STEGNER LITH. CO. ROCH. N.Y.

CARNATIONS.

Horticultural Art Journal.

January, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. Jenkins, Horticulturist

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 1.

THE NEW YEAR.

With the roll of the earth, in its yearly revolves,
Come the season of mirth and the time for resolves;
With a plenty to eat, and to drink, and to wear,
And, for him that doth need it, a trifle to spare,
Gracious God, now I thank Thee for that little store,
And I thank Thee, moreover, thou'st made it no more,
For my griefs—I have had them, who's he that hath not?—
Let them lie in the must of the old year, forgot;
For my joys—well, I find consolation in this:
He's a fool that would look for perfection in bliss.
Come Content, then, attend the new year to its close,
Though another may reach me—yet, nobody knows!

—*J. W., in January Table Talk.*

Nurserymen want Protection.

MEMORIAL TO CONGRESS.

THE EASTERN NURSERYMEN'S ASSOCIATION ASKS FOR A RESTORATION OF TARIFF RATES WITH EUROPE, BUT RECIPROCITY WITH CANADA.

THE Eastern Nurserymen's Association, which was formed in this city a year ago for the purpose of making a concentrated effort to secure a better rate of postge, and which has been continued as a permanent organization, held an important meeting recently at the Chamber of Commerce rooms. About fifty firms are members of the organization.

At the meeting the following firms were represented: S. D. Willard, Selover and Atwood, Geneva; H. E. Hooker Co., May Brothers, W. & T. Smith, Geo. Moulson & Son, G. B. McManamon, Glen Brothers, Jones & Rouse, Chase Brothers Company, John Charlton, Ellwanger & Barry, Hooker, Brown & Co., and J. F. LeClare, Brighton; Charles A. Green, Clifton; G. A. Sweet, Dansville; E. C. Pierson, Waterloo; C. W. Stuart & Co., Newark; Brown Brothers, Rochester.

William C. Barry, representing Ellwanger & Barry, president of the association, occupied the chair, and William Pitkin, representing the firm of Chase Brothers Co., acted as secretary.

The meeting was called for the purpose of obtaining the sense of the association on the present tariff on nursery products. But one or two of all those present spoke otherwise than in favor of a restoration of the duties, so far as Europe was concerned; but a majority spoke in favor of urging Congress to maintain the same relations with Canada as

regards nursery products, as now exist. The following memorial was presented, and a motion that it be submitted to Congress as the sense of the association was finally carried:

WHEREAS, Since the repeal of the duty on nursery stock imported into this country there has grown up among foreign nurserymen a practice of shipping to the United States large quantities of stock of various kinds, and generally of inferior quality, which is sold at auction and by agents at such low prices as to create a competition with the American cultivators highly injurious to the American trade, and of no real benefit, but an actual damage to the American planter;

WHEREAS, The nursery business of the United States has grown into an immense industry; many millions of dollars are invested in it; tens of thousands of persons find employment in it; the orchards, gardens, lawns, parks and pleasure grounds, cemeteries and plantations of every description are furnished with trees and plants by the nurseries; and if any American industry can justly claim protection against foreign competition, it is surely the American nursery. The nurserymen of Europe grow the stock largely with a class of labor that costs nothing, whereas in this country we are compelled to pay high wages. The wages of one nursery hand in this country will hire half a dozen in most parts of Europe; therefore,

Resolved, That we, the undersigned, members of the Eastern Nurserymen's Association, hereby request our representatives in congress to do all in their power to secure the restoration of the duty of 30 per cent. upon all kinds of fruit trees and plants, ornamental trees, shrubs, roses and plants of every description usually grown in nurseries.

Resolved further, That so far as our relations with Canada are concerned, reciprocity should be maintained.

In compliance with a resolution adopted, George G. Atwood, Irving Rouse and C. W. Stewart were appointed a committee by President Barry, to obtain signatures to the memorial, outside of the association. An effort will be made by the association to secure a hearing before the sub-tariff committee, before the tariff bill comes up for a final vote.

WHY TREES DO NOT GROW.—A change in the surrounding conditions will very often make a considerable difference. Thus, a tree which has grown up from a seedling for several years surrounded on all sides by a dense thicket, suddenly removed to the bleak and open exposure standing all alone, has more of a struggle to again gain a foothold and become established than one which came up and first saw the light in such a position, and this is one reason why trees very often, when transplanted and set more closely, to be afterwards thinned out, do much better and sooner become more thrifty.

CLEMATIS DAVIDIANA.

(*See Engraving on Page 3.*)

IN a recent article in this journal on *Clematis Tubulosa*, it is suggested by the writer, H. H. Berger, that *C. Davidiana* is the same as *C. Tubulosa*. As these two hardy species of Clematis are now being introduced to our gardens, I will state precisely what they each are. They both are herbaceous perennials, upright in growth, *not climbers*, but making stout annual stalks, with ternate foliage, which die down to the ground in autumn. The roots are perfectly hardy, and live many years. Both species have blue blossoms, of different shades, and both are very deliciously fragrant

Now for the distinctive differences between them. *C. Tubulosa* grows usually two feet high, has foliage much smoother than that of *C. Davidiana* and not more than one-fourth as large. The blossoms, also, are only about one-fourth the size of those of *C. Davidiana*, that is they are from one-fourth to one-third of an inch across, while those of *C. Davidiana* are just like the separate flowers of a fine light blue hyacinth, fully an inch across.

C. Davidiana grows three to five feet high, and has foliage roughish and one foot long, while its splendid blossoms form clusters, or whorls, of 15 or 20 flowers, in the axils of the opposite leaves, the whole mass being three or four inches across. The fragrance is almost exactly like that of orange blossoms.

To sum up: *C. Davidiana* is a distinct species, from China, while *C. Tubulosa* is a Japanese species, and is far larger in every way than *C. Tubulosa*. *C. Davidiana* was sent to Cambridge Botanic garden by Abbe David. I believe the plants there are now lost, but, from them, two plants were obtained and planted at the Arnold Arboratum, from which all the stock now known, in cultivation, has been grown. It is a grand hardy perennial for gardens and will take a front rank at once. I have flowered *C. Tubulosa* (received from H. H. Berger & Co.) this season, and many experts have studied the two species here, by comparison, during the summer past, as they have not been thoroughly known till quite lately. Lovers of sweet blossoms will plant both species.

F. L. TEMPLE.

RAMBO.

CLEMATIS DAVIDIANA.

See Page 2.

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich. Next meeting will be held at Ocala, Florida, Feb. 20, 21, 22.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, Chicago, Ills.; June, 1889.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., 1889.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, *Pres.*, Rockford, Ills.; A. McCullough, *Sec.*, Cincinnati, O. Next annual meeting in Washington, D. C.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

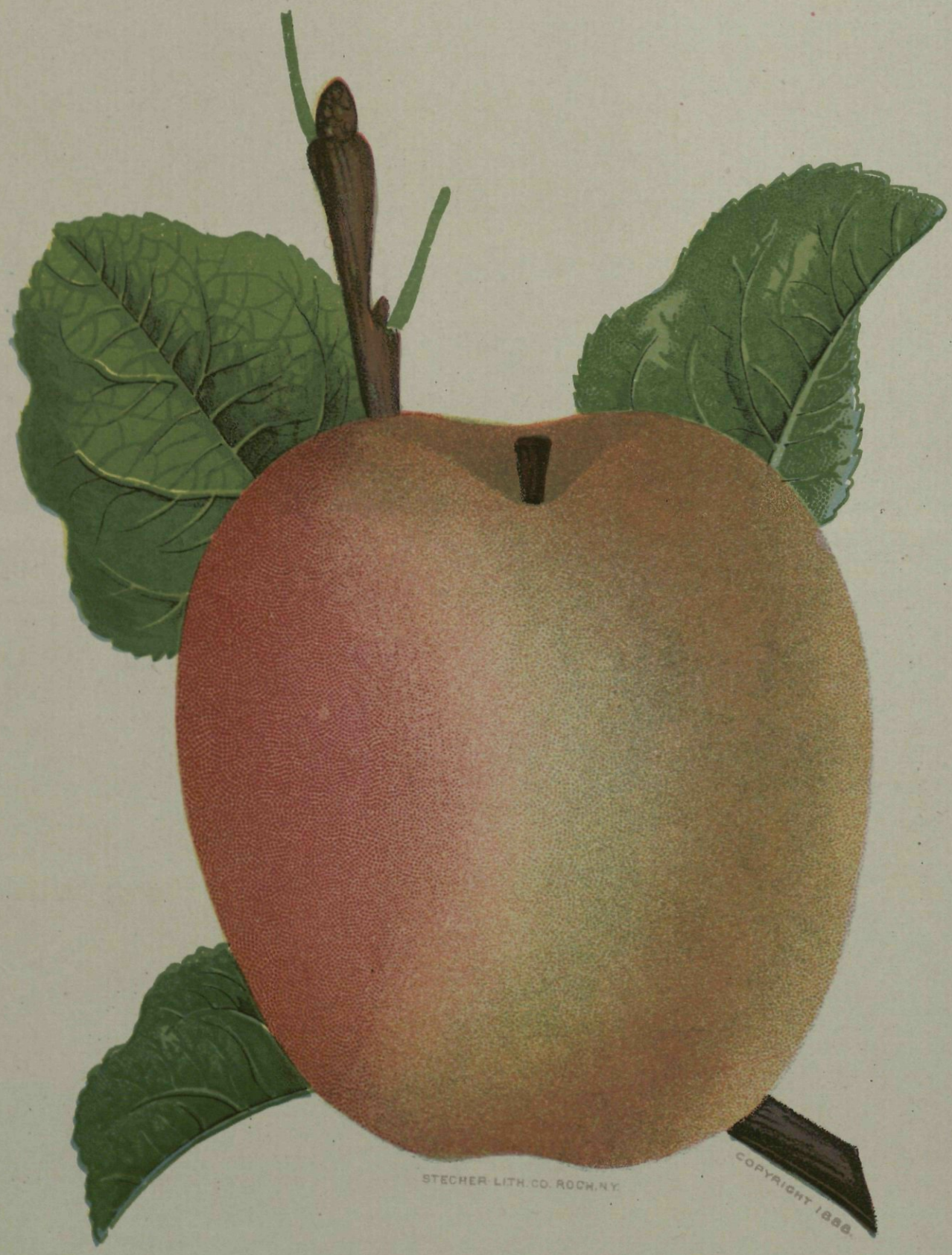
DEATH OF D. M. DEWEY.

"ONE of Rochester's oldest and most respected business men, Dillon M. Dewey, Sr., died at his residence, 398 East avenue (this city), at three o'clock this morning (Thursday, January 17th)." Such is the announcement we find recorded in the daily papers of our city, and as Mr. Dewey has been for a number of years closely connected with the nursery interests of this country, it is but proper that we should briefly notice his death at this time.

Mr. Dewey had been connected with and engaged in the book and publishing business since 1833, and published and sold several works devoted to horticulture, and in later years sold large quantities of pear seed and peach pits for nurserymen's use, with other nursery requisites. It is not true, however, that he originated the manufacture of colored plates, now so largely used by the nurserymen of this country. Years before Mr. Dewey knew of this business it was largely carried on by Mr. Prestele in this city, who had, as we are informed, a "large assortment," perhaps twenty-five varieties, which were made up into the old-fashioned cumbersome books about a foot square, and now nearly out of use. Eighteen years ago the publishers of this journal commenced the manufacture of lithographic fruit plates, which were largely, and until lately, distributed by Mr. Dewey Some years later Mr. Dewey sold out his book business and established an "Art Gallery" (continuing the sale of colored plates and other nursery requisites), which has been the means of greatly improving the taste and distributing many fine works of art. Later still, his health failing, he sold out and discontinued all business, and at the end of five months sickness peacefully passed away, well known and respected by a large number of friends and acquaintances.

WHEN fruit is stored for keeping it is desirable to have the temperature just above the freezing point—thirty-two degrees. Of course it will vary some, but the nearer this can be maintained with a dry atmosphere the better.

The world owes everyone a living, and is not slow in paying a good collector.



ANTONOOKA.

AMERICAN POMOLOGICAL SOCIETY.

THE twenty-second biennial session of this society will be held at Ocala, Florida, Feb. 20, 21, 22.

At the last meeting held in Boston, September, 1887, it was unanimously resolved to hold the next meeting south, and an invitation was accepted from the Florida State Horticultural Society to hold its next meeting in that state. Extensive preparations are being made by the Pomologists of the south for the reception of their northern friends, which give promise of the most successful meeting ever held.

The session will open at 10 o'clock on Wednesday, February 20th, and continue three days. It was expected to hold the meeting at Sanford, beginning February 6th, but it has been found necessary, owing to lack of time for suitable preparation, to postpone it until the 20th, and at the request of the Florida Society, to hold the session at Ocala instead of Sanford. Ocala is located in the central part of the Peninsula, in the midst of the Orange Region, nine-tenths of all the oranges grown in the State being produced within a radius of eighty miles. The climate is salubrious and healthful. No cases of yellow fever have occurred in that region, and the direct railroads leading to Ocala from the North pass through none of the districts where it has existed. No fear, however, need be entertained of visiting any portion of the State on this account. Since the occurrence of severe frosts the last quarantine, that of Jacksonville, has been raised, and the tide of winter travel is as before.

The attractions offered by the people of Ocala, as inducements to hold our meeting there, are the Florida International and Sub-Tropical Exposition, which opens in January, the commodius buildings of which are tendered for the use of the Society. The leading places of interest in the State are easily accessible from this point.

Arrangements have been made for unusually low rates on railroads entering Florida, and for excursions within the State.

It is hoped that all Pomological, Horticultural and Agricultural Societies in the United States and British provinces will send delegates, in such numbers as they may deem expedient, and all persons interested in the cultivation of fruits are invited to be present and become members of the Society.

The Society offers no premiums for exhibits of fruits. Several special prizes, however, are offered by the Florida Horticultural Society for exhibits to be made at the meeting, the awards to be made by a committee appointed by the American Society. The usual award of Wilder medals will be made for objects of special merit.

Packages for exhibition should be addressed, freight or express charges paid, to J. O. Clark, Ocala, Fla.

