New York, N. Y.

THE CLIMBING POLYGONUM

Why is the climbing Polygonum so little known? A vine that is extremely rapid growing, attractive in foliage, bears long feathery panicles of pinkish or whitish flowers in profusion seems to have all the qualities that would make a specialty or leader for any nursery.

The assortment of plants effective for climbing over porches and arbors is not large and one would think such a plant would be in demand as soon as discovered.

Polygonum Baldschuanicum, according to Bailey's Cyclopedia was first discovered in 1884 by Regal. It comes from Bokhara, in Central Asia and as hardy in the Northern States and worthy of greater attention.

Polygonum Auberti a similar plant apparently freer growing and perhaps a little hardier, is a more recent introduction from Thibet, China.

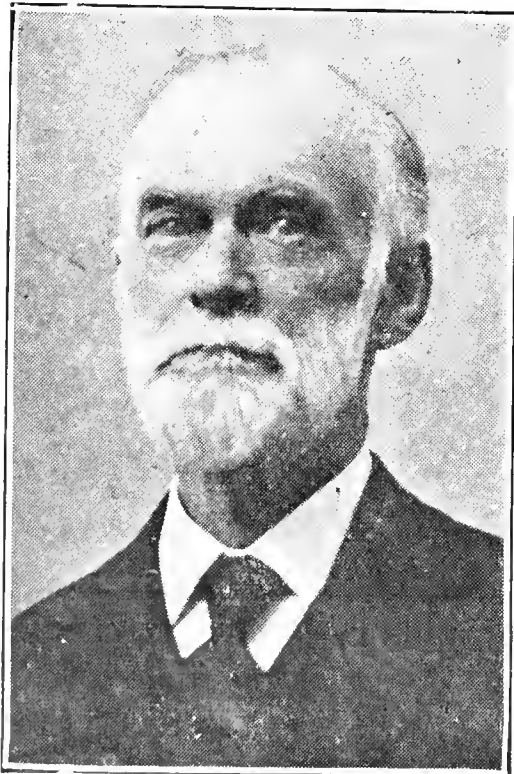
This plant bears panicles of flowers 6 to 8 inches long, has reddish stems and the young growth is also of a similar color. The writer failed in an attempt to grow a plant of *Baldschuanicum*, but the past year had all the success that could be desired in propagating and growing *Polygonum Auberti* plants from cuttings, made 6 feet of growth in three months and look as if they would make 20 feet by the end of the summer.



Obituary.

EDWARD HICKS

Edward Hicks, one of the oldest residents of Westbury, died July 17th, in the homestead where he was born 80 years ago. He was the son of Isaac Hicks, who



Edward Hicks

founded the Hicks Nurseries about 1854. As a young man Mr. Hicks taught mathematics in the Brooklyn Polytechnic Institute after his graduation at Albany Nor-

mal College. Later he joined his father and brother in the nursery business, under the firm name of Isaac Hicks and Sons. He was the inventor of numerous devices useful in farm operations and with his son Henry Hicks developed and patented several machines for transplanting very large trees. Mr. Hicks was deeply interested in education and has been a member of the Westbury School Board since 1865. Four years ago Mr. and Mrs. Hicks celebrated the 50th anniversary of their marriage. Mr. Hicks is survived by his wife, four children—Henry Hicks, Mrs. Harold T. Patterson and the Misses Grace and Marietta Hicks—six grandchildren, and his elder brother, Gilbert Hicks.

In a previous issue, we published the death of Mr. Joseph Davis, of Franklin Davis Nurseries, Baltimore, Md. Mr. Davis was General Manager of the company and died very suddenly on May 31st. He was fifty-five years old and was born in Staunton, Va., in 1863 and



*The late Mr. Joseph Davis,
of the Franklin Davis Nurseries, Inc., Baltimore, Md.*

moved with his parents to Richmond in 1868 and to Baltimore in 1877. He was a son of the late Franklin Davis, founder of the Franklin Davis Nurseries of that city. His many friends in the nursery business will sympathize with the bereaved family.

Fruit Tree

Apple, Pear, Mahaleb, Maz-
zard Cherry, Sour Cherry, My-
robolan, Mariana Plum, Quince,
Walnut, etc. —

and Rose

Manetti, Grifferaie, Dog-rose,
Polyantha (multiflora), laxa,
Sweet Briar, Rugosa. —

STOCKS

The price list concerning these
articles will be distributed to
our usual buyers by the end of
July. If you are not a cus-
tomer of ours, ask for a copy of
our list.

BARBIER & CO.

Nurserymen, 16 Route d'Olivet,
Orleans, France.

We will accept orders for N. C. Mountain natural peach
seed collected from sections where diseases are not known.
These seed are screened and graded. They are the best that
there is. Try us.

E. W. JONES NURSERY CO., Woodlawn, Va.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

ORDER NOW

Your stock of Apple, Pear, Cherry, Quince, Rooted
Rugosa cuttings the best stock for Polyantha roses.

Rugosa stems for Standard and Weeping Roses
Rosa Canina cuttings and seedlings

No Manetti available

Ask for Prices per 1,000; 10,000; 100,000

KROMHOUT & CO.

Boskoop

Holland

Peach Seed

All Varieties

Write

THOMAS R. HAMAN

1614 E. Oliver St.

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Md.

FALL BULBS

Aggregate

your sales of these and mail us
list for pricing. We carry a
complete general line of Flower
Bulbs.

Vaughan's Seed Store

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NEW YORK

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LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.

DERRY, N. H.

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* Don't Buy Your Fruit Tree, Canina Stock, *
* Roses, Etc., *
* Before you have seen the special offers from *
* The Fruit Tree Stock Specialist *
* JAN G. KLOOSTERHUIS, *
* Pomona Nurseries Gasselte, Holland *
* Our only address *
* Established 1894 Cable addr. Kloosterhuis, Gasselte *

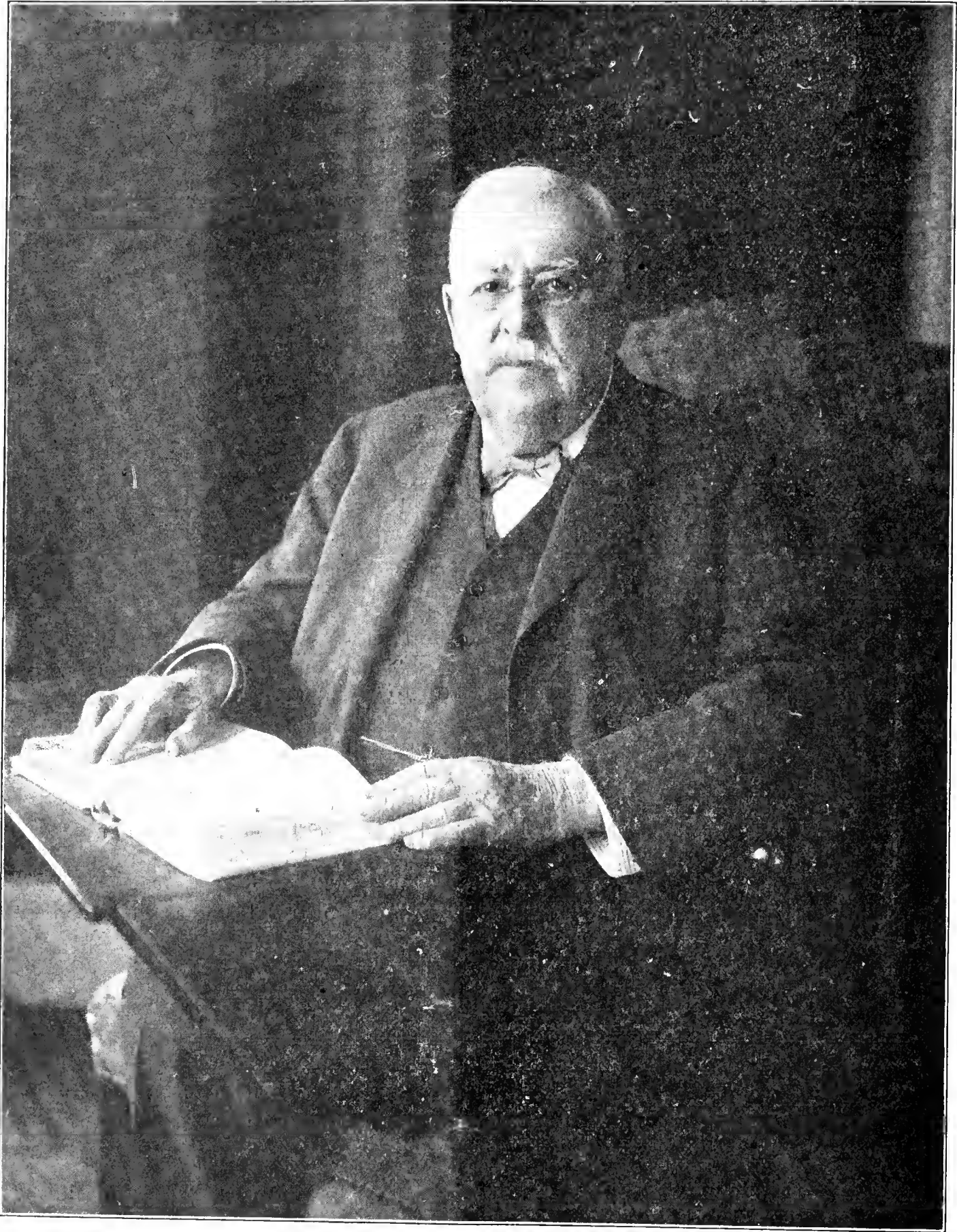
ABNER HOOPES

Abner Hoopes, senior member of the firm of Hoopes Brother & Thomas, Maple Avenue Nurseries, West Chester, Pa., died July 24th at the age of 84.

In the death of Mr. Hoopes another grand old nurseryman has quietly passed on.

in West Chester about 1853, later associating with them George Thomas. The nursery became the largest in the Middle Atlantic States. Abner Hoopes was president of the company.

Mr. Hoopes was a member of the Union League, Philadelphia. He belonged to High Street Meeting of Friends,



Abner Hoopes, senior member of the firm of Hoopes Bros. and Thomas, West Chester, Pa.

It is only a few years ago Mr. Hoopes was a regular attendant at the conventions, his genial personality and activities will be recalled and news of his death will bring a pang of regret to many who knew and loved him.

Abner Hoopes, in company with his brother, the late Josiah Hoopes, established the Maple Avenue nurseries

the West Chester Club and other organizations.

For several years he was a member of the Board of Trustees of the State Asylum for the Insane, at Norristown. He is survived by his widow, Mrs. Malinda Hoopes a daughter, Mrs. Louis Baker, of Bala; a son, Wilmer W. Hoopes, of Paoli, and nine grandchildren,



I should appreciate it very much if you have any suggestions to make concerning our catalogue, any criticism will be most welcome.

Yours truly,
AMERICAN FORESTRY COMPANY.

The catalogue of the stock growing on the Little Tree Farms, Framingham, Massachusetts, gives a pleasing impression when it is first opened.

It is generous in size. This may cause annoyance to the filing clerk where they are kept for future reference, but being too good for the waste basket, it is always in the way, unless the filing clerk happens to think about folding it.

The numerous cuts illustrate exactly what is offered for sale, not like so many catalogues, what a certain plant may possibly look like when it reaches maturity.

The quotation on the 100 and 1000 give assurance of a large stock and the purchaser can get what he orders.

Stating the number of times transplanted unfortunately conveys little information to the average retail purchaser, but is a true indication of value to the horticulturist.

To summarize the catalogue should prove a success with the big buyer, the nurseryman, the landscape man and the true plantsman but is likely to be ignored by Mr. Suburbs with less than an acre in favor of a catalogue with more "imagination."

UNITED STATES CIVIL-SERVICE EXAMINATION

SUPERINTENDENT OF FIELD SEED DISTRIBUTION

August 24, 1920.

The United States Civil Service Commission announces another competitive examination for superintendent of field seed distribution. A vacancy in the Bureau of Plant Industry, Department of Agriculture, Washington, D. C., at \$2,160 a year, and vacancies in positions requiring similar qualifications, at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

Appointees whose services are satisfactory may be allowed the temporary increase granted by Congress of \$20 a month.

All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles. For the present vacancy male eligibles are desired.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

1. Education20
2. Practical experience50
3. Thesis of not less than 3,000 nor more than 5,000 words on the subject "The Conducting of a Distribution of Seed on New and Improved Field Crops, and the Results to be Accomplished" (to be filed with application)30

Total100

Under the first two subjects competitors will be rated upon the sworn statements in their applications and upon corroborative evidence.

The duties of this position will be to superintend the placing

of field seed growing contracts, purchasing field seed in the market, transportation of the seed, the preparation and distribution of the seed, and the handling of correspondence, records, and reports incident to the distribution of such field seeds.

A FERTILIZER EXPERIMENT WITH ASPARAGUS

The following is a summary of a fertilizer experiment with asparagus planned and supervised by Dr. W. P. Brooks, of the Massachusetts Experiment Station published in detail in Bulletin 194.

SUMMARY.

A fertilizer experiment with asparagus was conducted for a period of nine years in the town of Concord on coarse, sandy loam, which was typical of the soils used for asparagus culture. Seven crops of young stalks were produced during the experiment, and the yield steadily increased each year until the sixth, which was the crop of maximum size on nearly every plot.

Of the chemical fertilizers used, a mixture of 466 pounds nitrate of soda, 300 pounds acid phosphate, and 260 pounds muriate of potash per acre produced the best yields.

Manure at the rate of 10 tons per acre produced nearly as good results as the chemicals, while combinations of manure with chemicals and with nitrate of soda were no better than manure or chemicals used separately.

There was no apparent cumulative effect produced by the annual use of manure, and the asparagus tops harrowed into the soil each year seemed to supply sufficient organic matter for the efficient use of chemicals.

When nitrate of soda was added to manure it was most efficient when applied in two portions, one in the spring and one in the summer. Nitrate of soda applied with acid phosphate and muriate of potash was slightly more effective when applied in summer in four years out of seven.

Muriate of potash was, on the whole, the most satisfactory potash compound used.

Following the second crop an attack of rust from an adjacent field swept over about half of the plots. The plots nearest the source of the attack were reduced in yield the next season nearly 20 per cent, and were permanently injured. The remainder of the plots apparently recovered before the maximum yield of the sixth crop.

The sixth or maximum crop averaged about 80 per cent greater than the second crop, which was the first full cutting. The seventh crop was less than 10 per cent smaller than the maximum sixth crop.

NEW AGRICULTURAL HEAD

After careful and mature deliberation, a director of the Agricultural Bureau of the Pennsylvania State Chamber of Commerce has been secured in the person of W. C. Byers who, it is believed, will efficiently fill this post in its many intricate dealings. In selecting a director for this bureau the officials of the State Chamber found it necessary to look at the matter from many angles, as care had to be exercised to get the services of a man who would command the respect of both farmers and consumers in the great problem of producing and distributing food products at this critical time.

We offer Azalea Indica Alba and Omurasaki (pink) in small plants; Azalea Amoena; Biota Aurea Nana and Rosedale; Abelia grandiflora; Viburnum Odoratissimum (Evergreen Snowball); Wegehelia Amabilis, Rosea and Variegata Nana; Spirea Van Houttei, Reevesii and Thunbergii; Forsythia Fortunei, Viridissima, Intermedia, Suspensa and Suspensa Variegata; Deutzia Pride of Rochester, Crenata fl. pl., and Candidissima; Roses: Radiance, Killarney, the Dorothys, Cherokee, Silver Moon, etc. **Thomasville Nurseries, Thomasville, Ga.**

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Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices. We are the printers of this Magazine

BOOST YOUR SALES

We have received word that our landscape views have done very good the past season. It is easy to make sales with our good material. Plate books for landscapemen.

Sent to responsible parties on approval.

B. F. Conigisky, 416 N. Jeff. Ave., Peoria, Ill.

PEACH PITTS

As all old Pits have been sold out all over, there is bound to be a scramble for new crop. Place your order NOW and save being disappointed.

The Howard -- Hickory Co.

O. Joe Howard, Secretary & Treasurer
Hickory - - - N. C.

THE NURSERY-MANUAL

by L. H. Bailey

Most exhaustive and up-to-date manual ever published, covering all the most recent improvements in the care of nurseries and in the practice of plant propagation.

CONTENTS

Description of all the various methods of plant propagation.

Diseases and insects taken up in detailed manner.

Two hundred page nursery list. Hundreds of plants listed by their common as well as the botanical names with description of methods of propagation.

A large number of full page plates, line drawings and descriptive figures.

Although founded on Mr. Bailey's former work "The Nursery Book" which ran through 21 editions, "The Nursery Manual" has been entirely rewritten with a wealth of new material and wholly new set of illustrations. Price \$3.00

The National Nurseryman

Hatboro - - - Penna.

The new director, Mr. Byers, was born in Mt. Pleasant Township, Westmoreland County, Pennsylvania, November 21, 1886. In 1905, he graduated from Washington and Jefferson Academy entering the class of 1909 of Washington and Jefferson College and after one year's attendance he left the college to take up the study of scientific agriculture at the Pennsylvania State College, graduating with the degree of Bachelor of Science in 1909 and in 1912 was granted the degree of Master of Science by the same college.

While still an undergraduate, Mr. Byers took the civil service examinations of the United States Department of Agriculture and shortly after his graduation received an appointment.

In 1913 he severed his connection with the United States Department of Agriculture to accept the position of Agricultural Agent of the New York Central and Hudson River Railroad in which capacity he served, with headquarters in New York City, until 1916. On January 1, 1920, Mr. Byers was appointed Supervisor of Agriculture of all agricultural work of the New York Central Lines, having supervision on these lines, both east and west, with headquarters in Chicago and this post he relinquished to accept the appointment with the State Chamber of Commerce.

During these years of service with the New York Central Lines, Mr. Byers has enjoyed an ever-growing acquaintanceship among the commercial and agricultural interest of the States, which he has been covering. His work, effort and aim has always been for things better agriculturally and he has originated and put into effect many helpful ideas for the States served by the lines he represented. Among railroad and agricultural men he has been looked upon as an authority and he has been in constant demand for conferences by commercial and agricultural organizations operating in the middle west.

An Advertisement in the National Nurseryman is read by thousands.

Address Hatboro Office for rates.

We offer to the Trade for Late Fall or Early Spring Delivery:-

- 75,000 Columbian Raspberry
- 150,000 Concord Grape, 1 year
- 100,000 Black Raspberry Tips

Address: **HARRY W. JOINER Sec'y.**

PERRY, The Associated Plant Growers, Lake Co., OHIO.

The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

A. B. KATKAMIER, MACEDON, N. Y.

St. Regis Raspberry Canes

in quantity, Fall or Spring Delivery

A. J. Humphreys. Mt. Sterling, Ky.

Retinosporus Pisifera, Squarosa Veitchii Per 100 and per 1000
AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

MYROBOLAN PLUM SEEDLINGS
 QUINCE CUTTINGS one year

Write for special prices to
SGARAVATTI BROTHERS, Nurserymen
 (Italy) Saonara, Padova

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices. We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

OPPORTUNITY

A live progressive firm conducting a nursery, landscape and floral business in a city of two hundred thousand people, with practically no competition, requires a bookkeeper and stenographer with knowledge of the business. A man of ability will be given full charge of office and allowed to acquire an interest in the business after his worth is proven. This position offers wonderful opportunities for the man who is posted, has executive ability and is looking ahead. All correspondence strictly confidential.

Box 35, Care The National Nurseryman.

WANTED—Competent nursery foreman who can successfully manage propagation, packing, storing, crop rotation and general nursery work, 160 acres.

MOUNT HOPE NURSERIES
 Lawrence - - - Kansas

WANTED

WANTED—Married man twenty five to thirty five years old as assistant to an Executive Officer in Nursery Company—experience in buying and selling at wholesale will help. Chance for rapid advancement. Give references, experience and salary desired.

Address R. N. this office.

WANTED

A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

WANTED—Reliable man familiar with names and habits of ornamental trees, shrubs, evergreens, and roses, with practical knowledge of landscape work and a Salesman. must be able to sell quality stock at quality prices. Salary \$100.00 per month with board and lodging and a commission on business in addition to salary, position permanent. If you are a landscape man and SALESMAN, write us, we will pay you all you are worth.

S. H. WEAVER & CO.,
 Houston, Texas.

FOR SALE

NURSERIES

FOR SALE—One-half interest in nursery, in town of 85,000 in Indiana. We have 40 acres of land under lease, 20 acres for 10 years and 20 acres for 3 years. Invoice shows \$20,000 to \$25,000 worth stock including greenhouse. Purchaser will have to buy growing stock only. The logical and perhaps the only person to buy should be experienced landscape architect, who could handle sales end of business. This is a very progressive city, with 50 to 100 mile territory. Price for one-half interest is \$10,000. Address

WESTERN SALES AGENCY, Minneapolis, Minn.

A FINE BUSINESS OPENING

We will sell controlling or entire interest in our nursery business including highly improved new propagating grounds, bungalow, grafting and packing sheds and other buildings, full equipment for nursery work. Well located for advertising purposes, on main State Highway and electric line. Also attractive home.

BOISE VALLEY NURSERY CO.
 Boise, Idaho

ESTABLISHED 1893 **THE NATIONAL NURSERYMAN** INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

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Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

North Carolina Peach Pits

We are accepting orders for Fall Shipments.

J. Van Lindley Nursery Co.

Pomona, N. C.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

Strawberries
Raspberries
Blackberries
Dewberries

Iris
Privet
Spirea
Rhubarb

Asparagus
Horseradish
Hardwood cuttings
Volga Poplar

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 6½d per week.

Send for free copy and subscription rates to:—

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W. C. 2, London, England

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Arrow Brand XX Superior Brand
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Colored Raffia in 20 colors

Bamboo Stakes, Dutch Bulbs, Hardy Lily Bulbs

Write for prices specifically stating requirements

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ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

HORTICULTURAL ADVERTISER, Ltd.
Lowdham, Notts, England

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

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A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

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A general assortment of nursery stock for delivery Fall 1920 or Spring 1921.

We also have some fine blocks of Peach Seedlings, a portion of which we offer to bud on contract for delivery fall 1921. Correspondence invited.

Headquarters for Nursery Supplies

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122½ GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries
North Abington
Mass.

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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

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ALLEGHENY, PA.

Bunting's Nurseries

G. E. BUNTING & SONS.

Selbyville - Delaware

Offers for delivery fall 1920

Grape Vines, 1 yr.

Asparagus Roots, 2 yr.

Strawberry Plants

Barberry Thunbergii, 2, 3, and 4 year

California Privet, 1 and 2 year

Silver Maples, 8-10 and 10-12 feet

Apple Trees, 1 and 2 year budded

Flowering Shrubs

Dorothy Perkins Roses

Would be pleased to quote you.

PERHAPS

You use RAFFIA for budding

If so, it will be to your interest to have a copy of our

MAY FIRST PRICE LIST

which will be mailed to you on request

Thomas B. Meehan Co.

Direct Importers of Raffia

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arbor Vitaes, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree Seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

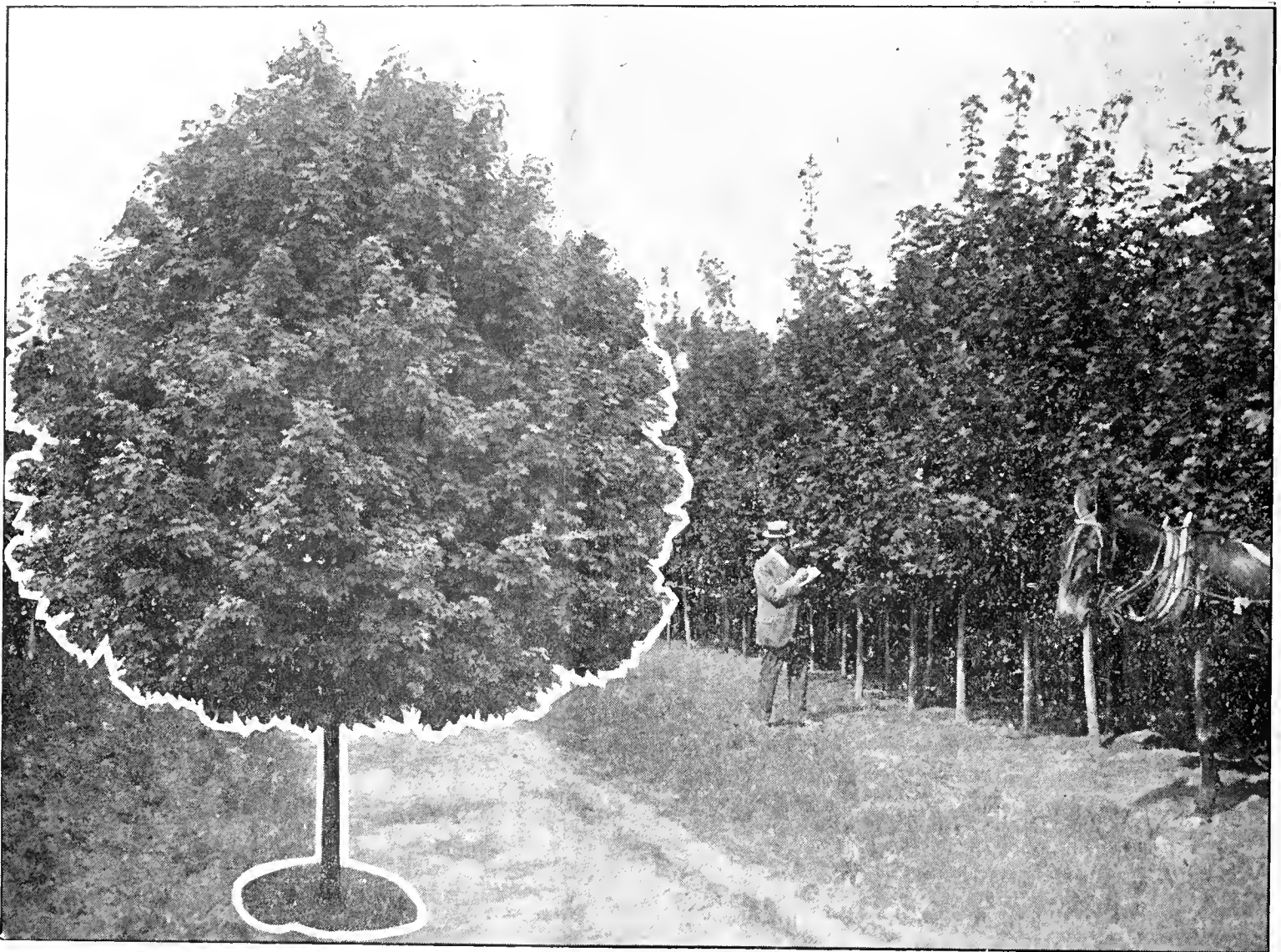
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Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

Harrisons'

Specimen Norway Maples



Nature seems to have provided no other tree so valuable and adaptable. For lawns, for streets, for parks, it has no superior. We offer:

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| 2000 | 7 to 8 ft. lin. |
| 5000 | 8 to 10 ft., 1 $\frac{1}{4}$ to 1 $\frac{1}{2}$ in. |
| 10000 | 10 to 12 ft., 1 $\frac{1}{2}$ to 1 $\frac{3}{4}$ in. |
| 10000 | 12 to 14 ft., 1 $\frac{3}{4}$ to 2 in. |
| 10000 | 14 to 16 ft., 2 to 2 $\frac{1}{2}$ in. |
| 10000 | 2 $\frac{1}{2}$ to 3 in. |
| 5000 | 3 to 3 $\frac{1}{2}$ in. |
| 3000 | 3 $\frac{1}{2}$ to 4 in. |
| 1000 | 4 in. |

Prices on application.

HARRISONS' NURSERIES

J. G. HARRISON & SONS, Prop.

Berlin,

Maryland



THE NATIONAL NURSERYMAN



SEPTEMBER 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of want.

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

RELY ON WELCH

Some genius of the future may find a way to grow fine nursery stock without constant supervision. Until that happy day comes, we will continue watching carefully every step in our growing and grading.

Stock grown on these rich, loamy lands enters the world under ideal conditions.

Send us your list of requirements. We will gladly send you our trade list upon application. It will be out about the first week in September.

Mount Arbor Nurseries,
E. S. Welch, President,
SHENANDOAH, IOWA.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company
Strawberry Specialists,
Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

C. R. BURR & CO. Manchester, Conn.

Let us talk to you in large or small quantities on the following:

- AMPELOPSIS VEITCHII, Heavy 2 yr.
- " " 1 yr. seedlings
- BARBERRY THUNBERGII, 3 yr.
- " " 1 yr. seedlings
- CALIFORNIA PRIVET 2 yr. in carlots
- APPLES, 2 yr. buds, fine stock
- PEACHES, in carlots, largely Elberta and assorted varieties
- H. P. and CLIMBING ROSES. New England grown. None better.
- Assorted Shrubs. Long on HYDRANGEAS P. G. and SPIRAE VAN HOUTTE
- RHUBARB, graded 1 and 2 yr.
- ASPARAGUS Plants, strong 2 yr.

The Preferred Stock



The Preferred Stock

DROP A LINE To Us

concerning those short items you will probably discover this month when you aggregate your Fall needs, and include your Want List for Spring. We try always to keep our assortment in good shape for general lists and to have also some of those scarce items including:

- ROSES
field grown
 - CLEMATIS
Large flowering and
Paniculata
 - AMPELOPSIS VEITCHII
Boston Ivy
 - DIELYTRA SPECTABILIS
Bleeding Heart
 - HARDY PERENNIALS
A good list
 - PEONIES
Named and unnamed by color
 - ORNAMENTAL SHRUBS
Large assortment
 - TREE HYDRANGEAS
BUSH HYDRANGEAS
 - BERBERIS THUNBERGII
 - FRUIT AND SHADE TREES
Staple kinds
- High Grade Stock for the Wholesale Trade

Jackson & Perkins Company
Newark, York New

The Preferred Stock

The Preferred Stock

105 Years in the Nursery Business

GENERAL STOCK:—Our propagation includes apple, peach, pear, plum, cherry, apricot, quince, grape vines, all small fruits, shade trees, shrubs, climbers, roses, garden roots, and etc.

—Special—

A BIG STOCK OF QUALITY SHRUBS

Everything is grown in large quantities. Our grades are dependable and we are generally prepared to quote to nurserymen nearly everything we offer to the retail trade, and prices are always in line with those of other reputable growers.

We will be glad to have a list of your requirements for the coming season. Doubtless there are some things that you can use that we have in surplus. Can also ship from our branch plants—Marionville, Mo., Farmington, Ark., Dansville, N. Y., North Girard, Pa., and Vincennes, Ind.

STARK BRO'S
Nurseries and Orchards Co.
Louisiana, Mo.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

THE
North-Eastern Forestry Co.
CHESHIRE
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please



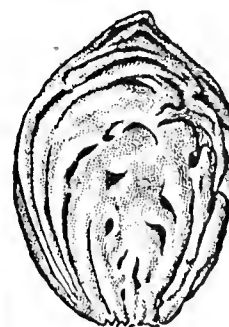
PEACH SEED



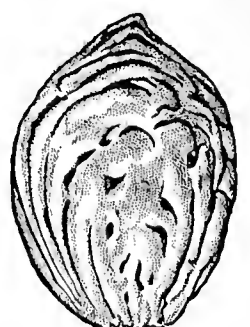
1920 Crop

California Grown Seed
Selected from the Best Orchards
Properly gathered and cured
Sacked ready for shipment
We will quote F. O. B. Kansas City, Mo.
Write us at once for prices either for small or large quantities.

California Nursery Company



NILES,
Alameda County,
California



mention the National Nurseryman.

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

JAC SMITS & CO.

Naarden, - Holland

Growers of stock for Apples and Pear; Mazzard Cherry; Prunus Mahaleb, Myrobolana and communis; Doucin; Paradise and Quince.

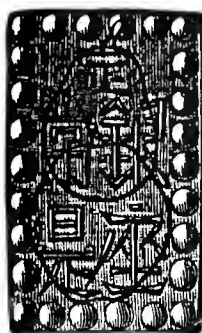
Rosa canina, rubiginosa, rugosa and Manetti also stems of Rugosa for topgrafting.

The catalogue contains also a general line of Nursery-stock, specially young plants to line out which can be imported by special permit.

Catalogue free on demand.

Heikes—Huntsville—Trees

We offer the following for Fall 1920 and Spring 1921:



- FRUIT TREES
- SHADES
- ROSES
- EVERGREENS
- SHRUBS
- HEDGE PLANTS
- ABELIA GRANDIFLORA

AND OTHER ORNAMENTALS

All of our own growing. Prices on application.

Address

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of Fruit Trees, Small Fruits and Hybrid Tea Roses.

Large Supply of
Ornamental Trees, Shrubs,
Perennials,
Vines, Evergreens.

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

A Complete Variety of Nursery Stock



60000

Norway and American Elm
fine stock in car load lots or less



C. M. Hobbs & Son

BRIDGEPORT

Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA., SEPTEMBER 1920

No. 9

Aphis Resistent Apple Stocks

John Watson, Secretary American Association of Nurserymen.

In the course of his remarks at the Chicago Convention, Professor Corbett, Horticulturist of the Bureau of Plant Industry, Washington, touched upon a subject of very vital interest to orchardists and therefore to nurserymen. Of course, all that Professor Corbett and Dr. Galloway and Mr. Coville said was of immediate interest bearing as it did on the necessity to produce our own raw materials in this country and outlining the proposed Governmental work planned to assist and point the way to do that; but Professor Corbett referred to a subject that nurserymen may well consider now: the production of aphis-resistant stocks. There are very great and profitable possibilities in that direction for the grower willing to pioneer into new fields and blessed, as he must be, with patience. We all know that woolly aphis is a very serious and a growing problem. In some sections it has made apple-growing impossible altogether; in the West, and particularly in California, it has caused many nurserymen to quit trying to produce apple trees.

We all recognize the influence of the stock upon the seion: how the quince will dwarf the pear and how the paradise will dwarf the apple; and it is even more interesting to note the influence of the seion upon the stock: apple grafts, for example, of Bechtel's Crab and of Transcendant will compel a far better root-system in two years than seions of Baldwin or Yellow Transparent on seedlings of exactly the same grade. We do not know the exact extent of that influence, but we can see its effect.

Our country is so young, as ages go with countries, and we have hurried along at so fast a pace that we have not taken time to change many of the old methods; it has been too easy to follow the beaten path and to pursue tried ways; we have done little experimenting. We have not had time for that, nor the money; and we have not felt the necessity to do it. In the case of apple trees, for example, we have had such a generous and such a wide market for the trees and in very nearly every State, that we have bent all our energies to quantity production. Now, the time must come with us as it always has with older countries, when we shall be obliged to work out better methods and especially methods that will result in better, longer-lived, healthier and more productive orchard trees.

Of all the aphis-resistant stocks, the Northern Spy is the best. It is largely used in England, South Africa, Australia and New Zealand. I venture the prediction that we shall see the time when California will use nothing else. In Australia, where woolly aphis is a prolific pest, the nurserymen have over twenty-five varieties of resistant stocks; but, with the exception of Northern

Spy which has been used there for fifty years and which furnishes, I understand, fully 95% of the apple stocks used, the others are still in the experimental stage or are not yet produced in quantity.

The trouble that we shall experience, if obliged to produce our own resistant stocks, is our handicap of hurry; we want to do things quickly and in the big way; the short cut invites us and we demand quick results. We cannot get them when we come to grow resistant stocks. None of them, not even Northern Spy, can be grown from seeds. Of course, the seeds will produce seedlings but it is a peculiar fact that the seedlings lose the resistant quality and are as prone to aphis as ordinary crab seedlings. That has been thoroughly demonstrated.

The method usually followed by the Australian nurserymen is to make root-cuttings of the Northern Spy about 2½ inches long. The cuttings are planted an inch apart in rows 4½ feet apart; here, we would use the wider standard row; or they can be planted in beds. The cuttings are planted upright in a warm, loamy soil early in the spring and cultivated clean, covered over the tops with half an inch of soil. The following season they are dug, graded, trimmed and planted in nursery rows like seedlings. Sometimes the stocks are dug around in the bed and cut off so as to leave pieces of roots that will grow out and make another crop of stocks in the same place.

Others are grown like paradise and doucin: thrifty young trees are planted in permanent rows and about three feet apart, cut back close to the ground, covered and cultivated; as soon as they throw out young shoots to a height of twelve inches, the soil is banked up to half their height. They root readily at the base and can be cut off from the parent stem at one year or preferably at two years, just like doucin and paradise. They are handled and planted in the same way as any other stocks. The stools will produce a greater number of shoots every year but they do not become quantity producers until at least four years old. They do not wear out and do not have to be replaced but a stool-bed increases in production and value with age. That is why we need patience. Stocks grown in this manner from Northern Spy similarly grown are immune in top and root to woolly aphis to a 100% degree.

Layers are always more expensive than seedlings; but we have to use dwarf stocks to grow dwarf trees and we have to use resistant stocks to get trees immune from aphis. And neither can be grown from seed.

Very soon orchardists are going to want and demand trees grown on resistant stocks wherever they are

troubled with woolly aphis. Some nurseryman of pioneering instinct and blessed with patience is going to have such trees when the demand comes.