P. J. BERCKMANS, President,
Augusta, Ga.
A. A. CROZIER, Secretary,
Ames, Iowa,
B. G. SMITH, Treasurer,
Cambridge, Mass.

IN connection with the meeting of the nurserymen of this section-held a few days since, noticed elsewhere, Mr. Irving Rouse said that "few people have any idea of the immense quantity of seedlings imported into this country from France and England. Our firm is only one out of a number in this city, and Rochester is only one among many places in which this business is carried on, and yet during the last month seventeen carloads of plants were brought to this city by our firm. Each car contains from sixteen to twenty cases. The number of plants in a case will average 20,000. This amount of stock is only about one-third of what we import, the bulk of it being distributed directly to our customers from New York. The importation of such an immense quantity of seedlings at a low price has driven American producers out of the market. These seedlings are produced in France, where labor is procured at from 30 to 60 cents a day with twelve hours for a day's work. As nine-tenths of the cost of production is in the labor, it will easily be seen that American growers cannot compete with labor here at $1.50 per day of ten hours. It is true that this large importation of seedlings has greatly increased the production of trees by our nurserymen, the seedlings being obtained at so much less cost than formerly. In one sense we may be said to be asking protection against our own acts, for the cheap price of seedlings has led to over-production and thus to a stagnant market."

Opportunities are very sensitive things; if slighted on their first visit they seldom come again.

CORRESPONDENCE.

Wells H. White, Secretary of the Culinary Grape Co., writes as follows:

TROY, O., Dec. 31, 1888.

Dear Sirs:

I suppose I need not tell you any of the "tricks of the trade" of tree men, or tree agents—or how many hundred thousand plants have been sold under the name of one kind, and quite another delivered—hence the amount of swindling that has been done on buyers is perfectly appalling. And now as we have been advertising our new grape a good deal, it has awakened the cupidity of no small number of the said kind of agents; and as you know I had our lithograph COPYWRITED expressly to prevent this kind of business, I hope you will not sell a single impression *to any one whomsoever*. And I give no order to any one. And if we want any agent to have them we must know him well, and he must get his picture of the grape from the CULINARY GRAPE CO. We have orders coming in from Canada to Florida, and from Maine to Washington Ter. We sent out all the fruit we had on our vines last season, to have it *put to the test*, and see some of the results. And this coming season we expect to have 1,000 pounds to send out in the same way, where we had one pound last year. We shall also send the fruit out to all the the agricultural experiment stations in all the states; also to the Agricultural Department at Washington, for we calculate to get an endorsement of it from sources that are indisputable! And we calculate that few, if any, sales shall be made except through the the mails or express, for then we put up every vine to the purchaser—and in this way we *know* our customers get what they buy, thus cutting short this *robbery* of buyers.

WELLS H. WHITE,

HARDY SHRUBS—PHILADELPHUS.

The several species or varieties of the Philadelphus or as they are more commonly termed, Syringa or Mock Orange, form when taken together a very meritorious and useful group of hardy deciduous shrubs belonging to the natural order Saxifragaceæ.

They may be described as being shrubs of vigorous growth and compact habit, growing from six to twelve feet in height, having opposite ovate, bright green leaves and producing their large, creamy white, fragrant flowers in the greatest profusion, and in dense clusters during the months of June and July. Although old, they still rank among the finest and most valuable of ornamental shrubs for the lawn, and a few of the most distinct varieties should be found in all collections, however small.

To grow the Philadelphus to perfection they should be given a deep, moderately enriched soil, and while small, grass and weeds should not be allowed to grow about them. Large and well established specimens should be given a good top dressing of well decayed manure every autumn.

As the tendency of the Philadelphus is to make long and rambling shoots pruning must be resorted to in order to preserve a natural grace, and as these shrubs flower on the wood of the preceding year's growth they must not be pruned in winter or spring, but after they have finished flowering the old wood should be shortened in order to promote the growth of the new for another season's bloom. It is well to thin out the old wood occasionally, and remove all root sprouts when they appear.

The list of distinct varieties is as yet rather limited and Philadelphus coronarius the common Syringa is still unsurpassed and ranks as one of the best when fragrance of flowers and beauty of foliage is desired.

Philadelphus coronarius folii aureis, (The Golden Syringa.) A golden leaved form of Philadelphus coronarius growing from four to eight feet in height. It has bright golden yellow foliage which retains its color well all summer. Its flowers which are produced in June are identical in all respects with the parent plant.

Philadelphus coronarius flore pleno, (Double flowering Syringa.) Grows from five to seven feet in height and produces its semi-double white fragrant flowers during the month of June.

Philadelphus gordonarius, (Gordon's Syringa.) A vigorous growing species attaining a height of from eight to twelve feet and from the strong erect shoots slender side shoots are produced which give it the appearance of a drooping habit. Foliage of a bright green color. Flowers large, white and slightly fragrant. This is especially valuable on account of its late flowering habit. The flowers are produced a month later than the other sorts.

Philadelphus grandiflorus, (Large flowering Syringa.) A strong growing species attaining a height of from ten to fourteen feet producing very freely during the month of June very large, showy, slightly scented, white flowers.

Philadelphus Zeyheri, (Zeyher's Syringa.) Grows from twelve to fifteen feet in height, and of a more spreading habit than the other varieties. It has also much smaller foliage. The flowers are large, white and but slightly fragrant. CHAS. E. PARNELL.

TETOFSKY.

OUR ILLUSTRATIONS.

Carnations.—So great has been the improvement in this class of plants that there are few of equal commercial importance to-day. It is in equal favor with the professional florist and amateur, and the already long list of varieties is being increased each season with new and startling novelties. Almost every known shade of color is represented in any florist's catalogue of these plants, and the cultivation, crossing and hybridization has produced the grand flower of to-day. See colored plate for a variety of colors in this flower.

APPLES. The *Rambo.*—This is supposed to be an American variety, originating on the banks of the Delaware many years ago. It is now widely disseminated, but more largely grown through Pennsylvania and adjoining states. Wherever it succeeds it is a very valuable apple for the table or culinary purposes, being largely used in Pennsylvania in making the famous "Apple Butter." The tree is a vigorous grower, forming a rather spreading or open head; very productive, and the fruit in season at place of origin from October to Christmas. In quality it is mild, sub-acid, tender and rich.

Antonooka or *Antonovka.*—This is fully described by Dr. Beadle on page 97 of last volume.

Tetofsky.—This is a Russian variety; one of the earlier introductions into this country, and now widely disseminated. It is a summer apple, and has proved profitable in some sections. The tree is an upright, spreading grower, forming an open head. Comes very early into bearing—often in the nursery row—and produces annually. Downing describes the fruit as of medium size, oblate conic, sometimes nearly round, smooth, with a yellow ground handsomely striped with red, and, like most of the Russian varieties, covered with a whitish bloom. Flesh white, juicy, sprightly acid; fragrant and agreeable. The artist got a little too much color on the colored plate, which otherwise is a fair representation.

WE have just completed a very fine and correct representation of the Wragg cherry, now becoming so popular in the west. It will appear in an early number.

NOTES ON NEW GRAPES.

DURING the meeting of the Ohio State Horticultural Society recently held at Troy, Ohio, George W. Campbell gave some interesting notes regarding small fruits grapes in particular, made during the past season. He said the Marlboro was a promising raspberry in his section, and the Shaffer is coming into popularity. The Golden Queen is also growing in favor. Mr. Caywood trains the Lucretia Dewberry to trellis and grows them successfully. Wilson and Crescent are still the principal strawberries for market.

Of grapes, Jewel is hardy, healthy, of good size, early and fine quality. It ripens about the middle of August, is of pleasant flavor, nearly equal to the Delaware, and black. Nectar is a black grape, handsome, with regular and large clusters. Eaton is later than Concord and more acid. Woodruff is a very valuable variety. Pocklington is hardy, but late in ripening. The Witt is a good new variety and worthy of cultivation, also Colarain. He gave some of his experience in propagating new varieties, and said he had rejected hundreds of them, though many were valuable in some respects, but not in all points up to his standard. He had one new variety that he was testing still, and hoped it would be worthy of cultivation. He was seeking a variety good in quality, hardy, vigorous and productive.

He believes that mildew and grape rot can be effectually thwarted by the use of sulphite of copper. "En Celeste," a preparation of this article with spirits of ammonia has proven effectual in numerous experiments. It can be relied on and is inexpensive. Samples of Mary's Favorite, grown by Mr. Coffin, of Westfield, this State, were handed him, and and after testing them he pronounced them excellent quality. This is a seedling from Mr. Campbell's noted grape, the Delaware. Jessica was highly recommended by a gentleman who followed Mr. C. in some remarks.

Mr. Snyder, of Lancaster said he had grown grapes for 30 years, and finding the Ives best suited to his locality and purposes, grew that variety almost exclusively. He trains to stakes 8 feet high, manures heavily and does no pruning in summer, but continues to tie up the vines to the stake instead of cutting them off. He grows three tons to the acre. In the fall he cuts off the old vines near to the surface of the ground, and grows his next crop on new wood entirely.

EXPERIENCE THE BEST TEACHER.

IN fruit growing, as in any other branch or line of farm work, the best plan of management is to commence on a moderately small scale at first, and then increase as your experience warrants. Many things seem very nice to read about, and it is comparatively an easy matter to figure out possible profits. A little experience will change much of this, and the fact will be developed that profits are only obtained by intelligent management, and this is fully as important with the making of any specialty of farm products, as in any other line of business. Men fail in other lines of business for the same reason that they fail in making a specialty of growing fruits—lack of experience and management. It is idle to imagine that a man who has made a failure of any other business can readily make a success of farming or fruit-growing. There is no doubt but that he can try, but the idea that everyone can at the present time go into fruit-growing and be sure of success is an erroneous one.

MR. AMORE, of the Japanese Importing Co., writes us from Japan that "Hattankio," or as we know it, Kelsey's Japan Plum, is very much liked in Japan, and thought much of, while "Boton" and "Ogon" are not regarded as of much value. It is difficult to know how this fruit looks when ripe, for it is all picked or gathered at such a stage that we should regard it as not half grown. They do not like "soft" fruit. Many of their Persimons are quite green when gathered, and amongst their numerous varieties the "Goshio" is regarded as one of the best. Large numbers of trees of the Seedless Orange, Oonshin, are are being imported into California.

THE California "Dried Fruit Association" have recently established a number of agencies in the Eastern States for the distribution of their products. So great is the demand that dealers are unable to secure enough to carry them through the season. A friend of ours, Mrs. E. L. Watson, of Santa Clara, recently sent over eight tons of prunes which, with a large quantity of apricots, etc., etc., came through in excellent shape to Messrs. C. H. Perkins & Co., of Newark, N. Y. Four thousand boxes of California raisins, sent to London, England, realized better prices than the hitherto famous Malagas.

NEWS ITEMS, ETC.

THE many friends of Prof. D. B. Edgerton, will be glad to learn that the degree of Bachelor of Philosophy has been conferred upon him by the Correspondence University, 147 Throop street, Chicago, Ill., the largest institution of the kind in the world, having over fifty professors and twenty-five courses. The distinction, we are assured, is the more valuable, as the usual honorary degrees are never granted by this university. Among its faculty are some of the most distinguished literary and scientific gentlemen of this country. It is non-sectarian.

THE publishers of *Good Housekeeping* (Clark W. Bryan & Co., of Springfield. Mass.,) announces a new series of papers on "Home Furnishing and Decoration," to begin in No. 98, February 2, with contributions from first-class authorities in all the important lines of household economics, making the current number of this periodical one of inestimable value to the housekeeper. The literary features of the magazine are well maintained, and it is becoming more and more indispensable to good housekeeping.

The Scientific American, published by Munn & Co., New York, during more than forty years, is, beyond all question, the leading paper relating to science, mechanics, and inventions published on this continent. Each weekly issue presents the latest scientific topics in an interesting and reliable manner, accompanied with engravings prepared expressly to demonstrate the subjects. *The Scientific American* is invaluable to every person desiring to keep pace with the inventions and discoveries of the day.

The Horticultural Times, 127 Strand, London, England. Weekly, at one penny each issue.

Revue de Horticulture. Monthly. 24 pages and two colored plates. One year, fourteen shillings (about $3.50.) 134 Rue de Bruxells, Ghent, Belgium.

VIBURNUM PLICATUM.

HORTICULTURAL ART Journal.

February, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. JENKINS, Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 2.

LOSS AND GAIN.

I sorrowed that the golden day was dead,
Its light no more the country-side adorning;
But whilst I grieved, behold!—the east grew red
With morning.

I sighed that merry Spring was forced to go,
And doff the wreathes that did so well become her;
But whilst I murmured at her absence, lo!—
'Twas Summer.

I mourned because the daffodils were killed
By burning skies that scorched my early posies;
But whilst for these I pined, my hands were filled
With roses.

Half broken-hearted I bewailed the end
Of friendships than which none had once seemed nearer;
But whilst I wept I found a newer friend
And dearer.

And thus I learned old pleasures are estranged
Only that something better may be given;
Until at last we find this earth exchanged
For Heaven.

—*E. T. Fowler.*

WESTERN NEW YORK HORTICULTURAL SOCIETY.

THE twenty-third annual meeting of this society was held in Rochester January 23d and following days, and was well attended, some two hundred being in attendance nearly all the time, clearly showing that the interest in fruit culture and rural improvements are extending. We have not room for a detailed report of the proceedings, but give interesting items as they appear to us.

PRESIDENT'S ADDRESS.

Mr. Barry, in his annual address, stated that the past summer and autumn had been generally cool, only short periods of heat, a cool, wet spring with late frosts, followed by a wet autumn until November, with early frosts, but in spite of this, crops had been abundant. Strawberries suffered from a short period of drouth, and grapes had failed, in some respects, to ripen, from a deficiency of heat. The plum crop was not uniform—in some cases a full average, and in others far below; and the same might be said of pears. Though individual specimens were generally larger than commonly seen. The mild and

wet weather of November and December prematurely ripened late varieties of pears which had to be sold at a loss of at least twenty-five per cent.

SPRAYING FRUIT TREES.

Calling attention to this, Mr. Barry said the subject was of great importance. One spraying of London Purple dissolved in water would prevent the ravages of that terrible pest of the orchard—the codlin moth; and although it was a good many years since it was first introduced, results have at last been reached which appear to justify the belief that when properly applied it will be effectual, and be worth millions of dollars annually, and if applied to the curculio would be equally as effective against its ravages. Mr. Barry congratulated the members upon the progress made in this respect, and that at last there was at their command an easy means of destroying these troublesome pests.

PEAR BLIGHT AND YELLOWS.

Continuing further, Mr. Barry said he was sorry no complete remedy or preventive for either had as yet been discovered but, considering how many scientific men are at work in all parts of the country in connection with experimental stations, we have reason to hope that a remedy may soon be discovered.

FUNGUS ON THE GRAPE.