Dr. Bailey says in his *Cyclopedia of Horticulture* that of all trees and plants sold less than 1% reach maturity to benefit the planter. We deal in perishable goods; there is some inevitable loss in transplanting and further loss comes from unfavorable weather and extremes of heat and cold; and few who buy our products are experts at planting and caring for them; certain losses are inevitable. But the indictment is so serious and so direct that it calls for special effort on our part to give more in quality and service to reduce that embarrassing percentage. No industry can grow and thrive under such a handicap without the continuance of abundant optimism in our patrons. In 1900, Dr. Bailey attended our convention at Niagara Falls and stated then that there were more apple trees in the nurseries than there were in all the orchards of the country.

May not this suggestion of using Northern Spy as an aphis-resistant stock be considered as one step toward meeting the planter's need in apple trees if we are to continue as a great apple-growing country?

Princeton, N. J., August 10, 1920.

SOUTHERN NURSERYMEN'S ASSOCIATION

Officers, Paul C. Lindley, President, Pomona, N. C.; C. A. Simpson, Vice Pres., Monticello, Fla.; O. Joe Howard, Secretary and Treasurer, Hickory, N. C.

Executive Committee, Chas. T. Smith, Concord, Ga., Chairman; S. W. Crowell, Roseaeres, Miss.; O. Joe Howard, Pomona, N. C.; Paul C. Lindley, Pomona, N. C.; C. A. Simpson, Monticello, Fla.

Whereas:

During recent years there has been a disposition on the part of periodicals generally to resolve all differences between Nurserymen and the public against the Nurserymen and in favor of the public; and

WHEREAS, in the spirit of fairness the Nurserymen through Association action have shown a willingness to investigate all claims of both unfairness and error, appointing for this purpose committees both on vigilance and arbitration, and

WHEREAS, the Nurserymen are entitled to be heard in their own behalf on all these matters before judgment is passed:

BE IT RESOLVED by the Southern Nurserymen's Association in Convention at Charleston, S. C., this August 19th 1920,

First, that we urge our Committees, that while due diligence should be used in endeavor to place the Nursery business on highest possible plane, greatest caution must be used, to the end that no injustice be done any member.

Second, that we condemn the practice of many journals of parading before the public the shortcomings of "ye Nurserymen," believing that such practice is inimical both to the public and nurserymen and is destructive of Confidence which is the basis of satisfactory trade relations. With a few farm journals it is "yellow journalism" run mad.

Third, that we deplore the Action of The American

Nurserymen in a recent issue making public a matter between Harrison Nurseries of Berlin, Maryland, and one of their customers, when said differences had been adjusted seemingly to the satisfaction of interested parties. Such publicity in our opinion being unwise and harmful, both to the Harrison Nurseries and to the Nursery interests as a whole.

Fourth, that while we are in hearty accord with all plans for higher ethical Standards in the Nursery business, and pledge our efforts individually and collectively to this end, we resent as unfair and untrue the implication often made, that there is something particularly bad in the Nurserymen's policies.

Resolved further that a copy of these resolutions be sent both American Nurserymen and National Nurserymen with request that it be printed.

THE CONNECTICUT NURSERYMEN'S ASSOCIATION

The Connecticut Nurserymen's Association held their summer outing at Lake Compounce August 14th, 1920.

Owing to the inclemency of the weather the attendance was not quite so large as usual, but those present enjoyed the outing and especially the "get-together" part.

It seemed to be the universal opinion that the other nurserymen and florists of the state—not now members of the Association—were not aware of the benefits they could derive from attending the meetings and outings of this Association, or they would make more of an effort to accept the cordial invitations, sent them, to convene with us.

These "get-together" meetings certainly do make for the betterment of any line of business. They are educators; they are friend makers, not only in the line of business but socially as well, and the short loss of time, in attending, is repaid a hundred-fold in the benefits gained.

We hope, therefore, that the Connecticut Nurserymen and Florists will make a strong effort to accept the next invitation sent them to attend a meeting or an outing of this Association.

At a short business meeting (the regular annual business meeting, early in the year, had to be postponed owing to illness of officers) it was voted that the present officials continue in their respective offices until the next regular annual meeting in January 1921.

The present officers of the Association are as follows:

President, C. F. Brainerd, Thompsonville, Conn.

Vice-President, H. W. Gottschalk, Manchester, Conn.

Secretary, F. L. Thomas, Yalesville, Conn.

Treasurer, W. W. Hunt, Hartford, Conn.

F. L. THOMAS, *Secretary*, Yalesville, Conn.

John Watson, executive secretary of the National Association is collecting information in regard to Hail insurance. He is sending a questionnaire to the various nurseries. The National Association has for some time had the subject of Hail insurance under consideration, but so far nothing has ever been done to enable the nurseryman to protect himself from loss through Hail storms.

Mr. W. H. Simpson, Adrian, Mich. has sold out his bulb business. Mr. Simpson was a specialist in Dahlias and Gladiolas.

AMERICAN GROWN FRUIT STOCKS

A great many nurserymen and fruit growers do not realize how the fruit tree seedling business has developed here in this country in the last few years. It is true, like many other lines of industry, there was a halt during the war and we have not yet come up to the pace that had developed before the war put a stop to many industries. The growing of apple seedlings especially bids fair to equal the supply from foreign sources, as time goes on. Mr. L. R. Taylor made the first planting of apple seedlings in the Kaw Valley, Kans. in 1879 or 1880, and the location has proved to be eminently fitted for the purpose and it looks as if it might ultimately equal the Loire Valley in France. When Mr. Taylor planted his first apple seedlings he used a garden drill, holding about a gallon of seed. This the operator pushed down the field, refilling from sacks of seed placed along the row. Following the operator would come a man with a wheel hoe cover-

this, horses are used, which will do the work of a dozen men. Practically all the apple seedlings in the United States are raised in the Kaw Valley and no one seems to know just why it is they cannot be raised as successfully in other sections. It has been tried in a good many places, but as far as is known, few have succeeded. The growing of apple seedlings as classes is specialized industry requiring certain location, special knowledge and equipment to grow them cheaply and well, so that it hardly pays a nurseryman to take time to grow his own if he uses from twenty-five to one hundred thousand seedlings or less. Usually he finds it is better to buy the Kaw Valley stock than to try to grow them himself. Due to the scarcity of apple stocks a great number of small growers have recently started in different sections, but very few reports have been received of success, a number have turned out complete failures and it still remains to be seen what character of stocks will be developed in the new localities. The above cut is a picture of a section of



Section of a field of Apple Seedlings on the Nurseries of L. R. Taylor and Sons, Topeka, Kansas.

ing the seed. The rows would be planted about 3½ feet apart and cultivated with a two horse cultivator. When it came to scuffling, there would be a man on each side of the row with a common garden hoe, cleaning out the weeds from along the rows. A very slow process, indeed.

Now, instead of a hand drill pushed by a man and followed by a wheel hoe, a wheat drill, is used holding two bushels, planting four rows at a time with plow attachment covering the seed making it possible for one man to plant and cover from 12 to 15 acres a day. Considerably more ground than was planted by one man in the early days. Instead of 3½ foot rows, there are now two foot rows being almost 50 per cent. saving in land.

When it comes to cultivating, one horse is used which cultivates two rows at a time, instead of two horses and one row as in the olden days and instead of so much hand work keeping down the weeds during the early stages, wheel hoe scuffles are used for the first few weeks. After

a field of apple seedlings on the nurseries of L. R. Taylor & Sons, Topeka, Kans. who grows about 140 to 150 acres of them.

POUGHKEEPSIE NURSERY COMPANY
REORGANIZED

Reorganization of the Poughkeepsie Nursery Company of Poughkeepsie, N. Y., a partnership formerly owned by Albert Tersteeg and William Godding, has been effected by the incorporation of the concern. The officers of the new company are Wm. Godding, President, E. J. Daniels, Vice President, P. J. Van Melle, Secretary-treasurer.

The corporation has taken over the obligations of the former partnership. Mr. Godding and Mr. Van Melle will have the management.

SOUTHERN NURSERYMEN'S ASSOCIATION

The twenty-second session of the Southern Nurserymen's Association was held at the New Charleston Hotel, Charleston, S. C.

PROGRAM

TALKS AND TOPICS

What Are We Here For? S. W. Crowell, Roseacres, Miss.
Southern Boosters - J. R. Mayhew, Waxahachie, Texas
Thinking - - - Paul C. Lindley, Pomona, N. C.
Horticulture Extension Plans Affecting Southern Nurserymen,

Prof. F. B. Richardson, Agricultural College, Miss.
Suggestions - G. M. Bentley, State Entomologist and
Plant Pathologist, Knoxville, Tenn.

"Trustworthy Trees" - John Watson, Executive
Secretary American Association of Nurserymen,
Princeton, N. J.

Not Trustworthy - Chas T. Smith, Concord, Ga.

How Can We Eliminate the Activities of the "Wildcat"
Tree Dealer? - - - Miss E. B. Drake,
Cumberland Nurseries, Winchester, Tenn.

"Don't sell him, and don't buy from him"

Two Hours for Thorough Discussion

Should a Nurseryman Invest His Profits or Gains in
the Nursery Business? - Henry B. Chase, Chase, Ala.

Substitution - - - O. Joe Howard, Hickory, N. C.

Selling Seedlings - A. L. Ligon, Macclenny, Fla.

In addition to Prof. Lobdell, we had with us Prof. Richardson of Mississippi, Prof. Conradi of South Carolina, and Prof. Bentley, of Tennessee.

Discussion on true conditions in each of the states represented at the convention. The President called on representatives from Huntsville Wholesale Nursery, Piggott Nursery Co., Glen St. Mary Nurseries, Ashford Park Nurseries, Hogansville Nurseries, H. F. Hillenmeyer & Sons, Clingman Nurseries, J. G. Harrison & Sons, James Brodie, L. P. Coulter, Greenville Nursery Co., Easterly Nursery Co., Southern Nursery Co., Texas Nursery Co., and others.

Notwithstanding the fact that the weather was extremely hot, we had a good meeting.

By far the most important thing that occurred was the election of a legislative committee, representing the southeastern states, to formulate a bill to stop "wildcat" nursery sales, and this committee was instructed to get the bill through the various state legislatures.

Paul C. Lindley was elected President, C. A. Simpson, Monticello, Fla., Vice President, O. Joe Howard, Hickory, N. C., Secretary and Treasurer. These, with C. T. Smith, Concord, Ga., and A. L. Ligon, Macclenny, Fla. constitute the Executive Committee.

The 1924 meeting is to be held September 7 and 8 at some point near Chattanooga, Tenn., in the mountains.

PRESIDENT'S ADDRESS

Charleston, S. C.

As we meet to hear the various papers prepared for this occasion and to discuss the different topics presented; to ask and answer questions of mutual interest, and to encourage each other by relating our experiences in the past, I wish to express the pleasure I feel in the beginning at seeing so many familiar faces present.

Knowing as we do the value of friendship, let us all unite in a hearty welcome to our friends who are meeting with us, and also to those whose attendance has been somewhat irregular, to the end that all may become more interested, our activities enlarged and the cause correspondingly advanced.

An organization of men engaged in the same trade or business, if founded upon the desire to render public service as well as for mutual protection, has its advantages, producing, as it does, an association of minds where there must be more or less of conflict of individual interest, which, in the end, must be marked by compromise and concession for the public good. The idea of cooperation is ancient, its recognition is more recent, and its application is essentially modern. It contains a newly discovered value. Once avoided and afterward recognized, it has now become a fixed principle upon which rests the welfare of all the people. There has come a wholesome conviction that prosperity depends upon fair dealing and honest methods, that a few must not profit at the expense of the many, but that all must share alike in the fortunes and vicissitudes that come in their turn, and that the foundation of business rests upon confidence, and confidence cannot be bestowed; it must be earned, and to be held the possessor must not falter in protecting his trust. That is why it is a good thing for men to come together and talk over the vital subjects in which we are interested and to which the public is lending a listening ear.

The past few years have produced a marvelous change in business conditions throughout the world. The employer of labor is having the hardest job in America today. He is conducting his business in a no-man's land between war and peace, and his position is like that of sea captain forced to navigate his ship in a heavy fog through a field of icebergs. Just now we are afflicted with various uplifters, doctrinaires, socialistic programs which make the old fashioned American way of making a living seem like a memory of by-gone days.

Against this bewildering and discouraging background the American business man stands as the nation's stabilizer. Perhaps more than any other class the future of our country is in his keeping. He needs courage, patience and wisdom in abundant measure. The American business man has his faults. He has made and will doubtless continue to make serious mistakes, but, at heart he is a true man, a brave and generous fighter, and a lover of his kind and his country.

Sensing the necessity of a change to higher ethics and principles, national and district and state nursery associations have begun to clean house. In the good old days these associations did not stand for much. Codes of ethics were maintained by individual firms; selfishness and financial gain and those things that smacked of sharp practices were brought to the front by a few unscrupulous firms and dealers, until public opinion, the final arbiter in such matters, said as Holy Writ did to Nadab and Abiha: "Be sure your sin will find you out," and that goes for modern business as well.

I am glad to say that this association was amongst the first of its kind to see the hand writing on the wall. It was the first to realize what Robert Burns said: "A

Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

SEPTEMBER, 1920.

A Few Good Items, Choice Nursery Grown at our Nursery in Western Springs, Illinois. We should be pleased to show this stock to anyone interested.

| TREES | | Height | Caliper |
|-------|---|--------|---------|
| | | Feet | Inches |
| 1,000 | American Elms | 10-12 | 2-2½ |
| 100 | " | 20 | 6-10 |
| 500 | Scotch | 10 | 2½-2 |
| 500 | " | 10-12 | 2-2½ |
| 300 | " | 10-12 | 2½-3 |
| 300 | " | 12-14 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 4-5 |

These Elms are extra fine stock, straight Stems, Bushy, Symmetrical heads. The best trees for city, estate and avenue planting.

SHRUBS

| | | |
|-------|----------------------------------|------|
| 250 | Berberis Ilicifolia, Specimens | 2½-3 |
| 200 | Crap Bechtels Dbl. fl. Specimens | 7-8 |
| 1,000 | Cydonia Japonica, Extra Bushy | 2½-3 |
| 250 | Eleganus Angustifolia, Specimens | 7-8 |
| 500 | Rhamnus Catharticus | 6-7 |
| 3,000 | " | 7-8 |
| 3,000 | Salix Discolor (Pussy Willow) | 6-7 |

VINES

20,000 Clematis Paniculata 2 in. Pot Grown
1,000 Wistaria Magnifica 4 yr. extra strong
We also have a fine block of Koster's Blue Spruce from 6-12 ft., every plant a specimen

VAUGHAN'S SEED STORE

New York - Chicago

Nursery: Western Springs, Illinois

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania



Box-Barberry Bordered Garden

MAKE A LEADER OF BOX-BARBERRY in your 1920 Catalogue

Many of the leading firms already have booked with us for their stock.

Write for terms.

Send for folder:—Fifty opinions on Box-Barberry

THE ELM CITY NURSERY CO.

WOODMONT NURSERIES, INC.

New Haven

Conn.

chief's amang ye takin' notes, and faith he'll prent 'em."

This association does not lay claim to a great share of the total results for good which have been brought about by various activities of similar associations during the past few years, but we do lay claim for being the first to demand of its membership the constant application of the golden rule in all transactions with each other and the consumer. We felt that in the business world stock taking did not mean the mere taking of inventory; it meant in its broadest sense a general survey of the entire business from every viewpoint. It was troublesome business; it needed a great deal of patience; it required much determination, but when it was done, we were well repaid, for it showed up the weak places before they became embarrassing circumstances, and after the facts of stock taking were known, it was a simple matter to adopt new plans and methods to increase efficiency.

In nearly every avenue of endeavor it becomes necessary for trade organizations to lay down rules and ethics to guide its membership; ethics that members do not dare violate. There was a time when the individual could walk alone with a reasonable amount of assurance that his business would succeed, a matter of bartering—buying and selling, but the public now demands something more, something separate and distinct from commodities and dollars, something we call confidence, the dominant article in every transaction. This confidence cannot be inspired by the individual working alone. He cannot combat the sinister effect of unscrupulous dealers though their activities may be wholly sporadic and negligible in quantity, and so it has become necessary if we wish to gain and hold public confidence in the wares we sell, we are compelled by their demand to be our brother's keeper.

This is why it has become necessary that the nursery business, like every industry, profession and trade, must have its national association as well as district and state associations to wield the power of united organization whose ethics must be above reproach, in order that we may grow in ever-widening circles, till the boundaries of our activities shall be broadened and unquestioned by those who place their confidence in us and the products we sell.

It was a splendid day for the nurserymen in this country when a few unselfish, far seeing men got together and decided to renovate the old organization known as the American Association of Nurserymen. The old structure was of little service measured by present day demands. The old structure only offered shade in fair weather. It was just a good place for members to gather, to barter and trade, a clearing house for stocks of questionable value in many instances. The old structure was built by honest hands in the good old days when harmony was the chief requisite to a successful meeting, but it could not withstand the storms of present day conditions. So a new structure has been erected. It has a sure foundation. Its walls are thick and solid, its roof safe under the stress of any storm, and within its chambers one is safe and secure if he lives up to certain codes of ethics.

Assuming that I am correct in making these statements, it is needless to say that every nurseryman in

the country should be affiliated with our National Association. I venture the assertion that within a very few years the buying public will demand the association's trade mark, "Trustworthy Trees," stamped on every tree and plant that is sold. This trade mark will be the compelling force that will define the public's approval or disapproval in the majority of future transactions when the buyer knows for what it stands, because there is no question but that the plans, purposes and services outlined by the American Association of Nurserymen, marks a higher plane for trade organization work than has heretofore been attempted. The entire program is a broad one and calls for broad and liberal cooperation and work, which from every viewpoint should have the hearty and wholesome support of every nurseryman throughout the country.

I do not believe in membership of the American Association of Nurserymen to the exclusion of district and state organizations. The latter are very necessary in dealing with local, state or district matters. In their separate ways each are important and wholly necessary, and active membership should be promptly taken by every non-member so that individual service could render some aid to the onward movement which is so necessary to our mutual welfare. We must not forget that this is still a time of sore distress and world agony. Political readjustments must be made. The struggle to achieve for peace-time industry a stable basis for that resumption of what is left of its normal relationships, is quite as difficult a task as conducting a war. Our only emancipation is a hearty, active cooperation in the various organizations which offer those permanent safeguards against those things which we know to be unsafe and unsound.

I trust you will pardon me for endeavoring to stress this matter as I have, but "united we stand, divided, we fall." Unity of spirit and purpose should carry us far along to better and permanent things. Efforts should be made to prevail on every worthy firm in the South, who are now non-members, to join our association as well as the American Association of Nurserymen. If worthy of membership, they should be participants in the good things that would surely be their's, because there is no other substitute for the vital relationships of man to man. I further suggest that a permanent Committee of Membership be appointed to work to this end.

The past season was one of prosperity for the nurseryman. We could possibly have no greater illustration that scarcity of stocks mean good prices, an object lesson given us by conditions over which we had no control. It is apparent that the peak of high prices has been reached, and if we desire to maintain a parity between commodities and values, our future plantings should have an eye to quality rather than quantity. The American buyer demands, above all things, quality. He is willing to pay the price if the product meets with his approval, besides he has the right to demand a square deal and even justice in every transaction.

During the past season a few unscrupulous tree dealers were active in disposing of trees and plants in a few sections of the South, and especially in the state of Mississippi. To procure sales various prizes were offered with orders to tempt the buyer, and as usual, under

**We have
One Year Apple**

to offer in the following varieties and can furnish these in
4 to 6 ft. grade
3 to 4 ft. grade
2 to 3 ft. grade

- | | |
|--------------------|----------------|
| McIntosh Red | a Ben Davis |
| N. W. Greening | Baldwin |
| Red Astrachan | Blk. Ben Davis |
| Red June | Delicious |
| Rome Beauty | Early Harvest |
| Staymans Winesap | Grimes Golden |
| Winesap | Gano |
| Winter Banana | Jonathan |
| Wealthy | M. B. Twig |
| York Imperial | Maiden Blush |
| Yellow Transparent | |

We also have to offer Grape Vines in one year No. one and One year No. two in Concord, Niagara, Moore's Early, Worden, Moore's Diamond and a few red sorts.

We have as fine a lot of Apple Seedlings as you ever saw and can furnish these in all grades.

Can supply roses in the following varieties, as well as a limited number of some other sorts.

- | | |
|---------------------------|-----------------------|
| American Beauty | LaFrance, pink |
| Etoile de France | LaFrance, white |
| Etoile de Lyon | Meteor |
| Frau Karl Druschki | Mad. Caroline Testout |
| Gruss an Teplitz | Paul Neyron |
| General Jacqueminot | Pink Cochet |
| Kaiserin Augusta Victoria | Sunburst |

White Cochet

All stock offered above is for late fall or early spring shipment. In addition to the items mentioned we will have a good assortment of two year apple in all grades as well as peach trees.

F. H. STANNARD & CO.
Ottawa - - - Kans.

L. R. TAYLOR & SONS

Topeka - - - Kansas

FOR FALL 1920

A Fine Lot of

Apple Seedlings

FRENCH and JAPAN PEAR SEEDLINGS

—ALSO—

2 Year Apple

2 Year Kieffer Pear

1 Year Cherry

Forest Trees and

Forest Tree Seedlings

—: WILLOW TREES :—

We have a block of Willows we desire to clear Fall 1920. We can quote attractive prices on large quantities.

- | | | |
|-----|---------------------------|----------------------|
| 400 | Babylonian Weeping Willow | 8 to 10 ft. |
| 500 | “ “ “ | 1 1/4-1 1/2 in. cal. |
| 700 | “ “ “ | 1 1/2-1 3/4 in. cal. |
| 600 | “ “ “ | 1 3/4-2 in. cal. |
| 600 | “ “ “ | 2-2 1/2 in. cal. |
| 100 | “ “ “ | 2 1/2-3 in. cal. |

Also a full line of Deciduous Trees and Shrubbery. Send us your Want List.

The Morris Nurseries
West Chester, Penna.

Fall 1920

Spring 1921

Est. 1884

400 Acres

Capital \$60,000.00

We have our usual line of Cherry, Sweet and Sour; Apple, Peach, Pear, Plum, Quince; also Shrubs and Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our wholesale price list.

Maloney Bros. & Wells Co.

Dansville, New York

Upland grown trees transplant best

such conditions of sale, many trees and plants of questionable value were distributed. I was not aware of these facts until the delivery season had closed, and efforts made to find the personnel behind these transactions were futile. As is usual in such cases, the buyer began to investigate after he had been duped and after all traces of the tree dealer had been covered up. These matters were taken up with state officials with no results whatsoever, but the suggestion was made that we should take effective steps to eliminate future practices of this nature, and if we failed, they would in turn act.

It is evident that something must be done to curb these evils. The disreputable tree dealer is a menace and every honest nurseryman in the country is a beneficiary of his evil deeds, because the public looks upon such matters as a whole and never thinks of placing the blame upon the individual where it rightfully belongs. I hope you will give this subject careful thought and thorough discussion. It demands action that should prove substantial and effective because they are our natural and economic enemies.

A resolution was passed at the last annual meeting directing the president to appoint a delegate to the meeting of entomologists that was held in St. Louis last winter. I therefore appointed Mr. Paul C. Lindley to represent our association, and he will make his report in due time.

There is a feeling expressed by some of the members that should we procure favorable action by the entomologists in regard to a uniform inspection law for the Southern states that it would conform to some one of the drastic laws now in evidence, rather than a modified law of less restraint and harshness, but I am inclined to feel otherwise. When we reach the point of candor and frankness in a larger way in our dealings with state officials, and change our mental attitude and sift things down to a normal human relationship, I am sure they will lend themselves to our viewpoint by meeting us half-way, and assist us in placing on the statute books only those laws that are just and equitable. This is a big, broad question, and until we can form a guaranty amongst ourselves of something that is convincing and substantial, we could not really ask a great modification from their present regulations.

There is also a feeling expressed by some of the members that prices and actual values of many stocks sold the past season were extremely irregular and below value in many instances, and that some step should be taken, if possible, to establish a uniform selling price for our products. This is a time when every grower and seller should know values. Ignorant competition is an economic crime for which the public pays, because standards are not maintained, and this is one of the foundation stones of any business, the standardization of its products.

One of the most serious problems confronting us is the traffic situation throughout the country. As a deterrent business factor, it easily holds first place. Due to the fact that the prosperity of any industry is largely dependent upon transportation, any untoward development in railroad circles, especially during the shipping season, reacts unfavorably on our business. The future holds some promise that with increased revenue made

possible by higher rates that will shortly become effective, the railroads will slowly add equipment to their present holdings and will be in better position to handle our products next winter.

At each annual meeting we have many practical talks and valuable papers of inestimable value that should be recorded and distributed to the members. We cannot grasp the full significance of any paper or talk during the rush of a business session, besides many members are denied the privilege of meeting with us by causes beyond their control. For these reasons I feel that it would be well to have the proceedings of our meetings printed and distributed to the members in order that they may have definite and permanent records of our activities. I suggest that this matter be discussed and action taken if you deem it worthy of consideration.

Now, gentlemen, I will not detain you longer because we have before us many good papers and talks of value and interest for discussion that are vital to our success. Let us do some constructive work and let the public know where we stand. This is an era of publicity, and let us tell the world that we are out gunning for the *Wildeat Nurseryman and Dealer*, that we have resolved to conduct our business in the strictest honesty and fairness, to avoid all deception and dishonesty and that we shall deal fairly with both customers and competitors, and will here and now place our house in order and work diligently to that end. We can do these things and without offense to God or man, but we shall have to dig. Don't be a mugwump merely sitting on the fence nor a mere dealer in nursery stock. Be a leader. Just transpose the letters l and d in the word dealer and you have it. This is the time when every one is expected to do his share in the general uplift. Let us not shirk our responsibilities and duties, for this is a time when our men need the action of steady, hard-working, thoughtful men, men whose feet stand on the ground, men who see things as they really are and who are not afraid to act accordingly; real men who know there is no royal road to success without steady plugging.

The packing shed and office of the Aurora Nurseries, Aurora, Ill., were burned Thursday, August 5th. The loss amounted to about \$8,000.00, which is partly covered by insurance. Fortunately, all records and books were saved. The fire occurred while the President, Mr. J. A. Young was attending the Ill. Nurseryman's Association meeting at Urbana.

G. M. Buttery, manager of the Louisville Nurseries, St. Matthews, Kentucky, has been spending several weeks visiting friends and relatives in New England and at the same time making a tour of the larger nurseries.

He reports prospects for fall business encouraging, especially in evergreens, and a tendency to use more evergreens in landscape work instead of deciduous stock.

Mr. Buttery found what appears to be a surplus in all common shrubs, but rarer and choicer planting material still scarce.

J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland
 (Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.
FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.
ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,
 116 Broad Street - New York City

ENGLISH NURSERY STOCK

Manetti Rose Stocks, a good quantity, 1 year splendidly rooted from sandy loam, none better imported. Also
 Seedling Briar.
 Polyantha Stocks.
 Fruit Tree Stocks for budding and grafting.
 New and Rare Chinese Plants.
 Other General Nursery Stock grown in large quantities.

Glad to answer your enquiries—Write for Catalogues.

WALTER C. SLOCOCK,
GOLDSWORTH NURSERIES,
Woking, Surrey - - - England

“A good picture is worth a million words.”
25000 true-to-type negatives to choose from, with a special landscape service.

THE NATHAN R. GRAVES CO.
Horticultural Photographers
84 Exchange Street
ROCHESTER - - NEW YORK

310 Acres devoted to business

Vincennes Nurseries
W. C. Reed & Son, Prop., Vincennes, Ind.

Offer for Fall 1920

Cherry, 2 Year XX $\frac{7}{8}$ up 5 to 7 feet
 Cherry, 2 Year $\frac{11}{16}$ up 4 to 6 feet
 Cherry, 2 Year $\frac{5}{8}$ to $\frac{11}{16}$, 4 to 5 feet
 Cherry, One Year, Sweets and Sours, all grades
 Peach, One Year all leading Varieties, strong on Elberta
 Apple, 2 Year, leading varieties
 Standard Pear, One Year, 4 to 6 feet and 3 to 4 feet
 Japan Plum on Peach, One Year
 Hansen Hybrid Plum, One Year on Peach roots
 Hardy Northern Pecans, Grafted Varieties

Please submit List of wants for prices

—THE—
Westminster Nursery
J. E. Stoner, Prop.
WESTMINSTER - - MARYLAND

Offers for Fall 1920

California Privets, Asparagus,
 Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars,
 Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks,
 Horse Chestnuts, Butter Nuts, Norway Maples,
 in grades from 6 to 16 feet.
 Cumberland and St. Regis Raspberry,
 Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses.
 Can supply in quantity. Write for prices.

5,000,000
SEEDLINGS

All First-Class Stock

APPLE, PEAR, PLUM, CHERRY, ST. JULIEN, CITISUS
 Laburnum, MAHONIA Aquifolia, FAGUS sylvatica, ROSA
 canina, SYRINGA vulgaris, etc., etc.

For Canada, we offer a large supply of fine stock.
 RHODODENDRON, AZALEAS, ROSES, (dwarf and standard,
 BUXUS, CONIFERS, PEONIES, etc., etc.

Ask our reasonable prices.

VanderVis & Co.
Boskoop - - - Holland

Soft Yellow Pine Box Lumber

Dry, bright stock 7-16x6 inches and wider, all 10 ft. lengths tied in bundles of 10 pieces each. Other lengths if wanted. Box framing random lengths $1\frac{5}{8} \times 1\frac{3}{4}$ inches surfaced.

Write or wire us for delivered prices.

The Dimension Company,
Lockhart, Ala.

For FUMIGATION With
HYDROCYANIC ACID GAS

“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
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The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., September 1920



HIGH PRICES OF FOREIGN FRUIT STOCKS

That fruit stocks will be scarce and high in price for some time to come is a foregone conclusion. Government research coupled with domestic production may in time supply

all requirements, but that is for the future to decide.

For the next few years at least the situation is not promising.

The regulations governing their importation from foreign sources, if they do not actually discourage, will not cheapen them by any means.

Add to this the very high prices being asked for them in France, the main source of supply, and it means high prices and scarcity of fruit trees for some time to come.

It is useless and even unjust to feel resentment at the Frenchmen for advancing the price, when we ourselves are to blame for the situation he finds himself in.

Presumably the French nurserymen are in business to make a profit. If his market for certain lines of his goods is taken away from him as it has been by our quarantine 37 and these have to go on the brush pile, to preserve himself from loss and bankruptcy he must very naturally recuperate his loss on the goods for which there is an urgent demand, to the greatest possible extent.

A business can hardly be accused of profiteering or even of taking a mean advantage under such circumstances.

If a nurseryman does not make a good profit on some items, how can he stand his losses and continue in business?

TRUSTWORTHY TREES AND PLANTS

The adoption of a trademark "Trustworthy Trees and Plants" and the appointment of a Vigilance Committee by the National Association to see that all members using that trademark lived up to its requirements is for the specific object of protecting the customer from the unscrupulous nurseryman and dealer, men who deliberately lie and cheat.

They should with equal force protect the honest nurseryman from the unscrupulous ignorant buyer. There are few nurserymen who have been in the business any length of time who have not received letters, somewhat as follows:

"The trees you shipped me are nearly all dead. They must have been diseased. I thought I was dealing with a responsible nursery or the plants you shipped came without any soil on the roots. If they do not live, I shall expect you to replace them."

Everything may have been done that was practically possible in growing the stock, digging, packing and shipping, but after the plants have once passed out of the control of the nurseryman, he is helpless and is often at the mercy of an unscrupulous or ignorant buyer. Plants are so extremely perishable that in many instances one hour's exposure to sun and a dry wind is fatal.

A good illustration of the ignorant buyer came before the writer the past season.

A shipment of assorted field grown roses was made to a party who attempted to arrange and plant them according to a plan. The packages were opened up and so as to be sure to have them planted according to plan, they were sorted out and laid in the sun and wind until they could be leisurely planted. Any plantsman can guess the results, almost a complete failure, with all the blame on the dishonest? nurseryman.

Then there is the lazy or ignorant planter who does not know enough or is too lazy to plant properly, who expects to get results without effort on his part, who blames the nurseryman because his trees and plants put out a few leaves, linger and then die. When the true cause is, he has not supplied the conditions under which it is possible for the plants to grow. The delay and exposure while en route, to excessive heat, cold or drying wind is a factor which causes much loss for which the nurseryman is blamed.

Dry hot weather following the planting too, is often the cause of failure, rather than poor stock. In fact, the causes are endless that contribute to failure for which the nurseryman may be accused of having shipped untrustworthy trees, to say nothing of "the unknown quantity" which even the expert with conditions of his own selecting can not always guard against.

The spirit of the Trademark Trustworthy Trees and Plants and all that it implies and the efforts of the National Association through its Vigilance Committee is for the sole purpose of insuring the purchaser of nursery stock a square deal, by enabling him to distinguish the nurseryman who does business in an honest way from the swindler. Further than this, they are not likely to be able to go without grave danger of working an injustice to their own members.

There never was a nursery nor ever will be whose em-



This Book and the Plan Back of it Will Help You Sell Nursery Stock

This book is designed to help you by helping your customers. It explains the art of pruning in everyday language, and illustrates the principal points. It tells how, when and where to prune for vigorous and healthy growth. It's clear and concise.

Our Selling Plan Involves You

We've a selling plan that will pay you big. A cooperative plan whereby The Little Pruning Book reaches your customers through you, at an ultimate profit to yourself. It is selling at 50c in bookstores.

Let us send you a copy free. We will also explain our plan in detail, after which you can decide what is best for your business. Write early—no obligation.

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PEXTO

PRUNING SHEARS

employees do not make errors who do not ship out goods below their own standard, but in all such transactions, they are willing and eager to adjust to the customer's satisfaction.

To make such exceptions or accidents, cases for the Vigilance Committee is unwise, except to act as arbiters failing settlement.

MODERN APPLICATION OF AN OLD LAW

On a separate page we publish a letter from P. F. Ridsdale, executive secretary of the American Forestry Association, Washington, D. C.

Clearing away the forests to make way for the agriculturist was one of the big jobs of the pioneers and early settlers.

Perhaps the hardships and labor experienced by our forefathers in accomplishing this work, has left an hereditary antipathy or at least a lack of appreciation of the absolute necessity of trees and forests to our very existence.

Judging from the government reports, the danger line towards exhaustion of our timber supply has long been past, and it is high time we took the back track, and instead of destroying the forests, restore them.

The national government supplemented by the state governments will have to be the means by which the larger phase of the work will have to be accomplished, because it is a work that is vital to the life of the country.

To bring home the importance of tree planting to every citizen we could hark back to a very ancient law in England, that required every freeman or yeoman to plant a yew tree in his enclosure.

The reason of this was, the wood of yew was used for making the bows for the archers.

Taxus baccata or the yew was supposed to have formed part of the forests in Britain in prehistoric times.

The yew is poisonous to cattle or it is not uncommon for them to die after eating it and for this reason the trees had to be in enclosures.

It is not uncommon even to this day to see very old yew trees in castle court yards, church yards and even in the yards of very old cottages, doubtless, echoes of the times when the yew tree furnished the implements of war.

A modern application of such a law would require every citizen to plant a tree every year to insure the welfare of these our United States.

AMERICAN FORESTRY ASSOCIATION

1410 H Street, N. W., Washington, D. C.

July 23, 1920.

Gentlemen:

We are again writing to ask for your support in our endeavor to save our forests, restore those which have been cut and to provide forests for our future needs. Urgent need for the adoption of measures for perpetuating our forests impels us to again ask you to become a member of our Association.

Every citizen is directly concerned in the condition

which may be summarized as follows:

—Our forests are being cut or destroyed three to four times as fast as new forests are growing;

—Only one-fifth of our original forests are left; lumber costs are high as a result;

—Pulp wood from which paper is made is scarce and costly;

—Watersheds are endangered by the disappearance of forests; recreational uses of them demand their upkeep;

—Conditions will grow worse unless there is adopted a constructive program for the better protection of forests from fire and disease; for encouragement of regrowth and the creation of new forests on cut-over forest land.

Our Association is conducting a nation-wide campaign for such a program. National and State legislation is needed; co-operation of timberland owners, wood-using industries and individuals, is essential.

We need your help and the help of every good citizen in furthering this movement. You are invited to become a member of the Association. Your membership will increase our income and enable us to carry on our campaign for perpetuation of our forests. Membership entitles you to our large and well illustrated magazine AMERICAN FORESTRY each month. It keeps you informed about forest conditions, about trees, birds, animals and kindred subjects. It is of particular value in every home.

Please join! Apply for membership to the American Forestry Association, Washington, D. C.

Yours, for the perpetuation of our forests,

P. T. RIDSDALE, *Executive Secretary.*

A NEGLECTED GROUP OF PLANTS

Because that group of plants known to botanists as the Heath Family which includes the Rhododendrons, Azaleas, Blueberries, Kalmias, etc., does not respond to rough and ready propagation and culture, it has been much neglected by American nurserymen. It is true they have handled them in large quantities but have never propagated and grown them to any great extent.

They have imported the hybrid Rhododendrons and Azaleas, merely acting as jobbers and have handled collected native plants, thereby destroying more than they have produced.

Broadly speaking, in their native state, this group of plants grows on peaty and sandy soil of an acid nature the extreme opposite to the limestone soils and loams that produce the best crops in most all other cultivated crops, and it can readily be seen why they have not been a success. They require special conditions and special treatment. There are so many localities with soils that are splendidly adapted to growing these plants that it is hard to understand why a nursery has never been established to specialize on them. The demand for the different members of this group of plants need not be questioned, the market is unlimited.

Perhaps Quarantine 37 will prove to be the necessary stimulus, for importations preceding it consisted largely of this class of plants.

Belonging to this group of plants are the Blueberries, Huckleberries, Billberries as they are variously called or botanically, the *Vaccinium*. It is interesting to note

Seeds For Nurserymen
 Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.
THOMAS J. LANE
 SEEDSMAN
 DRESHER, - Penna., U. S. A.

We offer Azalea Indica Alba and Omurasaki (pink) in small plants; Azalea Amoena; Biota Aurea Nana and Rosedale; Abelia grandiflora; Viburnum Odoratissimum (Evergreen Snowball); Wegelia Amabilis, Rosea and Variegata Nana; Spirea Van Houttei, Reevesii and Thunbergii; Forsythia Fortunei, Viridissima, Intermedia, Suspensa and Suspensa Variegata; Deutzia Pride of Rochester, Crenata fl. pl. and Candidissima; Roses: Radiance, Killarney, the Dorothis, Cherokee, Silver Moon, etc. **Thomasville Nurseries, Thomasville, Ga.**

Peach Seed
 All Varieties
 Write
THOMAS R. HAMAN
 1614 E. Oliver St.
 Baltimore - - - Md.

ORDER NOW
 Your stock of Apple, Pear, Cherry, Quince, Rooted Rugosa cuttings the best stock for Polyantha roses.
 Rugosa stems for Standard and Weeping Roses
 Rosa Canina cuttings and seedlings
 No Manetti available
 Ask for Prices per 1,000; 10,000; 100,000
KROMHOUT & CO.
 Boskoop - - - Holland

Don't Buy Your Fruit Tree, Canina Stock, Roses, Etc.,
 Before you have seen the special offers from The Fruit Tree Stock Specialist
JAN G. KLOOSTERHUIS,
 Pomona Nurseries Gasselte, Holland
 Our only address
 Established 1894 Cable addr. Kloosterhuis, Gasselte

PEACH PITS
 The heavy, continued rains will no doubt cause a shortage in the crop this year. We can't tell even yet just how many there will be, but we can't see how there can possibly be any more than enough to go around. Have you covered your wants? If not a little friendly advice is that you do so quick.
The Howard -- Hickory Co.
 O. Joe Howard, Secretary & Treasurer
 Hickory - - - N. C.

NATIVE AZALEAS
 25,000 of them
 100,000 Trillium grandiflorum
 10,000 Liliun Philadelphicum
 25,000 Mertensia Virginica
 100,000 Hardy ferns
 100,000 Rock plants in choice varieties
 These are a few items in which I specialize.
 My fall trade list is now ready. Send for it.
EDWARD GILLETT
 Southwick, Mass.

FALL BULBS
 Aggregate
 your sales of these and mail us list for pricing. We carry a complete general line of Flower Bulbs.
Vaughan's Seed Store
 CHICAGO NEW YORK
 10-12 W. Randolph St. 44-43 Barclay St.



LABELS FOR NURSERYMEN
THE BENJAMIN CHASE CO.
DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

they are beginning to receive attention in a horticultural way.

The Weekly News Letters from the U. S. D. of A. has the following note showing interest is awakening on account of the possibilities in connection with improving the fruit.

BLUEBERRIES ON "WORTHLESS" LAND

Luscious blueberries—many of which are three-fourths of an inch in diameter—that sell for \$10 a bushel! Such is the product secured by a New Jersey grower, whose principal business has been growing cranberries but who more recently has taken up the cultivation of blueberries. At present he has 20 acres which he has planted, in part, with carefully selected wild blueberry stock and, in part, with hybrids furnished by the Bureau of Plant Industry of the United States Department of Agriculture. Not only are the berries on this tract of very high quality but the yield is prolific, the older plants producing at the rate of nearly 100 bushels to the acre. The plantation is situated at Whitesbog, near Browns Mills.

The success of this grower is but one instance of what is being done commercially by men who are utilizing the information supplied by the Department of Agriculture scientists. The latter have made a study of blueberry culture for several years and are able to furnish data regarding the best varieties and the most suitable soils. Of particular significance is the fact that blueberries thrive best on peat and sand soils, so acid as to be considered worthless for ordinary agriculture. Thus through blueberry culture it is possible to utilize many tracts which have been regarded as especially hard and unpromising.

ILLINOIS NURSERYMEN'S ASSOCIATION

Urbana, Illinois, August 4-5

The summer meeting of the Illinois Nurserymen's Association was held at Urbana at the University of Illinois, August 4 and 5.

The following firms were represented:

Beaudry Nursery Company, Chicago, Ill.
 Klehm's Nursery, Arlington Heights, Ill.
 D. Hill Nursery Company, Dundee, Illinois.
 Onarga Nursery Company, Onarga, Ill.
 Arthur Bryant & Son, Princeton, Ill.
 Aurora Nursery Company, Aurora, Ill.
 Swain Nelson & Sons Company, Chicago, Ill.
 Palmgren's Nursery, Glenview, Ill.
 Naperville Nursery, Naperville, Ill.
 Littleford's Nursery, Downers Grove, Ill.
 Golf Nurseries, Glenview, Ill.
 Augustine & Company, Normal, Ill.
 C. W. Marsen & Son, Chicago, Ill.
 McKay Nursery, Madison, Wis.
 Eugene de St. Aubin & Brother, Oak Park, Ill.
 Jerseyville Nursery, Jerseyville, Ill.
 L. Graves & Son, Farina, Ill.
 Charles S. Wolke & Son, Neoga, Ill.
 F. D. Clavey & Son, Highland Park, Ill.
 James King Nursery, Wheaton, Ill.
 Glen Ellyn Nursery, Wheaton, Ill.
 Pfund Nursery, Elmhurst, Ill.

Jacksonville Nursery, Jacksonville, Ill.
 Herman F. Johnson & Son, Normal, Ill.
 Victor Kryda, Chicago, Ill.
 Lyon & Anderson, Belvidere, Ill.
 George Wittboldt Company, Chicago, Ill.

From some of these firms there were three and four present. In fact, it seemed that Nurserymen, generally, took a day off and had a good time.

The meeting started promptly at 7.30 p. m. August 4th. All papers read by the Professors were most instructive and interesting. All Nurserymen present are of the opinion that much valuable help can be secured at the University, and only for the asking.

It was necessary to hear Professor Blair on Wednesday evening so that all might be prepared for the tour of the University Campus, greenhouse, garden, flower garden, orchard and farm on Thursday.

Dr. Blair told us about the Nurserymen's school which is being established at the University. He explained that much of the course is already established and that it will require but the small outlay of \$15,000 dollars per annum to put the course into existence. To properly conduct the experiments and practical side of the course will require some land and some buildings, an estimated cost of \$50,000, and each Nursery firm present, and there were thirty of them representing hundreds of thousands of dollars of invested capital, agreed individually and collectively to bring every influence to bear to secure the \$65,000 needed to place an available course in the great University of Illinois. Prof. Blair called upon Prof. Dorner of the school of Floriculture, Prof. Ruth of the Research department, and others representing the various activities of the great school of Horticulture over which Dr. Blair presides. Their papers and talks were worth a trip to hear.

Dr. Blair then presented Prof. Crandall who has devoted his life to conducting experiments in breeding better fruit. The nurserymen were wonderfully impressed with the value of Dr. Crandall's work to the betterment of the fruit industry. It was apparent that the men in attendance were surprised that so great a work was being conducted and that they knew so little about it.

The real treat of the meeting was on Thursday morning when automobiles drew up at the Beardsley and the nurserymen were personally conducted through the University Campus and to the plantations of the various activities of the school of Horticulture.

Prof. Dorner's Department, where we saw the flowers and plants growing under the skilled hands of his corps of competent instructors and where we learned that orchids are successfully produced from seed, was interesting and instructive.

The cherry orchards, the vineyards, the chicken farm, and the vegetable gardens were viewed with surprise at the wonderful extension of the experiments being conducted for the benefit of the fruit grower, the vegetable gardener, and the general public, as well as the nurseryman and the florist. The small fruit division and the farm were equally well enjoyed and were highly instructive.

The real study and the promising value to nurserymen was found in Prof. Crandall's work. His is the work of a patient, hard-working martyr who is perform-

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

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CURETON NURSERIES, Austell, Cobb Co., Georgia.



PEACH SEED—1920 Crop

Choice,—Price very Reasonable.

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Get our prices before buying.

PIGGOTT NURSERIES, Inc., Piggott, Ark.

PEACH TREES

Good supply of straight well rooted trees

STANDARD VARIETIES

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Extra strong stuff for Grafting or Outside Budding 5-8 or 6-10 m-m.

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Windlesham Nurseries,

Surrey - - England

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

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TELEPHONE, NAPERVILLE No. 1.

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Collected plants.

Fruit stocks and rose stocks

We buy and sell nursery stock

Send us your want lists and surplus lists.

Koster & Co.

Bridgeton - New Jersey

G. A. H. BUISMAN & SON.

HEERDE, HOLLAND

Growers of Stock for Apple, Pear, Myrobolan,

Mahaleb, etc., Rosa canina, Laxa, Rubiginosa

Price List on Application

ing the kind of experiments that require the age of a tree to determine the value. His is the work of hybridizing tree fruits and producing new varieties.

Dinner was served at the University Cafeteria, after which the program was completed according to schedule.

Nurserymen were pleased; everybody was instructed and all agreed that for a real entertainer and instructor Professor Blair is not excelled.

The lessons learned from the meeting were many and varied and all agreed that too little is known by the people of Illinois about the great school where more than 10,000 of our young men and women are educated.

The appropriation for each two years is \$5,000,000 and has been for years, but now, since the high cost of most everything, this appropriation ought to be very materially increased.

TO AN APPLE

The erection of a monument to an apple on the Springwood Farm of John C. Schmidt, about two miles south of York, Pa., brings before the public one of the little romances of agriculture which very fittingly occurred in what is the garden spot of Pennsylvania and very nearly the garden spot of the world. That the York Imperial, the apple to which the monument has been erected, was developed one hundred years ago by Jonathan Jessup out of a seedling from an apple thrown aside by a farmer who couldn't market his product is an incident that will appeal to one's sense of the dramatic. But if memorials to fine fruit are to be set up, it is about time that a monument marked the spot near Philadelphia where that most delicious and aromatic of all fruits, the Seckel pear, was developed about the same time that the Jessup apple was being cultivated at York. Both apple and pear are a tribute to the careful husbandry of the original settlers of this state, be they English, Scotch-Irish or German.

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Both American and French Grown, Straight or Branched Roots, all grades. Carload rates to Central points; East, West and South. **ORDER NOW.**

Also a general line of nursery stock. Address
SHENANDOAH NURSERIES
D. S. LAKE, Pres.,
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JUNE BUDDED PEACH

All Leading Commercial Varieties
Wholesale only. Write us.

Joe Shadow Nursery Co.

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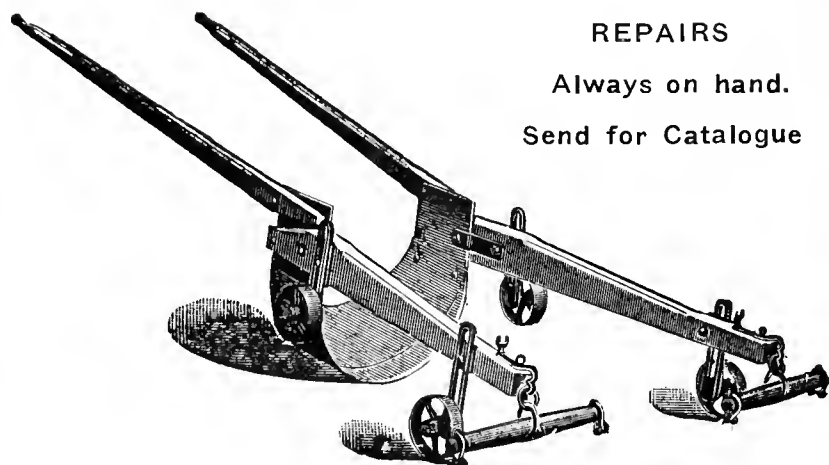
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TREE DIGGER

REPAIRS

Always on hand.

Send for Catalogue



Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

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FOR SALE—One-half interest in nursery, in town of \$5,000 in Indiana. We have 40 acres of land under lease, 20 acres for 10 years and 20 acres for 3 years. Invoice shows \$20,000 to \$25,000 worth stock including greenhouse. Purchaser will have to buy growing stock only. The logical and perhaps the only person to buy should be experienced landscape architect, who could handle sales end of business. This is a very progressive city, with 50 to 100 mile territory. Price for one-half interest is \$10,000. Address

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ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

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Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

WANTED

A man of wide experience in the Nursery business desires position with a reliable progressive concern.

Is familiar with all office details covering both Wholesale and Retail.

Considered a good correspondent and is capable of taking full charge of office.

No. 24, Care National Nurseryman.

WANTED

A nursery foreman with good knowledge of ornamental plants; their propagation and cultivation; to take charge of new nursery for supplying plant material to a rapidly developing locality. Fine opportunity to later own the business. Give references and state salary and experience.

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Kingsport, Tennessee.

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A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

WANTED—Competent nursery foreman who can successfully manage propagation, packing, storing, crop rotation and general nursery work, 160 acres.

MOUNT HOPE NURSERIES

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WANTED—Reliable man familiar with names and habits of ornamental trees, shrubs, evergreens, and roses, with practical knowledge of landscape work and a Salesman, must be able to sell quality stock at quality prices. Salary \$100.00 per month with board and lodging and a commission on business in addition to salary, position permanent. If you are a landscape man and SALESMAN, write us, we will pay you all you are worth.

S. H. WEAVER & CO.,
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WANTED—A man with experience to handle wholesale buying and selling. Good opportunity for a live wire. State age, references and salary desired. Apply only by letter.

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We offer to the Trade for Late Fall or Early Spring Delivery :-

- 25,000 Columbian Raspberry
- 100,000 Concord Grape, 1 year
- 100,000 Black Raspberry Tips

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St. Regis Raspberry Canes
in quantity, **Fall or Spring Delivery**
A. J. Humphreys. **Mt. Sterling, Ky.**

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FIRST QUALITY 1 YEAR SEEDLINGS

- 100,000 Rosa Canina by 800
- 100,000 Rosa Canina by 1200
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Write for prices of the above.

Order No. 30, Care National Nurseryman.

We will accept orders for N. C. Mountain natural peach seed collected from sections where diseases are not known. These seed are screened and graded. They are the best that there is. Try us.

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QUINCE CUTTINGS one year

Write for special prices to

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The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

A. B. KATKAMIER,

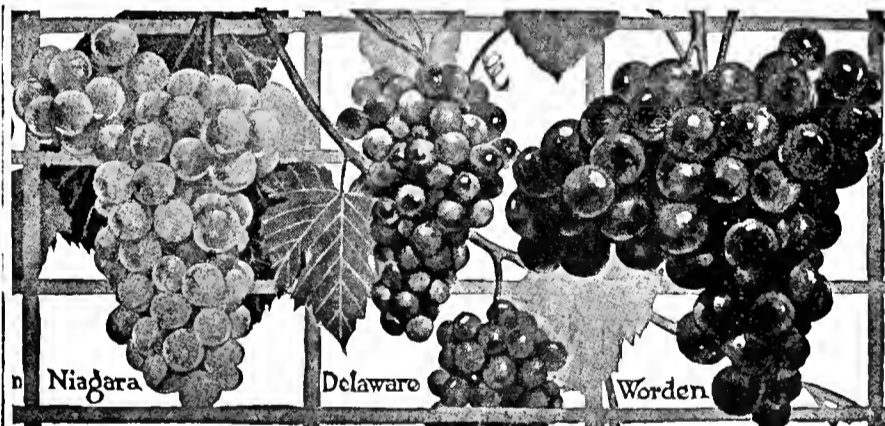
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Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

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Everbearing Strawberry Plants

We Have For Sale To The Trade Either
For Fall Or Spring Delivery

500,000 Progressive Everbearing Strawberry
Plants, No. 1 grade, large, vigorous stock,

BOISE VALLEY NURSERY CO.

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Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials. Bay Trees, Boxwood, Rhododendrons, Andromedas, Ericas and Azaleas.

Send us your want list.

Inspect our stock.

North Carolina Peach Pits

We are accepting orders for Fall Shipments.

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200 Acres "At it 25 Years"

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| Strawberries | Iris | Asparagus |
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See wholesale list before placing your order.

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This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

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A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

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A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.
Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

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A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

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A general assortment of nursery stock for delivery Fall 1920 or Spring 1921.

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Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.



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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

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We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

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NURSERY BANDS

Manufacturers of

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SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

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Two and One-half Million Strawberry Plants

Leading standard and everbearing varieties.

Our Stock is Grown Right

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Evergreen Specialist---Largest Growers in America

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Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

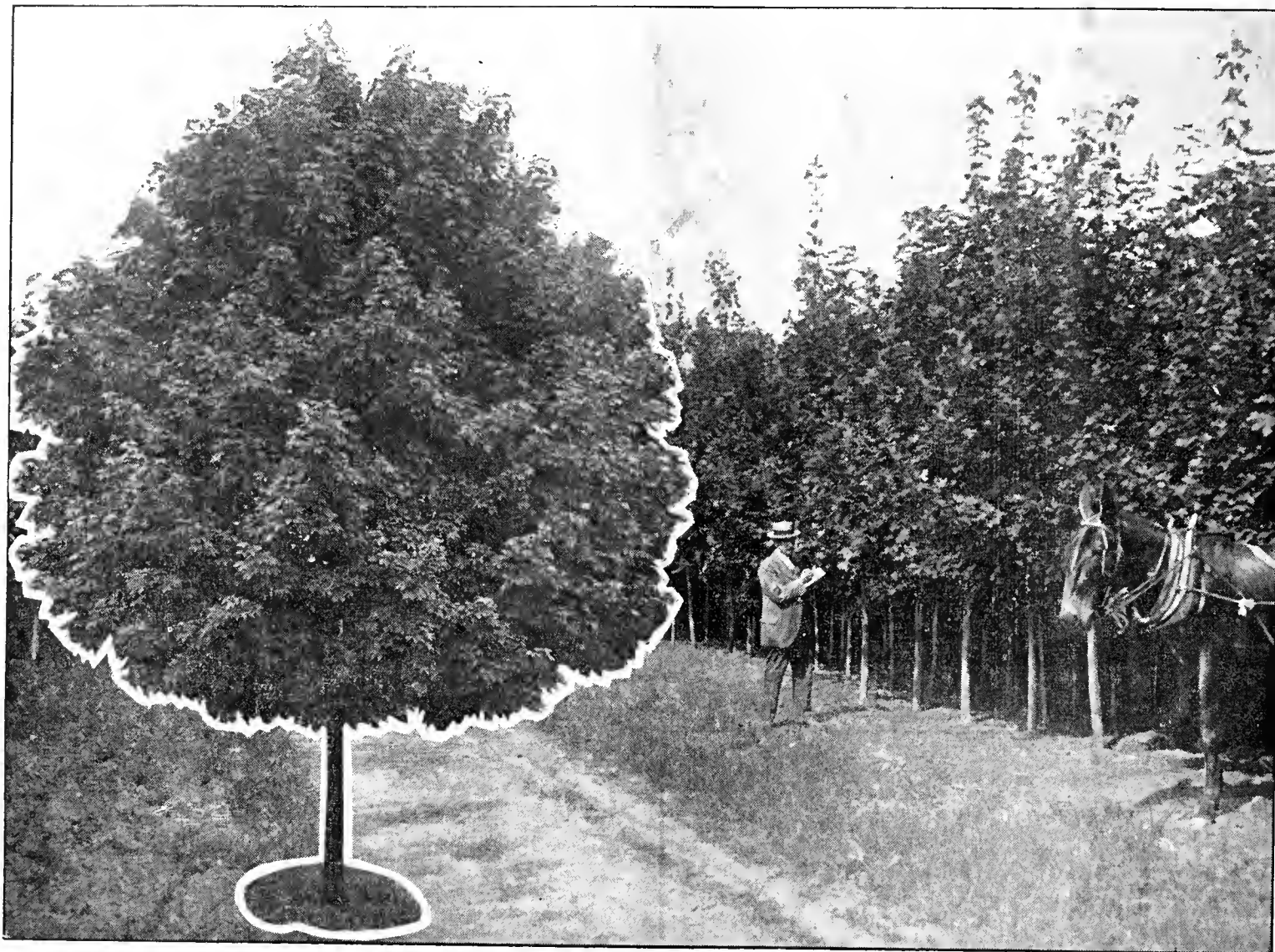
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Specimen Norway Maples



Nature seems to have provided no other tree so valuable and adaptable. For lawns, for streets, for parks, it has no superior. We offer:

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| 2000 | 7 to 8 ft. lin. |
| 5000 | 8 to 10 ft., 1 $\frac{1}{4}$ to 1 $\frac{1}{2}$ in. |
| 10000 | 10 to 12 ft., 1 $\frac{1}{2}$ to 1 $\frac{3}{4}$ in. |
| 10000 | 12 to 14 ft., 1 $\frac{3}{4}$ to 2 in. |
| 10000 | 14 to 16 ft., 2 to 2 $\frac{1}{2}$ in. |
| 10000 | 2 $\frac{1}{2}$ to 3 in. |
| 5000 | 3 to 3 $\frac{1}{2}$ in. |
| 3000 | 3 $\frac{1}{2}$ to 4 in. |
| 1000 | 4 in. |

Prices on application.

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THE NATIONAL NURSERYMAN



OCTOBER 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

24/10

Will be pleased to quote on your list of wants

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Stock grown on these rich, loamy lands enters the world under ideal conditions.

Send us your list of requirements. We will gladly send you our trade list upon application. It will be out about the first week in September.

Have a good holding of Fruit Tree Seedlings. Will be pleased to make prices on application.

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Strawberry Plants Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

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Let us talk to you in large or small quantities on the following:

- AMPELOPSIS VEITCHII, Heavy 2 yr.
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- APPLES, 2 yr. buds, fine stock
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- Assorted Shrubs. Long on HYDRANGEAS P. G. and SPIRAE VAN HOUTTE
- RHUBARB, graded 1 and 2 yr.
- ASPARAGUS Plants, strong 2 yr.

The Preferred Stock

The Preferred Stock



NOW IS THE TIME

to make sure you have everything you need to take care of your Fall deliveries and to protect yourself on staples and specials for Spring sales.

It is not possible to carry a full stock of everything through an entire season. Assortments become broken but right now they are very good with us.

However, Sales are Heavy

ROSES
field grown

AMPELOPSIS VEITCHII
(Boston Ivy)

CLEMATIS
Large flowering and
Paniculata

DIELYTRA SPECTABILIS
Bleeding Heart

HARDY PERENNIALS
A good assortment

PEONIES
Named and unnamed by color

ORNAMENTAL SHRUBS
Large assortment

TREE HYDRANGEAS BUSH HYDRANGEAS

BERBERIS THUNBERGII
FRUIT AND SHADE TREES

High Grade Stock for the Wholesale Trade

Jackson & Perkins Company

Newark, New York

October 1st, 1920.

The Preferred Stock

The Preferred Stock

105 Years in the Nursery Business

GENERAL STOCK:—Our propagation includes apple, peach, pear, plum, cherry, apricot, quince, grape vines, all small fruits, shade trees, shrubs, climbers, roses, garden roots, and etc.

—Special—

A BIG STOCK OF QUALITY SHRUBS

Everything is grown in large quantities. Our grades are dependable and we are generally prepared to quote to nurserymen nearly everything we offer to the retail trade, and prices are always in line with those of other reputable growers.

We will be glad to have a list of your requirements for the coming season. Doubtless there are some things that you can use that we have in surplus. Can also ship from our branch plants—Marionville, Mo., Farmington, Ark., Dansville, N. Y., North Girard, Pa., and Vincennes, Ind.

STARK BROS Nurseries and Orchards Co. Louisiana, Mo.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

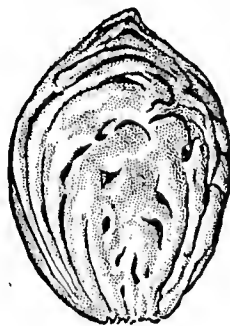
COLLECTORS OF TREE SEEDS



THE North-Eastern Forestry Co.

CESHIRE
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."



PEACH SEED



1920 Crop

California Grown Seed

Selected from the Best Orchards

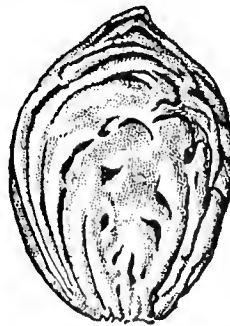
Properly gathered and cured

Sacked ready for shipment

We will quote F. O. B. Kansas City, Mo.

Write us at once for prices either for small or large quantities.

California Nursery Company



NILES,

Alameda County,

California



PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

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When writing to Advertisers please mention the National Nurseryman.

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Naarden, - Holland

Growers of stock for Apples and Pear; Mazzard Cherry; Prunus Mahaleb, Myrobolana and communis; Doucin; Paradise and Quince.

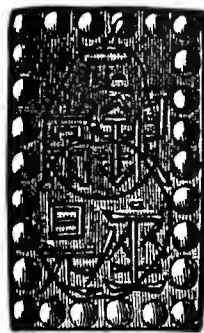
Rosa canina, rubiginosa, rugosa and Manetti also stems of Rugosa for topgrafting.

The catalogue contains also a general line of Nursery-stock, specially young plants to line out which can be imported by special permit.

Catalogue free on demand.

Heikes—Huntsville—Trees

We offer the following for Fall 1920 and Spring 1921:



FRUIT TREES
SHADES
ROSES
EVERGREENS
SHRUBS
HEDGE PLANTS
ABELIA GRANDIFLORA

AND OTHER ORNAMENTALS

All of our own growing. Prices on application.

Address

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of Fruit Trees, Small Fruits and Hybrid Tea Roses.

Large Supply of
Ornamental Trees, Shrubs,
Perennials,
Vines, Evergreens.

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

A Complete Variety of Nursery Stock



60000

Norway and American Elm
fine stock in car load lots or less



C. M. Hobbs & Son
BRIDGEPORT - - Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA., OCTOBER 1920

No. 10

THINKING

Address by Paul C. Lindley before the Southern Nurserymen's Association. Recently elected President of that Association

Thinking calls for considerable concentration, but I find that many of our nurserymen do not feel the importance of thinking, but after this meeting I hope you will have food for thought.

When we decided to come to Charleston last year, my thoughts were a change of meeting place, perhaps find some new broad-leaved evergreens and enjoy a short visit with the boys. But, gentlemen, times have changed since our last meeting. Up in Chicago at the meeting of the A. A. of N. they had a little ring tailed twister called a eyelone and the radical members along with "Trustworthy Trees" etc. pulled something worth while.

Now we southerners meet here in Charleston, I do not want to bring up fond recollections to the old settlers, but they once had an earthquake here, not a little eyelone. An earthquake is one of those slat jarring things and for some seconds you do not know whether you are coming or going. In the case of a blind man, who received his shock, jumped up, threw away his sign reading "I am blind" opened his eyes and ran away, that would be called an 'eye opener.' That's what the Chicago convention was—an eye opener. Since the convention I have received a letter from one of our nursery firms complaining of the ethics of certain firms in a certain state, and wishing that their names and marvelous tales be published. But I don't think that we have quite reached the stage; at least, the nurserymen haven't, though the farm press has been libeling our men and firms.

But to try and correct that evil we have a representative body of men, the Entomologists, our "governors," whose duty it is to see that we do not exceed the speed limit. In inviting several of them to meet with us, the executive committee realized that many nurserymen of our association had voiced their sentiment that we did not need them at our meetings. But we must have help, and drastic help too, if we rid ourselves quickly of the "wild-eat" nurserymen. You know your neighbors' faults, the entomologists in each state should know all our faults, so why not have them with us, face to face, man to man, and tell them what we want? It is against the law to misrepresent in some things, why shouldn't it be against the law to misrepresent fruit trees and other things we grow?

There is an old saying, "You can't judge a man by the clothes he wears," but let's get something started before we leave Charleston so that we can tell the variety of a budded tree by the label it carries.

There are men in this room sailing along under the "Trustworthy Tree" banner that can help all of us, if,

especially towards the end of the shipping season, they would not sell any and everything in the shape of a tree to unscrupulous salesmen and dealers. I received a quarterly bulletin from the Virginia Station a few days ago, giving the names of different nursery firms shipping apple trees into their state; also the per cent of crown gall and aphid on same. They also named the Garden Spot Nursery Company of North Carolina as shipping 1200 seedling Peach trees. This caused their license to be cancelled in Virginia; why allow them to sell at home?

I wish all states would get out a quarterly bulletin and publish the names and deeds, including seedlings, shipped by all nursery firms. I think Virginia has the best law governing the nursery industry in the south, inspection before planting.

The entomologists were appointed to protect the planter against scale and diseases, but what we desire now is for them to help in protecting the nurserymen as well as the planter against seedlings. The inspector should withhold a certificate from a nurseryman until all seedlings, where he finds them salable size, are destroyed.

Apricots, Quince, Plum and Pear 70 cents wholesale and the tree dealer clamoring, wiring send me anything for substitute, a 35 cent price and he takes them all. What does he get—Seedlings!

When you drive rivets, you have to jab 'em home, and while they are hot. If any of you wish to class me as one of the apostles or too radical, just remember I am only telling the truth. We are now on a hot trail; the nursery interests are eager, interested and can be influenced. The time to "eateh 'em" and drive them home to "Trustworthy Trees" is while they are hot.

Shall we co-operate with the state officials in correcting bad practices, or keep on as usual, side stepping and bluffing? That is the usual method of both parties. Put a case squarely up to a state official, they admit it is wrong, bad, unethical, and against the law, but there is nothing they can do. Now what we are going to insist upon is that you go home and make some laws that will handle the crooked nurserymen and tree dealer. Will you fire from the hip, or will what you hear go in one ear and out the other, or will you have the nerve to act and tell the truth.

The eyes of the honest nurserymen are fastened on the future. We will co-operate with you if you will help us.

Now let us think a few minutes about our coat of arms, our shield, our trade-mark—"Trustworthy Trees." Shields and coat of arms were first displayed by the

Holy Crusaders for heroic and valiant conduct in the crusades. Different emblems represented virtue, honesty and merit. Trademarks usually represent quality and merit, but not always honesty. There are many nurserymen in our organization using our slogan "Trustworthy Trees" who are given to bad practices; they allow the dollar to rule. Many other nursery firms are going to try to join our organizations, so our executive committees of all our organizations must look both ways. The word kodak spells camera; victrola spells all kinds of talking machines, "Trustworthy Trees" in the future will spell nurserymen.

My subject was "THINKING" and recently I have been doing a lot of thinking. The nature of my thinking can be easily imagined from my remarks. While here and when you go back home think hard and quick and let's all pull together and push "Trustworthy Trees" against all outsiders.

Let's start this Southern Association meeting off with that policy!

WAITING ON CUSTOMERS IN A RETAIL NURSERY.

In Pre-war days, waiting on customers was considered by many nurserymen as a necessary evil, of very uncertain profit. A customer would very often take up so much time, leaving an order that was hardly sufficient to cover the cost of the salesman's time. Then there was the necessary arrangements in regard to digging and delivery. All kinds of schemes were tried; to induce the customer to leave his order without breaking into the routine and disrupting the organization, such as keeping plants near the office, with the idea of selling from samples, but usually the customer who came to a nursery wanted to make a day of it, even if he only had a five dollar bill to spend. He would want to very carefully select each tree, supervise the digging of it and occasionally would take it away with him.

During the war, all this was changed. Many nurseries had to tell their customers it was impossible to dig and deliver, but if they could arrange to dig it themselves, and take it away, they would be glad to sell them stock. Otherwise, supplying their needs would be impossible.

Conditions during the war revealed to the nurseryman many things he had never dreamt of and forced him to use expedients he would not have considered for a moment during the old order of things.

The writer was much interested to note the method of serving customers, brought about by the lack of help, on the nurseries of James Krewson & Sons, Cheltenham, Pa., who do quite a large local retail business. Before the war three or four automobiles waiting to be served were enough to keep the entire sales force busy.

Last year when it was practically impossible to get help Mr. Krewson told me he had counted as many as twenty six machines on the nursery at one time selecting and taking away their own stock.

The plan was adopted of digging shrubs and other plants that were likely to be called for, tying the roots in burlap putting a price tag on them and heeling them in near the office. The result was many customers could wait on themselves.

The method proved so successful that the idea is being very much enlarged upon.

The use of the automobile has become so general in such a comparatively short period, that we have not adapted ourselves fully to the changed conditions in many things. If we could only look into the future, we would possibly see the retail nursery arranged so the customers can practically select, dig and take away their own stock. It is few nurserymen that will dispute the fact that nearly all loss in transplanting is due to the poor arrangement in digging and delivery to the customer. In pre-war days, it was quite a lengthy process, but the new idea of having the customer come and dig and take away his own, opens up a field that is likely to prove and develop into something that will profit to both customer and nurseryman.

SCIENTIFIC ASSISTANT

The United States Civil Service Commission announces an open competitive examination for scientific assistant, for both men and women, on October 20 and 21, 1920. Vacancies in the Department of Agriculture, for duty in Washington, D. C., or in the field at salaries indicated below, and in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion.

SALARY. The usual entrance salary for this position ranges from \$1,320 to \$1,620 a year, but persons showing in their examinations that they are unusually qualified are occasionally appointed at higher salaries, not to exceed \$1,860 a year. Certification to vacancies paying more than \$1,620 a year will be made only from those attaining the highest average percentages in the examination.

BONUS. Appointees whose services are satisfactory may be allowed the temporary increase granted by Congress of \$20 a month.

SEX. All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers however, have the legal right to specify the sex in requesting certification of eligibles.

NATIONAL NUT GROWERS

The National Nut Growers' Association will hold its 1920 convention in Austin, Texas, October 13, 14 and 15. The nurserymen and pecan growers of Texas are taking a special interest in the meeting and a record-breaking attendance is expected.

September 14th, 1920

Editor National Nurseryman,
Flourtown, Pa.

Dear Sir:

I want to congratulate you on your splendid editorial under the head of "Trustworthy Trees and Plants." I consider that you have covered this point of the nurseryman's responsibility to customers, sensibly and fully.

Yours very truly,
PARKER BROS. NURSERY COMPANY

THE CANADIAN NATIONAL EXHIBITION

The Canadian National Exhibition is held annually at Toronto usually the last week in August and the first week in September.

It is the largest annual exhibition of its kind in the world. During the two weeks it is open it is visited by over a million people. The attendance records show a steady increase.

The permanency of the buildings and magnitude of

the exhibition says much for the enterprise of our neighbors on the north.

The horticultural building has a floor space of 29,900 square feet and gives the Canadian nurserymen and florists an opportunity to bring their goods to the public notice annually.

Messrs. Stone and Wellington, Nurseries, at Fonthill, Welland Co., Ontario, and offices at Toronto, sent us the photograph of their exhibit, which due to the season, consisted largely of evergreens and perennials.



Exhibit of Stone & Wellington at the Canadian National Exhibition

COOPERATIVE ADVERTISING

At the annual meeting of the Southern Nurserymen's Association recently held in Charleston, S. C., plans for co-operative advertising were adopted by eight of the largest nursery firms in the Southern states.

The object will be to fix the trademark "Trustworthy Trees and Plants" in the mind of the reader and to create confidence in the firms holding membership in the S. A. N.

This advertising, while it will supplement the national publicity sent out by the American Association of Nurserymen, will appear exclusively in southern farm publications. The account will be handled by E. Fred Rowe of the McFarland Publicity Service, Harrisburg, Penna.

Mr. A. E. Robinson, of the Breck-Robinson Nursery Co., Lexington, Mass., has just returned from an auto trip which covered about 1700 miles, visiting the principal nurseries in the East, from Newport, R. I., to Washington, D. C.

C. H. Frey, Florist, Lincoln, Nebraska, has entirely disposed of his nursery stock and will confine himself strictly to the florist business.

September 10th, 1920.

Editor The National Nurseryman,

While perusing the pages of the September number of your magazine, we read an account under the heading "A Neglected Group of Plants" which was particularly interesting to us, as we are specializing in members of the Heath family. We have eighty-six acres of wooded or partly wooded land, half of which is under cultivation of *Rhododendron maximum*, *R. Catawbiense*, *R. Carolinianum*, *R. punctatum*, *Azalea nudiflora*, *A. canadensis*, *A. calendulacea*, *A. viscosa*, *A. arborescens*, *Kalmia latifolia*, *K. angustifolia*, *Andromeda floribunda*, *Leucothoe Catesbaei*, *Vaccinium corymbosum*, *Menziesia pilosa*, and *Azalea Vaseyi*. We have been established here for the past five years and now have a limited quantity of each of the above for sale. In two years time we will have large quantities of these plants ready for market.

Yours very truly,
LABARS RHODENDRON NURSERY,
Stroudsburg, Pa.

Mr. Charles Detriche, Sr., nurseryman of Angers, France, for whom Jackson & Perkins Co., Newark, N. Y., have been the American agents for the last twenty years, has taken his son into partnership.