Prof. Scribner, of the Department of Agriculture, and Prof. Dudley, of the Cornell University, with others, are devoting themselves largely to the investigation of these diseases, and will, no doubt, soon be able to aid the cultivator in applying remedies.

LOW PRICES.

We hear a good deal said about low prices, over production of fruits, and all that. This is nothing new; the same cry was not uncommon twenty or thirty years ago. In my opinion, prospects were never better; the consumption of fruit is increasing wonderfully all over the world, but it is natural that, as we advance, more regard be paid to the quality of fruits and to the manner in which they are placed on the market. *The slovenly fruit grower must go!*

PROGRESS.

Horticultnre, proper, is making some progress in Western New York, but it is far from being what we wish it, and what it ought to be. The gardens and home grounds of our farmers should receive more attention, and I hope the *Farmer's Institutes* that are being held through the country will take up the matter and awaken a spirit of improvement.

THE FUTURE.

In conclusion, gentlemen, let me say to you that whether as a "State Society" or "Western New York Society," you have a great work before you, and I hope that you, will in the future, as you have in the past, devote yourselves to it with vigor, intelligence and enthusiasm.

REMARKS.

An exhibition of apples, pears and grapes was made by Ellwanger & Barry, of this city, S. D. Willard, Geneva, N. Y., and W. P. Rupert, Seneca, N. Y., and was the finest and largest ever displayed before the society. Curtice Bros. made a fine display of canned goods. The following were elected as officers for the ensuing year: President, P. Barry, Rochester, N. Y.; Vice-presidents, S. D. Willard, Geneva, W. C. Barry, Rochester, N.Y., N. Brown Smith, Syracuse, and J. S. Woodward, Lockport; Secretary and Treasurer, P. C. Reynolds, Rochester, N. Y.

Interesting and instructive papers were read by a number of gentlemen present, experts on the topics of which they treated and of interest to members generally. But by far the most interesting was the following letter from Mr. Barry:

ROCHESTER, N. Y., Jan. 23, 1889.

To the President and Members of the Western New York Horticultural Society:

GENTLEMEN:—Feeling that I may not, in the future, be able to render you much assistance personally, and desiring that the society be maintained in all its usefulness, I propose to offer you a donation of two thousand dollars, the interest of which may be used annually to promote the objects of the society, under the direction of the executive committee.

This is but a small sum but it will serve as a beginning. Other friends of the society may, and I hope will, contribute to it in the course of time, and then a fund may be created worthy of the society and sufficient to enable it to prosecute its work effectively.

Wishing you a pleasant and profitable meeting, and regretting I cannot be with you, I am

Yours Truly,

P. BARRY.

GREEN MOUNTAIN GRAPE.

On motion a vote of thanks was tendered Mr. Barry for his generous donation.

S. D. Willard, of Geneva, referring to President Barry's donation, moved that a committee be appointed to solicit additional contributions so that the society may be put on a permanently sound financial basis. Mr. Willard paid a high tribute to President Barry who, he said, had always paid the deficiencies of the society and kept the organization alive. Geo. A. Sweet, of Dansville, said he wished to supplement what had been said. There is no man in New York State, he said, who had done so much for the fruit growers and horticulture as Patrick Barry. Remarks in the same spirit were made by E. A. Bronson, of Geneva, and others.

The motion was unanimously adopted, and the chair appointed such a committee. The papers read and the discussions which followed will be published in the proceedings which are free to all members of the society. Yearly dues may be remitted to Secretary Reynolds, Rochester, N. Y.

An interesting and valuable paper on Hardy Herbaceous plants, by Mr. Geo. Ellwanger, and one on the canning industry, by Mr. S. G. Curtice, were read by these gentlemen, and will appear in our next issue.

AN HOUR AMONG ORCHIDS.

A REPORTER of one of our daily papers tells their readers what he saw at the greenhouses of Wm. S. Kimball, Esq., in this city. "In quest of information and partly to indulge a natural taste for flowers, a reporter yesterday paid a visit to the Kimball greenhouses on Bronson avenue. It was past the hour when visitors are usually privileged to enter, but he was received by the florist in charge, Mr. George Savage, very courteously and shown through every part of the many glass-encased chambers, where the charms of these vegetable houri of the tropics, fair creations of earth, air and moisture, are developed to their full perfection.

The man of the quill was first ushered in among the orchids by his guide, who with a facility almost amazing, proceeded to make him acquainted with their technical Latin names; some of these were jotted down in his note book and will a little further on be inflicted upon the reader—for the sake of effect—but many of the others were quite too bewildering in their number and variety let alone unpronounceable quality, to be remembered.

A little plant with long dark glossy leaves somewhat spiculated in appearance was first pointed out to the visitor. It was called a *Cypripedium* and was a very rare specimen. It was valued at $500. It has ceased flowering for the season but in its peculiar laboratory nature was preparing for a future show of beauty. Of this plant there are known to be no less than 260 different varieties. One of these, a hybrid, was named after the gardener himself, and bore the somewhat euphonius name of *Cypripedium Savageium.*

Then followed a succession of orchids of different species and varieties. One of these, belonging to the variety *Cattleya*, had large showy blossoms of a lilac color with the deeper parts tinted a mingled violet and crimson. The flowers were very pretty. These plants grow abundantly in the warm, damp forests of Brazil and on the plains near the Amazon. They are also found near Bogota, in Columbia. Another variety was afterward looked at, in which the racemes were very long, terminating in clusters of white flowers shaded about the stigmas with many spots of a chocolate color. Another, brought from the island of Borneo, in the East Indies, had large star-shaped white blossoms which looked like wax. Other orchids were shown, gathered from all over the tropical parts of the world. One point with which many people are unacquainted is that the orchid belongs to the genus of plants known as *Epiphyte*, that is, plants which live upon the bark or stems of others. Many species may be seen in their native woods, waving from the tops of the tallest trees. Their roots wrap themselves securely around the limbs and leaf stems of their support and there they thrive, drawing their nourishment from the air, which, owing to the frequency of tropical rains is always surcharged with moisture.

Among the curiosities in plant life shown, also were samples of the croton foliage plants from which croton oil is obtained. The *Anthurium*, or flaming flag, a native of Costa Rico, in Central America, was another very handsome plant. Its large blood red flowers formed a striking contrast to its glossy leaves. One variety of this plant is named after Baron Rothschild and the specimen shown was brought from his conservatory at his residence at Versailles near Paris. The curious pitcher plants were also objects of pleasing attention.

The visit, though thoroughly interesting, was a little too early in the season. Many of the plants were not in bloom. Every reader of this journal living at a distance from Rochester should, when visiting the city be sure to call at these greenhouses, it is one of the rare sights.

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., 1889.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, *Pres.*, Rockford, Ills.; A. McCullough, *Sec.*, Cincinnati, O. Next annual meeting in Washington, D. C.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich. Next meeting will be held at Ocala, Florida, Feb. 20, 21, 22.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, Chicago, Ills.; June, 1889.

THOSE whose subscriptions to this journal have expired will confer a favor upon the publishers by sending in their renewals promptly, or notifying them if they wish to discontinue. This issue is sent to some this month in hopes of securing their subscription. We do not wish to force in on an unwilling subscriber, and a short note or postal card from any one receiving it and wishing it discontinued, will have the publishers' attention. We trust, however, that those who are now receiving it and have been for some time, will aid us in making it still more attractive and desirable by sending in their subscriptions, every little helps.

EXPERIMENTS made during the past year in both this country and Europe have shown that black rot of the grape can be wholly prevented by the proper application of the sulphate of copper compounds. A circular describing the manner of applying these has been prepared by B. T. Galloway, of the United States Department of Agriculture at Washington, D. C. It will be sent on application to all grape growers and others interested in such matters, and is well worth studying.

☞ WE have no Seeds, Trees or Plants for sale. Neither the editor or publishers are in any way interested in any of the above that we from time to time describe or notice in these pages. All that we know is from a practical observation of what we can see, hear and learn.

WE are under obligations to Prof. Lintner, the State Etomologist, for his fourth annual report, which, like all who have preceded it, is well filled with valuable information for the farmer, gardener and fruit-grower.

Populas Bolleana is a new ornamental tree with silvery foliage, deeply serrated. Prof. Sargent says this is the finest tree of the temperate zone, and will no doubt become popular.

ACCORDING to Dunn's report for the past year, 1888, the sale of nursery stock and seeds in Rochester amounts to $2,525,000.

WRAGG.

"THE GREEN MOUNTAIN GRAPE."

See Illustration.

STEPHEN HOYT'S SONS sending us specimens or samples of this fruit, writes as follows:

"This extra early and delicious grape was found by Mr. J. M. Paul, of North Adams, Mass., growing in a garden on the side of the Green Mountains, in Vermont, at an altitude of 1,400 feet, where he found it ripened its fruit perfectly. It is a very strong, vigorous and healthy growing vine, of remarkable productiveness and hardiness, and withal so early, that it does not fail to fully ripen its fruit in the locality where it was found, or in any other place where it has been planted. We have tested it three years in our soil. The two first seasons it ripened its fruit by the 25th of August, and the last season, which was a very late one, it was ripe by September 1st. We have set vines of the Delaware, Brighton, Iona, Prentis, Rebecca, Eldorado, Croton, Walter and other sorts of like character, but they all mildew in our soil so badly that they fail to ripen their fruit and we have been obliged to discard them. The "Green Mountain" has not failed to produce and ripen a full crop in the three years we have tested it. The vine grows as strong as the Concord and will flourish in any soil where the Concord grows, and is nearly three weeks earlier. It may truly be called in Southern Connecticut, an August grape. The color of the grape is greenish white when ripe. The quality is superb. The skin very thin; the pulp exceedingly tender and sweet, containing from one to two seeds only, which separates from the pulp by the slightest pressure after slipping from the skin. We have handed bunches of the Green Mountain to several persons to test its quality and the first exclamation is, "Oh! isn't that splendid!" We do not remember of a single person who has tasted the grape but was delighted with it, and many say that it is the most like a hot house grape of any out-door grape they ever tasted. We do not believe there is an early grape superior to it in quality; that bears younger; is more productive, or that is more desirable for an early grape than this one. It is especially well adapted to be grown in northern localities where the Concord, Brighton, Niagara, Delaware, Pocklington and many other valuable varieties, oftentimes fail, or perhaps never ripen, and in those localities where these sorts do ripen, the Green Mountain is equally desirable, as it will lengthen the grape season by coming in at least two weeks before the earliest of the above named varieties."

"THE WRAGG CHERRY."

See Illustration.

IN the winter of 1879–80 Mr. J. Wragg, of Waukee, Iowa, while traveling in the west part of Dallas county, Iowa, heard of a cherry growing on the farm of W. C. Humphrey that was very hardy and productive and which was thought to be "English Morello" on its own roots. Careful inquiry led him to think it was not "English Morello" and in the spring he procured two small trees of those growing around the parent trees. The following fall he visited the trees and learned from Mr. Humphrey, one of the most reliable of men, the following in regard to it. About twenty-five years before Dr. Maulsby, a gentleman living in the village of Redfield, had sent to him from Ellwanger & Barry a bill of trees among which was a cherry tree that was planted in his garden. A few years later, or to be precise, twenty-four years ago the present spring, he gave Mr. H. among other things nine small sprouts growing under the tree, which grew so closely together that to use Mr. H's expression, "it looked as though a hole had been punched in the ground and nine seeds put in." These he planted in a row near his house in rather uncongenial soil, low and too moist, but the nine trees are standing to-day, not only alive but in good healthy condition, and have borne almost continuously good crops of fruit. Mr. Wragg procured a number of the young and sent them for trial to Prof. Budd, of the State Agricultural College, and to others in Northern Iowa, Minnesota, Wisconsin, Illinois and Canada. In every case heard from they have proved hardy, the tree is a vigorous grower, with open spreading top like Early Richmond, but with the dark colored bark of English Morello. The leaf is large, thick and firm in texture, blooms late. The fruit from medium to quite large in size, liver colored, and with colored juice. Seeds small, stem rather long. It is unsurpassed for culinary use, but rather too acid to be a favorite when eaten from the tree unless quite ripe. The young trees first distributed by Mr. Wragg have borne fruit for several years, and have given general satisfaction as regards hardiness of tree and fruit. Many of the cherries the past year measured $2\frac{7}{8}$ inches from trees that bore from eight to twelve quarts of fruit.

VIBURNUM PLICATUM.

Subject o: Illlustration.

THIS is one of a large class of hardy deciduous flowering shrubs, amongst which is the common and well known Snowball so conspicuous about the last of May and first of June and to be seen in every dooryard. *Plicatum*, which we illustrate in this issue is much more desirable, is of moderate growth, with handsome plicated foliage, and globular heads of pure white flowers. All who love the old-fashioned Snowball, and do not have this variety, should get it at once, as it surpasses the old favorite. We are indebted to Japan for this valuable addition to hardy flowering shrubs hence it is beginning to be known as the "Japanese Snowball."

PRUNUS PISSARDII.

Subject of Illustration.

WE have before referred to this striking object of the lawn or shrubbery, which is now attracting much attention on account of the contrast between it and trees in general. We know of nothing which retains its color so well under the scorching sun of our summers and which seems so well adapted to this climate. We, ourselves, have never seen the fruit, but learn from reliable sources that it has fruited here, and bears a small oval plum, deep red, or purple, even when young, and when ripe quite rich and sugary. The variety is perfectly hardy and is well adapted for planting near to or amongst trees of variegated foliage.

We are now making the engravings for, and shall shortly publish. some seventy-five additional varieties to our already long list of colored plates. We have many new things in store for the readers of this journal, and it is the publishers' intention of inserting some beautiful designs in colors, not strictly belonging to horticulture. Just enough to make it a little more interesting generally.

MOORE'S DIAMOND.

Mr. Jas. F. Le Clare, who first undertook the dissemination of this grape, has succeeded in organizing a stock company for the propagation and sale of the plants of this now popular grape. We still think it is deserving of extensive cultivation, and will not disappoint those who plant it.

JAPANESE GRAFTING.

I mail you to-day a sample of Japanese style of grafting. You will see, Mr. Editor, that the graft is a combination of a cutting and a graft; the scion, which is partly in the ground, is kept alive until sap circulation is established. I find it a much easier and a surer graft than either cleft, whip or splice grafting. The idea is not original with me. I discovered it among my magnolias, which were imported from Japan. You may give a description of it in your valuable paper for the benefit of your readers; but what would still be better would be an illustration of it taken apart and together. Respectfully, J. L. NORMAND.

The graft, as stated, came to hand, and is a combination of graft and cutting. The cutting is some six to eight inches long, spliced in the ordinary way of tongue grafting, a little above the center of the cutting, thus allowing the bottom of the cutting to be inserted as low as the bottom of the root, one helping to support the other. Seems to us this would be just the thing for nut-bearing trees.