ALPHABETICAL LIST BY STATES GIVING NUMBERS
FOR CROSS-REFERENCE TO STATE AND
NATIONAL REGULATIONS, CONCERNING THE
SHIPMENT OF FIVE-LEAVED PINES AND
RIBES, (CURRANTS AND GOOSEBERRIES)

| State | White Pine | Ribes: | State | White Pine | Ribes: |
|-------------------------|---------------|--------|----------------|---------------|--------|
| Alabama | 2 | 16 | Montana | 1 | 15 |
| Arizona | 1 | 15 | Nevada | 1 | 15 |
| Arkansas | 2 | 16 | *New Hampshire | 3 | 17 |
| California | 1 | 15 | New Jersey | 9 | 16 |
| Colorado | 1 | 15 | New Mexico | 1 | 15 |
| Connecticut | 4 | 16 | *New York | 8 | 19 |
| Delaware | 7 | 21 | North Carolina | 7 | 24 |
| District of Columbia | 2 | 16 | North Dakota | 1 | 15 |
| Florida | 2 | 16 | Ohio | 2 | 16 |
| Georgia | 3 | 17 | Oklahoma | 1 | 15 |
| Idaho | 1 | 15 | Oregon | 1 | 15 |
| Illinois | 11 | 26 | Pennsylvania | 3 | 20 |
| Indiana | 2 | 16 | *Rhode Island | 4 | 20 |
| Iowa | 2 | 16 | South Carolina | 3 | 17 |
| Kansas | 1 | 15 | South Dakota | 1 | 15 |
| Kentucky | 2 | 16 | Tennessee | 14 | 27 |
| Louisiana | 2 | 16 | Texas | 1 | 15 |
| *Maine | 6 | 18 | Utah | 1 | 15 |
| Maryland | 10 | 22 | Vermont | 3 | 16 |
| Massachusetts | 4 | 18 | Virginia | 2 | 16 |
| Michigan | 5 | 23 | Washington | 1 | 15 |
| Minnesota | 13 | 25 | West Virginia | 3 | 17 |
| Mississippi | 2 | 16 | Wisconsin | 12 | 16 |
| Missouri | 2 | 16 | Wyoming | 1 | 15 |

(Note of Explanation: If you are buying white pines or Ribes from outside your own state, look up the state in which you are located; if you are selling, look up the state to which you desire to ship.)

The State and National laws from which this data was compiled were those in force April 14, 1920, according to the information on hand in this Office that date. While the authors do not hold themselves responsible for correctness, yet the digest of regulations has been submitted to the State authorities and in all cases has it been approved by them.

*States which are starred have regulations regarding the planting of five-leaved pines or Ribes. Purchasers in these States who contemplate planting these species should acquaint themselves with the state regulations.

STATE AND NATIONAL REGULATIONS RELATIVE TO THE
SHIPMENT OF FIVE-LEAVED PINES ON ACCOUNT
OF THE WHITE PINE BLISTER RUST

1. Orders received for five-leaved pine stock from any state west of the western boundary of Minnesota, Iowa, Missouri, Arkansas and Louisiana may be filled by any nursery in any state west of the above mentioned boundary, but by no nursery in any state east of this boundary.

2. Orders received from Alabama, Arkansas, District of Columbia, Florida, Indiana, Iowa, Kentucky, Louisiana, Mississippi, Missouri, Ohio, and Virginia may be filled by any nursery in any state except the New England States and New York.

3. Orders received from Georgia, New Hampshire, Pennsylvania, South Carolina, Vermont, and West Virginia may not be filled by any nursery outside of each respective state.

4. Orders received from Connecticut, Massachusetts, and Rhode Island may be filled by any nursery in any state.

5. Orders received from Michigan may be filled by any nursery outside of the New England States, New York, Minnesota, and Wisconsin, but only under special permit from the State Nursery Inspector at East Lansing.

6. Orders received from Maine may be filled by any nursery in any state, but only under special permit from the Maine Forest Commissioner at Augusta.

7. Orders received from Delaware or North Carolina may be filled by any nursery in any state except the New England States, New York, New Jersey, Ohio, Pennsylvania, Michigan, Wisconsin, and Minnesota.

8. Orders received from New York may be filled by any nursery in any state except the New England States, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Minnesota, and Wisconsin.

9. Orders received from New Jersey may be filled by any nursery in any state except the New England States, New York, Pennsylvania, Michigan, Wisconsin, and Minnesota.

10. Orders received from Maryland may be filled by any nur-

sery in any state except the New England States, New York, New Jersey, Pennsylvania, Illinois, Michigan, Wisconsin, and Minnesota.

11. Orders received from Illinois may be filled by any nursery in any state except the New England States, New York, Pennsylvania, New Jersey, Ohio, Minnesota, Wisconsin, and Michigan.

12. Orders received from Wisconsin may be filled by any nursery in any state except the New England States, New York, and Minnesota.

13. Orders received from Minnesota may be filled by any nursery in any state except the New England States, New York, New Jersey, Pennsylvania, Ohio, Wisconsin, and Michigan.

14. Orders received from Tennessee may be filled by any nursery west of the western line of Minnesota, Iowa, Missouri, Arkansas and Louisiana.

15. Orders received for Ribes from any state west of the western boundary of Minnesota, Iowa, Missouri, Arkansas, and Louisiana, may be filled by any nursery in any state west of the above mentioned boundary, but by no nursery in any state east of this boundary.

16. Orders from Alabama, Arkansas, District of Columbia, Florida, Indiana, Iowa, Kentucky, Louisiana, Mississippi, Missouri, New Jersey, Ohio, Virginia, and Wisconsin for Ribes may be filled by any nursery in any state, except **Ribes nigrum**, which may not be shipped into these states from New York and the New England states. Orders from Connecticut and Vermont for all Ribes may be filled by any nursery in any state.

17. Orders from Georgia, New Hampshire, South Carolina, and West Virginia for Ribes may not be filled by any nursery outside of each respective state.

18. Orders from Maine and Massachusetts for Ribes may be filled only under special permit from the Maine State Forest Commissioner and the Massachusetts Commissioner of Agriculture, respectively.

19. Orders from New York for all Ribes may be filled by any nursery in any state with this exception: **Ribes nigrum** may not be shipped into New York from the New England states.

20. Orders from Pennsylvania for all Ribes except **Ribes nigrum**, and orders from Rhode Island for all Ribes may be filled by any nursery in the country. In Rhode Island, the planting of black and flowering currants is not permitted.

21. Orders from Delaware for all Ribes may be filled by any nursery in any state except the New England States, New York, New Jersey, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota.

22. Orders from Maryland for all Ribes may be filled by any nursery in any state except the New England states, New York, New Jersey, Pennsylvania, Michigan, Wisconsin, Minnesota, and Illinois.

23. Orders from Michigan for all Ribes may be filled by any nursery in any state except New England, New York, Wisconsin, and Minnesota subject to permit from the Michigan State Nursery Inspector, except **Ribes nigrum**, which is prohibited entrance from the New England States and New York.

24. Orders from North Carolina for all Ribes may be filled by any nursery in any state except the New England States, New York, New Jersey, Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota.

25. Orders from Minnesota for Ribes may be filled by any nursery in any state provided the stock has been stripped of all leaves, except in the case of **Ribes nigrum**, which is prohibited entrance.

26. Orders from Illinois for all Ribes may be filled by any nursery in any state outside of the New England States, except that **Ribes nigrum**, is prohibited entrance from New York, Pennsylvania, New Jersey, Ohio, Minnesota, Wisconsin and Michigan.

27. Orders from Tennessee for Ribes may be filled by any nursery west of the western line of Minnesota, Iowa, Missouri, Arkansas, and Louisiana.

ROY G. PIERCE,
FOREST PATHOLOGIST
and WILLIAM E. PICKLER,
Assistant in White Pine Blister Rust
Eradication.

The Portland Wholesale Nursery Company, Portland, Oregon, are moving their offices, about October 1st, to the new location on the Second Floor of the Concrete warehouse, 971 Sandy Boulevard. This large building, consisting of two floors and basement, with adjoining grounds, gives abundant room for handling orders with convenience, safety and despatch.

Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

OCTOBER, 1920.

A Few Good Items, Choice Nursery Grown at our Nursery in Western Springs, Illinois. We should be pleased to show this stock to anyone interested.

| TREES | | Height | Caliper |
|-------|---|--------|---------|
| | | Feet | Inches |
| 1,000 | American Elms | 10-12 | 2-2½ |
| 100 | " | 20 | 6-10 |
| 500 | Scotch | 10 | 2½-2 |
| 500 | " | 10-12 | 2-2½ |
| 300 | " | 10-12 | 2½-3 |
| 300 | " | 12-14 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | 15-16 | 4-5 |

These Elms are extra fine stock, straight Stems, Bushy, Symmetrical heads. The best trees for city, estate and avenue planting.

SHRUBS

| | | |
|-------|----------------------------------|------|
| 250 | Berberis Ilcifolia, Specimens | 2½-3 |
| 200 | Crap Bechtels Dbl. fl. Specimens | 7-8 |
| 1,000 | Cydonia Japonica, Extra Bushy | 2½-3 |
| 250 | Eleganus Angustifolia, Specimens | 7-8 |
| 500 | Rhamnus Catharticus | 6-7 |
| 3,000 | " | 7-8 |
| 3,000 | Salix Discolor (Pussy Willow) | 6-7 |

VINES

| | |
|--------|---------------------------------------|
| 20,000 | Clematis Paniculata 2 in. Pot Grown |
| 1,000 | Wistaria Magnifica 4 yr. extra strong |

We also have a fine block of Koster's Blue Spruce from 6-12 ft., every plant a specimen

VAUGHAN'S SEED STORE

New York - Chicago

Nursery: Western Springs, Illinois

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

SPECIAL OFFER

CHOICE

JAPAN IRIS

true to name

Large undivided clumps

Can be divided into four to six strong divisions

| Amt. | No. | Description |
|------|-------|---|
| 1000 | (120) | Sano-watashii, double, tall, pure white, early. |
| 600 | (122) | Bandai-no-nami, double, tall, very free, white, showy yellow bend. |
| 75 | (123) | Shiga-no-namami, double, large, purple splashed. |
| 40 | (129) | Sofu-no-Kai, double, midseason, large, light blue veined purple. |
| 100 | (137) | Kasugano, double, light blue, faintly veined royal blue. |
| 50 | (157) | Wase-Banri, single, large, pale blue splashed royal purple. |
| 50 | (166) | Iso-no-nami, double, blue, splashed and blotched purple. |
| 75 | (149) | Manadzuna, single, royal blue, blotched white. |
| 100 | (9) | Ho-o-jo, double, white, overlaid delicate pale blue. |
| 50 | (23) | Shiritaki, single, tall, pure white. |
| 40 | (18) | Namuri-shi-bon, double, late, purple, blotch and overlaid blue. |
| 100 | (26) | Sivibijin, single, rosy purple. |
| 75 | (40) | Single, royal purple. |
| 70 | (103) | Single, rosy pink, suffused with carmine. |
| 500 | (200) | Pyramid, double, large, deep blue, suffused with royal purple. |
| 20 | (201) | Urcin, double, tall, royal blue, veined white. |
| 800 | (200) | Kumo-no-nye, double, late, rich royal purple, suffused with royal blue. |

We are now dividing and transplanting our Japan Iris. This list is the cream of many varieties imported from Japan and Europe.

THE ELM CITY NURSERY CO.

WOODMONT NURSERIES, INC.

New Haven

Conn.

Introducers of BOX-BARBERRY and IBOLIUM PRIVET

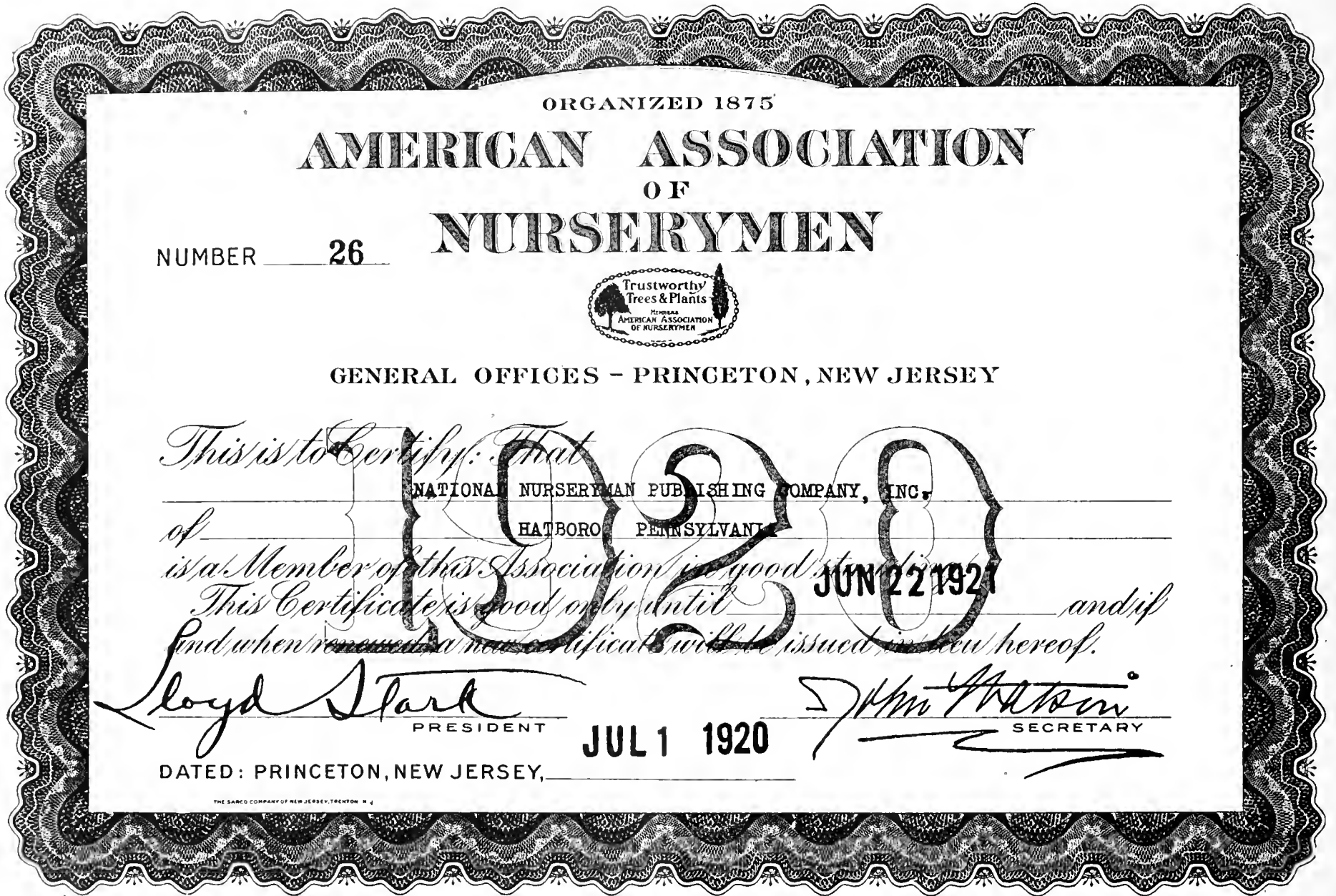
Certificate of Membership in The National Association of Nurserymen

Whoever originated the idea of a certificate showing membership in the National Association deserves credit for it. It is something tangible. It proves him a stock holder in the association and as such identifies him with its aims and objects and policies, and as trading both under its written and unwritten laws as typified by the trademark "Trustworthy Trees and Plants," besides being a receipt for the members' dues. Like other certificates

its value is only limited by the success of the Association it represents.

One does not have to draw on the imagination very much to see the certificate of membership proudly displayed in the catalogues of members in the future.

The more the Association becomes identified in the buying public's mind, with sound business policy and the best nursery practice, the more valuable will membership become.



Reproduction of the Certificate of membership in the American Association

INSECTS OF ECONOMIC IMPORTANCE

By Glenn W. Herrick

This book was given to a student of horticulture, interested in plants and insects attacking them, to tell what she thought of it.

For the busy man engaged in fruit growing or vegetable raising, or even animal husbanding it is very valuable. A fruit grower, for instance, finding the buds of his apple trees are being eaten in the early spring by a small brown caterpillar need only to consult this book on "Insects of Economic Importance" open it to the part classified as "Tree Fruits" and under "The Apple" he will find a full description of his caterpillar with its life history and methods of control.

The truck farmer raising cabbage need only look in this book under "Vegetables" to find the pest of "Cab-

bage" and thus learn to spray his cabbage with an arsenical poison, or if it has headed, with white Hellebore to control the green worms which multiply and devour the leaves so rapidly.

The book, being small and therefore easy to handle, is a ready book of reference for the farmer or gardener who can always keep it where it can readily be consulted.

The work is published by The MacMillan Company, New York, N. Y. Price \$2.00.

E. S. Welsh, Shenandoah, Iowa, Robert C. Chase, Chase, Alabama, and C. R. Burr, Manchester, Conn., sailed for Europe early in August to make a personal investigation of the fruit stock situation in France and Holland.

**We have
One Year Apple**

to offer in the following varieties and can furnish these in
4 to 6 ft. grade
3 to 4 ft. grade
2 to 3 ft. grade

- | | |
|--------------------|----------------|
| McIntosh Red | Ben Davis |
| N. W. Greening | Baldwin |
| Red Astrachan | Blk. Ben Davis |
| Red June | Delicious |
| Rome Beauty | Early Harvest |
| Staymans Winesap | Grimes Golden |
| Winesap | Gano |
| Winter Banana | Jonathan |
| Wealthy | M. B. Twig |
| York Imperial | Maiden Blush |
| Yellow Transparent | |

We also have to offer Grape Vines in one year No. one and One year No. two in Concord, Niagara, Moore's Early, Worden, Moore's Diamond and a few red sorts.

We have as fine a lot of Apple Seedlings as you ever saw and can furnish these in all grades.

Can supply roses in the following varieties, as well as a limited number of some other sorts.

- | | |
|---------------------------|-----------------------|
| American Beauty | LaFrance, pink |
| Etoile de France | LaFrance, white |
| Etoile de Lyon | Meteor |
| Frau Karl Druschki | Mad. Caroline Testout |
| Gruss an Teplitz | Paul Neyron |
| General Jacqueminot | Pink Cochet |
| Kaiserin Augusta Victoria | Sunburst |

White Cochet

All stock offered above is for late fall or early spring shipment. In addition to the items mentioned we will have a good assortment of two year apple in all grades as well as peach trees.

F. H. STANNARD & CO.
Ottawa - - - Kans.

—: WILLOW TREES :—

We have a block of Willows we desire to clear Fall 1920. We can quote attractive prices on large quantities.

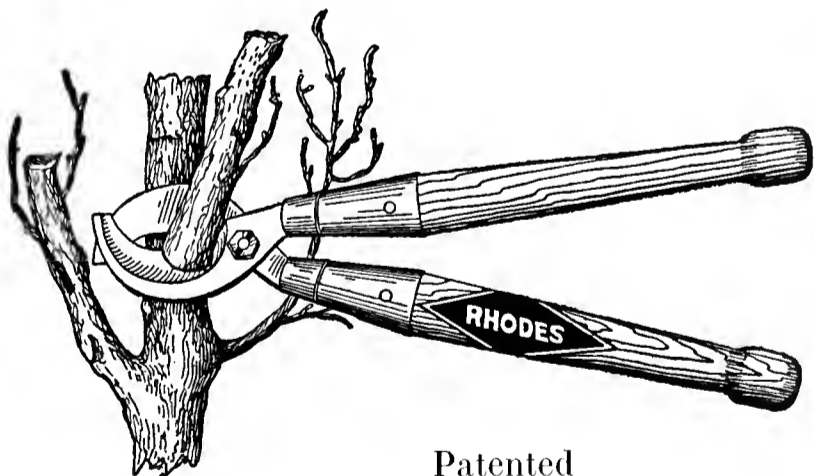
- | | | |
|-----|---------------------------|------------------------|
| 400 | Babylonian Weeping Willow | 8 to 10 ft. |
| 500 | " " | " 1 1/4-1 1/2 in. cal. |
| 700 | " " | " 1 1/2-1 3/4 in. cal. |
| 600 | " " | " 1 3/4-2 in. cal. |
| 600 | " " | " 2-2 1/2 in. cal. |
| 100 | " " | " 2 1/2-3 in. cal. |

Also a full line of Deciduous Trees and Shrubbery. Send us your Want List.

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**RHODES DOUBLE
.. CUT ..
PRUNING SHEARS**

In Use Throughout the World



Patented

The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
Grand Rapids, Mich.

Fall 1920

Spring 1921

Est. 1884

400 Acres

Capital \$60,000.00

We have our usual line of Cherry, Sweet and Sour; Apple, Peach, Pear, Plum, Quince; also Shrubs and Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our wholesale price list.

Maloney Bros. & Wells Co.

Dansville, New York

Upland grown trees transplant best

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., October 1920



THE UPLIFTERS

*I wish to write
Of the Uplifters.
God, let my verse be free
That I may swing a verbal club
Fore and back-handed, earnestly,
Without restraint of meter or of rhyme!
Vociferous incompetents,
That, ruling not themselves,
Do cheerfully take on the burdens of the spheres,
And then, when they have messed the show,
Do chatter round and underfoot,
While other men, who in hard schools
Have learned to labor and to do,
Set wearily to the untangling.*

*American Industries
September, 1920*

BETTER QUALITY

There is nothing encouraging or satisfying in being a pessimist, and it is not a pleasure to write in a pessimistic way especially about your own business or profession, neither is it good practice to be satisfied to live in a fool's paradise or shut your eyes to facts and realities.

I wonder how many nurserymen who have traveled and really know what should be, but will admit only to themselves that nursery products, considered as a whole are hardly 50% of what they should be. We have a quantity production—storage houses, where trees and

plants are stacked up like so much cord wood, tree digging machines and baling machines, tractors, nursery inspectors, numerous laws, quarantines and a hundred other things that indicate quantity production rather than high quality and unusual care.

Mr. Watson recently quoted Professor Bailey's estimate of the proportion of fruit trees planted that arrived at the full production stage that was so ridiculously small as to make one wonder if it was really true, and if so, what a tremendous waste. Whatever the proportion really is, it must be exceedingly small and is equally true of ornamentals.

What wonderful nurseries and gardens we would have if they only contained half the number of plants, but all as near perfect as possible to grow them. It goes without saying the actual value in dollars would be more.

How shall we lift the growing of plants on to a higher plane of quality and teach the public to be satisfied with none but the best? One of the best public educators is keen competition among growers, as to who can produce the best for the exhibitions. In a recent report of the Shrewbury Show in England, the first day's receipts were given as approximately \$45,000. It is easy to imagine when the public are interested in such numbers as this sum indicates the stimulation it would have on growers to produce quality. The American Public has only a superficial acquaintance with flowers and plants. Thanks to the enterprising florists it is beginning to know Roses, Carnations, Chrysanthemums and those things the florist trade has educated it to know. The same process of educating the public is going on in regard to fruit. Quality is becoming the chief consideration. How shall we educate it to know quality in nursery products?

Catalogue claims of quality, anyone can make, but if it were necessary to prove it in open competition, it would produce wonderful results.

MAKE AN ALLY OF THE F. H. B.

At the hearing before the Federal Horticultural Board in Washington, to consider the necessity of quarantining to prevent the spread of the Japanese Beetle, John Watson struck the right chord when he suggested the disuse of the word quarantine. The remarks of Mr. Watson were made in a humorous vein. At the same time, they presented a view of the situation which is deserving of earnest thought by nurserymen.

Most of the Nurserymen and Florists who attended the hearing, went to it in a spirit of antagonism. They were naturally opposed to any action of the Federal Horticultural Board that would be likely to adversely affect their business.

We might as well recognize the F. H. B. is Federal authority.

It is appointed for the specific purpose of protecting the agricultural and horticultural resources of the country.

Its decisions are made with the best scientific knowledge available. Protests against such decisions are invariably futile, unless new evidence is produced to nullify them, which the practical nurseryman is rarely able to produce.

It would be a part of good diplomacy, or perhaps

**J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland**

(Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.

FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.

ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,

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“A good picture is worth a million words.”

25000 true-to-type negatives to choose from, with a special landscape service.

THE NATHAN R. GRAVES CO.

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**THE
Westminster Nursery**

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

Offers for Fall 1920

California Privets, Asparagus, Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars, Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks, Horse Chestnuts, Butter Nuts, Norway Maples, in grades from 6 to 16 feet.

Cumberland and St. Regis Raspberry, Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses. Can supply in quantity. Write for prices.

Soft Yellow Pine Box Lumber

Dry, bright stock 7-16x6 inches and wider, all 10 ft. lengths tied in bundles of 10 pieces each. Other lengths if wanted. Box framing random lengths 1⁵/₈x1³/₄ inches surfaced.

Write or wire us for delivered prices.

**The Dimension Company,
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ENGLISH NURSERY STOCK

Manetti Rose Stocks, a good quantity, 1 year splendidly rooted from sandy loam, none better imported. Also

Seedling Briar. Polyantha Stocks.

Fruit Tree Stocks for budding and grafting.

New and Rare Chinese Plants.

Other General Nursery Stock grown in large quantities, and young stock for transplanting.

Importations by special permit.

Glad to answer your inquiries—Write for Catalogues.

**WALTER C. SLOCOCK,
GOLDSWORTH NURSERIES,**

Woking, Surrey - - England

310 Acres devoted to business

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Offer for Fall 1920

- Cherry, 2 Year XX ⁷/₈ up 5 to 7 feet
- Cherry, 2 Year ¹¹/₁₆ up 4 to 6 feet
- Cherry, 2 Year ⁵/₈ to ¹¹/₁₆, 4 to 5 feet
- Cherry, One Year, Sweets and Sours, all grades
- Peach, One Year all leading Varieties, strong on Elberta
- Apple, 2 Year, leading varieties
- Standard Pear, One Year, 4 to 6 feet and 3 to 4 feet
- Japan Plum on Peach, One Year
- Hansen Hybrid Plum, One Year on Peach roots
- Hardy Northern Pecans, Grafted Varieties

Please submit List of wants for prices

5,000,000

SEEDLINGS

All First-Class Stock

APPLE, PEAR, PLUM, CHERRY, ST. JULIEN, CITISUS Laburnum, MAHONIA Aquifolia, FAGUS sylvatica, ROSA canina, SYRINGA vulgaris, etc., etc.

For Canada, we offer a large supply of fine stock.

RHODODENDRON, AZALEAS, ROSES, (dwarf and standard, BUXUS, CONIFERS, PEONIES, etc., etc.

Ask our reasonable prices.

VanderVis & Co.

Boskoop - - Holland

For FUMIGATION With
HYDROCYANIC ACID GAS

“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
709-717 Sixth Avenue - - New York, N. Y.

horse sense would be the better word, on behalf of the nursery interests, to work with the F. H. B. to its own advantage rather than to object to its decisions. Even if we look at the F. H. B. through political eyes, as the nurseryman's worst enemy, all we can see is the forestry, lumber and agricultural interests looming largely in the potential majority to support its decisions. Even if the decisions may be unnecessary and unfair to the nursery interests. As a last resource, the F. H. B. controls that powerful weapon, the power to stampede the voting power of the country by fear of a pest or disease. The fear may be groundless, but the results of it would be quite effective in backing up any decision made to protect the larger interests.

MISUSE OF PLANTS

The misuse of plants is almost as common as their proper use and sad to say, by planters and those who ought to do better work.

The above statement is made on the assumption that all agree that results of the object of planting sit on the judges bench to decide "what is misuse?"

If we decide at random on any group of plants, then get into our automobile and make a tour of inspection, say through a suburban district near a large city, where wealth and refinement shows itself in fine residences and neatly kept grounds, it is not difficult to prove, that plants are used very much like bricks and mortar, woodwork and paint, but unlike these materials, the plants are alive and refuse to obey the misguided efforts of those who use them.

Take for instance the Norway Maple, within certain limits there is no better shade tree. It is quick growing, symmetrical, conventional in outline, adaptable, dense in growth and fairly free from disease and pests, in fact its many good qualities have led to its misuse and abuse. Planters in some localities must have adopted as their motto "when in doubt, plant a Norway Maple," or perhaps the nurseryman is to blame, he has them in quantity and will sell them cheap because they grow so easily.

In our trip of inspection we pass down a nice wide street, the attractive houses on each side built in pairs, set back about 30 feet from the side walk, with the object of having a nice front yard, with vine covered porches, window boxes, closely shaven velvety lawns, porch beds, rose covered party fences, old fashioned herbaceous borders or any variation in the taste in gardening the occupiers of the houses might desire, but what do we see? Nothing but a row of Norway Maples occupying the front yards for the houses are effectively hidden to the exclusion of most other plant life and much of the air and light.

The landscape gardener, builder, or someone misused the Norway Maple by placing one in the middle of the lawn in front of each house. They doubtless looked well and were in no way objectionable for the first ten years and perhaps helped to sell the houses, but suppose instead of planting them, the Pin Oak, Lombardy Poplar, Ginkgo, Honey Locust, Birch or such like tree had been used setting them a little to one side so they would frame the houses instead of hiding them like the Norway Maples do, what a difference in results there would have been.

Lawns, flowers, hedges, vines, all would have been possible, as well as shade from the hot sun and not so much obstruction to a free circulation of air.

How are shrubs misused? Largely by planting them where they cannot show their natural beauty and so cluttering up the ground with useless cripples. Let us continue our trip of investigation and see how some specific group of shrubs are used. At random, we will select and look for the bush honeysuckles.

They are large, fast growing shrubs whose beauty is in their flowers, fruit and whose ornamental value cannot be secured unless they are planted so there is ample room for free development of their branches. What do we find? Isolated specimens clipped and sheared of their flowering wood until they look like an unsightly bunch of growing sticks, or planted in masses among other shrubbery a few feet apart forcing them to grow into leggy sprawling unsightly brush such as the tidy farmer feels it his duty to clean up with the brush hook in the winter.

To get the full beauty of these plants they should be planted twenty-five feet apart instead of five. Hours of search fails to reveal one solitary specimen planted so that it can develop its full value although we have seen thousands.

Why does the nurseryman propagate so many kinds when one would be sufficient considering the way they are used or misused?

Lonicera tatarica, *L. tatarica grandiflora*, *L. Ledebouri*, *L. Standishi*, *L. Ruprechtiana* all produce about the same effect under such conditions, an unsightly bunch of sticks in the winter with green on them in the summer.

These same remarks apply to a greater or lesser extent to many other kinds of shrubs and trees. In most plantings it has too often been the right tree or shrub used in the wrong place and for the wrong purpose even in plantings designed by our most eminent landscape gardeners.

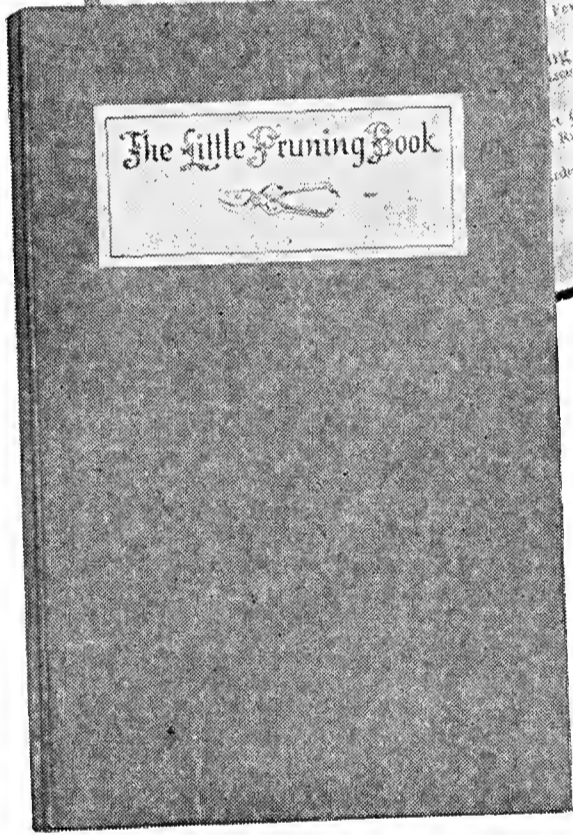
While on our trip of fault finding let us take a glance at the evergreens. The misuse we find is not quite so glaring, due largely to the fact they are slower of growth, and give very pretty effects while they are young, as when they are grouped in porch beds, so if the owner of the grounds is willing to pay there is no reason why he should not have them removed every few years. Unlike the Norway Maple they are generally moved when they become unsightly, or fail of the purpose for which they were originally planted.

Too often however we see illassorted groups, when it is naturally impossible for the selection to grow together in harmony and beauty. Three or more planted where one would be better or if a group is desired for immediate effect, a Pine, a Retinispora and a Blue Spruce planted six or seven feet apart when a group of three Pines or three Retinisporas would have been so much better both for the plants themselves and the future appearance of the place.

We come back from our trip, convinced, plants are very much misused and it is about time a new school or vogue in landscape planting was started.

A school that would take for its motto in the garden, "The Plant is King."

"Design," "Immediate Effect," "Quick Results" and all the other lame reasons for the misuse of plants be regulated to second place in the courts which decide what is



This Book and the Plan Back of it Will Help You Sell Nursery Stock

This book is designed to help you by helping your customers. It explains the art of pruning in everyday language, and illustrates the principal points. It tells how, when and where to prune for vigorous and healthy growth. It's clear and concise.

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We've a selling plan that will pay you big. A cooperative plan whereby The Little Pruning Book reaches your customers through you, at an ultimate profit to yourself. It is selling at 50c in bookstores.

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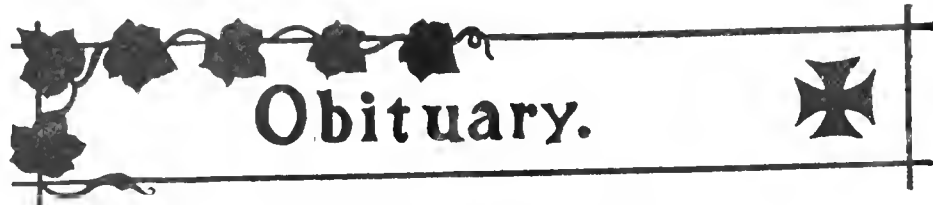
Cleveland, Ohio

Address correspondence to 2004 W. Third St., Cleveland, Ohio

PEXTO

PRUNING SHEARS

correct practice in matters of Landscape Art, or what is a better term "Good Gardening."



Obituary.

JOHN FRAZER, SR.

John Frazer, Sr., one of the best known nurserymen in the South and a pioneer nurseryman of Alabama, died at the home of his son, John Frazer, Jr., last month. Mr. Frazer was 78 years old and had been in failing health for more than a year. Mr. Frazer was born in Edinburgh, Scotland, but came to America while a youth and engaged in the nursery business, having been associated with Major W. F. Heikes in the original Huntsville Nursery, but later he went into business for himself and was for many years the head of the Frazer Nursery Co. is survived by his widow, three sons and three daughters: Mrs. George McLaughlin, Mrs. E. L. Leatherwood, Mrs. Robert S. Harrison, James W. Frazer and John Frazer, Jr., all of Huntsville, and O. W. Frazer, of Birmingham.

HORTICULTURAL TRADE COMMITTEES OF ANGERS, ORLEANS AND USSY (FRANCE)

The NATIONAL NURSERYMAN of August, 1920 and the AMERICAN NURSERYMAN of the same month, have published the contents of a letter from Mr. Lloyd C. Stark to Mr. Aug. Rolker.

The contents of this letter are not exactly the same in both papers because the beginning of it has not been published in the NATIONAL NURSERYMAN. It reads as follows:

"We have your favour of July 6th advising that the Holland firms have withdrawn their quotations, evidently because they are influenced by the extra high French quotations."

Nor has it published another chapter which reads as follows:

"We note that you expect to hear from Italy and Germany in regard to stock soon; also from Holland. If the Frenchmen insist on sticking to their exorbitant prices, we, and most other American Nurserymen, will certainly feel like letting the French Syndicate keep their high-priced fruit stocks."

Our eminent and gallant colleague has examined the situation at the American point of view without considering at the French side. We beg him to examine it with us.

At first, when he says:

"Of course, we realize that last year seedlings of all kinds were scarce, almost no crop on account of the war and bad season but this year's crop is a good one. We have confidential information from reliable French sources that there is a big crop, practically all lines, except plum and there are more plum than there were last year."

We must rectify these reports concerning the French situation, which have been sent by someone who does not know how this situation stands exactly and which is as follows:

Cherry (Mazzard) as scarce as last year.

Cherry Mahaleb, about the same quantity as last year.

Quince, rarer than last year.

Pear, about the same quantity as last year with a larger demand in France than last year.

Apple (common) about the same quantity as last year with a larger demand in France than last year.

Apple (English Paradise) quantity smaller than that of last year.

Plum Myrobolan, about the fifth part of the quantity which was available last year, the prices established by our committees are not sufficient to cover all the expenses, as the seeds have been bought at a very high price and not 10 per cent of them have grown.

Plum St. Julien, same situation as Myrobolan Plum.

Rose stocks, Canina and Manetti are available about the same quantities as last year.

All prices have been established taking into consideration the situation of the crop. If some French nurserymen have quoted higher prices than those fixed this is due to their special situation: either they were very poor of an article, being themselves

buyers of it or as it is the case with several of the largest buyers of Myrobolan seed last season; the seeds were so bad that most of the lot had to be thrown away and are used actually as pavement for the foot ways of their nurseries. They may sell the stock at any price, it will be impossible for them to recover the money paid for the seeds.

Mr. Lloyd C. Stark has expressed the opinion that the high prices of this season have been fixed by us as recompense of the assistance rendered to France by America during the war.