MIAMI STRAWBERRY.

Mr. J. D. Kruschke, the originator of this variety, makes the following offer: "To anyone who will produce a strawberry as late as the Miama, and excel it in one instance, equalling it in all others, I will give $50.00." This seems to be a fair offer and no doubt made in good faith. We notice this variety seems to be gaining in popularity. Have lately completed a fine colored plate of the above.

WHERE THE PEPPERMINT IS GROWN.—Wayne County, in this State, a few miles east of Rochester, has long been celebrated for its extensive fields of this herb, from which is distilled the oil of commerce. Mr. C. H. Perkins, of Newark, who has long been engaged in this business, informed us a few days since that the total yield in the whole world is now about ninety thousand pounds per year, and fully three parts of this, or over sixty thousand pounds, is produced in Wayne County. From a large and surrounding section it is brought into Newark and put up into ten and twenty-pound cans, hermetically sealed and packed into cases and sent all over the world; commencing usually in August and lasting until the following May.

PRUNUS PISSARDII.

HARDY SHRUBS—LONICERAS.

THE several species or varieties of Loniceras or as they are more popularly known under the familiar name of Honeysuckle, form when taken together, a very valuable and interesting group of hardy deciduous shrubs and vines belonging to the natural order *Cupufoliacea*.

The genus Lonicera is rather an extensive one and may be divided into two distinct classes, viz., those of a climbing or twining habit, and those of a shrubby character, and in this paper I propose to treat of the shrubby varieties only, and to leave the others for future consideration. This latter class is popularly known as the tree Tartarian or Bush Honeysuckle, and may be described as being a group of deciduous shrubs growing from eight to twelve feet in height, some varieties being dwarfer and of a more spreading habit; all are, however, of strong robust growth, having small-sized, ovate, cordate, bright green leaves, and producing their small but pretty sweet-scented pink or white flowers in the greatest profusion during the months of may and June.

When well grown and properly cared for the Bush Honeysuckles are entitled to the front rank among ornamental shrubs on account of the delicacy of their foliage, the pure colors of their delicately perfumed flowers, the little care and attention required to grow them to perfection, and last but not least their perfect freedom from all insect pests. The flowers are succeeded in the autumn by red, blue or yellow berries which are quite ornamental, and the leaves are retained until quite late in the fall.

When it is desired to grow them to perfection they should be given a deep, well enriched soil and ample space to properly develop themselves. Grass and weeds should not be permitted to grow around the plants while small. If possible let them be well mulched with littery manure every autumn.

The Bush Honeysuckles require but little pruning—only enough to secure health and vigor—trim only enough to keep the plants in good shape; thin out the old growth occasionally, and remove the root sprouts as they appear. Whatever trimming is required it should be done as soon as flowering ceases. The following are the most distinct and desirable varieties:

Lonicera Tartarica, (Red Tartarian Honeysuckle.) A native of Russia, growing from ten to fifteen feet in height. It blooms during the month of May or June and its pure pink flowers are delightfully but delicately perfumed. This is a very strong growing and desirable species.

Lonicera Tartarica Alba, (White Tartarian Honeysuckle.) This variety is stronger in growth than the preceding and has much larger but paler foliage. Its sweet scented, pure white flowers which are produced during the months of may and June are succeeded by yellow berries.

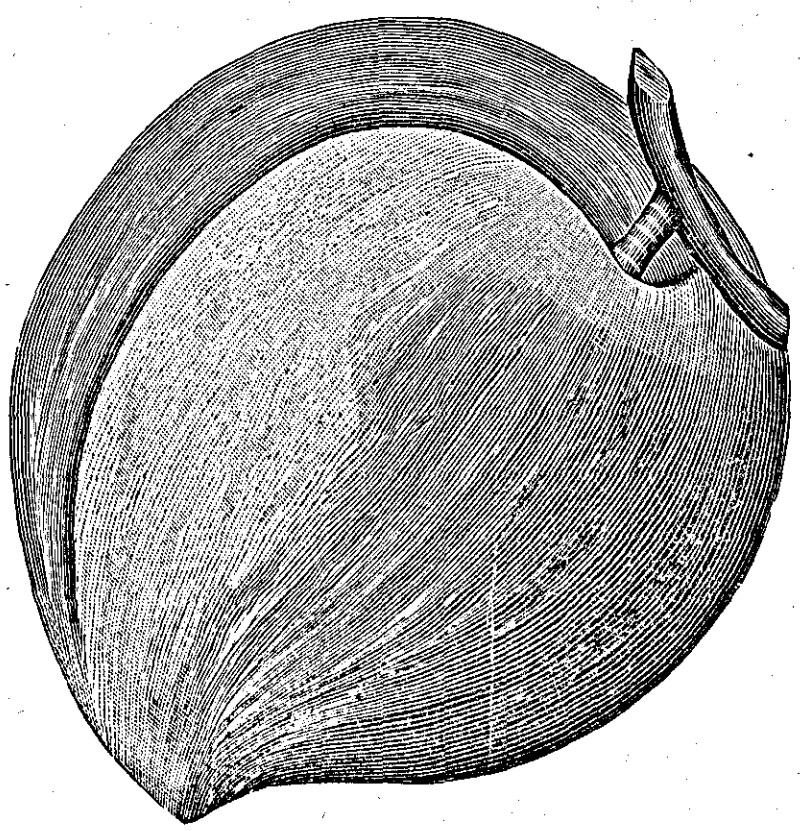
Lonicera Tartarica Fragrantissima, (The fragrant tree Honeysuckle) is a variety of low spreading growth attaining a height of from four to six feet. It is almost evergreen in foliage which is of a deep green color and much larger than the other varieties. Flowers small, not very abundant, but exceedingly fragrant; they are produced early in the spring before the leaves appear.

Lonicera Standishi, (or Ligustrina) is a variety from China having large leaves and light pink fragrant flowers which are produced early in the spring before the leaves appear.

Lonicera Cemba, (The Blue Berried Honeysuckle.) This is a small upright growing shrub attaining a height of from three to four feet and producing its greenish yellow inconspicuous flowers in June. These are suceeeded by bright berries. The foliage is of a bright green color—an old but rare species.

Lanicera Hylosteum, (The English Fly Honeysuckle) bears abundantly; small very fragrant flowers before the leaves are produced, and is deserving of more attention than it at present receives.

CHARLES E. PARNELL.



EARLY ARLINGTON PEACH.

THIS is from a photograph of a peach originating at Orlando, Fla., on the premises of the late A. J. Bidwell, from seed of a Peen-to planted during the winter of 1882. The following description was furnished by Mr. James Mott, who has for some time, had the management of Mr. Bidwell's nursery: Size, above the average; skin thin, nearly destitute of hair or fuzz; color, a light carmine on a pale ground; flavor vinous, with none of the bitterness of the parent, juicy and sweet; a half cling. Tree vigorous, very productive. The past two seasons it has borne full crops where Peen-tos were nearly a failure on some ground. Season in Florida from May 10th to 20th.

APPLE—PARAGON.

THE original tree of this variety is still growing and bearing on the farm of the late Maj. Rankin Toole, Fayetteville, Tenn. Comparing it with the *Wine Sap* we are satisfied that it is much superior. The tree is a more vigorous grower, the color of the wood a shade darker, and the size of the leaf fully double that of the *Wine Sap*. Grown under the same conditions, it inclines to one side, showing its *Wine Sap* origin. The apple is about the same shape as a well developed *Wine Sap*, but fully one-third to one-half larger. Color dark red, flesh firm, flavor mild sub-acid. Specimens we had sent us lately from Mr. Smith, Tenn., measured fully twelve inches in circumference, and were about as handsome as anything we have ever seen. In some sections of the south-west this is known as *Black Twig*.

POSSIBILITIES OF THE NEAR FUTURE.

A CONTEMPORARY indulges in the following suppositions in regard to what we may be likely to witness in the way of progress in the near future: "A great deal has been accomplished within the last century in the way of invention, but we fully believe that more will be accomplished within the next decade. Among what we thoroughly believe to be within the possibilities of the future is a substance that will insulate magnetism. That would mean perpetual motion. We believe that ocean ships will be propelled by the motion of the ocean, and as rapidly as they are now propelled. There is in the ocean unlimited power. A boat weighing 5000 tons is tossed about like a nutshell. This power will one day be practically applied. We believe that balloons will be made to travel very rapidly from one point to another where the wind is regular, as upon the coast. We believe that cars will come across the continent at the rate of a mile a minute. We believe that men will successfully navigate the air. We believe that private residences will within a few years be lighted with electricity as cheaply as they are now lighted with coal oil. We believe that a telephone will be invented that will work short distances, say 50 miles, without connecting wires. We don't claim to be a crank either.

The Western Rural, a journal for the farmer, published at Chicago by Milton George, a practical Western farmer, is one of the largest farm, family and reform journals published in the United States. It has proficiently edited departments for every branch of farming, and is a faithful record of every step of progress that is being made in agriculture. It indulges in no theories, but deals only in plain, practical facts and methods that will aid the farmer in making the farm more profitable. It is a paper for the farmer, his wife and children, for the man who believes in justice between class and class and for all who believe that a pure, practical farm literature and advocate of farmers' rights should be encourged. Write Milton George, editor and publisher, Chicago, Ill., for sample copy.

WEALTHY

HORTICULTURAL ART Journal.

Under the editorial management of T. B. JENKINS, Horticulturist.

March, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 3.

PLANT TREES!

Plant trees, my friend, plant trees to-day
Beside your cottage doors,
And let their leafy shadows play
With sunshine on your floors.

Plant trees, that birds may build their nests
In bowers that you have made,
And children play and tire and rest
Beneath their grateful shade.

Let oaks and lindens round your field
Like stately monarchs grow;
With iron arms your home they'll shield
'Gainst wintry winds and snow.

Let hemlock, spruce, and fragrant fir
And hardy, graceful larch
Stand guard against the gales that stir
The boisterous days of March.

Let locust scent the breath of May,
Cool April clothe the prune,
And chestnut blossoms, blithe and gay,
Wave in the air of June.

Plant trees along each thoroughfare,
And let the branches meet
Above the country roads and o'er
The city's dusty street.

Let willows fringe the sparkling stream
And poplars line the lane,
And let the maple's silver gleam
Be seen upon the plain.

Let elm and ash their shadows fling
Across the murmuring rills,
And let the pine's Æolian strings
Make music on the hills.

Plant trees and something better leave
Your daughters and your sons
Than 'twere to have your name engraved
On marble shaft or bronze.

HARDY HERBACEOUS PLANTS.

BY GEORGE ELLWANGER.

Read at meeting of Western N. Y. Horticultural Society.

Although hardy flowers do not come under the title of ornamental shrubs, they are many of them, after all, ornamental shrubs in miniature, and some of them of larger habit than not a few of the arborescent growths that adorn the garden. Certainly no ground, however limited in extent, can do without some hardy perennials. A place or garden deprived of hardy flowers is a house without pictures, a landscape without sun. Both ornamental shrubs and hardy flowers are required for the outward adornment of the home; neither can be dispensed with. But hardy flowers, somehow, are often considered as difficult to grow, and are thought to require the constant attendance of a gar-

dener. Where the grounds are of considerable extent and the collection is large, the latter opinion may hold good. But for places of ordinary extent where hardy plants are grown the care required is comparatively slight.

Some care they assuredly require—nothing that is worth having takes care of itself. Numerous species there are which call for special treatment. Many foreign plants and some natives are always difficult to grow. Some are capricious as to soil and shade; some demand an especial climate; some are too tender to successfully withstand our winters. On the other hand a large number of the most desirable hardy flowers are very easily grown, and scarcely need further attention after they once become established.

Most good garden soils will grow good garden flowers, and with proper soil to start with, an annual manuring, an occasional stirring up of the surface, and attention to watering during the extreme dry weather, the flowers will seldom fail to perform their part. Some strong-growing subjects there are which will prove exhaustive to the soil, and these may require future transplanting or dividing. Some species require renewal through fresh seedlings or cuttings. A large majority of hardy flowers, however, as I have stated, continue to increase in beauty year by year.

By herbaceous plants is meant such plants as die down in the autumn and renew themselves in the spring. To mention and describe all desirable herbaceous plants, even briefly, would require a large volume. The space accorded me is limited; and I, therefore, in this instance, merely refer briefly to a few species, supplementing these with a list of some among the many others which may be cultivated to advantage.

Perhaps the most satisfactory manner of growing hardy flowers is in borders, by themselves, where the roots of trees and shrubs may not interfere. Some of the more robust species, like the Pæonies, the large Japanese Anemones, etc., may find a place in the foreground of the shrubbery. The lawn should not be broken for plants, unless it be large enough to admit of a bed or two of really desirable flowers, or a group of the large ornamental grasses, like the hardy Japanese Eulalias. In planting it is well to plant thickly, so that bare places may not obtrude. So, also, spring and summer-blooming flowers should be alternated, in order that the borders may at no season suggest a dearth of bloom in large individual portions. Monotonous planting will be avoided, grouping will be carried out here and there, and contrasts of color will be carefully studied. Both the tree and herbaceous Pæonias will find a place in the shrubbery and flower-borders, and Roses, Lilies, Larkspurs, Phloxes, Columbines, Campanulas, Irises, Hemerocallis, Poppies, Funkias, Heliantheæ, and a host of other hardy flowers will extend the flowering season. Subjects like the Azalea, which require special treatment, and are always more or less affected by our rigorous climate, I have not included.

Among the medium and tall-growing plants I would specify: Aquilegia Chrysantha, Aquilegia Coerulea, many of the Campanulas, Clematis erecta, many of the Delphiniums or Larkspurs, Funkia grandiflora, Funkia Sieboldiana, Funkia Japonica, the red and white Valerian, the red and white Dictamnus, Coreopsis lanceolata, Papaver Orientale, Papaver Orientale bracteatum, Hemerocallis flava, Monarda didyma, Lathyrus grandiflorus, many of the German and Japanese Iris, Hesperis matronalis fl. albo pl., Platycodon grandiflorum, Helianthus multiflorus fl. pl., Helianthus orgyalis, Helianthus Doronicoides, Helianthus rigidus, Helianthus decapetalus, Spiræa aruncus, Spiræa filipendula, Spiræa venusta, Spiræa ulmaria fl. pl., Statice latifolia, Lilium candidum, Lilium excelsum, Lilium tigrinum, Lilium Chalcedonicum, Lilium umbellatum, Lilium Japonicum longiflorum, many of the Pyrethrums, the two Japanese Anemones, Lychnis Chalcedonica, Echinacea intermedia, Centaurea glassifolia, Silphium perfoliatum, Hyacinthus candicans, Chrysanthemum maximum.

Subjects like the Silphium and the taller-growing Sunflowers or Helintheæ, are more suitable for the shrubbery, or placed in the background. Among smaller plants, Violets, Cowslips and Primroses are best placed in beds by themselves, where they may receive

SECKEL.

partial shade. The Primrose family is especially adapted for the rock-garden where the plants form dense cushions of bloom. Indeed, many beautiful dwarf plants may be grown to the best advantage in the rock-garden; but not a few may be appropriately placed in the foreground of the flower-border. All of the following are charming small hardy flowers:

Adonis vernalis, Silene alpestris, Saxifraga cordifolia, Saxifraga cuneifolia, Saxifraga Schmidtii, Sanguinaria canadensis, Trillium grandiflorum, Ranunculus bulbosus, Phlox amoena, Phlox procumbens, Phlox subulata, Phlox subulata alba, Locus corniculatus, Iberis correæfolia, Iberis corifolia, Iberis sempervirens, Iberis Gibraltarica, Iberis jucunda, Hepatica triloba, Cypripedium spectabile, Cypripedium pubescens, Doronicum caucassicum, Convallaria majalis, Astilbe Japonica, Anthericum liliastrum, Saponaria ocymoides, Gold and Silver leaved Thyme, Daffodils in variety.

Among the ornamental grasses should be included Eulalila Japonica, Eulalia Japonica Zebrina, Eulalia Japonica Zebrina variegata, Erianthus Ravennae, Aira fol. var., and the variegated Arundo. The Rose would require a separate paper to do justice to its manifold form and varieties. I have mentioned but a very few of the very many desirable hardy herbaceous plants; but enough to render any garden beautiful from early spring until late autumn. Little care, indeed, they call for—these nurslings of nature—compared with the beauty they bring. Year by year they renew their youth and draw new loveliness from the mould of spring.

AN ORIENTAL FLOWER.

BY KATE V. AUSTIN.

The greensward's border, and the orchard's air,
Unless some Tulip-cheek be there,
Can charm not.
—*Hafiz.*

We remember reading once, a story in which the souls of a number of women, famous in fiction and history, had transmigrated into flowers, these flowers expressing by their color and contour the characteristics of mind and person that had belonged to them before transmigration had taken place. In this group was Queen Elizabeth of England, who was described as "a flame-colored hawk's-bill tulip, that directly assumed a ruff and an aquiline nose."

The soul of the stately and haughty Elizabeth, certainly found its type in the tulip, this regal flower of the Levant.

Deriving its name from the resemblance of the flower to a turban, the tulip wears its insignia of office as proudly as ever did Turkish sultan. Indeed, it might be said to wear its corolla of splendid colors, with twice the pride than ever *tulbend* of sultan was worn, for as the head-dress of the padishah contains the three heron's feathers, as a sign of sovereignty, so the turban of the tulip contains double that number in its stamens, which royally rear themselves as so many feathers.

Queen of flowers, as the rose is acknowledged to be, yet we read how at one time the tulip held such sway in the commercial circles of Holland and Belgium, as actually to amount to a reign of terror. A sultan in very truth, over all other flowers, with every Dutch and Belgian gardener converted into a sort of a *tulbend aga*, to take care of it; and a sultan with the Hollanders it yet remains, but fortunately, however, all the miseries and disasters that once attended it are dead these two centuries.

It is said that nothing can equal the magnificence of the gardens in Holland at the time when they are covered with innumerable varieties of this turbaned plant, these varieties being often disposed in a regular figure, according to their size and the different colors.

In its wild state, we are told that the color of the flowers is uniform, often yellow or reddish, and sometimes brownish, but cultivation having given them nearly every color and shade except black, the tulip with its haughtiness of mien, and turbans enough to suit the most capricious of monarchs, reigns the Haroun Alrashid of springtime flowers.

One might almost say that the poetry of Moore's "Lalla Rookh," or "Tulip Cheek," finds itself repeated on every petal of the tulip, particularly on the petals of the red tulip, and the variegated one, whose rich warm hues are expressive in their flower language of words of love, and of eyes that are beautiful.

From Moore's oriental poem to an oriental poet is an easy transition. The words of Hafiz are dyed with the colors of the tulip, for on nearly every page this flower flashes forth its brilliant petals—a true synonym of Shiraz's poet.

Montgomery, in his poem "On Planting a Tulip-Root," speaks of a curious fact or fancy:

"'Tis said that microscopic power
Might through his swaddling folds descry
The infant image of the flower,
Too exquisite to meet the eye."

But whether this is reality or not, the time eventually comes when the tulip is visible to all eyes, and it is at such a time that all lovers of the flower exclaim: Blessed be the memory of Conrad Gesner!

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., 1889.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, *Pres.*, Rockford, Ills.; A. McCullough, *Sec.*, Cincinnati, O. Next annual meeting in Washington, D. C.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, Chicago, Ills.; June, 1889.

WE shall have more to say in our next upon the proposed tariff, or duty, to be imposed upon nursery productions coming into this country.

WE are compelled to send out this number with only three colored plates, but will make up for this deficiency in a following issue.

WE had expected, from a visitor at Ocala, Florida, a full report of the biennial session of the American Pomological Society held there on the 22d of February, but are disappointed. We learn however from another source, that it was a successful meeting, members representing twenty-two States were in attendance, the finances were represented as in a very satisfactory condition, with an increased membership. The old officers were re-elected and the next place of meeting left with the Executive Committee with a decided tendency towards Chicago, where all the strong and successful societies meet. The display of fruits was very large and fine. Four gold, and seven silver medals were awarded. Members of the Society were kindly treated and free transportation offered to any part of the State. We hope to be able to refer to this again.

ORLANDO, Fla., Feb. 17, 1889.

DEAR SIR:

The February number of your JOURNAL contains a cut of the *Early Arlington Peach.*

The paragraph accompanying it says the following description was furnished by James Mott, who has for some time had the management of Mr. Bidwell's nursery. This is an error which I wish corrected. I have never had the management of Mr. Bidwell's nursery. I have only had charge of disseminating his new peaches. Truly,

JAMES MOTT.

SELLING IN CANADA.

The bill exacting bonds from American nurserymen making sales of nursery stock in Canada seems likely to be abandoned by the Canadians upon the assurance of our representatives at Washington that the duties which the intended bill now before Congress would enforce, should be given up. So it seems that the free exchange, in regard to trees and plants, between this country and Canada will be continued.

DEAR SIR :

I am pleased to note your article on "*Prunus Pissardii*" in last issue of ART JOURNAL. More can be said in favor of this *most elegant* foliage tree. Also of its products. From a small tree about three feet high when set, in the spring of 1886, we gathered a number of fine specimens Aug. 1st, last, measuring 1 to 1¼ inches through. Form quite round and color a most beautiful red. Had pronounced the fruit quite eatable. We supposed the fruit *worthless*, so made no effort to care for it. Tree set full of fruit and think would have carried and ripened a large part of it (a peck at least) had it not stood in an unfortunate place, at the end of a row of young nursery stock, and during times of cultivation was rubbed against and barked up more or less, and as a consequence the fruit was nearly all knocked off. Of the specimens gathered we noticed no imprint of curculio. If it can be depended on to fruit to any considerable extent, we think the earliness of its ripening may sell it. We would not advise planting it for fruit purposes until further experiments are made. Its effects as an ornamental tree will not be easily surpassed.

Yours truly,

H. S. WILEY.

SOME SCIENTIFIC TINKERING.

Editor Hort. Art Journal :

I am an admirer of the indefatigable work of men and women of science. Their handiwork can be seen all over our civilization, in short, without it there would be no civilization. Science has made it possible for us to enjoy a thousand things of which we would be ignorant without it. But, sometimes science plays a part on the other side of the ledger ; for instance : For years we have been told that the plum curculio had no digestive organs, no mouth or mandible to feed with, that it seemed to exist only until it had performed the mission of laying eggs, when it expires. We were gravely told that poison would not affect it as it could not imbibe it. The consequence was that no effort was made to feed the "little Turk" to death. But in spite of the microscope and the words of wisdom from the sages of the east some grangers, out of sheer despair *did* dose their plum trees with Paris Green, London Purple, &c., and from some reason or other they got plums, but of course, the poison only frightened them away &c. But now, before me is a paper by John Henry Comstock, summarizing experiments by A. J. Cook, Prof. Forbes, C. M. Weed and himself, the meat in the shell being that curculios confined with green plums and leaves, *cut holes* in them and *ate* them, and the *scientific* conclusion is that the curculio "is a voracious feeder." I hope now we will be able to find how he manages to feed without mandibles, and digestive organs.

Yours

J. D. KRUSCHKE.

PENN. HORTICULTURAL ASSOCIATION.

A correspondent writes that the annual meeting of the State Horticultural Association of Pennsylvania, held Jan. 16 and 17 in Lewistown, Pa., was well attended and the proceedings were of great interest. There was a fine display of apples and dried and evaporated fruits. Thirty-five new members were secured from among the fruit growers of the immediate vicinity. Most of the old members renewed, one county (Berks) presenting a list of fifty-one names. Every county in the state is represented in the association.

Calvin Cooper, of Lancaster county, presided. He served faithfully as president for a number of years, but, having declined a re-election, Henry C. Snavely, of Lebanon, a successful fruit-grower, was chosen his successor. E. B. Engle, of Waynesboro, who has served as secretary very acceptably for many years, was re-elected, as were the other officers of the association. The reports and papers were considered at length. "Facts and Figures on Cold Storage," by Col. McFarland, of Harrisburg, was one of the most important papers of the meeting.

There were several disappointments. Prof. Buckhout, of the State College, and Prof. Heiges, of Cumberland county, who were announced on the program, could not be present. The chairman of the General Fruit Committee, Cyrus T. Fox, of Reading, was also unavoidably absent. The latter's report, which was read, covers the pomological and horticultural operations of the past

year in the sixty-seven counties of the state, and has appeared in printed form. The year was exceptionably favorable for the different fruits, especially apples and grapes. The yield of pears, however, was light. Peaches succeeded well in some localities. There was a large crop of plums in the southwestern counties. There was a fair crop of cherries, but wet weather during the ripening period caused them to rot. Greater attention is being paid to quince culture. The raising of small fruits is proving profitable. Renewed interest is being manifested in horticultural adornment, and the ornamentation of grounds and door-yards is on the increase. The report concludes with observations in regard to the enemies of fruit culture. "Peach yellows" is pronounced a germ disease, communicable by inoculation. Eradication and destruction of infected trees seems to be the only remedy. Grape rot can be controlled by spraying the vines with the Bordeaux mixture. Mifflintown, Pa., was selected as the next place of meeting.

"WHAT'S IN A NAME."

JUDGE Barclay recently rendered an interesting and important decision regarding firm names, similarity of names and infringements. The case was that of the Plant seed Company against the Michel Plant and Seed Company, in which the plaintiff asked that the defendant be enjoined from the use of their present name, claiming it was injurious to their present business and led not over-observing customers to purchase from the defendant by mistake. In his decision Judge Barclay noted that the plaintiff was the first incorporated, but that the defendant was in the same business and could not incorporate without using his name and the nature of his business. Careful customers noted the difference in name in the character "&" between "plant" and "seed," but many did not. Hereafter the defendant will be compelled to use the word "and" spelled out in full in letters as large as used in the whole name on all matter on which the name of the firm is printed.

JONES SEEDLING.

Origin, Williamson county, Tenn. Tree a moderate grower of *Limbertwig* habit, but healthy and hardy, blooms late and bears very early and regularly. Fruit large and well shaped, often angular. Color very light red on yellow ground. Very firm and heavy, and keeps well till April, retaining its flavor and keeping better than any large apple we have. Flavor good, much better than Red Limbertwig and Ben Davis. Introduced by Wm. Hy. Smith, Leiper's Fork, Tenn.

WHERE COLORS COME FROM.

A WELL known artist gives some curious information regarding the sources from which the colors one finds in a paint box are derived. Every quarter of the globe is ransacked for the material—animal, vegetable and mineral—employed in their manufacture. From the cochineal insects are obtained the gorgeous carmine, as well as the crimson, scarlet and purple lakes. Sepia is the inky fluid discharged by the cuttle-fish to render the water opaque for its concealment when attacked. India yellow is from the camel. Ivory black and bone black are made out of ivory chips. The exquisite Prussian blue is got by fusing horses' hoofs and other animal matter with impure potassium carbonate. It was discovered by an accident. In the vegetable kingdom are included the lakes, derived from roots, barks and gums. Blue-black is from the the charcoal of the vinestalk. Lamp-black is soot from certain resinous substances. From the madder plant, which grows in Hindoostan, is manufactured turkey red. Gamboge comes from the yellow sap of a tree which the natives of Siam catch in cocoanut shells. Raw sienna is the natural earth from the neighborhood of Sienna, Italy. When burned it is burnt sienna. Raw umber is an earth from Umbria, and is also burned. To these vegetable pigments may probably be added India ink, which is said to be made from burnt camphor. The Chinese, who alone produce it, will not reveal the secret of its composition. Mastic—the base of the varnish, so called—is from the gum of the mastic tree, indigenous to the Grecian Archipelego. Bistre is the soot of wood ashes.

STECHER LITH CO. ROCH N.Y.

WHITE MOSS.

APPLE—WEALTHY.

Subject of Illustration.

VERY few there are in the Pomological world who have not heard of Mr. P. M. Gideon, of Excelsior, Minnesota, now connected with the experimental farm in that state, for few have done more towards introducing and perfecting a race of hardy fruits in the Northwest. And amongst the most valuable of his productions stands the Wealthy Apple, which we illustrate in this issue. It is said that he gathered a quantity of Crab seed in Maine, and, sowing it in Minnesota, produced the now famous apple of which we write.

During the past ten or fifteen years, this variety has been extensively planted, and has given general satisfaction. The colored plate fairly represents the variety, and is described as medium sized oblate, or roundish oblate, whitish yellow ground, shaded with deep rich crimson in the sun; obscure broken stripes and mottlings in the shade, sometimes entirely covered with crimson. Flesh white, fine grained, stained with red, tender, juicy, sub-acid, has a small core, and may be ranked as very good. In season from midwinter to last of February. The tree is a fair grower, with handsome foliage and is considered one of the very hardy varieties.

GOLDEN PROLIFIC.

PEAR—SECKEL.

Subject of Illustration.