Our American friend of whom we highly appreciate the gallant part he took in the war, has certainly not retained his thought long enough to examine the question on its exact situation and he is far from the question when he compares the Holland situation with the French one.

We will let the question of the quality of the Holland fruit tree stocks aside and consider only the economical situation of both nations Holland and France.

At first our American friend has been wrongly informed for saying that France was able last autumn and this Spring to work normally, this was the situation of the Hollanders and other neutrals who have not suffered from the war, but not of the Frenchmen, who had at first to clean their nurseries when coming back, whereas the Hollanders who had been at home during the war and have made profits of it, were ready to work and to compete in all markets.

Our situation is now the following one:

Owing to the high rates of exchange demanded by our American and British allies and by the neutrals, all the articles we are obliged to buy abroad are paid by us at two or three times their value. The coal paid by us about five times its value, is an example. If Frenchmen sell to their allies or to neutrals who make high profits by exchanging French money they will soon be out of business and conducted to bankrupt or to leave their business. After having won the war they will be totally beaten on the economical struggle.

We could return to our American friends the opinion said by Mr. Stark: are their high rates of exchange, and their high prices for coal, raw materials, and all manufactured articles a recompense for France who has supported the heaviest burden of the war and is still supporting it.

Is it a recompense that at the actual date, France has paid about 200 milliards of francs as difference of exchange since the armistice, difference amounting nearly to her expenses of war. This situation being not at end because our devastated areas are still wanting enormous quantities of materials and labour that we pay at very high rates and, as you know, without having the assurance that Germany will pay.

The letter of Mr. Lloyd C. Stark confirms us what we had learned that numerous Dutch offers have been withdrawn. Our American friend said that this has happened on account of the publication of the high French prices. This is not quite the true reason.

The Hollanders have removed their offers because the French decision to sell to them the goods in florins and not in francs, so to place them on the same level as our allies, has destroyed their hope to profit of the French nurserymen's work as they have profited during the war and since too.

Since April, nearly all the important Dutch firms visited the French ones or wrote them and asked their prices. They tried to buy the French products in francs, with the intention to sell them to our American friends in dollars and get the profit of the exchange.

It should be a pity, after having been the most affected in the war, to be the commercial drudge of the world wide horticulture. We want to sell our products ourselves on the markets where those products are wanted at a price permitting us to live.

As to our American Trade, we have not altered our methods, for we have always established our prices in the money of this country, and we have used the same basis to establish prices for the neutral countries.

We hope that our American and British friends will reconsider the situation and conceive that we can stand and continue our business only if we get a return sufficient to cover our expenses and that the goods we have to sell this season have been grown by people who have been the last discharged of their military duty and that no comparison can be done between them and the Hollanders who have not had to take their part in the war.

We could still say more, but esteem this to be sufficient.

We are working hard and we hope next season to be in a better financial position, we ask our friends and our allies, not to consider the situation only on their angle, but to examine it in a friendly way as it stands on both sides.

On behalf of the Horticultural Trade Committees
of Angers, Orleans and Ussy

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President

Orleans
R. BARBIER
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EVERGREENS
ORNAMENTAL TREES,

Shrubs, Vines, Woody and Herbaceous Plants
of the Blue Ridge Mountains

Collections to Order in Carload Lots a Specialty

Correspondence solicited from large planters.

Ask for Price List

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Avery County North Carolina

We offer Biota Aurea Nana and Rosedale, Ligustrum
lucidum, Lonicera fragrantissima, Deutzias, Forsythia,
Spireas and Wegelias in variety.

THOMASVILLE NURSERIES, Thomasville, Ga.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER, Penna., U. S. A.

FRUIT TREE STOCKS

We have to offer, the leading sorts of FRUIT TREE
STOCKS: such as:

Apples, Cherry, Mahaleb, Pear, Plum, Paradise
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Also the best lines of ROSE STOCKS such as:

Manetti, Grifferaie, Multiflora seedlings, Laxa,
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Our catalogue quoting the lowest prices for these
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E. TURBAT & CO., Nurserymen
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For Fall 1920 and Spring 1921

CALIFORNIA PRIVET, 1 year old.
Oriental Planes, Norway Maples, Pin Oaks, Lombardy
Poplars.
A select lot of trees in all sizes—transplanted.
APPLES, 1 and 2 year old; all grades and all standard
varieties. Nice stock.
PEACH, 1 yr. old. Heavy stock. All leading kinds and
all grades. Write us for special prices on large lots.
GRAPES, 1 and 2 year.
ASPARAGUS, 2 yr. old. Can make very attractive prices.

MISCELLANEOUS

A good stock of flowering shrubs, shade trees, etc.

SEND US YOUR TRADE AND WANT LIST.

FRANKLIN DAVIS NURSERIES, Inc.

404 W. Baltimore Street, BALTIMORE, MD.

PEACH PITS
Very Scarce

The Howard -- Hickory Co.

O. Joe Howard, Secretary & Treasurer

Hickory - - N. C.

**Don't Buy Your Fruit Tree, Canina Stock,
Roses, Etc.,**

Before you have seen the special offers from
The Fruit Tree Stock Specialist

JAN G. KLOOSTERHUIS,

Pomona Nurseries Gasselte, Holland

Our only address

Established 1894 Cable addr. Kloosterhuis, Gasselte



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list for pricing. We carry a
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Bulbs.

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DERRY, N. H.

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FRUIT STOCKS

First class Seedlings, well rooted, Disease Free

GROWN ON CONTRACT

Delivery Fall 1921

WRITE FOR PRICES

| | |
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| Apples | half 3-5 and half 5-8 mm |
| Pears | “ 3-5 “ “ 5-8 “ |
| Peaches | “ 3-5 “ “ 5-7 “ |
| Myrobolans | “ 4-6 “ “ 6-10 “ |
| Common Cherries | “ 3-5 “ “ 5-7 “ |
| Quince Cuttings | “ 4-6 “ “ 6-9 “ |
| Briars | “ 3-5 “ “ 5-8 “ |

We book orders until the end of December. Please draft orders referring Myrobolan. Engagement subject to climateric events. All other terms shall be established by correspondence.

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SIBLEY, LA. Postoffice. Minden Our Town
WEBSTER PARISH NURSERY

UNITED STATES CIVIL SERVICE EXAMINATION PREPARATOR IN NEMATOLOGY

October 20, 1920

The United States Civil Service commission announces an open competitive examination for preparator in nematology on October 20th, 1920. A vacancy in the Bureau of Plant Industry, Department of Agriculture and vacancies in positions requiring similar qualification at entrance salaries ranging from \$660 to \$1,000 a year, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

WANTED

WANTED—Superintendent or Manager who knows nursery management from all angles.

Must be capable of handling labor, able to estimate on and supervise large and small planting operations, possess a knowledge of landscape gardening, forecast nursery needs, have a knowledge of current prices and generally direct business policy. Outline past experience, give one or more references and state salary desired.

Location of nursery is near Philadelphia.

Address Box 70, National Nurseryman.

WANTED

Nurseryman. We are starting a new nursery, and want a young man of energy and ability to take charge of it. Must be a first class propagator and grower of trees, shrubs and evergreens, and capable of handling men. In addition to wages, a share of the profits will be given, and an opportunity to become part owner of the business.

ELLIOTT NURSERY,
MAGEE BUILDING,
Pittsburgh, Pa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

WANTED

A man with greenhouse experience and versed in the propagation of conifers. In writing state experience and give references. Wages \$100.00 per month with board and lodging. Address:

CALIFORNIA NURSERY COMPANY, Niles, Calif.

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Standard varieties in any quantity.
Satisfaction guaranteed.

R. L. TUTTLE, Paw Paw, Michigan

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Catalogues
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Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

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Both American and French Grown, Straight or Branched Roots, all grades. Carload rates to Central points; East, West and South. **ORDER NOW.**

Also a general line of nursery stock. Address:

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Shenandoah, Page County, Iowa.

JUNE BUDDED PEACH

All Leading Commercial Varieties
Wholesale only. Write us.

Joe Shadow Nursery Co.
WINCHESTER, TENN.

For Perennials, Gladiolus, Dahlias and Cannas

Write

WELLER NURSERIES CO.

Perennial Specialists,

HOLLAND

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WANTED—For late Fall or early Winter delivery: No. 1 Hardwood cuttings of Spiroea V. Houttei; Privet Amoor North and Ibota; Lilac Persian and Rothomagensis, etc., in 10,000 lots; and different varieties of shrubs and trees in 1000 lots. We are also interested in lining out stock of Evergreens, shrubs and hardy perennials.

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CHARLES DETRICHE & SON

ANGERS, FRANCE

Growers and Exporters of Fruit Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs and Conifers for Nursery Planting.

For all information as to Stocks, Prices, terms, etc., address

JACKSON AND PERKINS COMPANY,
(Sole Agents)

NEWARK

NEW YORK

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For Wrapping Nursery Stock. Write for prices.

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301 Delaware St., Kansas City, Mo.

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1000 BOSTON IVIES, 1 yr. pot grown 21 1/2 inches

300 ENGLISH IVIES, 1 yr. pot grown 21 1/2 inches

250 Budleia Magnifica Var.—"BUTTERFLY BUSH"

1 yr. field grown

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We offer to the Trade for Late Fall or Early Spring Delivery:—

COLUMBIAN RASPBERRY TIPS

CONCORD GRAPE, 1 year

No better stock grown. Priced right.

Address: **HARRY W. JOINER Sec'y,**

The Associated Plant Growers,

PERRY,

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OHIO.

We will accept orders for N. C. Mountain natural peach seed collected from sections where diseases are not known. These seed are screened and graded. They are the best that there is. Try us.

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MYROBOLAN PLUM SEEDLINGS

QUINCE CUTTINGS one year

Write for special prices to

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The Bushel Basket Strawberry

will be grown in every garden and commercial plantation. The best seller, the greatest money maker. Get your agents at work with it. Interesting illustrated circular free.

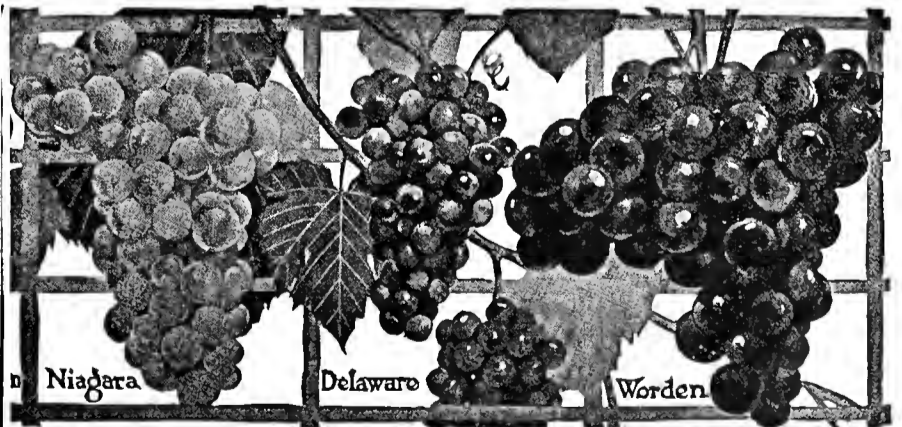
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LET US QUOTE YOU ON BETA GRAPE

Send us your surplus lists and place us on your regular mailing list.

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St. Paul, Minn.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

When writing to Advertisers please mention the National Nurseryman.

- - - The - - -
American Association of Nurserymen
ORGANIZED 1875

Office: Princeton, New Jersey

A Co-operative Organization of Four Hundred Nursery firms associated for mutual benefit.

Our aims and purposes:

To improve conditions in the Trade wherever improvement is needed;

To make business between Members profitable and pleasant through observance of the ethics of fair competition;

To bring the Nurserymen and the Planters into closer relations and secure a better understanding of the problems of each;

To disseminate accurate information about Trees and Plants and to encourage and assist in their more general and more profitable use;

To Advertise the Association in connection with our Publicity Campaign, so that the buying public can know what the Association is and what it stands for; to recommend its Members to planters as logical and dependable sources of supply; to get orders for our Members and to see that they are filled according to the Association's stated policy of fair-dealing.

To assist Members to avoid bad debts with reliable Credit Information;

To Collect Accounts for Members;

To Collect Freight and Express Overcharges and to advise Members regarding any Transportation problem, through Mr. Charles Sizemore, Traffic Manager;

To adjust all disputed accounts between Members through our Arbitration Committee;

To see that the rights and interests of our Members are carefully watched and protected by our Legislative Committee.

To secure a more accurate and complete Code of Standardized Plant Names through the work of our Committee on Nomenclature;

To do all and anything that will add to the prestige and standing of the American Association of Nurserymen and make the business of its members more profitable and, as representative of the Nursery industry, to advance the trade in public esteem.

All Nurserymen who approve of our aims and purposes are invited to join with us. Any further information wanted will be gladly furnished by the Secretary.

The ASSOCIATION BULLETIN will resume regular publication and a copy will be mailed on request.

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Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

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We offer at Wholesale 2 carloads of nursery stock consisting of Walnuts, Catalpa, Lombardy and Carolina Poplar, Oriental Plane, Maples, Magnolias, Altheas, Deutzias, Weigelias, Privets, Forsythia, Lilacs, Crape Myrtle, Corral Berry, Spice Bush, in sizes for retailing. Must sell or burn. Ground rented for next year.

CURETON NURSERIES, Austell, Cobb Co., Georgia.



PEACH SEED—1920 Crop

Choice,—Price very Reasonable.

Write for Prices and Samples

Alpha Nursery

Alpha - - Illinois

STRAWBERRY PLANTS

Get our prices before buying.

PIGGOTT NURSERIES, Inc., Piggott, Ark.

PEACH TREES

Good supply of straight well rooted trees
STANDARD VARIETIES

W. T. Mitchell and Son

Beverly - Ohio

NEW and RARE TREES and SHRUBS

NEW and RARE ROSE TREES

NEW and RARE HARDY HERBACEOUS

Our complete wholesale catalogue describing several hundred new varieties in the above lines is ready and will be sent to all nurserymen and florists who will apply for it.

E. TURBAT & CO., Nurserymen,

Orleans, France.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ESTABLISHED 1866

NAPERVILLE NURSERIES

—Growers of—

Trees, Evergreens, Shrubs, Perennials, etc.

Lining Out Stock

NAPERVILLE, ILL.

TELEPHONE, NAPERVILLE No. 1.

KALMIA LATIFOLIA

Collected plants.

Fruit stocks and rose stocks

We buy and sell nursery stock

Send us your want lists and surplus lists.

Koster & Co.

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Growers of Stock for Apple, Pear, Myrobolan,

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Price List on Application

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Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens
Trees and Perennials. Bay Trees, Boxwood, Rhododendrons,
Andromedas, Ericas and Azaleas.
Send us your want list. Inspect our stock.

North Carolina Peach Pits

We are accepting orders for
Fall Shipments.

J. Van Lindley Nursery Co.

Pomona, N. C.

SCARFF'S NURSERY



Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

We offer for spring 1920 a good assortment of following
stock and will be pleased to submit prices on your want list.

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|--------------|---------|-------------------|
| Strawberries | Iris | Asparagus |
| Raspberries | Privet | Horseradish |
| Blackberries | Spirea | Hardwood cuttings |
| Dewberries | Rhubarb | Volga Poplar |

See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in
England. Price 6½d per week.

Send for free copy and subscription rates to:—

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Arrow Brand XX Superior Brand
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Colored Raffia in 20 colors

Bamboo Stakes, Dutch Bulbs, Hardy Lily Bulbs

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the
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This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

HORTICULTURAL ADVERTISER, Ltd.
Lowdham, Notts, England

A Fine Stock of
Norway Maple, Silver Maple, European Sycamore
and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.
Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST
Maple Bend Nursery Perry, Ohio

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A Magazine of Trade News and Cultural Information
for the NURSERYMAN, FLORIST, SEEDSMAN and
GARDENER. A reliable exponent of advanced Trade
and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.
147 Summer St. Boston, Mass.

TO THE TRADE ONLY

A general assortment of nursery stock for delivery Fall
1920 or Spring 1921.

We also have some fine blocks of Peach Seedlings, a
portion of which we offer to bud on contract for delivery
fall 1921. Correspondence invited.

Headquarters for Nursery Supplies

Portland Wholesale Nursery Co.

122½ GRAND AVENUE PORTLAND, OREGON

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.
Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thou-
sands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for
YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

BUNTINGS' NURSERIES

G. E. BUNTING & SONS.

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We offer a surplus of the following stock for delivery fall 1920 or spring 1921

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| 10,000 | Concord Grape Vines | 1 yr. No. 1 |
| 4,000 | Catawba " " | 1 yr. No. 1 |
| 1,000 | Niagara " " | 1 yr. No. 1 |
| 1,000 | Worden " " | 1 yr. No. 1 |
| 200,000 | ASPARAGUS ROOTS | 2 yr. No. 1 |
| 250,000 | " " | 1 yr. No. 1 |

Two and One-half Million Strawberry Plants

Leading standard and Everbearing varieties, let us handle your strawberry plant orders, shipping to you, or direct to your customers using your tags.

Our Stock is Grown Right
Packed Right and True to Name
Let us quote you.

HILL'S EVERGREENS

Since 1855

For Fall 1920 and Spring 1921 delivery we have a large stock of choice and rare varieties of Evergreens for nursery planting. We also have a good supply of Deciduous Trees and Shrub stock for lining out. Careful packing given special attention. Trade List for Nurserymen only is now ready.

The D. Hill Nursery Co., INC.

Evergreen Specialist---Largest Growers in America

Box 401.

Dundee, Illinois.

PERHAPS

You use RAFFIA for budding

If so, it will be to your interest to have a copy of our

MAY FIRST PRICE LIST

which will be mailed to you on request

Thomas B. Meehan Co.

Direct Importers of Raffia

Dresher - - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

NORWAY MAPLES

(The finest and most satisfactory of all shade trees)



We have the largest blocks in America,—all sizes for all purposes. Our maples have straight, smooth trunks, fine tops and clean, strong roots,—they will make good. Tell us how many you can use and the sizes and we will quote interesting prices. Better yet, come to the Nursery and inspect and mark the trees for yourself. You will be pleased with what we have to offer.

NORWAY MAPLES (*Acer platanoides*), have typical Maple leaf, large and bright green, fading to gold in the fall. Trunk and branches are sturdy and strong, lending an effect of ruggedness. Growth is fast. Branches and foliage are thick and compact, and the head, which is round-topped, begins to branch not far above the ground. The tree is large, towering 50 feet high when fully grown. For lining the sides of lanes and roads, for a lawn, to protect the house from sun and weather, for shade, and for real permanent worth in all landscape planting, there are no other trees in its class. The handsomest American lawn tree. We offer,—

| | | | |
|--------|----------------------------|-------|-------------|
| 5,000 | 8 to 10 ft., 1 to 1½ in. | 9,000 | 2½ to 3 in. |
| 10,000 | 10 to 12 ft., 1½ to 1¾ in. | 8,000 | 3 to 3½ in. |
| 10,000 | 12 to 14 ft., 1¾ to 2 in. | 3,000 | 3½ to 4 in. |
| 5,000 | 14 to 16 ft., 2 to 2½ in. | 1,000 | 4 in. |

ASK FOR SPECIAL PRICES ON CAR LOTS. DO IT NOW.

HARRISONS' NURSERIES

J. G. HARRISON & SONS

Berlin,

Maryland

80
221

NOV 10 1920



THE NATIONAL NURSERYMAN



NOVEMBER 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Manufacturers of The I. E. Ilgenfritz' Sons CO.'s Celebrated Graft and Stock Planter and Firmer

Subscribers to "Nurserymen's Fund for Market Development."

RELY ON WELCH

Some genius of the future may find a way to grow fine nursery stock without constant supervision. Until that happy day comes, we will continue watching carefully every step in our growing and grading.

Stock grown on these rich, loamy lands enters the world under ideal conditions.

Send us your list of requirements. We will gladly send you our trade list upon application. It will be out about the first week in September.

Have a good holding of Fruit Tree Seedlings. Will be pleased to make prices on application.

Mount Arbor Nurseries, E. S. Welch, President,

SHENANDOAH, IOWA.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

NOW MOVING.

Our Bulletin frequently throughout the season offering:

- APPLES—Good list of varieties.
- PEARS—General assortment—strong on Bartlett.
- CHEERRIES—Early Richmond and Montmorency..
- PLUMS—"Jap" Budded on Peach, at right prices.
- PEACHES—Surplus of Carman, Champion, Early Elberta, Elberta, J. H. Hale.
- H. P. ROSES and CLIMBERS
- ORNAMENTAL SHRUBS—General Assortment. Some scarce varieties like Hydrangeas, Weigelas.
- AMPELOPSIS VEITCHII, 2 year, heavy
- AMPELOPSIS VEITCHII, 1 year, heavy
- ASPARAGUS ROOTS
- BARBERRY THUNBERGII Seedlings—Largest stock in the world.
- Imported Fruit and Rose Stock, quoted f. o. b. Manchester.
- FRENCH APPLES 7/12 grade. ENGLISH MANETTI 5/12 and 1/2. FRENCH MANETTI 5/12.

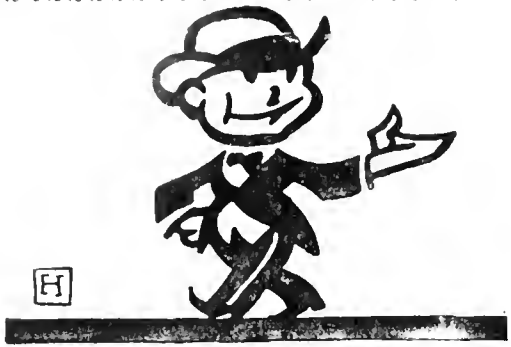
Write for special prices. Glad to quote.

C. R. BURR & COMPANY

Manchester, Conn.

The Preferred Stock

The Preferred Stock



YES INDEED

We're happy because we're busy. Fall shipments are unusually heavy and business for spring is keeping up too. Some things are showing up short already. Others are selling fast. If you are not covered on items you know you will need, in our opinion you cannot protect yourself too quickly. Our list offers all regular stock and some specials.

ROSES

field grown

CLEMATIS PANICULATA AMPELOPSIS VEITCHII

DIELYTRA SPECTABILIS

Bleeding Heart

HARDY PERENNIALS

PEONIES

ORNAMENTAL SHRUBS

TREE HYDRANGEAS

BUSH HYDRANGEAS

BERBERIS THUNBERGII

FRUIT AND SHADE TREES

High Grade Stock for the Wholesale Trade

Jackson & Perkins Company

Newark, New York

November 1st, 1920.

The Preferred Stock

The Preferred Stock

105 Years in the Nursery Business

GENERAL STOCK:—Our propagation includes apple, peach, pear, plum, cherry, apricot, quince, grape vines, all small fruits, shade trees, shrubs, climbers, roses, garden roots, and etc.

—Special—

A BIG STOCK OF QUALITY SHRUBS

Everything is grown in large quantities. Our grades are dependable and we are generally prepared to quote to nurserymen nearly everything we offer to the retail trade, and prices are always in line with those of other reputable growers.

We will be glad to have a list of your requirements for the coming season. Doubtless there are some things that you can use that we have in surplus. Can also ship from our branch plants—Marionville, Mo., Farmington, Ark., Dansville, N. Y., North Girard, Pa., and Vincennes, Ind.

STARK BRO'S
Nurseries and Orchards Co.
Louisiana, Mo.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please



PEACH SEED



1920 Crop

California Grown Seed

Selected from the Best Orchards

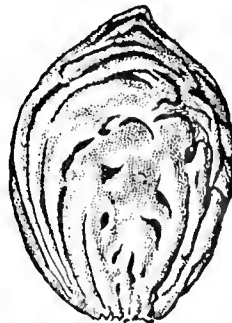
Properly gathered and cured

Sacked ready for shipment

We will quote F. O. B. Kansas City, Mo.

Write us at once for prices either for small or large quantities.

California Nursery Company



NILES,
Alameda County,
California



mention the National Nurseryman.

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

JAC SMITS & CO.

Naarden, - Holland

Growers of stock for Apples and Pear; Mazzard Cherry; Prunus Mahaleb, Myrobolana and communis; Doucin; Paradise and Quince.

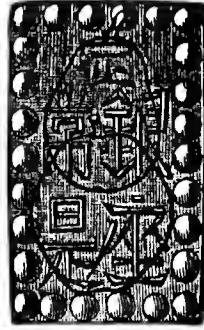
Rosa canina, rubiginosa, rugosa and Manetti also stems of Rugosa for topgrafting.

The catalogue contains also a general line of Nursery-stock, specially young plants to line out which can be imported by special permit.

Catalogue free on demand.

Heikes—Huntsville—Trees

We offer the following for Fall 1920 and Spring 1921:



FRUIT TREES
SHADES
ROSES
EVERGREENS
SHRUBS
HEDGE PLANTS
ABELIA GRANDIFLORA

AND OTHER ORNAMENTALS

All of our own growing. Prices on application.

Address

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

A Complete Line

We still have unsold a good assortment of Fruit Trees, Small Fruits and Hybrid Tea Roses.

Large Supply of
Ornamental Trees, Shrubs,
Perennials,
Vines, Evergreens.

W. & T. SMITH COMPANY

GENEVA, N. Y.

74 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

A Complete Variety of Nursery Stock



60000

Norway and American Elm
fine stock in car load lots or less



C. M. Hobbs & Son
BRIDGEPORT - - Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA., NOVEMBER 1920

No. 11

Tree and Shrub Seeds

Trees and shrub seeds begin to ripen in early summer on some varieties, but during the harvest time of the fall is when the great majority come to maturity. Such conspicuous kinds as the acorns from the Oak, the showy fruits of the Viburnum, Pyrus and such like are easily seen, but in many shrubs and trees the seeds are hidden away in a very inconspicuous manner, and are easily overlooked. If you wish to get them you have to be more or less familiar with the nature and character of the plant.

Many nurserymen miss the opportunity of collecting seed in their own locality, preferring to buy from those who make a practice of it. This would be all very well if it were possible to always get just what was wanted in good condition, but the propagator would find that seed collected by himself would cost very much less when everything is considered, and he would have the satisfaction of knowing just what he was sowing.

Just as soon as seeds are ripe they should be gathered. It is not always possible or convenient to clean them and put them up in packages ready for use, but there is an advantage in having them on hand in any condition if they are needed. A good plan is to never let seed go to waste if it can be avoided. Gather it and put it in a safe place out of reach of vermin until such time as it is needed. In a general way, the proper time to sow seed is as soon as ripe, but from a practical standpoint this is not always feasible. Some of the tree and shrub seeds

take too long to germinate, and it is a waste of ground and labor to sow them and keep the ground free from weeds until they germinate.

If they are sown as soon as ripe, the ground has to be kept weeded and in good condition for such a long period that when the time does arrive for them to germinate, the storms and other weather conditions have very likely washed away the greater part of them.

A much better plan is to stratify them as soon as they are matured. This may be done by placing them in thin layers in a box, alternating with an inch or two of sand. To save time in separating them from sand, when it is necessary to sow them, a good plan is to place them between thin burlap in the sand, in shallow boxes, the object being to give them the same conditions as if they were sown in the ground. The boxes may be either buried in the ground or left in some out of the way place where they will be safe from vermin.

Providing conditions of moisture are right, freezing does not harm them. In fact, it is considered beneficial for some kinds.

When the ground becomes in right condition in the spring they should be taken out of the boxes and sown, when they will germinate in the natural course of things and will have an even chance with the crop of weeds.

A well ordered nursery gathers the seeds as they mature and on wet days cleans and stores them away for future use.

ANNUAL MEETING OF THE SOUTHWESTERN ASSOCIATION OF NURSERYMEN

The Southwestern Association of Nurserymen met in annual convention in a very interesting two day's session at Dallas, Texas, on September the 22nd and 23d.

Secretary Chas. Saville of the Chamber of Commerce of the city bade the delegates welcome at the opening of the Convention and Hon. E. W. Kirkpatrick, of McKinney, responded in his usual able manner. President Jim Parker, of Tecumseh, Okla., in his annual address which was filled with good things, made the special point of the Southwestern nurserymen advertising their stock as "Hardy Southern Grown" in as much as all stock grown in the South and Southwest is always perfectly matured owing to the gradual, rather than abrupt, coming of the fall and winter season in this climate. All nurserymen know that ability to withstand the severe northern climates is inherent in the varieties and not in the localities of the plants' early days.

The members resident in Dallas did themselves proud with a splendid get-together luncheon and musical program at the Oriental Hotel at noon of the first day of the

Convention. It was heartily enjoyed by the thirty-five or forty members present.

In the matter of special courses in Nursery Training our Southwestern States represented in this Association are not behind, Mr. M. E. Hayes of the Extension Division of the Texas Agricultural and Mechanical College declared, and told of the course now being offered there under the direction of Dean E. J. Kyle.

The matter of legislation and a new uniform Inspection Law for all of the Southern States now under consideration was discussed by Mr. J. R. Mayhew of Waxahachie, who reported the Proceedings of the Southern Nurserymen's Convention which was held recently at Charleston, S. C., in as much as matters affected the nursery interests of the Southwest.

Other speakers on the program were John S. Kerr, of Sherman, Texas, on "Landscape Development;" Louis J. Tackett, State Nursery and Orchard Inspector, Fort Worth, on "Quarantines and their effect on Trade;" W. A. Wagner, of Sherman, on "Maintaining morale of Salesmen;" J. B. Baker, of Baker Brothers Co., Fort Worth, on "Ornamentals for the Southwest;" Will B. Munson, Denison, on "Labor Problems" and impromptu

talks by E. Y. Teas, of Houston, and N. M. Shive, of the Cabot Nurseries, Cabot, Ark.

Special mention should be made of the fine exhibit of Arkansas grown fruit trees exhibited by the Cabot Nurseries, showing June budded, yearling and 2-year old trees.

The new officers are J. M. Ramsey, Austin, Texas, President; N. M. Shive, Cabot, Arkansas, Vice-president; George F. Verhalen, Scottsville, Texas, Secretary-Treasurer; Executive Committee, (besides officers) Jim Parker, Tecumseh, Oklahoma, and E. W. Knox, San Antonio, Texas. B. L. Adams, of Bonham, Texas, acted as Secretary pro tem in the absence of J. C. Boyd, of New Orleans, La. Dallas was again selected as the next place of meeting, the date being left open on suggestion that it be held earlier in September.

The Southwestern Association includes the States of Louisiana, Arkansas, Oklahoma, New Mexico and Texas.

WINTER PROTECTION

Last winter took a large toll of evergreens, trees, shrubs and plants in many sections of the country.

Many nurseries in the East Coast States looked as if they had been swept by fire especially the blocks of evergreens.

Immense damage also was done among shrubbery and trees by rabbits and field mice gnawing off the bark at the surface of the snow.

It is to be hoped that the coming winter will not be a repetition of the past one, at the same time it is well to be prepared as much valuable stock can be saved by forethought.

The large evergreens and trees of course will largely have to take their chance as it is not practical to give them much protection, but it is a good time to renew consideration of the planting of windbreaks, and resolve again to plant them next spring if circumstances forbid this fall.

Perhaps it will be even possible and worth while to build a temporary windbreak to protect some choice lot of plants that are in danger of injury.

The damage is usually done in late winter and early spring so such work can be left until cold weather has actually set in and things are not so rushed. Experience will have taught where a little protection will do the most good. Many claim the damage is done by the sun shining on the plants when they are frozen but plants protected from the dry frosty winds are seldom hurt by the sun, perhaps it is a combination of both.

In the case of seedlings and plants in frames that are given a protective mulch it is well to remember that the mulch also forms a harbor for field mice and other vermin that are as likely to do as much damage as the weather.

Put the mulch on after the ground is frozen and put poisoned corn or take other steps to destroy the vermin before they destroy the plants.

THE BEMIS TRANSPLANTER

Can any nurseryman give information about the Bemis Transplanter. If it is a success for transplanting nursery stock?

J. V.

IN THE HORTICULTURAL PROFESSION

It is interesting to note how similar nurserymen's problems are the world over, at least in the English speaking countries. A letter from Geo. A. Green, Hon. Secretary of the New Zealand Association of Nurserymen, says:—"Just now we are interested in the Bud Selection Association idea and we hope to get it going soon. We are also going in for a closer organization in several ways. Co-operative advertising is also to the fore. The Palmerston North Nurserymen's Council have just issued an associated catalogue with the names and addresses of each member in it, while the Lalanake Council run collective advertisements and find they work well."

A report of the twenty-second Annual meeting of the Horticultural Trades Association, England, shows them to be debating on the same problems as our own National Association, Standardization of terms of trading, national advertising, railroad rates and classification, etc.

It seems to be dawning into our intelligence the world over that mutual helpfulness or co-operation is the key note of progress, and that it is the only thing that will solve the problems that confront us.

Suspicion, jealousy, smart practice and supreme selfishness have had a good trial and have proved themselves retrogressive and complete failures. While millennial conditions can hardly be expected on the morrow, the evidences are plentiful that the current is strongly setting in the direction of a sane co-operation, and those who do not go with the current are likely to find themselves in the eddies along the side.

THE SMALL ORDER

How to get and handle the small order profitably is one of the problems of a retail business. Many houses realize small orders do not pay for handling, but they also realize that small orders lead to large ones, and if the small orders can be got in sufficient volume, so as to permit economical handling, they can be made as profitable as the large order.

It is not easy, however, to lay down any fixed rules as to just how they should be handled or what attitude to take toward them.

In other lines of merchandise the small order has been capitalized into one of the largest merchandising concerns in the world, namely the 5 and 10 cent store. The 5 and 10 cent store idea was founded on a sound business policy as proved by the results, and there seems to be no reason why a similar thought cannot develop an immense trade in connection with the nursery business, or at least by suggestions of a plan that would develop the nursery trade into large proportions.

As soon as we leave the city lot and go countryward, we see houses standing on 25 ft. lots and upward that certainly need the nurseryman's products. A very large proportion of these houses contain potential customers for an order of \$5.00 and upward for the nurseryman. The problem is how to develop this class of trade profitably. It can be readily seen, looked at from every angle, there would be a tremendous volume of business in the aggregate, if some means could be conceived whereby the interest could be aroused, and this large potential

market be developed. It is needless to say the purchaser, the nurseryman, and the country at large would all be benefitted by it.

DAHLIAS

There is nothing equals a first class exhibition of flowers to arouse interest and create enthusiasm.

The Dahlia has always held an important place among flowers, its popularity waxing and waning.

Just at present, judging from remarkable exhibits that have been staged at the different shows, and the number of specialists engaged in their culture, they are coming very much to the front. Another good sign is the interest and competition among private gardeners as to who can grow the best.

Results of high feeding and disbudding are really extraordinary, and are quite a revelation to those who only know the Dahlia as it grows in the garden without special attention. Practically speaking it is more of a florist's flower than one that can be handled by a nurseryman.

It will not stand frost at any time, even in the winter when the roots are dormant. This necessitates at least a frost proof cellar for storing the roots and a greenhouse or hotbed sash for propagating in the spring.

The method of propagating the named varieties is by division of the roots, but with the new and expensive varieties this is too slow. A quicker method is to start the roots in growth in the greenhouse in early spring and make cuttings out of the sprouts. They root very easily and these young plants give better results than when the tubers are planted.

The young spring struck plants, however, do not always find favor with the amateur buyer, who likes to see a big plant for his money. The writer recalls a method practiced by an old country nursery that may have value under some conditions.

Cuttings were taken from the new or scarce varieties, as long as they continued to throw shoots. These were potted into three inch pots which were plunged outside in ashes. Orders were filled from them as long as they came in, or as long as the stock lasted. The balance were left all summer in these small pots, producing of course, poor starved plants, but wonderfully firm small tubers that made splendid stock for shipping at least expense of handling.

TREE-LINED ROADS

France Serves Utility as Well as Beauty in Its National Road Building

Sentimental appeal has given more or less vogue to the suggestion that trees be planted along the main roads of the country, like the Lincoln Highway, as a memorial to the soldiers of the American Expeditionary Forces, until for every man who gave his service for the country there shall be a tree as a living monument of appreciation.

Possibly the idea had its origin somewhere along those roads in France, where American soldiers marched to and fro, sometimes with full ranks and quick step toward the field of battle, and sometimes with broken lines and weary steps returning from the fight. At least, the

tree-lined roads of France are among the pleasant memories that the boys brought back, and it may be that they will add their influence to a phase of the tree-planting campaign that will serve the utilities as well as the sense of sentiment and beauty.

All the national roads in France, covering some 24,000 miles, are bordered with trees planted and cared for by the government as a part of its good roads enterprise. When the road is less than seventeen feet wide a single row of trees is set out on either side; when it is wider two rows are planted and a footwalk provided between them. Four centuries ago King Francis I. is said to have found time and pleasure, apart from his dreams of empire and their consequent wars, to set out a line of Lombardy poplars along one of the royal roads, and the example has not been neglected from that day to this. Now there are said to be more than three million trees under the care of the Ministry of Public Works, whose continuing duty it is to see to their protection and replacement, while with every contract for road construction there is issued an auxiliary contract to some local forester to set out accompanying rows of trees and be responsible for their nurture for a period of two years.

Their contribution to the beauty of the highway is obvious. But the French are practical in their appreciation of the aesthetic, and tree planting is regarded as having its place in the utilitarian design of road making. Roots, as well as limbs and boughs make their contribution, the latter providing shade and the former assisting in the natural drainage of the road bed.

American highway engineers generally admit the value of such tree planting, and, of course, concede its contribution to the landscaping, but in general they have not had time, or money, or even space, to put the plan into practice. One fault of road improvement in America, as it is most generally exemplified, is that attention is concentrated on the construction of a speedway, and if a smooth course can be provided of sufficient width for two automobiles to pass, the mileage of construction can be stretched according to the expense that can be saved on the border, and whatever is left of the public reservation on either side of the roadway is dedicated to nature's kindly or unkindly care.

Country highways are regarded as primarily for automobiles, secondarily for horse drawn vehicles. Pedestrians must look out for themselves. Foot paths are not considered a necessary adjunct of such highways, and where suggestion has been made for the provision of a bridle path, the idea has been frowned upon as if it were an unwarranted demand on the part of those who can still afford or prefer to sit in the saddle, rather than in a flivver.

Moreover, the public demand is for speed facilities, rather than for bordering beauty. At thirty-five to fifty miles an hour, one doesn't notice the absence of trees on either side, and is fully content to concentrate conversation on the "beauty" of the road, as exemplified in the absence of bumps. Possibly if the anti-billboard crusade ever shall accomplish its objective and the roadways be relieved of these atrocities, the bareness of the road line may make its impression on the eye of the speeding traveler and the place of the tree be recognized.

Massachusetts highway builders have done some-

thing in the way of tree building, both for adornment and the protection of their roads, and here in Pennsylvania, the state highway engineers have made use of trees as windbrakes or snow screens, although in other places where natural growth has contributed to the banking of snow it has been cut down without substituting an orderly line of shading. Save for the park roads and boulevards, where generally the tree has been given recognition, and for the natural forest-growth, tree-planting is an unfamiliar branch of the science and art of road-building in America.

One of the main roads running out of the city of Los Angeles is lined on either side, for a distance of more than twenty miles, with rose bushes, over eight thousand settings being required. The average road-building engineer would call that a luxury—possibly a folly. A few years ago an appropriation was made on one of the Eastern railroads for the planting of rambling roses along the embankments and cuts beside the right of way on its main line for a distance of many miles, and "practical" railroad men called it foolishness, although patrons of the road found in the beauty of the flowers something to take their minds off other incidentals of their journey that were more "practical" but nevertheless neglected.

Beauty and utility often merge. Ordinarily they can be made to co-operate. It isn't necessary that a railroad route should be a road-bed and nothing more, and that nature's deficiency in scenic attraction should be aggravated by eyesores of negligence or design. Nor is there good reason why beauty and the eye for it should not be served "on the side," in road-building, at least to the extent of providing the "setting" of shady green.

TWO LEAF-HOPPERS INJURIOUS TO APPLE NURSERY STOCK

A. J. Ackerman (U. S. Dept. Agr. Bul. 805 (1919))—This is a report of studies of *Empoasca mali* and *Empoasca rosae* conducted at West Chester, Pa., during the seasons 1915 and 1916 and supplemented by field observations in southeastern Pennsylvania and western Maryland.

Investigations made of the more injurious species, *E. mali*. Its attack on nursery apple trees results in the leaves becoming undersized and curled which causes a decided check to the growth of the new wood. Curling begins at the apex and extends toward the base of the leaves, the lower surface always being rolled in. The leaves become wrinkled, and the loss of sap causes the tips to gradually dry up and turn brown.

In the vicinity of West Chester, Pa., there are three broods during the season and three corresponding checks in the terminal growth. The first brood is the most abundant on apple and causes more injury than either of the two following. As a result of the continued checking of the growth, nursery apple trees often require an additional year's growth before they become of marketable size. Seedlings and the initial growth of buds and grafts are very seriously injured, but after the first year's growth the more vigorous varieties become partially immune to injury and succeed in maintaining a satisfactory growth, while slow-growing and tender-leaved varieties

are at all times badly injured by the attack. Among the varieties most severely injured in Pennsylvania nurseries are the Red Astrachan, a particularly slow grower during the first two seasons, which ranks first, followed by Smith Cider, Starr, Early Harvest, Summer Rambo, Delaware Winter, Wagoner, Golden Russet, Early Ripe, Wealthy, and Alexander. Three other species (*Empoasca birdii*, *E. flavescens*, and *E. unicolor*) were found associated with *E. mali* on nursery apple trees at West Chester. The injury caused by *E. unicolor* in the vicinity of West Chester was negligible.

In southeastern Pennsylvania *E. mali* hibernates only in the adult stage. The eggs are laid singly in the sides of the mid-vein and occasionally in the smaller veins of the terminal leaves. The average length of incubation of the first brood of eggs is one week. The feeding period of the first brood nymphs extends from May 30 to about July 15, varying from 15 to 22 days, with an average of 18.7 days. The second brood eggs hatch from the latter part of June to about August 1, the length of the incubation period being about one week, and the average length of the second nymphal period 15.8 days. The third brood eggs hatch from July 30 to about September 1, the incubation period being about 9 to 10 days and the average length of nymphal period 18.7 days. The winter is passed in the adult stage under rubbish in the nursery or more often under accumulations of leaves in adjoining woodlands.

E. rosae, while primarily a pest of cultivated roses and apples, is a rather general feeder. The nymphs and adults confine their feeding entirely to the lower leaves of apple trees in the nursery. Their injury is caused by the sucking of the plant juices as indicated by a mottling of the leaves with yellowish or whitish spots at the points where the punctures were made. When the leaves become heavily infested they turn yellow, dry up, and drop to the ground prematurely. The foliage is never curled by this species, nor is the terminal growth checked as in the case of injury by *E. mali*. A second type of injury is produced by the egg punctures made by the females in the fall during the ovi-position period. The eggs are deposited under the bark of young apple trees, several hundred eggs often being placed on a single twig. As compared with the more destructive *E. mali*, the injury produced by *E. rosae* to apple nursery stock is of little importance.

E. rosae is two-brooded at West Chester, and hibernates in the egg stage, the eggs being deposited singly, largely under the bark of apple trees, and rose bushes. In the nursery these eggs hatch from May 1 to 15, or about a month earlier than those of *E. Mali*. About one month is required for the development of the first brood nymphs. The incubation period of the second brood eggs is about 25 days, hatching commencing about July 20. The second brood nymphs require a period of 17 days for development. The winter eggs are deposited throughout the month of October. Parasites appear to play a more important role in reducing the numbers of *E. rosae* than they do in reducing the more injurious *E. mali*. Larvae of dryinid parasites are quite common on the adults of *E. rosae*, but have rarely been found attacking *E. mali*. *Anagrus epos* and *A. armatus nigriventris*, parasites of the winter egg of *E. rosae*, help considerably

in checking the numbers of this species. No parasites have been reared from the eggs of *E. mali*.

The author found that a single application of 40 per cent nicotin sulphate at the rate of 1:5000, combined with soap, will so materially check an infestation by the leaf-hopper when applied against the first brood nymphs that injury caused later by those that escape will be of little consequence. The same treatment made three or four weeks earlier is effective against the rose leaf-hopper, though this species is seldom sufficiently injurious to justify a special application.

FAIR AND STABLE PRICES

Jos. H. Defrees, President of the U. S. Chamber of Commerce, says: "that one of the most fruitful sources of the unrest at the present time in this country, is the belief on the part of a great number that business in many instances is securing an inordinate profit.

It is the theme of the agitator, and is used as justification for the various unfair exactions which are put upon business."

Applied to our own business, the nurserymen can hardly be accused of profiteering, except in rare instances, but there is a sad lack of uniformity or consistency in prices of nursery stock, and the sooner we get down to a standard quality of stock, and fix on a price which allows a fair profit, the better it will be.

Confidence on the part of the purchaser that he is getting his money's worth, and that he could not secure the same quality of goods from other sources at a lower price, will do much to increase sales.

There is nothing shakes the buyer's confidence and ruffles his feelings more than to find out he has been stung.

BOX BARBERRY

You no doubt have watched with interest the introduction of *Box-Barberry* to the American public. Of course, *Box-Barberry* is just what the public wanted, but what would have taken several generations to have accomplished in the way of publicity without Printers Ink has with it been done in three years. Practically the entire horticulture loving public are today familiar with *Box-Barberry*. An unfortunate condition at present confronts the nurserymen for on every side are coming in inquiries and orders for *Box-Barberry* with practically no stock available to supply it. Even we who have been propagating *Box-Barberry* on a scale that we consider most liberal are practically cleaned out on all but frame cutting plants, and the 1920-21 sale season has hardly begun. Even if every nurseryman in the country should propagate *Box-Barberry* to the limit of this capacity it is our opinion that it will be several years before the supply will catch up with the demand.

The J. Van Lindley Nursery Co., Pomona, N. C., have rather a novel way of making their letters they send out on their own stationery advertise their retail nursery and landscape business for them.

In addition to the usual letter head on the other side of the letter sheet is printed views in colors of landscape effects such as porch plantings, lawns, drives and trees.

It gives the recipient an idea at a glance just what the firm can do for them in the way of fixing up their grounds.

HARDY CHRYSANTHEMUMS

There always will be a demand for chrysanthemums because there is practically no other flower to take their place at that particular season when they make the gardens and greenhouses gay. At other periods of the growing season there is a choice of flowers but in the late fall especially after the light early frosts, chrysanthemums with a few odds and ends of flowers are the only things that are in good display.

For this reason there is always general interest and a steady demand. From the nurseryman's point of view, the chief demand is at the wrong end of the season, when they are in bloom, so the trade goes to the florist. The nurseryman should use every means to awake the interest in the spring, at the time they should be planted. A good way is to have a good display on the nursery in the fall and book orders for spring delivery.

While many varieties are classed as hardy, they are not altogether dependable, especially if planted in the fall. A small cutting or division in the spring is much better risk than a large clump transplanted out of doors in the fall. A good way for the nursery to carry over stock is to lift the roots from the field and take off the rhizomes, planting them in light and sandy soil in frames and keep them covered with sash during the wet cold weather of winter. They can then be potted up for sales in spring or planted out in the field.

To make sure of those varieties that do not make shoots very freely from the roots, it will be necessary to store away the entire plant without pulling it apart, so cuttings may be taken from them in the spring. If the plants are handled in this way there is no reason why many of the varieties that now grow almost exclusively under glass, should not be grown in the open. The old time growers used to get wonderful results without the aid of a greenhouse, merely arranging to give them cheese cloth or some other light protection from the early frosts in the fall during their flowering season.

This is worth while even with the hardy pompons and singles because often a single frosty night spoils the entire crop of flowers, whereas if they had received protection there would be abundance of flowers during the long open spells that are so frequent up to Thanksgiving day or even later.

IBOLIUM PRIVET

This office is in receipt of two sturdy plants of the *Ibodium Privet* from the Elm City Nurseries, New Haven, Conn. As the samples indicate, this plant is a very sturdy grower, growing more bushy than the common California Privet, filling up the base quicker.

It proved hardy at the Arnold Arboretum last winter, which was a severe one. Both as a hedge plant, and to be grown as an ornamental bush it should be in good demand. It closely resembles the California Privet, but is claimed to have proven much hardier over a wide range of country where the California Privet will not stand severe weather conditions.

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AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
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Hatboro, Pa., November 1920



PRICES AND THE JOBGING GARDENER

Prices of nursery stock are much higher than in pre-war days, and few nurserymen will agree that they ought to come down, even if labor and other commodities that enter into the cost of production, do slump.

They very properly take the stand that they were much too low in the pre-war days in comparison with other lines of merchandise, due to many and obvious causes that under the old conditions they were unable to control.

It is confidentially expected, and there is every evidence of it, that practically all prices of staples will find a lower level than they are at present.

What is to prevent nursery stock being the exception? We know from bitter experience an abundant supply of stock with a poor demand will start prices on the toboggan, in spite of all the preaching and good resolutions made in time of scarcity.

The National, and other associations, will do much to put backbone into those with a tendency to cut, but all the associations in the world will not hold prices up when the nurseryman has to decide between the brush pile and a lower price.

The two fundamental forces that will keep prices, that will enable nurserymen to grow at a profit are:— better stock and less of it, and an ever increasing demand.

The first requirement is largely in the control of the individual nurseryman. It is up to each one to grow less

and better stock, and get it to the consumer in better shape, and to discourage the amateur nurseryman in every way possible.

The second requirement will only be brought about by close co-operation through the associations especially in connection with national advertising and along the lines laid down by the National Association.

This, however, is not sufficient in itself. It is up to each one to do his share in his own particular business, to increase the interest in planting.

The channels through which nursery stock is distributed to the consumer are, the nursery salesman and florist, the landscape architect, the jobbing gardener, and the retail catalogue direct to the consumer.

The tendency at present, judging from the terms offered the jobbing gardener and florist, and even the small retail nursery, seems toward an elimination of this channel of distribution.

No one cares to handle nursery stock at a discount of 10 to 20 per cent., the customary allowance to those in the trade, especially if he is in any way in competition with the nursery that supplies him, and has to take the responsibility, with the purchaser, of failure.

Those who have done much retail selling realize the very big handicap of planting. Hundreds more sales would be made if planting was part of the transaction. It is the inability of the would-be purchaser to plant that prevents much buying.

A big increase in the number of jobbing gardeners, or those men who make a living by buying nursery stock and planting it, would mean a larger consumption. In other words, planting is an inseparable part of retailing with many prospective customers. The big nursery is not usually equipped to take care of planting a great number of small or medium sized orders in the rush days of spring.

A more liberal and unselfish policy towards the little fellow would be the means of a larger consumption of nursery stock. Nurserymen can grow good stock, but it has yet to be proved they are good sellers.

ADVANTAGES OF BUYING OUT OF SEASON

A very interesting article appeared in the October issue of the GARDEN MAGAZINE, by Grace Tabor, under the title of "Advantage of Buying out of Season."

It points out to the buyer the advantages of buying in the fall even though the stock may not be actually wanted for planting before spring, that it will keep in just as good condition heeled in on the customer's grounds until wanted, as it will heeled or in storage houses on the nursery to be assembled and shipped under stress of the spring rush.

There is nothing new to the nurseryman in this. He knows it all too well and would give a great deal to be able to fill orders over a longer period to relieve the congestion in spring, and consequent dissatisfaction.

The thanks of the nurserymen are due the author in attempting to educate the public along such practical lines and incidentally giving the nurserymen a pointer for propaganda in connection with their market development.

Princeton Products

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Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

November, 1920.

A Few Good Items, Choice Nursery Grown at our Nursery in Western Springs, Illinois. We should be pleased to show this stock to anyone interested.

| | | TREES | Height Feet | Caliper Inches |
|-------|---|-------|-------------|----------------|
| 1,000 | American Elms | | 10-12 | 2-2½ |
| 100 | " | " | 20 | 6-10 |
| 500 | Scotch | " | 10 | 2½-2 |
| 500 | " | " | 10-12 | 2-2½ |
| 300 | " | " | 10-12 | 2½-3 |
| 300 | " | " | 12-14 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | | 15-16 | 3-4 |
| 300 | English Elm planted in single rows mostly 9 ft. apart | | 15-16 | 4-5 |

These Elms are extra fine stock, straight stems, bushy, symmetrical heads. The best trees for city, estate and avenue planting.

SHRUBS

| | | | |
|-------|----------------------------------|-------|------|
| 250 | Berberis Ilicifolia, Specimens | | 2½-3 |
| 200 | Crap Bechtels Dbl. fl. Specimens | | 7-8 |
| 1,000 | Cydonia Japonica, Extra Bushy | | 2½-3 |
| 250 | Elegans Angustifolia, Specimens | | 7-8 |
| 500 | Rhamnus Catharticus | | 6-7 |
| 3,000 | " | " | 7-8 |
| 3,000 | Salix Discolor (Pussy Willow) | | 6-7 |

VINES

| | | |
|--------|---------------------------------------|--|
| 20,000 | Clematis Paniculata 2 in. Pot Grown | |
| 1,000 | Wistaria Magnifica 4 yr. extra strong | |

We also have a fine block of Koster's Blue Spruce from 6-12 ft., every plant a specimen

VAUGHAN'S SEED STORE

New York - Chicago

Nursery: Western Springs, Illinois

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

SPECIAL OFFER CHOICE JAPAN IRIS

true to name

Large undivided clumps

Can be divided into four to six strong divisions

| Amt. | No. | Description |
|------|-------|---|
| 1000 | (120) | Sano-watashii, double, tall, pure white, early. |
| 600 | (122) | Bandai-no-nami, double, tall, very free, white, showy yellow bend. |
| 75 | (123) | Shiga-no-namami, double, large, purple splashed. |
| 40 | (129) | Sofu-no-Kai, double, midseason, large, light blue veined purple. |
| 100 | (137) | Kasugano, double, light blue, faintly veined royal blue. |
| 50 | (157) | Wase-Banri, single, large, pale blue splashed royal purple. |
| 50 | (166) | Iso-no-nami, double, blue, splashed and blotched purple. |
| 75 | (149) | Manadzuna, single, royal blue, blotched white. |
| 100 | (9) | Ho-o-jo, double, white, overlaid delicate pale blue. |
| 50 | (23) | Shiritaki, single, tall, pure white. |
| 40 | (18) | Namuri-shi-bon, double, late, purple, blotch and overlaid blue. |
| 100 | (26) | Sivibijin, single, rosy purple. |
| 75 | (40) | Single, royal purple. |
| 70 | (103) | Single, rosy pink, suffused with carmine. |
| 500 | (200) | Pyramid, double, large, deep blue, suffused with royal purple. |
| 20 | (201) | Urcin, double, tall, royal blue, veined white. |
| 800 | (200) | Kumo-no-nye, double, late, rich royal purple, suffused with royal blue. |

We are now dividing and transplanting our Japan Iris. This list is the cream of many varieties imported from Japan and Europe.

THE ELM CITY NURSERY CO.

WOODMONT NURSERIES, INC.

New Haven

Conn.

Introducers of BOX-BARBERRY and IBOLIUM PRIVET

Obituary.



ARTHUR WILLIS, SR.

Arthur Willis, Sr., of the Willis Nurseries, of Ottawa, Kansas, died October 1st, 1920, at the Ottawa Hospital, after an illness of six weeks. Two operations were performed for bladder trouble but they failed to bring relief. The funeral was held the afternoon of October 4th, from the residence, 439 South Cherry street, where the family had lived since 1882. Rev. W. A. Elliott, of the First Baptist Church, conducted the services.

Mr. Willis was born in Delavan, Wisconsin, March 18, 1843. When he was 21 years old, he left home to work in Rockford and Bloomington, Ills., and later went to Columbia, Mo. From Columbia, he came to Ottawa to raise apple grafts, and decided to make his home there. He is survived by his widow, Mrs. Amelia Esterly Willis, two daughters, Miss Ola Willis, of Ottawa, and Mrs. Gail W. Beach, of New Westminster, B. C., and son, Mr. Arthur Willis, Jr., of Ottawa.

He established the Willis Nurseries, at Ottawa, about 50 years ago, has been an extensive grower of general nursery stock, and his business is well and favorably known throughout the United States. A very large circle of friends and acquaintances are saddened by his death. Though quiet and unassuming, Mr. Willis was keenly interested in all civic matters, educational affairs, and the activities of the Baptist church, of which he was a deacon 40 years. He was president of the old Ottawa city council and a member of that organization many years. The board of trustees of Ottawa University numbered Mr. Willis as a member from 1885 until the time of his withdrawal in favor of his son, Arthur, about a year ago. He was secretary of the board from 1912 to 1919, and a member of the executive committee for a long time. He had signed more of the 700 diplomas of the graduates of the university than any other member of the board. During the time Mr. Willis and his wife have lived in Ottawa, they have known the work of the college intimately, have constantly come in contact with the students and faculty, and have been continuous contributors to the work of Christian education. When a daughter, Miss Fern Willis, passed away, Mr. and Mrs. Willis established the "Fern Willis Memorial Scholarship Fund" of \$1000. After Mr. Willis retired from business, he paid into the permanent funds of the college \$10,000 on the annuity plan.

Following is the editorial tribute of the Ottawa Herald:

"A. WILLIS, PREMIER CITIZEN.

The death of A. Willis removed a citizen to whom Ottawa owes much, because of his long residence here and service to the community. Town, church, college and a host of friends will miss him sorely. Mr. Willis built up an important industry, in his nursery business, that is known considerable distances away from here. He also devoted much of his time to public affairs that mean much to any town, giving of his substance as generously as he did his personal effort. Men of his type are appreciated during their lifetime.

and their death leaves a gap that is hard to fill."

At the time of a serious illness a few years ago, Mr. Willis retired from business, and his daughter, Miss Ola Willis, took charge of the business, later was joined by her brother, Mr. Arthur Willis, Jr., Miss Willis is one of the most capable women in the nursery business at the present time.

SAVE THE REDWOODS LEAGUE

A Society has been organized under the name of Save the Redwoods League, the purpose of which should appeal to every nurseryman.

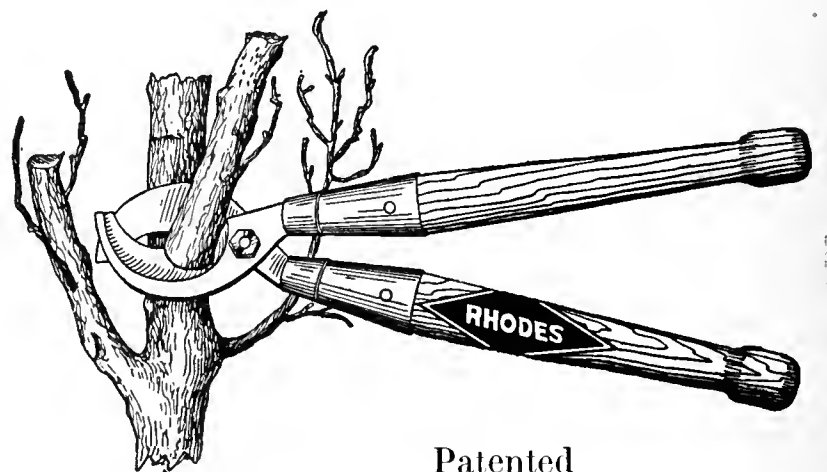
These wonderful trees are the only living things in the world that were in existence before the dawn of our civilization. It would really be a calamity if through carelessness and want of interest, they were destroyed. They are the birth-right of the American people, and should not be sold, or lost to future generations for a mess of pottage.

For information concerning membership in the League please address
ROBERT G. SPROUL, Sec'y-Treas.
430 Library, University of California
Berkeley, California.

The Inter-State Nurseries, C. M. Griffing & Co., Jacksonville, Fla., have moved their offices to the Duval Bldg., Jacksonville. The nursery is located 28 miles west of Jacksonville on the Seaboard Air Line Railway.

RHODES DOUBLE .. CUT .. PRUNING SHEARS

In Use Throughout the World



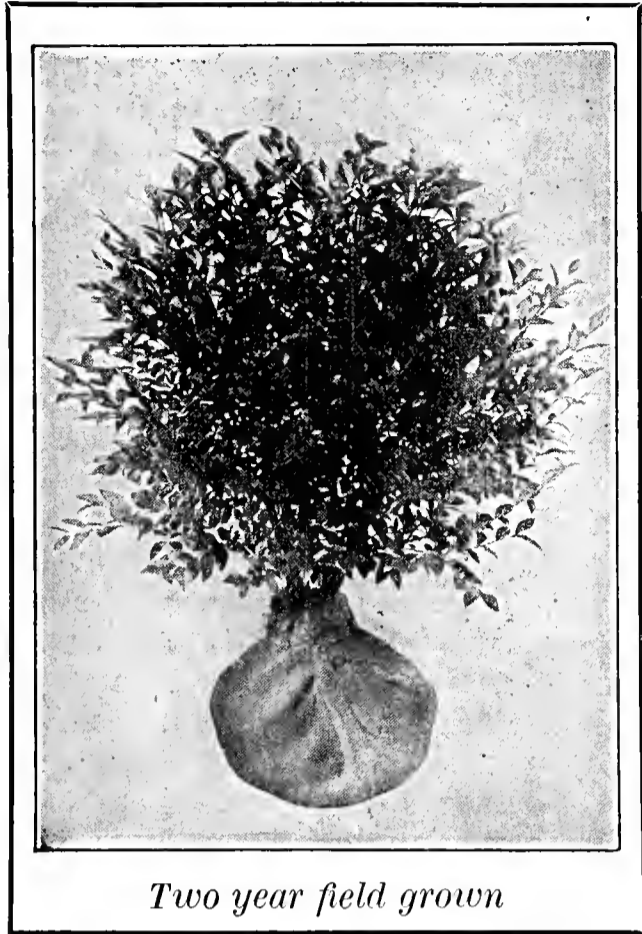
Patented

The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
Grand Rapids, Mich.



Two year field grown

IBOLIUM Hardy Hybrid PRIVET

Cross between CALIFORNIA and IBOTA PRIVET

Hardy As Ibota
Looks Like California

Arnold Arboretum
Report it hardy there
The Past Winter

—Just think what this means—
Order Propagating Stock
NOW

Grows equally well from either
Hard or **SOFTWOOD.**

Start Propagating now and be ready for the
Coming Demand

TRADE OFFER

2 years 3-4 feet
(Not cut back. See above cut.)
1 year 1-2 feet
Also Summer frame cuttings

SURPLUS
American Hemlock, 2-3 ft., 3-4 ft., 4-5 ft.
Japan Iris—20 varieties (true to name)

THE ELM CITY NURSERY CO.
Woodmont Nurseries, Inc.
NEW HAVEN - - - CONN.
Also Introducers of BOX-BARBERRY

Surplus Stock

- 5,000 Elberta June-buds 2-3 ft.
- 1,000 LeConte Pear 4-5 ft., 1 year buds heavy
- 1,000 Garber Pear, 4-5 ft., 1 year buds heavy
- 750 Kieffer Pear, 4-5 ft., 1 year buds heavy
- 800 Hicks Mulberry, 5-6 ft.
- 500 assorted Fig, 2-3 ft.
- 1,000 Assorted Roses 2 year field-grown own root.

Write us for prices.

HARLAN FARMS NURSERY,
Lockhart, Ala.

Members American Ass'n of Nurserymen.

We Solicit Correspondence and A List of Your Wants

For Fall 1920 and Spring 1921

- CALIFORNIA PRIVET, 1 year old.
- Oriental Planes, Norway Maples, Pin Oaks, Lombardy Poplars.
- A select lot of trees in all sizes—transplanted.
- APPLES, 1 and 2 year old; all grades and all standard varieties. Nice stock.
- PEACH, 1 yr. old. Heavy stock. All leading kinds and all grades Write us for special prices on large lots.
- GRAPES, 1 and 2 year.
- ASPARAGUS, 2 yr. old. Can make very attractive prices.

MISCELLANEOUS

A good stock of flowering shrubs, shade trees, etc.

SEND US YOUR TRADE AND WANT LIST.

FRANKLIN DAVIS NURSERIES, Inc.

404 W. Baltimore Street, BALTIMORE, MD.

We have One Year Apple

to offer in the following varieties and can furnish these in

- 4 to 6 ft. grade
- 3 to 4 ft. grade
- 2 to 3 ft. grade

- | | |
|--------------------|----------------|
| McIntosh Red | Ben Davis |
| N. W. Greening | Baldwin |
| Red Astrachan | Blk. Ben Davis |
| Red June | Delicious |
| Rome Beauty | Early Harvest |
| Staymans Winesap | Grimes Golden |
| Winesap | Gano |
| Winter Banana | Jonathan |
| Wealthy | M. B. Twig |
| York Imperial | Maiden Blush |
| Yellow Transparent | |

We also have to offer Grape Vines in one year No. one and One year No. two in Concord, Niagara, Moore's Early, Worden, Moore's Diamond and a few red sorts.

We have as fine a lot of Apple Seedlings as you ever saw and can furnish these in all grades.

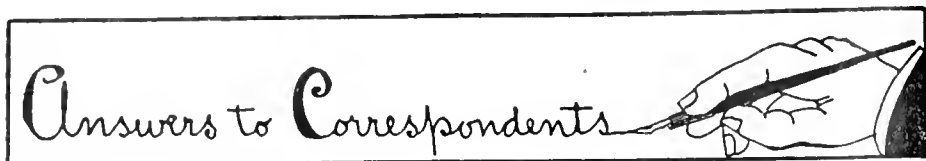
Can supply roses in the following varieties, as well as a limited number of some other sorts.

- | | |
|---------------------------|-----------------------|
| American Beauty | LaFrance, pink |
| Etoile de France | LaFrance, white |
| Etoile de Lyon | Meteor |
| Frau Karl Druschki | Mad. Caroline Testout |
| Gruss an Teplitz | Paul Neyron |
| General Jacqueminot | Pink Cochet |
| Kaiserin Augusta Victoria | Sunburst |

White Cochet

All stock offered above is for late fall or early spring shipment. In addition to the items mentioned we will have a good assortment of two year apple in all grades as well as peach trees.

F. H. STANNARD & CO.
Ottawa - - - Kans.



I wish sometime you would discuss the best method of propagating *Hydrangea paniculata grandiflora*. It would undoubtedly interest the younger set of which I am one.—A. G. H.

Hydrangea paniculata grandiflora is comparatively easy to propagate. It roots very readily from cuttings of half ripened wood put in sand in August or September. Good success may be had by just putting them in the cutting bed of sand, with sash over it, although if they can be given a little bottom heat they will root much more readily and more successful results will be obtained. It is also possible to root them from hard wood cuttings made in the winter, stored in a cool frost proof place and planted in the open ground in the early spring in the same way the privet, willows and altheas are propagated. Perhaps one of the surest and best ways to propagate them is by layering. The great advantage in this method is that you get a saleable plant so much quicker. Some nurseries do it on a very large scale. Stool plants are set out and at a good distance apart, say six feet in the rows and six feet in the plants. They are cut back to induce them to send up several stems. During midsummer the ground is spaded up around these stool plants and if it is stiff and heavy, a dressing of sand and well rotted manure is worked in the ground around them. The shoots are bent down and covered with soil, leaving the end out of the ground. They keep on growing, each branch carrying a huge flower on its terminal. By the time the frost comes, all these layers will be rooted and may be taken from the stool plants, stored away in a cellar or if conditions are favorable, even planted out in the open. If the planting is done however in the late fall, every care will have to be used to prevent them from lifting out of the ground by the action of the frost or there is likely to be a big loss.

STOCKS FOR CHERRIES

“Will you give me any information you have in regard to cherries being budded on the Wild-bird, or pin-cherry, or *Prunus Pennsylvanicum*, as it is called?

Doesn't it make a stronger growth than Mazzard or Mahaleb stock? What nurseries use it, and what success have growers had with it.

Is there such a thing as male or non-bearing cherries?”

E. F. H.

We do not know of any nursery that uses the *Prunus Pennsylvanicum* as stocks upon which to bud cherries, although we believe it would be satisfactory to do so if you wanted an especially hardy stock. It is doubtful if it would be as satisfactory as either the Mazzard or the Mahaleb.

The Mahaleb is the best stock from the nurseryman's point-of-view. It is easier budded, hardy, and more free from insects or fungi, as it stands in the nursery from budding, and the buds are more quickly developed into

saleable trees, but the Mazzard is much the better stock for the fruit grower, as it produces thriftier, longer lived and more productive trees.

We do not know of such a thing as male or non-bearing cherries, as all the cherries produce perfect flowers, carrying both stamens and pistils, and unless there is disease or some abnormal condition, there is no reason why they should not bear fruit.

AN INVESTIGATION IN TRANSPLANTING

J. C. Whitten (*Missouri Sta. Research Bul. 33, (1919)*)

Following several years of preliminary observations, the station began a definite investigation in 1908, with a view to recording accurately the results of fall and spring planting of various kinds of trees and other plants, and, if possible, to determine the reason for any difference in the behavior of the trees. The results of this investigation are presented in detail, together with the results of some minor studies relating to transplanting. The literature of the subject is briefly reviewed, and a bibliography is appended.

A review of the literature dealing with the season of transplanting led the author to conclude that, for the most part, those who recommend spring planting based their opinion upon experience in sections where winter conditions are trying, while those who recommend fall planting based their advice upon experience in the milder fruit-growing sections. Where fall planting is recommended, the desirability of planting in very early autumn, so as to give time for the roots of the trees to become better established before fall weather approaches, is emphasized. Experience at the Missouri Experiment Station, however, shows that this does not hold true under conditions in that State; for, whereas fall planting for hardy fruit trees and most of the hardy deciduous trees and shrubs has given better results than spring planting, late fall planting has given better results than early fall planting. Trees planted in early fall dry out more during the fall and winter than do those planted in late fall. The apparent reason for this is that their parts are less thoroughly ripened or not fully at rest at the time of early planting. Early fall in Missouri is followed by a period of high atmospheric temperatures and often by dry weather. Apple trees planted in the fall usually begin new root formation about the first of January from the sides of the lower main roots after the surface soil has frozen. Early fall-planted trees have begun root growth no earlier than late fall-planted trees.

Fall-planted trees mulched during the winter have made slightly poorer growth than those not mulched. The soil about the mulched trees dries and warms more slowly even where the mulch is removed in early spring. Young apple trees having their branches pruned back in autumn made better growth the following season than trees pruned back in spring. This was true whether or not the trees were transplanted. Branches pruned back evaporate more water through the wounds than do similar branches which are not pruned, for the first few days only. After the first few days the pruned branches lose less water throughout the winter than those which are not pruned. The wound made in pruning back a twig, or a slight wound anywhere on a twig, stimulates greater

**J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland**

(Cable address: Blaauw, Boskoop)

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.

FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.
ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

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25000 true-to-type negatives to choose from, with a special landscape service.

**THE NATHAN R. GRAVES CO.
Horticultural Photographers**

84 Exchange Street
ROCHESTER - - NEW YORK

**THE
Westminster Nursery**

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

Offers for Fall 1920

California Privets, Asparagus,
Barberry Thun., Bushy, 2-5 ft., Lombardy Poplars,
Oriental Planes, Tulip Poplars, Catalpa Speo, Pin Oaks,
Horse Chestnuts, Butter Nuts, Norway Maples,
in grades from 6 to 16 feet.
Cumberland and St. Regis Raspberry,
Rhubarb, Spireas, Deutzias, Dorothy Perkins Roses.
Can supply in quantity. Write for prices.

APPLE and PEAR SEED

I received from Austria this past spring,—too late for planting at that time, a shipment of Pear and Crab Apple seed of the 1919 crop packed in charcoal and which I have placed in cold storage. The seed is of excellent quality and is keeping in fine condition. I will send you a sample if you are interested.

I can offer for immediate shipment.

Also I will have ready for shipment about latter part of November some native apple seed of 1920 crop, and Myrobolan Plum seed, 1920 crop. Write for prices.

**THOMAS J. LANE, Seedsman,
Dresher, Pa.**

310 Acres devoted to business

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Offer for Fall 1920

Cherry, 2 Year XX $\frac{7}{8}$ up 5 to 7 feet
Cherry, 2 Year $\frac{11}{16}$ up 4 to 6 feet
Cherry, 2 Year $\frac{5}{8}$ to $\frac{11}{16}$, 4 to 5 feet
Cherry, One Year, Sweets and Sours, all grades
Peach, One Year all leading Varieties, strong on Elberta
Apple, 2 Year, leading varieties
Standard Pear, One Year, 4 to 6 feet and 3 to 4 feet
Japan Plum on Peach, One Year
Hansen Hybrid Plum, One Year on Peach roots
Hardy Northern Pecans, Grafted Varieties
Please submit List of wants for prices

**5,000,000
SEEDLINGS**

All First-Class Stock

APPLE, PEAR, PLUM, CHERRY, ST. JULIEN, CITISUS Laburnum, MAHONIA Aquifolia, FAGUS sylvatica, ROSA canina, SYRINGA vulgaris, etc., etc.

For Canada, we offer a large supply of fine stock.

RHODODENDRON, AZALEAS, ROSES, (dwarf and standard, BUXUS, CONIFERS, PEONIES, etc., etc.

Ask our reasonable prices.

VanderVis & Co.

Boskoop - - Holland

For FUMIGATION With
HYDROCYANIC ACID GAS

“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
709-717 Sixth Avenue - - New York, N. Y.

Soft Yellow Pine Box Lumber
Dry, bright stock 7-16x6 inches and wider, all 10 ft. lengths tied in bundles of 10 pieces each. Other lengths if wanted. Box framing random lengths $1\frac{5}{8} \times 1\frac{3}{4}$ inches surfaced.

Write or wire us for delivered prices.

**The Dimension Company,
Lockhart, Ala.**

growth of adjacent buds. A wound made just above a bud stimulates greater growth than a similar wound made below or at the side of a bud. Wounds made in autumn stimulate greater growth the following season than do similar wounds made in spring.

Late spring planting has given as good results as early spring planting, providing the trees are kept dormant until they are planted. The trees "heeled in" for planting may be held dormant until late spring, sometimes until early June, by lifting them out of the trench, turning them over and again heeling them in, in the same trench as often as their buds show indication of starting. Sour cherries usually suffer a mortality of one-third to one-half of the number of trees when planted in spring, but suffer no appreciable mortality when planted in late fall. On the other hand, peaches and most species which are subject to considerable injury under Missouri conditions succeed best when planted in the spring. Coniferous evergreens do best when transplanted just as their new growth is starting in the late spring. Under moist soil and weather conditions, they may be transplanted in early autumn with satisfactory results. Certain trees, such as persimmons, native walnuts, chestnuts, hickories, and pecans, have given the best results by planting just as their new leaves are pushing out in spring. They do not transplant successfully when fully dormant either in fall or early spring. Magnolias have done best when transplanted during their early blossoming period; the tulip and sweet gum trees just as their buds were bursting; and most of the other slightly tender deciduous species before their buds start growth.