NEARLY every one knows and is acquainted with this fine pear, for it is more widely grown and cultivated than any other variety, unless it is the Bartlett, and is justly pronounced the richest pear grown. We do not always see the Seckel in its highest possible condition, for the tree is apt to overbear, and thus the fruit be small and without color and flavor. Even in such a state it is good, but nothing compared to those grown on trees that are in good condition and liberally supplied with some enriching fertilizer. The fruit should be always thinned to produce fine, large, handsome specimens.

The history of this celebrated American pear is quite interesting, and is vouched for by the venerable Bishop White: Many years ago, when the Bishop was a boy, there was a well-known sportsman and cattle dealer in Philadelphia, familiarly known as "Dutch Jacob." Every season, early in the autumn, on returning from his shooting excursions, Dutch Jacob regaled his neighbors with pears of an unusually delicious flavor, the secret of whose place of growth, however, he would never satisfy their curiosity by divulging. At length the "Holland Land Company," owning a considerable tract

south of the city, disposed of it in lots and Dutch Jacob then secured the ground on which his favorite pear tree stood, a strip of land near the Delaware. Not long afterwards it became the property of Mr. Seckel, who introduced this remarkable fruit to public notice and it received his name. The property was afterwards added to the estate of the late Stephen Girard, and pears "from the original tree" may still be seen at our fall exhibitions of fruits. It is entirely distinct from any known variety, and is regarded as the standard of excellence in the pear.

ROSE—WHITE MOSS.

Subject of Illustration.

This belongs to a class which is a favorite with every one, for who is there that does not love the beautiful Moss Rose? and as is well known no home-made bouquet is complete without Moss Rose buds, so that we may safely say it is a general favorite. As a class, Moss Roses need high culture, and repay for the careful attention in the increased size and beauty of their buds and flowers. On the whole they are subject more or less to mildew on the foliage, which may be kept in check by judicious pruning and thinning of the branches. The varieties of Moss Roses are not near so numerous as some others, but there are enough in most of the nursery catalogues of the present day to make a very fine assortment.

THE EARTH SEEN FROM THE MOON.

La Science Illustre says that as seen from the moon, which gravitates around us at the mean distance of 240,000 miles, the earth appears four times greater in diameter and thirteen times wider in surface, and, consequently, more luminous than our satellite does to us. Immovable in the dark depths of celestial space, she soars with majesty, and shows phases analogous to those exhibited in the moon, but in inverse order. When the sun covers with his rays the terrestrial hemisphere that faces the moon, the latter is new, and the full earth is shining in the sky; while at the moment of the full moon it is the non illumed half of our globe that is turned toward this neighboring world; the earth is then new. To the first lunar quarter corresponds the last terrestrial quarter, and to the first quarter of the earth, the last quarter of the moon. The lunar day, the period during which our satellite successively presents every portion of her surface to the solar rays, and consequently makes one revolution upon her axis, equals twenty-nine days, twelve hours and forty-one minutes. During this long diurnal period the earth offers its first quarter at sunset and its last at sunrise. So the "earth-light" contributes much more to the illumination of the lunar nights than the moonlight does to the illuminating of our nights, and the selenites have truly more reason for believing that the earth exists for the sole purpose of dissipating the darkness of their nights than we have for considering the moon as created to be the torch of terrestrial nights. Our planet is afterward visible, amid the stars, and despite the sun's presence, under the form of a large crescent, which gradually diminishes in width until it entirely disappears at the moment of the new earth. The daily rotation of the earth upon its axis forms a very attractive spectacle. Varied spots mark our continents and seas, over which move vast bands of clouds. Two white caps cover the poles. The oceans have a bluish green color and appear darker than the land. The contour of the disk, more luminous than the inner part, is slightly reddish under the influence of atmospheric refraction. Europe and Africa, Asia and the Indian Sea, the Pacific, the two Americas, and the Atlantic defile in turn every twenty-four hours. The earth thus forms a marvelous celestial clock that may be consulted by but a glance at the heavens, and to which the succession of the terrestrial phases adds another base for the measurement of time. In the course of the long lunar night of 354 hours, which forms half of the diurnal period and succeeds daylight, the earth soars majestically in the heavens, undergoing her phases from the first to the last quarter, and at midnight shines with an intense light fourteen times stronger than that of the full moon. With so strong a light do we illuminate that part of our satellite which is dark at this epoch that it becomes visible from here, owing to the reflection of the terrestrial rays from its surface.

RED FLOWERING DOGWOOD.

HORTICULTURAL ART Journal.

April, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. JENKINS.
Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 4.

SPRING.

"Wake up, ye fields, ye sloping hills,
Ye meadows and ye lazy rills.
Ye've lain too long in slumber drear—
Wake up, I say, for spring is here.

RED-FLOWERING DOGWOOD.

(CORNUS FLORIDA FLORE RUBRO.)

Subject of Illustration.

IN walking through the woods in Spring when the White Dogwoods are in bloom, we have often seen flowers that had quite a tinge of pink running through them, though not sufficient to make them particularly desirable. When this new red flowered variety was first introduced, many persons thought it was but one of these light pink forms, that was perhaps a trifle more marked than some of the wild white ones. Being anxious to learn just what merit it possessed, through the kindness of the originators, we secured some flowers of it, and upon opening the box were agreeably surprised to find them of the most beautiful rosy pink color, somewhat bordering on red. A growing plant before us also showed the leaves to have a rich velvety appearance, and to be darker than the white variety. So much so, that it was quite easy to distinguish them, when growing side by side. The tree makes a close upright growth, another characteristic of its own.

Whether the bunches of scarlet berries will follow after the flowers have dropped, we are unable to say, but we see no reason to the contrary.

That this is undoubtedly a grand acquisition to the list of ornamental flowering trees, no one will doubt after seeing it in bloom. Can anyone imagine a more beautiful or unique group on the lawn, than the Red Flowered, the White Flowered and the Weeping Dogwood. THOMAS MEEHAN, JR.

PENNSYLVANIA HORTICULTURAL SOCIETY held its annual spring exhibition April 2d to 5th inst., and, judging from the reports we get, it must have been the largest and best held by this society at this season of the year. Large exhibitions of orchids were made by all the best growers, and the other plants and flowers shown were without end, and very fine. The great feature of the exhibition was the portable and complete greenhouse of Weatherhead's Sons, filled with plants by Craig & Brother.

PEARS FOR KANSAS.

PEARS are such desirable fruit that their cultivation will not be abandoned ; yet the tendency of most varieties is to blight, and the tardy, slow coming into bearing of some kinds, has deterred many, who need early returns from planting trees. Among the old varieties, we find in Kansas the B. de Anjou, Duchess de Angouleme, Sheldon and Seckel, are comparatively free from blight, and of very excellent quality. The Sheldon is slow coming into fruiting. Experience for the past six or eight years with Keiffer's Hybrid, Le Conte, Garber's Hybrid, Smith's Hybrid and Duchess Hybrid, and a purely American variety, the Early Harvest, has proved so far that they are worthy of more general cultivation by fruit growers, because of their healthy, strong, vigorous growth, freedom from blight, and early fruiting. They are all large showy fruit, bring high prices in the market, valuable for cooking, and for dessert at least good ; in these respects of blight, healthy and strong growers, early and constant bearing, they excel our best kinds of apples ; and this fact is worth considering by fruit growers.

The Le Conte pear in quality, nearly equals the best Bartlett, in size and productiveness it excels it, but the tree while young, grows so late that it does not stand the severe cold winters of the north. As the tree gets older it improves in this respect. It is not safe to plant largely much north of here.

A. H. GRIESA.

CANNING AND EVAPORATING FRUIT.

DURING the last meeting of the Western N. Y. Horticultural Society. Mr. S. G. Curtice read a paper on this rapidly extending industry, which began in a small way near this city, some thirty years ago. Now, however, the distant Western mining camps, Seaside resorts and households, are supplied and so successfully, as to compete with green fruits and vegetables in their season. No accurate data is at hand as to the amount of business done by the canneries of the country, but the estimates are enormous. The firm of which he is a member paid in 1888, $236,000 for fruits, $70,500 for tin, $14,500 for sugar, and $68,000 for labor. Eighty dollars had been paid for the fruit of one single cherry tree in a season. Within forty miles of the City of Rochester, there are nearly 2,000 fruit evaporators, besides many small dry houses on farms. Careful estimates show that 25,000,000 pounds of apples were evaporated, and the total dried product of all kinds of fruits amounted to 37,750,000 pounds, for which the producers received $1,485,000. More than 4,000,000 pounds of dried fruit was exported from this region last year, and Rochester supplies many of the distant markets in Australia.

ROCHESTER FRUIT FARM AND NURSERIES.

THESE are located just outside the city limits, on the road leading towards Pittsford, and have attained an enviable reputation, not only for the large quantities of fruits produced here, but for the fine quality and the care with which it is sent to market. About 70 acres are planted to apples, now 25 years old, and bearing heavy crops. 3,000 plum trees are just coming into bearing, while 2,000 pears and 2,000 quinces are in an advanced stage of growth. 30 to 40 acres are occupied with small fruits, such as currants, raspberries and gooseberries. It was on this farm that several of the now celebrated fruits were first noticed, and which are still partially held by the owners. We refer to the crossbred seedlings of Mr. Jacob Moore, viz: Brighton and Moore's Diamond Grapes, Moore's Ruby Currant and the Bartlett-Seckel Pear. All these are now of acknowledged reputation and worth, and were first noticed by Mr. Hooker, the senior member of the firm. Over 3,000 barrels of the last apple crop was exported by the firm. Much of the general crop finds its way into our city market and a part is evaporated on the farm. Hooker, Brown & Co. are largely engaged, through agents, in selling nursery stock at retail, and for this purpose employ a large force of canvassers. That they are to be commended is evident to all, for with their large and wide experience, ample means and accomodations they are surely able to serve their customers well.

STECHER LITH. CO. ROCH. N.Y.

ALEXANDER.

GOVERNMENT SEED DISTRIBUTION.

DURING the speech made by Mr. B. A. Enloe of Tennessee, Feb. 8th, 1889, on this abuse, he made the following remarks which are worthy of careful consideration :

MR. ENLOE. — If the gentleman desires to have the entire paragraph read I have no objection. But I offer this amendment, Mr. Chairman, with the object in view of trying to retire the United States Government from the wholesale seed business, and to try to retire the members of Congress from the retail seed business. I offered a similar amendment to the same paragraph of a similar bill in the first session of the Fiftieth Congress proposing to cut this abuse down then one half

This amendment now proposes to cut it up by the roots, and if I could succeed in getting the amendment adopted I should propose also to strike out that part of the bill which provides an appropriation of $8.400 for the pay of the superintendent and clerks in the seed division. In addition to that, I should also propose to go further and strike out the sum of $4.200 appropriated for printing seed-packets, labels, postal cards, circulars, etc. So that if the proposition shall be adopted the amount in the aggregate that would be saved would reach the sum of $12,600.

I know that this is a proposition that will not meet with the favor of many gentlemen on this floor, because it proposes to deprive them of the privilege of distributing seeds to their constituents. I understand that the object of the Government in establishing this bureau, or the object of Congress in making the first appropriation for the purchase of seeds, rather, was a very proper one. It contemplated the buying of new and valuable varieties of seeds and letting the Government take the risk and expense of making the experiments and tests to see whether they were adapted to our soil and climate, and thus save the farmers of the country that risk, in which way the appropriations for this purpose were designed to promote agriculture.

But, sir, we have departed very far from the original object in making the first appropriation. That appropriation was made in 1839, and the amount provided for the purchase of seeds and plants was the small sum of $1,000. Congress in 1851 increased the appropriation to $5,000 per annum. In 1862 the Bureau of Agriculture was established and the sum of $62,000 was appropriated for this purpose. It has thus continued steadily to grow in popularity with the members of Congress until to-day we are appropriating $100,000 annually for the purchase of seeds and for distributing them amongst our constituents. Congress, when it created the Bureau of Agriculture, declared the general designs and duties of the bureau to be :

To acquire and diffuse among the people of the United States useful information on subjects connected with agriculture in the most comprehensive sense of that word, and to procure and propagate and distribute among the people new and valuable seeds and plants.

So it will be seen that the original idea was that the bureau should propagate and distribute new and valuable seeds and plants, but it was not within the contemplation of Congress at that time to go to the seed growers and buy the same seeds that are sold everywhere by merchants and distribute them among the farmers.

While this system is perhaps a boon to some people in this country, and has the approval and support of a great many men who have become attached to it, especially members of Congress who send these seeds to their constituents for campaign purposes, yet it does seem to me that it has grown into such an abuse, and a moss covered abuse at that, that we can no longer permit it to pass the House in an appropriation bill without an effort to abolish it. The time has come when the object which was originally sought in purchasing seeds for distribution no longer furnishes a reason for such legislation.

It was an evil principle in the beginning, however much we may approve the purpose in view. Insignificant as the sum expended may appear, and small as the benefit received by the individual citizen who receives the seed is, still it is part and parcel of the legislation of a political school in this country which is steadily seeking to destoy self-reliance and to teach people to look to the Federal Treasury for gifts.

I can remember the good old days when the good women in the country homes carefully saved their own garden seeds every year and always had, not only enough for their own use, but some to give away to neighbors. It is not generally so any more. Some look to the Government for a supply and some look to the seed stores. A few of the more provident still pursue the wise plan of caring for small things and saving garden seeds at home.

Of the thousands of papers of seeds sent out by members with the request from the Bureau of Agriculture for reports of results, how many are ever heard from ? Instead of sending back reports to the Commissioner of Agriculture of the failure or success of the experiments with the seeds as the law intends, the majority think nothing about it and care less.

Some persons who receive the seeds do not even save seed from them when they are satisfactory, and often the very next season the member who sent them will receive postal cards and letters asking for the same seeds, and frequently the order of one constituent is of such proportions that even the Bureau of Agriculture can not supply all the varieties embraced in the order.

In 1880 the politician laid his relentless grasp upon the seed division, and took for his own perquisite, to be distributed as he might elect, two-thirds of all the seeds purchased by the Commissioner of Agriculture.

The number of papers received this year by each member is seven thousand, and such great agricultural centers as New York and Chicago, where they raise no other agricultural product but "bulls" and "bears" to toss the prices up and to ride the prices down, receive the same quantity that goes to the great agricultural empire in the "wild and woolly West" represented by my friend from Texas (Mr. Lanham).

(Continued on page 29.)

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., 1889.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, *Pres.*, Rockford, Ills.; A. McCullough, *Sec.*, Cincinnati, O. Next annual meeting in Washington, D. C.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, Chicago, Ills.; June, 1889.