The station's experience has shown that in transplanting fruit trees, the roots generally should be set no deeper than they stood in the nursery; especially if the trees are set in the spring, at which time the soil is slow in warming to the depth of the lower roots. The tendency of trees in the orchards of this region to lean toward the northeast may be overcome in part by proper orientation of the tree when it is set in the orchard. In planting the tree, the side that grows heaviest in the nursery should be set toward the southwest. The author recommends careful planting in holes sufficiently large enough to accommodate the main roots without their being bent or twisted. Fibrous roots should be pruned away before planting and the tops of young fruit trees should be pruned back, the degree of pruning differing with the character and habit of growth of the species. The roots of fruit trees should not be allowed to freeze in handling, as it has been found that they may be injured even by a few degrees of frost.

Attention is called to the fact that garden vegetables such as cabbage, tomatoes, etc., will endure lower temperatures and greater extremes of drought without injury after transplanting if grown slowly in the forcing bed. Such vegetables grown in a seed bed, of sandy soil, low in plant food, watered sparingly, and ventilated freely, have large fibrous root systems, short thick, firm woody stems, and a concentrated sap of low freezing point; vegetables grown in a seed bed of rich soil, highly manured, abundantly watered, and in a high temperature with little ventilation have scanty root systems, long stems, luxuriant leaves, succulence, and a less concentrated sap of higher freezing point.

DANGER IN BANDING TREES

It hardly seems possible that trees can be killed by putting a girdle of sticky material or grease around the trunks to prevent caterpillars from crawling up them, but in two instances known to the writer, valuable trees were killed by this process.

In the first instance the writer was called in to diagnose the cause of sugar maples dying. Examination proved that automobile grease had been used to band the trunks of the trees, effectually destroying the cambium layers under the bark. This was conclusively proved by a longitudinal strip of bark being taken off through the place where the grease was applied. The inner bark was alive above and below but quite brown and dead where the grease was, completely girdling the trunk.

All the trees on the place had been banded, the sugar maples all died but in the case of Norway maples, their bark being thicker it took longer for the grease to reach the inner bark, heroic measures saved them. The grease was washed off with hot water and soap and the tops thinned to reduce the foliage until new cambium layers had been formed.

In the second instance the reason of injury was not so easily explained as one of the standard preparations was used, but it was evident beyond doubt that the banding caused the injury, as in the former instance the cambium layers were alive above and below but quite brown and dead at the banded portion.

The trees do not die immediately as they seem to draw sustenance through the wood for a time but the bark eventually peels off completely girdling the tree when they succumb.

The conclusion reached by those in charge of the trees was:—That while there may be no ingredients injurious to vegetable life in the material used it has a bad physical effect if applied annually for a number of years in exactly the same place and however harmless the material it should be removed in the winter and applied in a different place when needed the following summer.

COST SYSTEM

In a bulletin just issued under the title, "What a Cost System Should Do for You," the Fabricated Production Department of the Chamber of Commerce of the United States calls attention to the purpose and value of cost accounting.

"Accurate information regarding the various elements which go to make up costs," says the bulletin, "automatically eliminates arbitrary, empirical or guess costs which prevail to a surprising degree among manufacturers. Cost keeping brings to light inefficiencies in system by calling to attention the cost of its operation and points out equipment that has become inadequate by showing an excessive cost of product coming therefrom; it points out employees who are below the standard required and permits of performances being kept within certain limits by watching the accumulation of costs.

"Increased production depends largely on the intimate knowledge the management has of all elements in their manufacturing operations which can only be supplied

FRENCH FRUIT STOCKS

December or February Shipment

FROM VINCENT LEBRETONS NURSERIES, ANGERS, FRANCE

Mahalebs, Myrobolans, Pears, Apples, Mazzard, Quince,
Manetti, Multiflora, etc., all grades

WRITE FOR PRICES—SPECIFYING YOUR REQUIREMENTS.

McHutchison & Co., The Import House **95 Chambers St., New York.**

LANDSCAPE PHOTOGRAPHS

It has been proven beyond a doubt that our splendid views have increased landscape orders. Our new circular will be off the press this fall or we will send some samples to those in great need. Send your name now so as to be sure of having this circular.

B. F. CONIGISKY, 229 N. ADAMS, PEORIA, ILL.

PEACH PITS Very Scarce

The Howard -- Hickory Co.

O. Joe Howard, Secretary & Treasurer

Hickory - - - N. C.

FRUIT TREE STOCKS

We have to offer, the leading sorts of FRUIT TREE STOCKS: such as:

Apples, Cherry, Mahaleb, Pear, Plum, Paradise Quince, etc.,

Also the best lines of ROSE STOCKS such as:

Manetti, Grifferaie, Multiflora seedlings, Laxa, Dog Rose. etc.

Our catalogue quoting the lowest prices for these stocks will be sent on demand.

E. TURBAT & CO., Nurserymen
Orleans, France

New Firm

C. K. and J. C. PLUMB

Landscape Gardeners and Nurserymen
Perennial Garden Specialists

Wanted Catalogs—Retail and Wholesale—Surplus lists.
Stock wanted—Oxydendrum, Tamarix Amurensis and Aestivalis, Aralia Pentaphylla, Hardy Perennials.
New Canaan, Conn.

Native Broad-leaved EVERGREENS ORNAMENTAL TREES,

Shrubs, Vines, Woody and Herbaceous Plants
of the Blue Ridge Mountains

Collections to Order in Carload Lots a Specialty

Correspondence solicited from large planters.

Ask for Price List

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Avery County North Carolina

CHARLES DETRICHE & SON

ANGERS, FRANCE

Growers and Exporters of Fruit Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs and
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For all information as to Stocks, Prices, terms, etc., address

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THE BENJAMIN CHASE CO.
DERRY, N. H.

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through an adequate cost system. It enables them to establish proper control and increase output as warranted by the cost record.

"In many plants considerable sums of money are spent to establish a standard practice of operation. From time to time certain variations from the established standard practice occur, affecting costs in an adverse way. Timely costs reports showing what is happening, rather than what has happened, suggest immediate correction of such inefficiencies. It is not sufficient that executives know that expenditures are excessive; they should be supplied with information to show exactly where these excessive expenditures occur and take action. Definite responsibility for expenditure as the authority to make the expenditure should be fixed by an adequate system of cost accounting."

The bulletin takes occasion to say that part of the work of the Fabricated Production Department will be to assist organizations in obtaining for the industries they represent cost systems as practicable and as simple as possible.

"We shall not either devise or install cost systems," it says, "but by co-operative study of each situation, aided by the contributed experience of trade organizations and expert knowledge of the subject, help those who are disposed to help themselves."

A NEW SYSTEM OF BUDDING

We wondered after writing this heading if we have really anything new to lay before our readers, for as the wise man said, "There is nothing new under the sun." However, let us say it is new to us. Last week we had a visit from one of our New Zealand confreres, Mr. Lippiatt, of Otahuhu. In walking round the fruit trees he remarked upon a Cox's Orange Pippin which had overgrown the paradise stock upon which it was worked, "I see you use wood buds." Now we have always thought that the swelling at the point of junction was caused by the bud or graft being more vigorous than the stock, and the phrase used by our visitor was Greek to us, so we had to ask what was meant by a "wood bud." He explained that in taking a bud of either a rose or fruit tree, we cut a small portion of wood with the bud, and took this out before inserting the bud; to which we replied, "Certainly, how can it be done otherwise?" The reply came quickly, a knife was produced and a bud sliced off with the bark only, and this was promptly slipped into a branch, showing that the operator was no novice or simply theorist.

Mr. Lippiatt stated that this was the common practice in New Zealand, and that in many American nurseries they would not employ a man who used any other method. His contention was that a bud which had wood removed from it never made so good a union, and that it did not fit so smoothly to the stock, caused swelling and was more likely to die, and lastly, that the operation was much slower. We tested the last point on the next working day, and given a really sharp knife there is no difficulty about it, and certainly time is saved. The stocks so worked we have marked and shall be interested to see if there is any benefit to be seen in the results.

The method may be known to growers in this country,

but if it be we have never heard of it previously, and we thought it was worth bringing to the notice of our readers, many of whom will not have finished their budding and who might like to give it a trial.—*The Horticultural Advertiser*.

A WHITE PINE STAND GROWS 1,000 BOARD FEET A YEAR

Two acres of white pine, near Keene, N. H., were sold three or four years ago, before the war prices, for \$2,000 on the stump. The total stand was 254 cords, which equals 170,000 board feet, or an average of 85,000 feet per acre. The trees were from 80 to 85 years old; so the growth on each acre was about 1,000 feet per annum and the gross returns about \$12.20 per acre per annum.

WESTERN NORTH CAROLINA APPLE SHOW

The Fruit Growers of Western North Carolina, Asheville Board of Trade and the North Carolina Department of Agriculture, cooperating, organized the Western North Carolina Apple Show which was held October 27, 28, and 29 at Asheville.

This section of the country is fast forging to the front as an apple growing district, having made a gain along this line of over 400 per cent in the last ten years.

Judging from the prize schedule and program the right kind of men have got together to let the world know of this wonderful fruit district.

PRUNING EVERGREENS

Evergreens after they have left the hands of the nurseryman and have been planted in their permanent quarters, rarely need much pruning. In fact, it would not be a bad idea for the nurseryman to tell all inquiring customers that they never do need pruning. It is, of course, always in order to prune away the interior dead twigs. In fact, it should be strongly recommended in close growing subjects like *Retinispora squarrosa* and in some of the Spruces or any evergreen that gets an accumulation of dead leaves and twigs in the center, as it is only a harbor for red spider and other pests.

This cleaning out of the centers is really worth while from the apparent beneficial results it has on the plant. Other pruning of well grown plants is scarcely necessary, or at least should be confined to shortening the current year's growth, if it is desired to have them very bushy.

Exception must be made, of course, to topiary work where evergreens are annually clipped into fantastic unnatural shapes. This is a proposition entirely aside from pruning for the welfare of the tree or plant. There is too much clipping done to evergreens. In many places it is an annual operation that could very well be dispensed with to the great advantage in the appearance of the place. Such plants as the common *Retinisporas*, Junipers, etc., are often clipped until the poor things die in despair. Just as soon as the plant puts out its beautiful green foliage in spring, the would be gardener clips it all off. If the same labor was directed in cleaning out the inside and merely cutting off with a knife any straggling twig or branch, the specimen would be much more pleasing in shape if allowed to resume its natural habit.

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Both American and French Grown, Straight or Branched Roots, all grades. Carload rates to Central points; East, West and South. **ORDER NOW.**

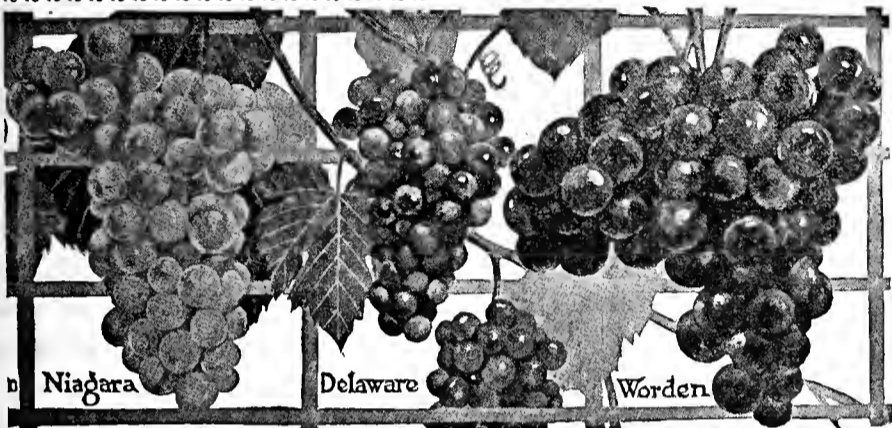
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Growers of Grape Vines and Small Fruit Plants
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First class Seedlings, well rooted, Disease Free

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| Common Cherries | “ 3-5 “ “ 5-7 “ |
| Quince Cuttings | “ 4-6 “ “ 6-9 “ |
| Briars | “ 3-5 “ “ 5-8 “ |

We book orders until the end of December. Please draft orders referring Myrobolan. Engagement subject to climateric events. All other terms shall be established by correspondence.

SGARAVATTI BROTHERS, Nurserymen,
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We offer Biota Aurea Nana and Rosedale, Ligustrum lucidum, Lonicera fragrantissima, Deutzias, Forsythia, Spireas and Wegelias in variety.

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For Perennials, Gladiolus, Dahlias and Cannas

Write

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Perennial Specialists,

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For Wrapping Nursery Stock. Write for prices.

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Sphagnum Moss

10 bbl. bale, \$4.00,
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Green Lump Moss \$2.00 per bag.

Burlap 40c. per bale. Terms Cash.

JOSEPH H. PAUL,

Box 156, Manahawkin, N. J.



We have some very fine two year old plants of the following Roses—grown from cuttings—to offer the trade—Let us quote on your needs.

ROSES:

- American Pillar
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- Crimson Rambler
- Dorothy Perkins
- Philadelphia Rambler
- Pink Rambler
- White Rambler

- Cut Leaf Weeping Birch 8-10 in. and 10-12 in. grades.
- Black Locust 4- 6 in. and 6- 8 in. grades.
- Carolina Poplars 4- 6 in. and 6- 8 in. grades.

Oregon Nursery Company

ORENCO, - OREGON

The practice is too common, even among nurserymen. In fact, sheared specimens are offered in the catalogues. It is bad gardening.

Of course, evergreens in their young state have to be trained and pruned until they can take care of themselves. In subjects like *Retinispora plumosa*, *pisifera*,

squarrosa, and some of the Junipers it is well to select and stake the leader while young, then shape them with a knife, shortening back the strong growth to make the plants bushy and prevent them from having more than one central axis or leader. If more than one leader is allowed to grow the plants open up with the weight of the snow and become very unshapely as they become older.

The growth will always be stronger at the top of the plant, and while it is young it is advisable to annually reduce the young growth, encouraging the lower branches to fill out and get a well balanced plant, so it will be sent out from the nursery in condition to take care of itself.

The real skilled workman knows the characteristic shape of each variety of plant he wishes to prune, and acts accordingly. Too often men without any knowledge are given a pair of shears and turned into a block of evergreens to shear them into shape. In spite of such treatment plants often develop into fine specimens, but if they had been helped more intelligently the size and their own beautiful character would have been developed to much greater advantage without the annual shearing.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912 Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for October 1, 1920. State of Pennsylvania. County of Philadelphia.

Before me, a Notary Public, in and for the State and the county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are: Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa. Editor,—ERNEST HEMMING, Flourtown, Pa. Managing Editor,—None. Business Manager,—THOMAS B. MEEHAN, Dresher, Pa.

2. That the owners are: Mrs. Ellen B. Yates, Rochester, N. Y. James McHutchison, Jersey City, N. J. Thomas B. Meehan, Philadelphia, Penna. Albert F. Meehan, Philadelphia, Penna. Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE. THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 9th day of October, 1920. Elmer Miller, Notary Public. (My commission expires March 11, 1921.)

FOR SALE

FOR SALE—Pedigreed apple trees with records. Send us your order for trees to grow your scions from for your grafting. There is none better, many not as good. E. W. JONES Nursery Co., Woodlawn, Va.

FOR SALE—Collected plants and clumps of Rhododendron, Kalmia, Leucothæ, in car lots or less, also seedlings of Rhododendron, Kalmia, Hemlock and Balsam. J. B. ANDERSON, BLACK MOUNTAIN, N. C.

WANTED

A nursery that bought over 38,000 of our apple, peach and plum trees last year wrote us September 15, 1920 as follows: "It was a pleasure to deliver such trees as those you sent us last spring. * * * Let us know how many Delicious and Winesap you will let us have. There are plenty to be had but we want your stock." We now have their order for another carload. If you are looking for exceptionally nice trees send us your requirements. NEOSHO NURSERIES CO. Neosho, Mo. Members American Association of Nurserymen.

WANTED Nurseryman. We are starting a new nursery, and want a young man of energy and ability to take charge of it. Must be a first class propagator and grower of trees, shrubs and evergreens, and capable of handling men. In addition to wages, a share of the profits will be given, and an opportunity to become part owner of the business. ELLIOTT NURSERY, MAGEE BUILDING, Pittsburgh, Pa.

ESTABLISHED 1893 THE NATIONAL NURSERYMAN INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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Per 100 and per 1000

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COLUMBIAN RASPBERRY TIPS

CONCORD GRAPE, 1 year

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Standard varieties in any quantity.

Satisfaction guaranteed.

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Good supply of straight well rooted trees

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We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ST. REGIS RASPBERRY CANES

1000 BOSTON IVIES, 1 yr. pot grown 21 1/2 inches

300 ENGLISH IVIES, 1 yr. pot grown 21 1/2 inches

250 Budleia Magnifica Var.—"BUTTERFLY BUSH"

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Leading standard and Everbearing varieties, let us handle your strawberry plant orders, shipping to you or direct to your customers, using your tags. Our Stock is Grown Right, Packed Right and True to Name. We are located in the largest strawberry center in the world. Would be pleased to quote you.

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Trees and Perennials. Bay Trees, Boxwood, Rhododendrons,
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We offer for spring 1920 a good assortment of following stock and will be pleased to submit prices on your want list.

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| Strawberries | Iris | Asparagus |
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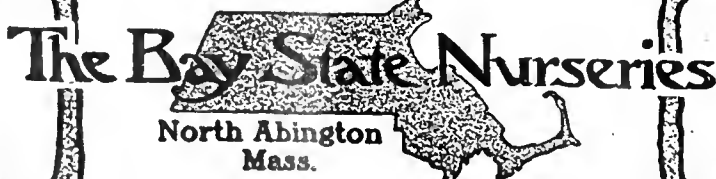
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| GOLDEN BELL, Dark Green 1,000 4 to 5 ft. | SPIREA, ANTHONY WATERER 300 2 to 3 ft. |
| MOCK ORANGE, GOLDEN (Dwarf) 200 2 to 3 ft. | WEIGELA, ROSEA 500 4 to 5 ft. |
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| | |
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| MAPLE, Norway 5,000 8 to 10 ft., 1 1/4 to 1 1/2 in. 5,000 10 to 12 ft., 1 1/2 to 1 3/4 in. 10,000 12 to 14 ft., 1 3/4 to 2 in. 10,000 14 to 16 ft., 2 to 2 1/2 in. 5,000 2 1/2 to 3 in. 5,000 3 to 3 1/2 in. 2,000 3 1/2 to 4 in. 400 4 in. | PLANE, ORIENTAL 1,000 7 to 8 ft. 5,000 8 to 10 ft., 1 1/4 in. 5,000 10 to 12 ft., 1 1/2 in. 5,000 12 to 14 ft., 1 3/4 in. 5,000 14 to 16 ft., 2 in. 500 2 1/2 in. 500 3 in. |
| OAK, Pin 100 4 to 5 ft. 100 5 to 6 ft. 1,000 6 to 7 ft. 1,000 7 to 8 ft. 500 8 to 10 ft. 100 10 to 12 ft. | POPLAR, CAROLINA 500 6 to 8 ft. 500 8 to 10 ft. 500 10 to 12 ft. 200 12 to 14 ft. |
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EVERGREENS

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| ARBORVITAE AMERICAN (Thuja Occidentalis) 200 3 1/2 to 4 ft. 500 4 to 4 1/2 ft. 500 4 1/2 to 5 ft. 500 5 to 5 1/2 ft. 500 5 1/2 to 6 ft. 200 6 to 7 ft. 200 7 to 8 ft. 100 8 to 10 ft. | RED (Juniperus Virginiana) 25 4 to 4 1/2 ft. 25 4 1/2 to 5 ft. 25 5 to 5 1/2 ft. 25 5 1/2 to 6 ft. 25 6 to 7 ft. HEMLOCK CANADIAN 200 2 1/2 to 3 ft. 200 3 to 3 1/2 ft. 500 3 1/2 to 4 ft. 500 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 6 ft. | JAPANESE, Golden Pea-fruited (R. Pisifera Aurea) 50 2 to 2 1/2 ft. 50 2 1/2 to 3 ft. 50 3 to 3 1/2 ft. 50 3 1/2 to 4 ft. 50 4 to 5 ft. JAPANESE, Plume-like (R. Plumosa) 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 5 ft. 50 5 to 6 ft. | SPRUCE COLORADO BLUE (Selected Blues—Compact) 50 3 1/2 to 4 ft. 50 4 to 4 1/2 ft. 50 4 1/2 to 5 ft. 50 5 to 5 1/2 ft. 50 5 1/2 to 6 ft. 50 6 to 7 ft. 50 7 to 8 ft. |
| CHINESE (Biota Orientalis) 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 5 1/2 ft. 100 5 1/2 to 6 ft. 100 6 to 7 ft. 100 7 to 8 ft. | PINE AUSTRIAN... 25 3 to 3 1/2 ft. 25 3 1/2 to 4 ft. 25 4 to 4 1/2 ft. 25 4 1/2 to 5 ft. 25 5 to 5 1/2 ft. 10 5 1/2 to 6 ft. 10 6 to 7 ft. 10 7 to 8 ft. | JAPANESE, Golden Plume-like (R. Plumosa Aurea) 100 3 to 4 ft. 150 4 to 5 ft. 50 5 to 6 ft. JAPANESE, Thread-like (R. Pisifera Tilifera) 15 3 to 3 1/2 ft. 15 3 1/2 to 4 ft. 15 4 to 5 ft. | KOSTER'S BLUE (Specimen Plants) 50 3 to 3 1/2 ft. 50 3 1/2 to 4 ft. 50 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 5 1/2 ft. 100 5 1/2 to 6 ft. 100 6 to 7 ft. 50 7 to 8 ft. 25 8 to 10 ft. |
| CEDAR BLUE VIRGINIA (Juniperus Virginiana Glauca) 25 4 1/2 to 5 ft. 50 5 to 6 ft. 50 6 to 7 ft. 25 7 to 8 ft. | RETINOSPORA JAPANESE (R. Filifera) 15 2 to 2 1/2 ft. 15 2 1/2 to 3 ft. 15 3 to 3 1/2 ft. 15 3 1/2 to 4 ft. 15 4 to 5 ft. | VEITCH'S JAPANESE (R. Squarrosa Veitchii) 100 2 1/2 to 3 ft. 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 5 ft. | NORWAY 500 3 to 3 1/2 ft. 1,000 3 1/2 to 4 ft. 1,000 4 to 4 1/2 ft. 1,000 4 1/2 to 5 ft. 1,000 5 to 6 ft. 500 6 ft. 300 7 ft. 100 8 ft. 100 10 ft. |

Complete list furnished upon request.

HARRISONS' NURSERIES, BERLIN, MARYLAND



THE NATIONAL NURSERYMAN



DECEMBER 1920

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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$\frac{3}{16}$ and up straight or branched
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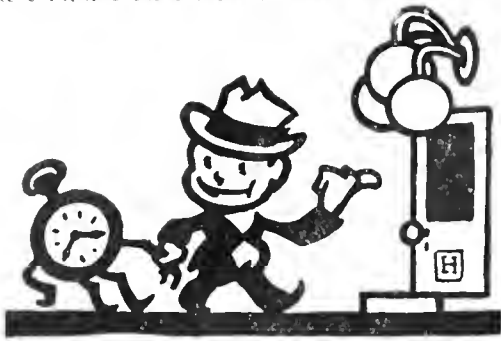
APPLES—Good list of varieties.
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AMPELOPSIS VEITCHII, 1 year, heavy
ASPARAGUS ROOTS
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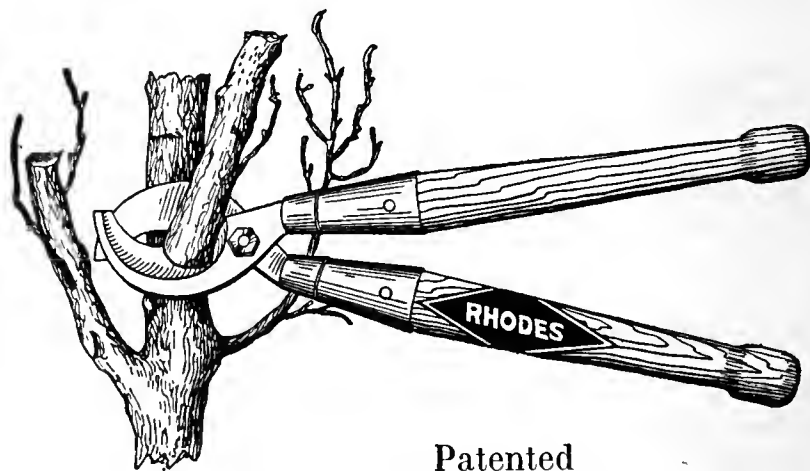
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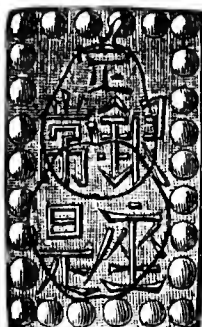
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FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVIII.

HATBORO, PENNA., DECEMBER 1920

No. 12

Growing Material for the Florist's Trade

The proper co-operation between the nursery and Florists Trades has never been developed to the extent that would seem called for by their close connection.

The fault seems to be rather on the side of the nurserymen, as they are to a great extent the growers of the raw materials which the florist works up into a condition for the consuming public.

There are many florists who also do a nursery business, in fact, try to cover the whole scope of Horticultural Art from making a funeral design or decorating for a society function, to laying out an estate, and perhaps in fewer instances the same may be said about the nurserymen.

There is no reason why they should not if their organization is big enough to carry experts to compete with specialists in the various lines.

But this is an age of specialists, and usually all the concentration and skill available is necessary to carry on one branch of the business successfully.

With the shutting off of the foreign supply of what might be termed the raw material in the way of plants for forcing, it opens up a big field that is in the province of the nursery grower. It remains to be seen if the nurserymen proper will force the florist's trade to grow its own material. While it is foolish to attempt to draw an arbitrary line between the florist and nurseryman, the fact remains there is a recognized province for each, due to the fact that the florist trade is largely one of greenhouses and stores, while the nursery trade is growing upon acreage.

The nursery trade should plan to propagate all the plants the florists need, and bring them to the stage desired, which is usually "ready to be forced." It is only necessary to recall the large quantity of Rhododendrons, Azaleas, Deutzias, Roses and other hard wooded plants,

that used to be imported to realize the immense demand for early spring blooming subjects the florist needs in his business. Unless it is available the florist trade will either grow them itself, or substitute bulbs, herbaceous and what is generally known as greenhouse plants for the winter demand for plants for interior decoration.

There is no doubt the florist trade will develop its own growers of greenhouse plants, that were formerly imported. Its equipment is along the line necessary for the production of this class of plants, but for the propagation and material of woody plants the nurseryman is in the best position to give the florist what he needs.

There are endless ways in which the florist trade could be entered to to the advantage of both trades. Evergreens for winter is one of them. Few nurseries make any special effort to give the florist trade all it needs in tubbed evergreens for porch decoration or small evergreens for window boxes, or cut evergreens for interior decoration, yet there are many beautiful subjects practically unknown to the florist that could be grown in quantity for the purposes of cutting.

There may be reasons the Southern Smilax, Holly Galax leaves, Laurel, Ferns, Mahonia, etc., are gathered from the wild and shipped long distances in such quantities, but those reasons are not complimentary to the enterprise of the nursery trade, and this source may be permanent but it is very much like wasting natural resources.

Then there is a big field in ornamental berried plants, the florist trade knows very little about, and it is up to the nurserymen to show them. One can almost imagine the sensation a big supply of *Celastrus scandens*, *Ilex verticillata*, *deciduous Euonymus*, would cause if it were available in quantity and in prime condition for the florist decorating trade.

Bud Selection

What Henry W. Kruckeberg, Secretary of the California Assn. of Nurserymen says about the Bud Selection Idea

GROWTH AND DEVELOPMENT

In the evolution of the nursery and fruit industry the one big object that was ever uppermost in the minds of nurserymen was the betterment of their product, not only with respect to health and vigor, but more particularly in the selection of the best varieties for special purposes and for particular conditions of soil and climate. Much has been learned in this direction that has proven of practical application. The nursery interests, with their working knowledge obtained through experience, are quite ready to supply the most adaptable varieties for varying conditions, affording root stocks and buds that are reasonably certain to give satisfactory results in both the growth of the plant and the quality of its product. The increase of land values and more discriminating

markets (due to a constantly increasing volume of product) and the variable character of trees and quality of fruit produced, has emphasized and made imperative that if California horticulture is to render maximum returns in the future on investments, the quality and bearing capacity of all her fruit trees and vines must be improved. And this leads directly to the subject of bud selection.

A PIVOTAL MOVEMENT

Individual plantsmen have been diligent in their search for buds from trees yielding quantity and quality fruit of types fulfilling these requirements. Individuals, too, have been scrupulously careful to use only the best material and grow their stock with care. Still the results have been individual rather than general, which has re-

sulted in more or less inferior stuff finding its way to the orchards. Duly appreciating the pioneer work done in this direction by the Department of Agriculture with citrus fruits, the fact was nevertheless brought home to the plantmen that the greatest service they could render California fruit culture and their own industry was to formulate a practical working plan whereby the buds used in the propagation of nursery trees and vines should come from recognized types that would regularly produce a uniform quality and quantity of product. These types, the plantmen decided, should be selected by experts regularly employed by their organization and the buds cut therefrom under scientific direction.

In its somewhat nebulous original form many nurserymen favored the idea, but for want of initiative and continuity of purpose, it never became a tangible fact until William T. Kirkman, Jr., of Fresno agitated for it by calling the attention of nurserymen and orchardists to its vital importance. At the Nurserymen's convention, held in conjunction with the State Fruit Growers' meeting at Chico last fall, the matter finally assumed concrete form and the Nurserymen's Bud Selection Association was perfected. This was not only heartily supported by the craft, but was enthusiastically indorsed by the fruit growers there assembled in convention at the same time.

NURSERY FRUIT TREE STANDARDIZATION

In its last analysis bud selection under the plans being considered simply means that the nursery interests of California propose to standardize nursery fruit trees so that the product of their stock will more closely correspond to standard requirements of fruit growers and the demands of the market. With the advancing years fruit growing is more and more becoming an exacting vocation calling for large capital and intensive methods. To realize its widest possibilities the best trees that time, labor and money can produce, must be supplied by the nurserymen. Appreciating this, it is indeed pleasant to record that nearly all the larger nursery establishments of the state are in the new organization, hence it is certainly in evidence that the nursery industry is keenly alive to its responsibilities in the development of our fruit interests and is now thoroughly in line for the growing of a superior quality of trees and that the speculative element will be reduced to the vanishing point.

The California Nurserymen's Bud Selection Association is a regularly incorporated body under the laws of California, with a capital stock of \$150,000, of which sum over \$50,000 has been subscribed. The officers selected for the first year are: president, William T. Kirkman, Jr., Fresno; vice-president, J. E. Bergtholdt, Newcastle; secretary-treasurer, Max J. Crow, Gilroy; directors, John S. Armstrong, Ontario; Henry A. Hyde, Watsonville; J. W. Barnicott, Newcastle, and George C. Roeding, Fresno. Headquarters for the present have been established at San Jose.

While the individual units composing the organization anticipate a material return from its operations, chiefly from the fact that its success will enable nurserymen to standardize their product, the organization itself is a cooperative non-profit sharing enterprise; its principal and only aim will be to improve the fruit tree of the future; to elevate the fruit industry to reduce the element of

chance in tree planting; to eliminate the unprofitable; to enhance quality and increase bearing; to avoid undesirable varieties; these are considerations that appeal alike to the fruit tree planter, the fruit shipper, the fruit canner, and the ultimate consumer. On the basis of service that serves, by affording trees that will yield better profits, increase production and improve quality, the Bud Selection Association asks consideration and hopes to receive the support of every horticultural interest.

AN APPEAL TO EVERY FRIEND OF AMERICAN HORTICULTURE

A Preliminary Report by the Executive Committee appointed at a Conference of representatives of Horticultural and other societies, held June 15, 1920, in the American Museum of Natural History, New York City.

On August 20, 1912, the Congress of the United States enacted a law entitled "An Act to regulate the importation of nursery stock and other plants and plant products, to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests, to permit and regulate the movement of fruit, plants, and vegetables therefrom, and for other purposes."

Under the provisions of this law the Secretary of Agriculture, at the request of the Federal Horticultural Board, issued, in 1918, Quarantine Order No. 37, which, after due notice and hearings, became effective on June 1, 1919.

Designed for the admirable purpose of protecting the United States against the admission of additional insects and diseases injurious to plant-life, the regulations promulgated from time to time under the quarantine have in effect acted as an embargo, preventing the importation of any plants or seeds except those permitted by narrow and seemingly arbitrary rulings. Further, permits to import under these regulations have been granted or refused in such fashion as to make the Federal Horticultural Board the controller of horticultural research and commerce in a way hard to square with the necessities of an adequate quarantine.

Under these regulations all importations of plant material, whether received at Boston or New Orleans or New York or San Francisco, must first go to Washington for examination and fumigation, being then forwarded to the consignee at his expense; and the delays incident to this procedure and the treatment to which the plants are subjected, have in some cases injured them and completely killed them.

While it is true that the Federal Horticultural Board theoretically will issue a permit to anyone for the importation of plants he may desire, it is also sadly true that in certain cases either such permits have been arbitrarily denied or so long delayed that the opportunity has passed. It is also a fact that the requirement of a bond to follow the importations for two years operates as an effective embargo to plant importation by amateurs.

The official acting for the Federal Horticultural Board determines the quantity of any plant which in his wisdom it is proper to admit for propagation purposes, and there seems to be no logical basis for his determination.

Few realize that the present quarantine was issued after the Bureau of Plant Industry, on February 26, 1918, had submitted to the Department of Agriculture a report in which it was stated that in order to protect the country against dangerous plant pests and diseases "the time

seemed to be at hand for the inauguration of a policy that would gradually result in the exclusion of all foreign nursery and florist stock."

Various appeals by individuals and associations for the modification of these and many other apparent inequities proving ineffective, and the beneficial research work of the great institutions of America, such as the Missouri Botanical Garden in St. Louis and the Arnold Arboretum of Harvard University, having been either stopped or disastrously checked in so far as such operations are dependent on plants obtained from beyond the borders of the United States, the horticultural societies of Massachusetts, New York, and Pennsylvania called a Conference which met in New York on June 15, 1920. At that conference there were present the representatives of forty-five societies interested in horticultural advance in America, including virtually all the amateur and scientific associations interested in promoting the study and use of ornamental and economic plants in the United States.

The general sentiment of the meeting was in favor of an adequate and reasonable quarantine, but strongly opposed to inequitable regulations, and to the practical imposition of an embargo against plants from abroad. The discussion showed great respect for the probity of the Federal Horticultural Board, but it was believed that this Board did not adequately realize either the ultimate result of the quarantine as enforced or the fact that the quarantine was in effect an embargo rather than a quarantine.

The outcome of this meeting was the appointment of a General Committee, consisting largely of private individuals interested only as amateur horticulturists, which appointed a small Executive Committee to consider the situation and to formulate a report and a definite plan of action.

This Executive Committee now deems it prudent and necessary to make this, its preliminary report.

This Committee and those whom it represents agree that it is important to prevent the importation into this country of insects and diseases injurious to vegetation. It believes that necessary and reasonable regulations will be obeyed and supported by all patriotic citizens, but that if such regulations prove, in practice, to be drastic, unreasonable and not actually essential to the end in view, and definitely damaging to the progress of horticulture in America, they should be modified. It is the function and purpose of this Committee to investigate and to make constructive recommendations in consequence of such investigations.

Horticulture, this Committee holds, is an important agent of civilization. It believes that the love and cultivation of flowers and plants attaches men and women to their homes, and develops in them better and more stable citizenship. It is the hope of this Committee that the people of the United States, rich and poor, may be able, under proper regulations, easily to obtain all the plants needed to beautify their homes.

For centuries the skilled horticulturists of Europe and Asia, through the assistance of their inherited knowledge and labor, working generation after generation upon the same subjects and in the same homes and establishments, have developed horticulture as it has been developed nowhere else in the world, and as we in our new country with our high labor costs and lack of inherited knowledge have not been able to develop it. Thus Europe and Asia have produced and furnished this country with many beautiful, rare, and valuable plants. Under the present quarantine regulations those are nearly all barred, because under them only a limited number of certain arbitrarily specified plants can be imported. With the contemplated total embargo in force, it would never again be possible to secure for the United States any newly discovered, rare, interesting, valuable exotic fruit or ornamental plants, whether species or hybrids.

It should not be difficult to show the necessity for modifying a quarantine which prevents the importation in any quantity of plants with sand or soil on their roots,

no matter how carefully they have been inspected, fumigated, and treated abroad, and yet which takes no account of shiploads of soil brought in as ballast from any port, tropical or otherwise, regardless of the fact that this soil is never inspected, fumigated, or treated, and may contain insects and germs of diseases dangerous to human beings or plants.