A CONTRAST.

WHEN the Phylloxera threatened to destroy and annihilate the vineyards of France that government promptly came forward and offered some sixty thousand dollars for an effectual remedy. Our government annually spends $100,000 in buying and distributing, in an unequal and uneven manner, the meanest and commonest kinds of seeds. How much better and with what far better results if this was divided up into ten or a dozen different amounts and offered to the whole country, to be paid out to individuals, who by their efforts should produce something better in the way of fruits than we have now. Take, for instance, the Concord grape; how much would one be worth to the country at large with the constitution and ability of the Concord to generally succeed and of real good quality. So with the Baldwin apple; so with all fruits, vegetables and cereals. There is room for improvement in all these things, in all that grows in every section of our broad land, and we maintain that it should be the duty of the government to develop and increase the possibilities which lay within reach of our people, in that which they already possess, but in an inferior degree to what is possible.

PEACH TREE YELLOWS.

AN interesting case was tried at the last term of court in Niagara County, this State. James Mayne, a Niagara county farmer, and owner of a peach orchard badly affected with the yellows, having been condemned by the commissioners appointed for that purpose, was indicted by a late grand jury for refusing to carry out their instructions in destroying the trees. The trial lasted over a week, with numerous postponements. Over a hundred witnesses were examined, including Prof. Bailey, of Cornell University. After an all-night session, the jury not being able to agree, were discharged; but the court ruled the law as constitutional, and ordered the case put on the next calendar. Great interest was manifested, and it was clearly shown that the disease was contagious and had ruined entire orchards, and that diseased fruit had been sold in large quantities.

GOVERNMENT SEED DISTRIBUTION.

(Continued from page 27.)

Now, let us work out the scheme for distribution. Seven thousand papers of seeds to be distributed among 150,000 inhabitants would give each inhabitant of a Congressional district one paper of seeds about every twenty-one years if equitably distributed, and if you were to count the seeds perhaps each inhabitant would receive about one seed a year, and every one knows that a farmer can not do much good with one seed.

Mr. Chairman, if you are going to continue this business and the Government is going to run a wholesale seed house, I am in favor of putting it right down on a business basis and making the appropriation large enough so that everybody who pays taxes shall get seeds. Let the postmaster make the distribution. Let every man make his requistion upon the postmaster for the quantity of seeds he wants, and let the postmaster draw upon the Department and thus give everybody an equal chance.

As it is, the distribution is unequal, unjust and unfair, and I am opposed to taking money out of the pockets of one set of people to buy seed and giving all the seed to another portion of the people — because a great many of them never see a seed from the Department, because no man can distribute them equally. I know, furthermore, that there is a great difficulty growing out of the transmission of these seeds through the mails. A man sees that his neighbor is receiving seed, and he says that he wants some, too, and he sits down and writes to his Representative, and the consequence is that the mail of members of Congress is burdened with applications for seed, and the members are said to be so overworked that there is a proposition now pending to give them clerks in order to relieve them of the burden of work that is cast upon them by this seed business and other duties outside the legislative business.

I am opposed to the seed distribution and against the proposition to give clerks to members, but if this system is sustained it will not be long before we will be called upon to pay from two to three hundred thousand dollars annually for clerks for the members of the house. I entertain the opinion if one man is to have his garden seeds furnished by the United States Government that every other tax payer is equally entitled to them. But if you are going to have tests made, and reports made, and are going to disseminate information among the farmers according to the original purpose in creating the Bureau of Agriculture, then this appropriation is much larger than is necessary for that object.

Another view of the matter is this, and it is a business view: We appropriate $100,000 for seed annually, but the actual amount that is invested in seed, common seed at that, is only $49,137.97. The expense of handling them is $50,862.03. The expense of transmitting them through the mails, 205 tons of matter, as estimated by the Commissioner, is $32,800 more, for I am informed by the Third Assistant Postmaster-General that it costs about 8 cents a pound to handle this class of matter in the mails.

Sir, when you come to sum it all up — how much you spend for seed, how much you pay for clerks and officials to handle them, how much you pay for the transmission of the seed — you find that in order to send out $49,000 of seeds you expend $96,000 for salaries and expenses of handling generally. Therefore I say it is not a good business operation.

There are a number of gentlemen upon this floor who have a decided advantage over me as members in many respects. Many gentlemen can hire clerks to distribute seeds and conduct their corresopndence. They have the money; I have not. They can buy seeds and distribute them. They have the money; I have not. But I can afford to serve the people for as little money as any gentleman on this floor, and if there is anybody here who thinks that he gets more salary than he earns he can cover it back into the Treasury.

We have passed a bill through both Houses of Congress proposing to make the Commissioner of Agriculture a Cabinet officer and to give him a seat in the Cabrinet, and I think he ought to be charged with some more responsible duty than that of distributing seed. I think this department ought to be elevated so that the people might look to it for light and knowledge on the subject of agriculture, but not look to it as an agency for the distribution of garden seeds that can be bought cheaper at home, or better still, raised at home.

I have occupied about as much time on this question as I care to occupy. I only want to say that the farmers of this country, as I understand them, are not begging the Government for seed, but they are demanding that the hand of the tax gatherer shall be taken out of their pockets, and that they shall be given an opportunity to keep some part of that which they earn by their toil. If you will do that for the farmer, his own industry, and the God above us, who sends the sunshine and the rain, and imparts fertility to the soil, will do the rest.

Mr. Chairman, with these remarks I submit this amendment. If the House sees proper to vote it down, all right; I will still distribute all the seed alloted to me, but if I had the power to prevent it, there should never be another seed distributed by a member of Congress.

The amendment was opposed and defeated by representatives as follows: W. H. Hatch, Missouri; R. W. Dunham, Illinois and J. B. Morgan, Mississippi.

SECRETARY MCCULLOUGH of the American Seed Trade Association, expects to have the programme for the Washington meeting, ready about May 1st. The headquarters will be at the "Arlington," (rates $3.00 per day) and will begin Tuesday, June 11th. A full attendance and good time is anticipated.

THE GREENHOUSE.

ABELIAS.

The several species or varieties of Abelias form, when taken together, a small but very interesting genus of greenhouse plants belonging to the natural order *Caprifoliaceæs.*

They may be described as being small greenhouse shrubs growing about two feet in height and being of slender branching habit, producing their small tubular sweet scented flowers in terminal clusters in great profusion during the autumn and early winter months. And on account of their flowering at a season of the year when all flowers, even those of little or no beauty are so highly prized, I am induced to call attention to them and to offer a few remarks regarding their successful cultivation. To obtain strong, healthy, blooming plants, they should be planted out about the first of May in a deep, well enriched border and given a sunny situation. They must be well cared for, and thoroughly watered whenever it is necessary, and as soon as hot, dry weather sets in, well mulched with coarse littery manure.

About the tenth of September they should be carefully lifted and potted, always selecting soft or porous pots. See that they are proportionate to the size of the plants and drain well. Use a compost composed of two thirds turfy loam, one third well decayed manure with a fair sprinkling of bone dust. When potted the plants should be kept close and moist for a few days or until they have taken hold of the soil, then they should be brought inside and placed in a light sunny situation where an average temperature of 55° is maintained until they cease blooming, after which they will gradually pass into a state of rest, when they can be removed to any dry, cool, airy situation beyond the reach of frost and very sparingly watered until they are planted outside. During the plant's season of growth and bloom, liquid manure should be given at least twice a week.

If it is desired to increase the stock a few plants should be started into growth about the first of March, as propagation is effected by cuttings of the half ripened wood, and if the young plants thus obtained are grown on carefully under glass or in a cold frame and gradually shifted on whenever necessary for one season, fine flowering specimens will be obtained.

The generic name was given in honor of Dr. Abel, physician to the embassy of Lord Amherst to China.

The following are the varieties briefly described:

A floribunda. (The free flowering Abelia.) A plant of graceful habit, producing its bright rose-colored flowers in groups of six or seven at or near the ends of the shoots. A native of Mexico.

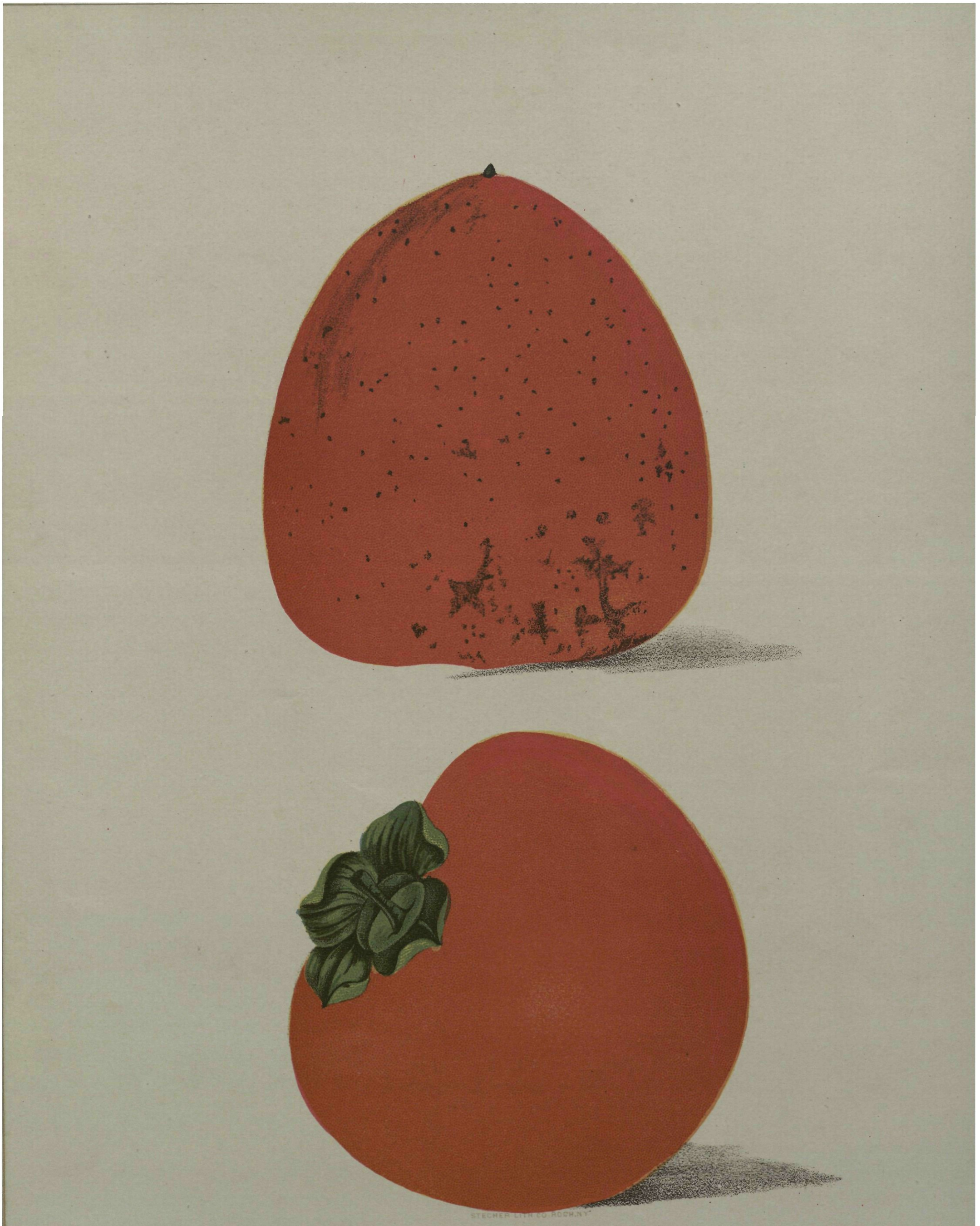
Arupestris. (Rock Abelia.) Flowers small but exceedingly fragrant, of a rosy white color, produced in clusters at the ends of the branches. A native of China.

CHAS. E. PARNELL.

NURSERYMEN'S CONVENTION.

FOURTEENTH annual meeting to be held in Chicago (at Grand Pacific Hotel), commencing June 5th, 1889. We have not the space to say as much as we would like to about the above announcement. We think it hardly necessary to say very much, for no live nurseryman will deny the fact that there is very much benefit to be derived from such organization. During the past year the benefits which have accruèd to each member were more than enough to compensate for the entire expense of the society since its beginning. We refer to the reduction of freight rates on nursery stock and reduced postage rates on plants, vines, etc.

Every nurseryman should be well informed in his business, and here is just the place of all others to get posted, and to this the pleasure in meeting those you are dealing with or seeking to establish such relations. The usual reduced rates are expected on all railroads leading to Chicago, one of the best and largest hotels in the city will take care of your comforts while there, and an ample room provided under the same roof for discussions and exhibitions. An interesting programme has been arranged, and embraces questions and discussions on interesting topics. In each case a well-known expert has been selected to open the discussions, and each one will come prepared to tell what he knows and exchange information.



JAPANESE PERSIMMONS.