If, as we believe is the fact, a sane and efficient quarantine is desirable, the officials of the Government owe the people a whole duty and not a half duty. A quarantine defined by carefully studied law and not by incidental official regulations established under a broad law, protecting not merely through the exclusion of incidental plants but through the exclusion or treatment of other disease- and insect-bearing media, would, if properly proposed, be supported by the people. If the necessity is shown, we believe that the Federal Horticultural Board, or some other executive agency, will be provided with funds to establish quarantine stations at enough ports of entry adequately to protect the nation, and to serve at the same time the proper desires and convenience of its citizens. It is our confident belief that well-equipped and carefully administered quarantine stations should be established at a certain number of ports of entry, such for example as San Francisco, Seattle, New York, New Orleans, and Boston. Unless some such action is taken, the extension of the present system of exclusion by regulation under a blanket law will undoubtedly result in the total embargo against further horticultural progress in the United States which the report of the Bureau of Plant Industry above referred to seems to have had in mind.

Time has been lost and animosities engendered, and valuable imported plants and seeds have been destroyed since the quarantine became effective, because no well-prepared and adequate presentation of the facts has been made to the officials of the Department of Agriculture; and it is no reflection on those officials to propose for them assistance in the gaining of information, which must be gathered slowly, carefully, and at different times and places, to show the facts and the effects concerning this plant-quarantine which is so dangerously near to plant-exclusion.

It is, therefore, the proposal of this Committee to send a capable investigator, furnished with all requisite entomological, pathological, and other expert assistance, wherever it may be necessary to gain information, interview individuals, compare notes, and obtain statements and affidavits, upon which the facts can be adequately presented to the Federal authorities at Washington.

It is the purpose of this Committee, when such information has been gathered and when the law under which quarantine regulations have been promulgated has been carefully studied in connection with the situation, to arrange for such argument and presentation, in the belief that there should result a modification in some respects and an extension in others of the quarantine regulations tending to place horticulture once again on a firm footing with relation to the rest of the known world, and to make it possible for any citizen of the United States, willing to provide the necessary safeguards, to import such plants as he may reasonably require.

To accomplish the objects above set forth, the Massachusetts Horticultural Society, the Horticultural Society of New York, and the Pennsylvania Horticultural Society have made substantial primary subscriptions, be-

believing that those interested will add the considerable additional amount required.

It is confidently believed that those who are opposed to a Chinese Wall plant policy for America, who think that we are entitled to other plants which may be discovered anywhere as valuable to us as have been the apple, the lilac, the potato, and countless other familiar but exotic plants in use today, will aid the work of this Committee in contributions and in effort.

Great care will be used in expending the funds of the Committee, none of which will be devoted to lobbying or the obtaining of influence. All expenditures will be authorized by the Committee, and all payments carefully audited. In addition to their own contributions, the members of the Committee serve without pay and pay their own traveling and other expenses.

You are therefore asked to evidence your interest by a substantial subscription, to be sent to the Treasurer of the Committee, Mr. T. A. HAVEMEYER, 50 Broad Street, New York City.

Communications and information regarding this matter may be sent to any member of the undersigned Executive Committee, or to its Secretary and Attorney, Mr. HERBERT W. SCHLAFFHORST, care of Massachusetts Horticultural Society, 300 Massachusetts Avenue, Boston, Mass.

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ican Rose Society,
606 Finance Building, Philadelphia, Pa.

WHERE A QUARANTINE WOULD BE WELCOME

"Meanwhile foreign importations of nursery stock are increasing in quantity, and although Continental growers cannot sell so ridiculously cheap as before the War, their prices do look small by comparison with ours. There seems no possibility of getting the Government to move in the direction of restricting imports, and all this has a bearing on the matter of hard and fast regulation of prices for home-grown plants."

The above clipping is from the Horticultural Trade Journal, an English publication.

It goes without saying the English nurserymen and florists would welcome a Quarantine 37. It is doubtful if they would object to it even if it was put in operation with the ostensible purpose of keeping disease and pests out of the country as long as it kept the plants out also.

WHAT ROOT STOCKS ARE WE USING?

Prof. W. L. Howard, University of California, Mountain View, California.

The root-stock problem is an old one, but ever new to the fruit growers and nurserymen of California. Experience has taught that certain fruit may be adapted to adverse soil conditions by using the right kind of root-stock. While there is much that we do not know about root-stocks, we do have sufficient information on the subject to make it worth while to review the present status as regards the general or special use of the well-known stocks we are using every year as we continue to plant orchards.

Three years ago I made a survey of the nurseries of the state to find out just what stocks were then being used, assuming that the nurserymen were giving the people what they wanted. In other words, it seemed to be a safe assumption that the percentage of the different root-stock being used by the nurserymen was a current index of the extent to which such stocks were being planted. The interest in the results of this survey was so widespread that I have again canvassed the nurserymen in order to bring my figures up to date.

Three years ago, the results secured were as follows:
STOCKS FOR ALMONDS—Peach, 44%; Almond, 56%.

FOR APRICOTS—Apricot, 58%; Peach, 28%; Myrobolan, 13%; Almond, 1%.

FOR CHERRIES—Mazzard, 71%; Mahaleb, 26%; miscellaneous, 3%.

FOR PEACHES—Peach, 90%; Almond, Apricot and Myrobolan, 10%.

FOR PEARS—Japanese, 63%; French, 33%; Quince, 4%.

FOR PLUMS—Myrobolan, 60%; Peach, 37%; Almond, 3%.

FOR PRUNES—Myrobolan, 64%; Peach, 24%; Almond, 11%; Apricot, 1%.

FOR WALNUTS—Northern California Black, 99%; Miscellaneous, 1%.

The survey just completed, which, of course, includes the trees planted during the present season, shows results to be quite different in some particulars from what they were three years ago. At present a much larger percentage of almond root is being used as stock for almonds, and much less peach root for the same purpose.

The results for apricots show that apricot root is much less popular as a stock than formerly; that peach is about the same, and that myrobolan is used to a much greater extent than three years ago.

In the main, the results for cherries are about as they were, although about 7% more Mazzard is being used than was previously reported, with a consequent decrease in the amount of Mahaleb.

We are now using a much greater percentage of peach root as a stock for peaches than we were. Three years ago, almond, apricot and myrobolan made up 10% whereas myrobolan was not reported at all as a stock for peaches during my recent survey.

The percentage of Japanese stock for pears has jumped from 63% to 76%, and the French stock has decreased from 33% to 20%.

The results for plums and prunes have not changed materially, except that we are now using more apricot

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

November, 1920.

AMERICAN GROWN APPLE SEEDLINGS

Straight and Branched

—ALL GRADES—

Frequently Sprayed.

Absolutely Free from Insects or Diseases.

Car Lots to Central Points.

Will Exchange for Such Stock as we Need.

Now is the Time to Grow High Priced Apple Trees.

ALSO A GENERAL ASSORTMENT OF FOREIGN FRUIT TREE STOCKS

(Apple, Pear, Mahaleb, Mazzard, Plum, Quince, Etc.)
All grades.

We will have a Complete Line of General Nursery Stock in
Storage for Spring Trade

SHENANDOAH NURSERIES

D. S. LAKE, Pres.,

November 1, 1920 SHENANDOAH, IOWA

Are You Troubled

with lost or "astray" shipments of nursery stock,
to say nothing of other difficulties experienced
through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it
up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a
reputation for giving you "what you want when
you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

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West Chester, Pennsylvania



Box-Barberry Bordered Formal Evergreen Garden

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THE NEW HARDY
BORDER AND
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Trade prices on request.

Send for
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BOX-BARBERRY

SURPLUS
American Hemlock
Japan Iris (20 sorts)

THE ELM CITY NURSERY CO.

WOODMONT NURSERIES, INC.

New Haven

Conn.

NEW INTRODUCTION
IBOLIUM PRIVET,
The New Hardy Hedge Plant

as root-stock for plums and almond for prunes than we were.

By classifying the nurseries by regions, some additional information is brought out regarding the preference for certain stocks in certain places. While we know, of course, that any given nursery doing a large business sells stock all over the state, it is assumed that it will be influenced by the desires of growers who may live comparatively near by, under their particular set of climatic and soil conditions.

Three regions have been recognized, namely the foothills, interior valleys, and coastal valleys. It is interesting to compare or contrast the reports of root-stocks used by the nurseries in these different regions with the average for the whole state. It is also interesting to compare them with one another.

In the case of almonds, there are no great regional differences in the use of stocks, almond, the preferred root, being about the same in all districts. Apricot is a much more popular root-stock for apricot trees in the interior valleys than it is in either the foothills or in the coastal region. Likewise the peach is used much more as a stock in the same region than it is in either of the others. One striking feature is that myrobalan is so popular as a stock for apricots in the foothills and coastal valleys, while only a small percentage is used in the interior. Another interesting feature brought out is that Mahaeb root-stock is so popular in the interior valleys and so unpopular in the foothills. Peach is a very popular stock for plums and prunes in the interior valleys and foothills, but is not favored by the coastal valley nurseries. Almond is a very popular stock for prunes in the coastal region, but is used only in a small way in the foothills and interior valleys. Finally, a very large percentage of apricot is being used for stock for prunes in the interior valleys, while none is used in the foothills and less than 2% in the coastal region.

It might be added that for the first time one coastal valley nursery reports the use of a considerable percentage of Kieffer pear root as a stock for pears. The Kieffer, because the seeds can be procured from canneries, is often in the East, especially when imported stock is scarce, but this is the first time I have met with this stock in California. There is no reason why Kieffer should not make a reasonably good stock, as it is probably more resistant to blight than French stock, although it is not as safe as the Japanese root.

Apparently the increased use of apricot as a stock for prunes is based on the belief that the apricot is more tolerant of a slightly alkaline soil than any of the other available stocks; at least this is the reason given for its use. In this case I should like to again call attention to the advisability of making larger use of *Prunus davidiana* as a root-stock for peaches, and perhaps for plums and prunes, also where the soil is too alkaline, for other stocks to thrive. I recently had an opportunity of visiting an orchard, near Yuba City, growing on *davidiana* stock, and just now about four years old. Previous plantings of peaches on peach stock speedily died on account of the alkali.—*From the Transactions and Proceedings of the California Nurserymen's Association.*

REPORT SHOWING STOCK ON HAND

The list of unsold stock published by the Western Association of Nurserymen showing stock on hand September 1st, 1920, shows the nurserymen in the western part of the country are getting closer together in their efforts to regulate the supply of nursery stock to meet the demand.

Although the list only gives stock of staple kinds held by twenty-three firms in twelve states, it shows the possibilities and tremendous value of such listing, especially if the idea were carried out covering the whole United States, sectioned off into isothermal regions, that grow similar stock and where nurserymen are likely to do business with each other.

Such lists would have a tremendous influence in regulating the plantings of the different nurserymen because they could see at a glance what stocks were scarce and which were likely to be in surplus.

Their plantings would have a tendency to be less competitive and more co-operative in supplying the general demand.

No doubt the prime reason for the report is to show where stock can be procured. This, of course, is invaluable but the idea enlarged to cover the entire legitimate nursery business of the country would do much toward eliminating the jobber and speculator, as all entitled to the information would know where different stocks could be procured.

NEW HYBRID FRUIT PLANT

A new hybrid fruit plant, a cross between a black currant and a gooseberry, has been added to the official list of such plants. It has been obtained by James Innes, of Knockando, Speyside, Scotland, and has been growing five years.

According to the Ministry of Agriculture the berries resemble a black currant of large size—gooseberry in taste and a currant in appearance. When the sample of berries was first received, it was believed currants had been sent in mistake, but the foliage was like that of the gooseberry, with plentiful thorns and there was no perfume such as the currant possesses. The Ministry has requested cuttings for testing with the object of proving whether the fruit has any economic value.—*Commerce Reports.*

UNITED STATES CIVIL SERVICE EXAMINATION

Assistant Horticulturist. Salary \$2,040 to \$2,280. Receipt of applications to close December 21, 1920. Applicants should at once apply for form 2118, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.

Curtis Nye Smith, formerly attorney for the nursery trade, announces the removal of his law offices to 73 Tremont St., Suite 701, Boston, Mass.

J. O. Kelley & Sons, Jeff, Alabama, report they are very closely sold out on nursery stock.



Spraying materials

**HE WHO SPRAYS IS WISE,
but
HE WHO SAVES WHEN
HE SPRAYS IS WISEST**

The Naco line of Insecticides and Fungicides, appeals to the jobber and dealer because of its leadership in quality and packing.

- Paris Green
- Arsenate of Lead
(Paste and Powder)
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If your dealer cannot supply you, write to us direct.

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J. H. SKINNER & CO.
Topeka Kansas.

Offer for late fall or early spring shipment:

- Apple trees, 2 yr.
- Peach, 1 yr.
- Kieffer Pear, 1 and 2 yr.
- Grapes, 1 yr.
- Gooseberries, 1 yr., Strong plants.
- Rhubarb Myatt's Linneas, Divided roots.

Apple Seedling. All grades.

- Black Locust Seedling
- Honey Locust Seedling

Shade Trees

- Ash Elm Maple Sycamore
- Honey Locust American Chestnut
- Bechtel's Double Flowering Crab. All sizes.
- Amoor River Privet 12-18 in.; 18-24 in.; 2-3 ft.
- Spirea Van Houtti 12-18 in.; 18-24 in.; 2-3 ft.; 3-4 ft.

Let us price your list of wants.

Strawberry Plants Only

We have grown a crop of more than fifty million CHOICE HIGH GRADE plants—about forty of the leading standard varieties. Three the best everbearing.

It will be to your interest to get in touch with us if in need of plants to supply your trade. We furnish more nurseries with strawberry plants than any other plant growers in America. There must be a reason. We make shipment direct to your customers and guarantee same satisfaction that you could give shipped out from your own Packing house.

THIS WILL ALSO INTEREST YOU

We are in position to offer lower prices—Our Stock of plants were never better quality than now—Give us your want list—Let us figure with you.

E. W. TOWNSEND & SONS,
(Wholesale Nursery)
Salisbury, Maryland

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

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 by the Business Manager, Hatboro, Pa.

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

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., December 1920



The Editor's Christmas Wish

THAT in our summary of the strivings of the past year, we find the biggest item to our credit is Faith.

Faith that we can do a bigger and better business next year, and under better conditions brought about by our own efforts.

It is possible many nurserymen who were very antagonistic to the Quarantine 37 when it first went into effect, would be in favor of its repeal.

Like good citizens of a Democracy, they growled and grumbled and freely expressed their opinions of the Quarantine, criticized the way it was put into operation, questioned the reasons given for its necessity, but at the same time accepted it as the law of the land and true to the spirit of American enterprise, began to organize their business to meet the new conditions the Quarantine produced.

They began to invest their brains, labor and capital to fill the vacuum produced by the stoppage of foreign imports, if not with the identical plants, why then with

something else that would be acceptable to the buying public.

It would work a double injury to a large part of the trade if after it had adjusted itself to the new conditions, the Quarantine had produced in the country, the law should be repealed, and foreign stock be allowed entry.

We publish on a separate page the preliminary report of the Joint Committee on Horticultural Quarantine. It is very doubtful if this report would have the endorsement of the majority of the nursery trade.

THE TOLL OF PLANT DISEASES

Here are some of the losses to American farmers in the United States in one year by plant diseases which might have been prevented if known control measures had been immediately applied: Wheat, 112,000,000 bushels; oats, 50,000,000 bushels; corn, 80,000,000 bushels; potatoes, 50,000,000 bushels; sweet potatoes, 40,000,000 bushels (two-fifths of the total crop); tomatoes, 185,000 tons; cotton, 850,000 bales; peaches, 5,000,000 bushels; apples, 16,000,000 bushels. The figures were compiled for the year 1919 by the Plant Disease Survey of the Bureau of Plant Industry, United States Department of Agriculture.

In compiling the above the Bureau of Plant Industry has been playing the children's game of supposing.

Why not play the game to a finish and keep on supposing what would happen if the "might have been" really happened.

Without disease and crop failure present plantings would produce more than could be harvested, transported or used. Farming and gardening would soon be a lost art, no skill and little labor would be required to produce all the crops necessary.

We might as well keep on supposing there would be no disease among animals and incidentally no disease or death among human beings if proper control measures were used. The game ends here as the imagination gives out.

CONTROL APPLE BLOTCH AGAIN THIS SEASON

Apple blotch which has been causing an annual loss of thousands of dollars in Ohio and which has been increasing rapidly for several years is being controlled. Last year demonstrations were conducted in Clermont, Sciota, Lawrence, Hamilton, and Warren Counties. Where blotted trees were sprayed, 90 per cent. of the fruit was free from blemish and the remaining portion was marketable. On unsprayed blotted trees 90 per cent of the fruit was blotted so badly that it was unmarketable.

This season's demonstrations in the same sections showed a repetition of the results.

On the average the cost of spraying per tree was from 30 to 50 cents, including the sprays for codling moth. Four sprays were applied—two, four, six, and ten weeks after the petals fall. The second- and ten-weeks spray was for codling moth and contained 1½ pounds of powdered arsenate of lead, in addition to the regular spray which consisted of three pounds of bluestone, five pounds of hydrated lime, and water to make 50 gallons of solution. This year's results have again emphasized the importance of the two-weeks spray and the need of applying it very thoroughly.

Dr. Martin Krotger has sold his nursery at Remo, British Columbia.



Two year field grown

IBOLIUM Hardy Hybrid PRIVET

Cross between CALIFORNIA and IBOTA PRIVET

**Hardy As Ibota
Looks Like California**

Arnold Arboretum
Report it hardy there
The Past Winter

—Just think what this means—
**Order Propagating Stock
NOW**

**Grows equally well from either
Hard or SOFTWOOD.**

Start Propagating now and be ready for the
Coming Demand

TRADE OFFER

2 years 2-3 feet
(Not cut back. See above cut.)
1 year 1-2 feet

Also Summer frame cuttings

SURPLUS
American Hemlock, 2-3 ft., 3-4 ft., 4-5 ft.
Japan Iris—20 varieties (true to name)

THE ELM CITY NURSERY CO.

Woodmont Nurseries, Inc.

NEW HAVEN - - - CONN.

Also Introducers of BOX-BARBERRY

We have One Year Apple

to offer in the following varieties and can furnish these in

- 4 to 6 ft. grade
- 3 to 4 ft. grade
- 2 to 3 ft. grade

- | | |
|--------------------|----------------|
| McIntosh Red | Ben Davis |
| N. W. Greening | Baldwin |
| Red Astrachan | Blk. Ben Davis |
| Red June | Delicious |
| Rome Beauty | Early Harvest |
| Staymans Winesap | Grimes Golden |
| Winesap | Gano |
| Winter Banana | Jonathan |
| Wealthy | M. B. Twig |
| York Imperial | Maiden Blush |
| Yellow Transparent | |

We also have to offer Grape Vines in one year No. one and One year No. two in Concord, Niagara, Moore's Early, Worden, Moore's Diamond and a few red sorts.

We have as fine a lot of Apple Seedlings as you ever saw and can furnish these in all grades.

Can supply roses in the following varieties, as well as a limited number of some other sorts.

- | | |
|---------------------------|-----------------------|
| American Beauty | LaFrance, pink |
| Etoile de France | LaFrance, white |
| Etoile de Lyon | Meteor |
| Frau Karl Druschki | Mad. Caroline Testout |
| Gruss an Teplitz | Paul Neyron |
| General Jacqueminot | Pink Cochet |
| Kaiserin Augusta Victoria | Sunburst |

White Cochet

All stock offered above is for late fall or early spring shipment. In addition to the items mentioned we will have a good assortment of two year apple in all grades as well as peach trees.

F. H. STANNARD & CO.

Ottawa - - - Kans.



We have some very fine two year old plants of the following Roses—grown from cuttings—to offer the trade—Let us quote on your needs.

ROSES:

- American Pillar
- Baltimore Belle
- Blue Rambler
- Crimson Rambler
- Dorothy Perkins
- Philadelphia Rambler
- Pink Rambler
- White Rambler

- Cut Leaf Weeping Birch 8-10 in. and 10-12 in. grades.
- Black Locust 4- 6 in. and 6- 8 in. grades.
- Carolina Poplars 4- 6 in. and 6- 8 in. grades.

Oregon Nursery Company

ORENCO, - OREGON



Obituary.

GEORGE B. THOMAS

George B. Thomas died November 10th at the age of 84 years.

Mr. Thomas was formerly associated with the firm of Hoopes Bro. & Thomas Company, West Chester, Pa., retiring from it July 1st, 1904.

In 1866 he became associated with Josiah and the late Abner Hoopes whose death we reported last August.

His death is the third and last of the original members of the firm.

MAY RESTORE CHESTNUT ORCHARDS

Chestnut orchards which have been practically annihilated by a blight of Japanese origin may be restored through efforts of the United States Department of Agriculture. Ten years' experimentation has shown that it is possible to cross the chinquapin, a dwarf chestnut, with the Japanese chestnut, which is blight resistant, and that the hybrid trees thus produced are quite resistant to the disease and yield nuts of good flavor and quality.

SAVE THE REDWOODS

"It took more than 3000 years to make some of the oldest of the Sequoias, trees that are still standing in perfect strength and beauty, waving and singing in the mighty forests of the Sierra."

So speaks John Muir in an hitherto unpublished writing recently discovered among the late naturalist's papers by Dr. William F. Bade, his literary executor, and now reprinted by the Save the Redwoods League.

"Through all the eventful centuries since Christ's time, and long before that, God has cared for these trees," says John Muir, "saved them from drought, disease, avalanches, and a thousand storms; but he cannot save them from sawmills and fools; this is left to the American people."

Muir's article is particularly timely in view of the concerted effort being made to save the best representative tracts of *Sequoia sempervirens*, or Redwood, in Humboldt, Mendocino and Del Norte counties. Muir was a lover and admirer of the massive *Sequoia gigantea* of the Sierras, large tracts of which have been preserved by the Federal government. He was an equal admirer of the *Sequoia sempervirens* of the California coast at present almost entirely in private hands and threatened with ultimate destruction through lumbering operations.

Muir advocated a National Park of *Sequoia sempervirens* "While the iron of public sentiment is hot let us strike hard. In particular, a reservation or national park of the only other species of Sequoia, the *sempervirens*, or Redwood, hardly less wonderful than the *gigantea*, should be quickly secured. It will have to be acquired by gift or purchase, for the Government has

sold every section of the entire redwood belt from the Oregon boundary to below Santa Cruz."

COMMITTEES APPOINTED BY LLOYD C. STARK PRESIDENT. AMERICAN ASSOCIATION OF NURSERYMEN, YEAR 1920-21.

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James M. Pitkin, Newark, N. Y.
John H. Dayton, Painesville, Ohio.
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C. R. Burr, Manchester, Conn.
A. E. Robinson, Lexington, Mass.
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J. T. Foote, Durant, Okla.
S. A. Miller, Milton, Oregon.
William Flemer, Springfield, N. J.
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Paul C. Stark, Louisiana, Missouri.
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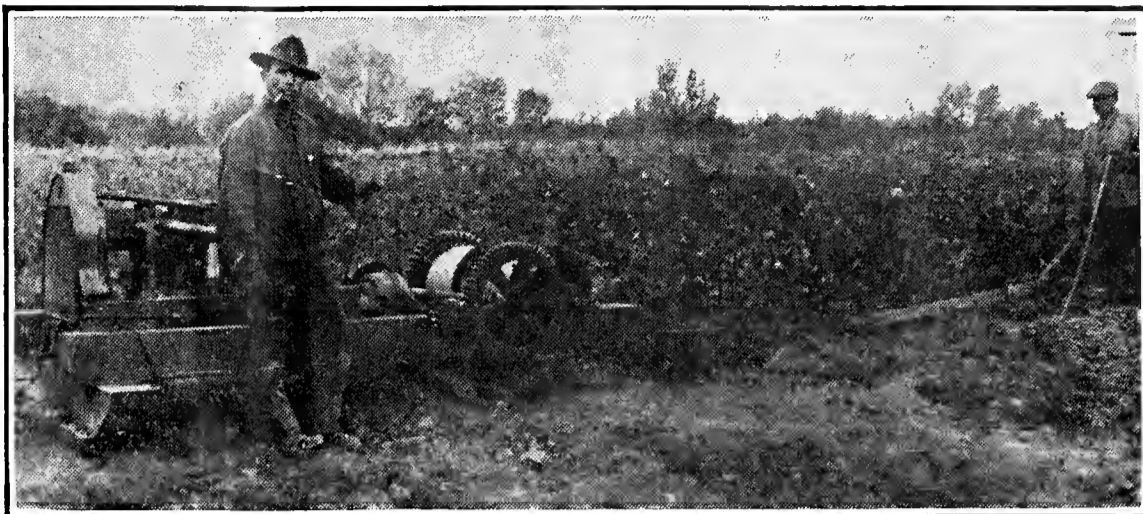
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Henry Hicks, Westbury, New York.
Theodore F. Borst, 15 Beacon St., Boston, Mass.
Ralph T. Olcott, 39 State St., Rochester, New York.

THE BRECK ROBINSON NURSERY COMPANY

The Breck-Robinson Nursery Company, Lexington, Mass., is increasing its Capital Stock from \$25,000 to \$125,000. \$75,000 of the new issue is now being sold to friends and customers of the Company. The remaining \$25,000 will be held in reserve. The Company was founded in 1912 with a capital of \$25,000 which, at the time, was considered ample. The business has expanded so rapidly however, that additional capital is desirable for conducting the business to the best advantage.

JACKSON POWER DIGGER (patented)

60,000 trees per day.
 Three men, two horses and 10 gal. fuel will dig 60,000 trees per day.
 Cost is \$750.00 without cables.
 Pulls any size lifter.
 Can be used in mud or dry ground.
 Never breaks or injures a tree.
 20 feet sufficient for machine at end of row.
 Ground is not packed for replanting same season.
 Can be used for subsoiling or stationary engine.



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 Box 152, R. F. D.,
 Santa Clara, California

J. BLAAUW & CO,
The Wholesale Nurseries, Boskoop, Holland

(Cable address: Blaauw, Boskoop).

beg to announce the trade, that they have contracted for Fall 1920 delivery with one of the largest growers for the following articles.

FRUITSTOCKS:—Apple, Pear, Plum, Mahaleb, Quince, etc.

ROSESTOCKS:—Manetti, canina (briar), rubiginosa (sweet briar), Laxa, Rugosa, etc.

Our Mr. John Radder will visit the United States and Canada during June and July, prices on application, mail address during that time care

MALTUS & WARE,

116 Broad Street - New York City

APPLE and PEAR SEED

I received from Austria this past spring,—too late for planting at that time, a shipment of Pear and Crab Apple seed of the 1919 crop packed in charcoal and which I have placed in cold storage. The seed is of excellent quality and is keeping in fine condition. I will send you a sample if you are interested.

I can offer for immediate shipment.

Also I will have ready for shipment about latter part of November some native apple seed of 1920 crop, and Myrobolan Plum seed, 1920 crop. Write for prices.

THOMAS J. LANE, Seedsman,
 Dresher, Pa.

“A good picture is worth a million words.”
 25000 true-to-type negatives to choose from, with a special landscape service.

THE NATHAN R. GRAVES CO.
Horticultural Photographers

84 Exchange Street

ROCHESTER - - NEW YORK

310 Acres devoted to business

Vincennes Nurseries

W. C. Reed & Son, Prop., Vincennes, Ind.

Offer for Fall 1920

- Cherry, 2 Year XX $\frac{7}{8}$ up 5 to 7 feet
 - Cherry, 2 Year $\frac{11}{16}$ up 4 to 6 feet
 - Cherry, 2 Year $\frac{5}{8}$ to $\frac{11}{16}$, 4 to 5 feet
 - Cherry, One Year, Sweets and Sours, all grades
 - Peach, One Year all leading varieties, strong on Elberta
 - Apple, 2 Year, leading varieties
 - Standard Pear, One Year, 4 to 6 feet and 3 to 4 feet
 - Japan Plum on Peach, One Year
 - Hansen Hybrid Plum, One Year on Peach roots
 - Hardy Northern Pecans, Grafted Varieties
- Please submit List of wants for prices

Soft Yellow Pine Box Lumber

Dry, bright stock 7-16x6 inches and wider, all 10 ft. lengths tied in bundles of 10 pieces each. Other lengths if wanted. Box framing random lengths $1\frac{5}{8} \times 1\frac{3}{4}$ inches surfaced.

Write or wire us for delivered prices.

The Dimension Company,
 Lockhart, Ala.

For FUMIGATION With
HYDROCYANIC ACID GAS

“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
 709-717 Sixth Avenue - - New York, N. Y.

IDAHO PLUMS IN LONDON

There recently arrived in London the first consignment of the season of fresh prune plums from Idaho. The total consignment is stated to have been small. The fruit was packed in trays averaging five lbs. each, and four trays comprised a crate, each crate therefore containing approximately twenty lbs. The condition of the fruit is reported as having been variable—poor rather than excellent—and the whole sale prices obtained ranged from

10s. to 22s. (from \$2.43 to \$5.35 at normal exchange) per crate, or an average throughout of 16s. 10d. (\$4.10).

Some fair proportion of the fruit found its way into the Soho district of London, where it was retailed at 4s. (\$0.24) per pound. The prunes had the fresh bloom on them and could be purchased either by the pound or half pound or by the tray, and, while not in the perfect condition of fruit sold in the highest class stores, were sound and palatable and exhibited few instances of damage through pressure.—*Commerce Reports*

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FIGHTING PEACH TREE PEST WITH GAS SAVES MILLIONS

The result of what is known as the para-dichlorobenzene treatment for the eradication of the peach-tree borer lead experts of the United States Department of Agriculture to believe that a practical means has finally been found of ridding orchards of this disastrously destructive pest. Previously the only effective method of fighting the borer was by removing the soil around the base of the tree and digging the grubs out of their galleries with a knife. It is estimated that the borers have done \$6,000,000 damage a year and that \$2,000,000 a year has been spent in fighting them.

The para-dichlorobenzene method was first used extensively by orchardists in 1919. It consists in sprinkling fine crystals of the insecticide on the soil around the base of the infected tree and covering with earth to hold the gas. The substance is highly volatile and forms gas when the soil is between 74° and 80° F. This gas is five times heavier than air and sinks down through the soil. It is highly effective against the borer; and a pound of the insecticide, costing not more than 25 cents, is sufficient for eight or ten trees. The labor is scarcely one-third of that formerly required. The saving therefore is great.

This year the para-dichlorobenzene process has been used extensively in the Georgia peach belt, some localities buying as high as 50,000 pounds and large individual growers as high as two tons each. Growers declare that it is one of the greatest accomplishments in the history of the department, comparable to the self-boiled lime-sulphur treatment for control of brown rot and scab of the peach.

Dear Sir:—

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WELLER NURSERIES CO.
Perennial Specialists,
HOLLAND MICHIGAN

WANTED

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The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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direct to your customers, using your tags. Our Stock is
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Would be pleased to quote you.

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"It was a pleasure to deliver such trees as those
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Palms and Greenhouse Stock, Roses, Evergreens
Trees and Perennials. Bay Trees, Boxwood, Rhododendrons,
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Inspect our stock.

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Norway Maple, Silver Maple, European Sycamore

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A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

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for

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Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



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We have to offer, the leading sorts of FRUIT TREE STOCKS: such as:

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Also the best lines of ROSE STOCKS such as:

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of

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Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

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Cannas, Dahlias and Gladioli

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Harrison's 20 Mule Team which we use to the tree plow when digging the trees from the largest block of Norway Maples and Oriental Planes grown in America.

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| DEUTZIA, Crenata 1,000 4 to 5 ft. | SCOTCH BROOM 200 3 to 4 ft. |
| DEUTZIA Pride of Rochester 1,000 4 to 5 ft. | SWEET SCENTED SHRUB 200 3 to 4 ft. |
| DOUBLE WHITE DEUTZIA 1,000 4 to 5 ft. | SPIREA, Blue 200 3 to 4 ft. |
| ELDER, FERN LEAF 200 5 to 6 ft. 200 6 to 7 ft. | SPIREA, VAN HOUTTII 1,000 4 to 5 ft. |
| GOLDEN BELL, Dark Green 1,000 4 to 5 ft. | SPIREA, ANTHONY WATERER 300 2 to 3 ft. |
| MOCK ORANGE, GOLDEN (Dwarf) 200 2 to 3 ft. | WEIGELA, ROSEA 500 4 to 5 ft. |
| | WEIGELA, AMABILIS ALBA 100 4 to 5 ft. |

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| | |
|---|---|
| BEECH, Purple (Fagus Sylvatica) 100 4 to 5 ft. 100 5 to 6 ft. 100 6 to 7 ft. 100 7 to 8 ft. | PLANE, ORIENTAL 1,000 7 to 8 ft. 5,000 8 to 10 ft., 1 1/4 in. 5,000 10 to 12 ft., 1 1/2 in. 5,000 12 to 14 ft., 1 3/4 in. 5,000 14 to 16 ft., 2 in. |
| MAPLE, Norway 5,000 8 to 10 ft., 1 1/4 to 1 1/2 in. 5,000 10 to 12 ft., 1 1/2 to 1 3/4 in. 10,000 12 to 14 ft., 1 3/4 to 2 in. 10,000 14 to 16 ft., 2 to 2 1/2 in. | POPLAR, CAROLINA 500 6 to 8 ft. 500 8 to 10 ft. 500 10 to 12 ft. |
| OAK, Pin 100 4 to 5 ft. 100 5 to 6 ft. 1,000 6 to 7 ft. 1,000 7 to 8 ft. 500 8 to 10 ft. 100 10 to 12 ft. | POPLAR, LOMBARDY 400 7 to 8 ft. 500 8 to 10 ft. 500 10 to 12 ft. 200 12 to 14 ft. |
| PECAN (Seedlings) 150 5 to 6 ft. 300 6 to 8 ft. | WALNUT, Black 1,000 5 to 6 ft. 1,000 6 to 7 ft. 1,000 7 to 8 ft. 1,000 8 to 10 ft. 500 10 to 12 ft. 500 12 to 14 ft. |

EVERGREENS

| | | | |
|---|--|---|--|
| ARBORVITAE AMERICAN (Thuja Occidentalis) 200 3 1/2 to 4 ft. 500 4 to 4 1/2 ft. 500 4 1/2 to 5 ft. 500 5 to 5 1/2 ft. 500 5 1/2 to 6 ft. 200 6 to 7 ft. 200 7 to 8 ft. 100 8 to 10 ft. | RED (Juniperus Virginiana) 25 4 to 4 1/2 ft. 25 4 1/2 to 5 ft. 25 5 to 5 1/2 ft. 25 5 1/2 to 6 ft. 25 6 to 7 ft. | JAPANESE, Golden Pea-fruited (R. Pisifera Aurea) 50 2 to 2 1/2 ft. 50 2 1/2 to 3 ft. 50 3 to 3 1/2 ft. 50 3 1/2 to 4 ft. 50 4 to 5 ft. | SPRUCE COLORADO BLUE (Selected Blues—Compact) 50 3 1/2 to 4 ft. 50 4 to 4 1/2 ft. 50 4 1/2 to 5 ft. 50 5 to 5 1/2 ft. 50 5 1/2 to 6 ft. 50 6 to 7 ft. 50 7 to 8 ft. |
| CHINESE (Biota Orientalis) 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 5 1/2 ft. 100 5 1/2 to 6 ft. 100 6 to 7 ft. 100 7 to 8 ft. | HEMLOCK CANADIAN 200 2 1/2 to 3 ft. 200 3 to 3 1/2 ft. 500 3 1/2 to 4 ft. 500 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 6 ft. | JAPANESE, Plume-like (R. Plumosa) 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 5 ft. 50 5 to 6 ft. | KOSTER'S BLUE (Specimen Plants) 50 3 to 3 1/2 ft. 50 3 1/2 to 4 ft. 100 4 to 4 1/2 ft. 100 4 1/2 to 5 ft. 100 5 to 5 1/2 ft. 100 5 1/2 to 6 ft. 100 6 to 7 ft. 50 7 to 8 ft. 25 8 to 10 ft. |
| CEDAR BLUE VIRGINIA (Juniperus Virginiana Glauca) 25 4 1/2 to 5 ft. 50 5 to 6 ft. 50 6 to 7 ft. 25 7 to 8 ft. | PINE AUSTRIAN 25 3 to 3 1/2 ft. 25 3 1/2 to 4 ft. 25 4 to 4 1/2 ft. 25 4 1/2 to 5 ft. 25 5 to 5 1/2 ft. 10 5 1/2 to 6 ft. 10 6 to 7 ft. 10 7 to 8 ft. | JAPANESE, Golden Plume-like (R. Plumosa Aurea) 100 3 to 4 ft. 150 4 to 5 ft. 50 5 to 6 ft. | NORWAY 500 3 to 3 1/2 ft. 1,000 3 1/2 to 4 ft. 1,000 4 to 4 1/2 ft. 1,000 4 1/2 to 5 ft. 1,000 5 to 6 ft. 500 6 ft. 300 7 ft. 100 8 ft. 100 10 ft. |
| | RETINOSPORA JAPANESE (R. Filifera) 15 2 to 2 1/2 ft. 15 2 1/2 to 3 ft. 15 3 to 3 1/2 ft. 15 3 1/2 to 4 ft. 15 4 to 5 ft. | JAPANESE, Thread-like (R. Pisifera Tilifera) 15 3 to 3 1/2 ft. 15 3 1/2 to 4 ft. 15 4 to 5 ft. | |
| | | VEITCH'S JAPANESE (R. Squarrosa Veitchii) 100 2 1/2 to 3 ft. 100 3 to 3 1/2 ft. 100 3 1/2 to 4 ft. 100 4 to 5 ft. | |

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