Horticultural Outlook, N. J. Colman, Washington, D. C.; Suggestions for the Improvement of the Nursery Business, S. M. Emery, Minn.; New Varieties Plums, S. D. Willard, N. Y.; New Small Fruits, J. W. Hale, Conn.; Grape Industry, Meissner, Mo.; Assorting and Grading Grape Vines, E. H. Pratt, N. Y.; French Nurseries, E. I. Dickinson, France; The Outlook on Pacific Coast, O. Dickinson, Oregon, Geo. R. Bailey, Cal.; The Outlook in the South, P. J. Berckmans, Ga.; Nursery Agents, Wm. Pitkin, N. Y.; Fertilizers in the Nursery, Thomas Meehan, Pa.; Packing and Shipping Trees, N. H. Albaugh, O.; Nursery Outlook, Franklin Davis, Md.; New Apples, W. C. Barry, N. Y.; Forestry, R. Douglass, Ills.; New Pears, E. A. Bronson, N. Y.; Outlook in Canada, Wellington, Ont.; Outlook in England, Wm. Fellton, England; Experience in Forest Seedlings, J. J. Carpenter, Neb.; How and When to Advertise, P. Barry, N. Y.; Expensive Catalogues, J. J. Harrison, O.; Tree Diggers, J. B. Morey, N. Y.; Nurseries in Russia, Leo. Weltz, O.; Grafting Machines and Planting Spades, I. E. Ilgenfritz, Mich.; Wintering of Strawberry Plants Dug in the Fall, Wm. Storrs, O.; Injuries of Mice and Snowbanks, J. Jenkins, O.; Insects and Insecticides, Theo. F. Longenecker, O.; New and Old Strawberries, M. Crawford, O.; New Cherries, J. J. Harrison, O.; New Peaches, Geo. B. Thomas, Pa.; Wintering Grape Vines, T. S. Hubbard, N. Y.; Growing Vines, etc., Silas Wilson, Iowa; Preserving Greenhouses, etc., P. Henderson, N. Y.; Insuring Nursery Stock, J. Van Lindley, N. C.; Duplicates in Mailing Lists, J. T. Lovett, N. J.; Novelties—Who Should Grow Them? J. H. Hale, Conn.; Bailing Materials, Hobbs, Ind.; Tree Boxes or Cases and How Made, N. Bogue, N. Y.; Spagnun Mass and Packing Material, A. K. Bayless, Mo.; Raffia for Tying Buds, H. T. Jones, N. Y.; Duty on Imported Nursery Stock, Geo. G. Atwood, N. Y.; "Specialties" Grown, Augustine Normal, Ills.; New Grapes, Geo. W. Campbell, O.; Artistic Ornamental Planting, W. C. Barry, N. Y.; Large Nurseries or Small; Which the Most Profitable, J. R. Johnson; Tex.; Nurserymen and Local Horticultural Societies, A. Lamb, N. Y.; How to Handle Laborers, C. L. Watrons, Iowa; Planting Nursery Stock, I. Rouse, N. Y.; Implements in the Nursery, L. G. Bragg, Mich.; Nursery Foremen; Qualifications, etc., T. F. Wilson, Ont.; Local Names of Well-known Varieties, G. B. Arnold, N. Y.; Protection for Originators, C. L. Watrons, Iowa; Protecting Trees from Excessive Cold, Z. K. Jewett, Wis.; Packing Stock Free, etc., H. S. Anderson, N. Y.; Should the Number of Varieties in our Catalogues be Reduced and the Space Devoted to Fuller Descriptions of Better Varieties? Geo. Ellwanger, N. Y.

SEEN FROM THE COTTAGE PORCH.

Trees about the house make it more homelike and attractive, and shield it from the cold winds of winter and the hot sun of summer.

A grapevine over the out-building, while not injuring the building, will increase the attractiveness of the premises, and will furnish wholesome, agreeable food at slight cost.

When the garden gets as much attention as the swine lot, and the fruit trees as much feed and care as the cattle, there will be more health and good humor on the farm, and just as much money.—*American Agriculturist for April.*

"Carrying Coals to Newcastle." In a recent letter from Mr. W. F. Heikes, Huntsville, Ala,, he informs us that they were making sales of Standard Pears, mostly Bartletts, to our Rochester nurserymen. We remember the time when it was said, and thought, that Standard Pears had to be grown in this section—near the Lakes.

THE committee appointed at the winter meeting of Western N. Y. Hort. Society to solicit subscriptions are meeting with some success, and hope to collect quite an amount. Mr. Ellwanger and Mrs. H. E. Hooker subscribed quite liberally.

How to be Successful on the Road as a Commercial Traveler. — By an old drummer. 96 pp., paper, price 20c. New York: Fowler & Wells Co., 775 Broadway. In a neat volume of about 100 pages, that one can carry in the pocket, we have a condensation of the experience and observation of an old and successful commercial traveler.

Good Housekeeping. — People interested are continually falling into error of calling GOOD HOUSEKEEPING a *monthly* magazine. Others, knowing that to be incorrect, make another error in calling it *semi-monthly*. Both lose sight of the fact that GOOD HOUSEKEEPING gives more numbers for a year's subscription than either a monthly or a semi-monthly. GOOD HOUSEKEEPING is a fortnightly or bi-weekly journal, published *every other week* the year round, thus giving *twenty-six* numbers a year, instead of only 24 as would be the case if it were semi-monthly, or 12 if it were monthly, and making two large volumes of the best housekeeping literature in a year. These points are worth remembering.

S. L. Allen & Co., Philadelphia, Pa., send us their catalogue of "Planet, Jr.," "Fire Fly," and other garden implements. As is well known these tools combine lightness with strength and adjustability, simplicity and perfection of work, and we commend them to cultivators generally.

Catalogue of "Greenhouse" and "Bedding" plants. 36 pages. Illustrated. P. J. Berckmans, Augusta, Ga.

The Massachusetts Horticultural Society with its usual liberality, appropriated $6,000 for prizes and gratuities for the year 1889. Some eighteen exhibitions are thus provided for, which will no doubt prove interesting and satisfactory.

The *Florist* asks why the "Chinese Yam," should be changed into a "Cinnamon Vine," and offered at 25 cents each, when its value should approximate that of its first cousin, the Sweet Potato, say $1.50 per bushel; and wants to know what is the so-called "Vegetable Peach."

Herbaceous Perennials.—These are "coming to the front" and interest in them is being revived. As a class nothing can be more interesting or afford so continuous bloom. Temple & Beard, Cambridge, Mass., issue a forty page catalogue entirely devoted to them, which is well worth studying.

Report of California Fruit Union, by the secretary H. A. Fairbank, for 1888, makes very interesting reading. From it we learn that during the season, 850 car loads of green fruits were sent east by this company realizing the gross amount of $773,117.06.

Hints on Cacti.—A. Blanc & Co., Philadelphia, Pa. This is a comprehensive little work of 68 pages, fully describing this unique and interesting class of plants, with hints on their cultivation.

"Most of the Cactaceous plants are natives of North and South America, and principally of Mexico. Only a limited number are found in South America. California, Texas, Nevada, Utah and Arizona produce some very fine species, while even in Montana we find some hardy varieties, and yet it is a curious fact that until now it was impossible to buy from any one dealer in the United States more than 50 or 100 varieties, while over 1,000 varieties are actually known at the present time. To get these, some 10 or 15 foreign houses must be drawn upon, as it would require many thousands of miles and years of travel to collect even half that number in their native haunts. This fact naturally increases the value of the rarer sorts, which are mostly small plants raised from seed, and although a rare Cactus is often not as handsome as a commoner variety, still it is more valuable to a collector."

Transactions of Illinois State Horticultural Society, for the year 1888, from the secretary A. C. Hammond, Warsaw, Illinois.

Table Talk.—The success of TABLE TALK has been remarkable, and the secret of that success lies, no doubt, in the fact it has shown in thus serving the dainties of the table with a literary sauce. The practical aid it gives to the housewife, through Mrs. Rorer's teachings, is another factor in its success, and one that ought to push it on until no household in the country is without its monthly presence. Published by the TABLE TALK PUBLISHING CO., 402, 404 and 406 Race street, Philadelphia. $1.00 a year; 10c. single copy.

HOW DISEASES ARE PROPAGATED AND PERPETUATED.

The germ theory of disease is to most people a very vague one. There is a general idea that disease is carried by germs, and that the air is filled with these, and it is a wonder to most people that every one is not so afflicted. The laity conclude that the germ theory is an absurdity and a contradiction. They do not consider the element of a fertile soil. The germ is the same as a seed, and all organic bodies are reproduced by seed. We must plant seed in a soil suitable for it, and the surroundings—heat and moisture—must be adapted to it if it is to grow. As we descend in the scale of organic life, we find that some of the lower animals can hardly be distinguished from plants. and these are reproduced not by seed, but by a process of division or budding. A part of the animal is divided and separated, and forms a new animal.

As we descend in the scale, we find that instead of seeds we have spores, as in ferns; but these serve the purpose of seeds, and demand a fertile soil before they can grow. Of many million spores, but one or two may serve their purposes: the rest die without giving any result. As we descend still lower, we find that fungi and moulds need not only a fertile soil, but a peculiar soil, and many of them will not grow except in or on another organic body.

The theory of disease germs is founded on the knowledge of the actions of the lower animals and plants. The bacillus may be an animal or it may be a plant, poisonous in itself, or simply a carrier of contagion. It may even be a result of disease, and have nothing to do with its cause except as a foreign body. Still as we find it present, and find it always present, we are necessarily induced to believe that it is an active agent, but in order to reproduce itself it must have a fertile soil. This it finds, as a rule, in a person whose constitution is run down from overwork, lack of rest, poor living or disease. It may be introduced into the system, directly into the blood, through an open wound, thus inducing septicæmia, a state of poisoned blood, or it may be introduced indirectly into the blood through the alimentary system.—"*M. T. E.*' *in Technics.*

HORTICULTURAL ART Journal.

May, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. JENKINS,
Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 5.

THE FLOWER GARDEN.

BY CHAS. E. PARNELL.

THE several species or varieties of *Achyranthes* form, when taken together, a very interesting and useful genus of highly ornamental foliage plants belonging to the natural order Amaranthaceæ. They may be described as being stove or warm greenhouse plants of somewhat succulent habit and rapid growth, attaining a height of from twelve to twenty-four inches, having opposite cordate or oblong lanceolate leaves which vary greatly in color, some being carmine, crimson and bronze, while others are beautifully marked and veined with green, yellow and pink.

Some varieties are indeed truly beautiful and are largely employed in ribbon lines, masses and other situations where plants are to be grown in certain shapes, as they are of rapid growth and can be easily propagated. Besides this they stand our hot, dry, summer weather perfectly well as they require the full sunshine to bring out and perfectly develop their intense colors. They can also be grown to good advantage as single specimens or as groups in the mixed border, while for show or exhibition purposes or for the decoration of the warm greenhouse during the winter season, their value is beyond all question. For the decoration of the flower border, or for use in ribbon work, bedding or massing purposes, young plants should be rooted as early in the season as possible and grown on in a moderate temperature until the weather becomes settled (which in this vicinity is about the middle of May), when they can be planted out. Previous to this, however, it is well to pinch them back occasionally in order to obtain compact plants. For inside decoration during the winter season or for show or exhibition purposes some of the most promising of the young plants should be selected, potted, and shifted on as often as they require it until they are planted outside. They must be given a deep, moderately enriched border and a sunny situation, and sufficient space to properly develop themselves. During the summer they require but little care and it will consist in pinching them back occasionally in order to secure compact, well shaped specimens, and in watering thoroughly whenever necessary. About the tenth of September they can be taken up and potted. In potting use porous or soft baked pots and let them be

proportionate to the size of the plants, drain well, and use a compost composed of two-thirds turfy loam, one-third well decayed manure, and a fair sprinkling of bone dust; when potted, water thoroughly and place in a close, moist situation for a week or ten days; this will enable them to become well rooted; then they can be brought inside.

For the winter they should be given a light, sunny situation, where an average temperature of 55° is maintained. Water should be thoroughly given whenever necessary and as soon as the pots become well filled with roots give liquid manure once a week. Slugs are very partial to the Achyranthes and will soon ruin a plant if permitted to have their own way. Among insect pests the green fly and red spider should be carefully guarded against. I should have stated that for outside use, bedding or massing purposes, they should be given a deep, moderately enriched soil, and that the plants should be placed four, six or eight inches apart, according to size, and they can be trimmed to any desired size or form. Frequent pinching back of the young shoots will be preferable to severe occasional trimmings.

Propagation can be readily effected by cuttings of the half ripened wood at any time. The generic name is derived from "Ashuron," chaff, and "anthes" a flower, in allusion to the chaffy nature of the floral leaves.

The following are the most desirable varieties:

A Verschaffeltdii. A robust growing species, attaining a height of some eighteen or twenty inches. Stems crimson. Leaves somewhat cordate in shape, the upper side being of a dull crimson maroon, while the underneath is of a deeper crimson. A native of Brazil.

A. V. aurea reticulata. A variety of the above, from which it differs in being of a more dwarf compact habit of growth, also in the variegation of its leaves which are of a light green, regularly marked with a network of yellow and occasionally splashed with red. Stems purplish carmine.

A. V. acuminata. A garden variety of A. Verschaffeltdii, having sharply acuminate leaves and being of a more spreading habit.

A. Lindeni is a native of the Peruvian Andes and is of dwarf, compact habit, growing about eighteen inches in height. The leaves are lanceolate in shape and of a deep blood red color.

A. L. aurea reticulata is a very distinct and beautiful variety of the above, having light green leaves beautifully marked and veined with yellow.

A. L. Emersonii. I presume this is a sport from A. Lindeni, as it appears to be identical with it in all respects save in the color of its leaves and stems, which are bright red.

A. Collinsii is the finest variety in cultivation. It grows about two and a half feet in height, yet is of very compact habit. Leaves willow shaped, most beautifully variegated with golden yellow and green. The stems and midribs are rich crimson.

A. Woolseyi. A very distinct, dwarf, miniature variety, growing about fourteen inches in height, with small foliage of a deep bronze color. A very pretty plant for the window gardens.

THE FRUIT TREE PEDDLER.

DURING the spring months fruit tree peddlers get a large amount of free advertising, and this year is no exception. Already the customary wail is going the rounds of the press against the wicked irrepressible canvasser. It has become the fashion to pounce upon him at this season of the year, and the whole world of newspaper correspondents and agricultural writers, great and small, are emptying their vials of wrath on his head, and advising farmers to let him entirely alone.

One writer denounces the agent for carrying with him picture samples of fruit twice as large as life and colored in a corresponding manner, and then advises farmers to order direct from a trustworthy nursery. I have no fault to find with this; it is certainly better to purchase nursery stock direct from a trustworthy nursery than of a rascally agent; but, on the other hand, would it not be just so much more preferable to buy of a reliable agent than of an unscrupulous nurseryman? Those highly colored pictures are, with hardly an exception, furnished by the nurserymen

themselves. Some of the most extensive nurseries in the United States deal exclusively through agents, and supply their agents with sample books, as do a large majority of firms engaged in other business. The illustrations in agents' sample books are taken from the finest specimens of the variety of fruit which they represent, and are, of course, larger and finer looking than the real fruit, grown in a scrubby grass-grown orchard.

As a rule they as truthfully represent the real fruit as illustrations in catalogues of nurserymen dealing directly with the purchaser, or of seedmen, agricultural implement manufacturers, and live stock breeders.

In the same article the writer accuses fruit tree peddlers of pulling up fruit trees by the roadside, or in some farmer's yard, and palming them off for first class nursery stock, and for this reason farmers should shoot every fruit tree peddler who dared to set foot on the premises. Why not condemn every merchant because a few rascals among the number mix sand with sugar, or would it not be just as sensible to advise fruit tree peddlers to shoot farmers because, once in a while, one makes butter out of lard, and puts stones in his hay to get even with tricky hay dealers?

I favor any movement to clear the country of rascally lightning-rod swindlers, patent-right men, and fraudulent fruit tree agents; but I do not see why all representatives of nurseries, and book agents, especially, should be set down upon as frauds by every one who has enough literary ability to get his name in print.

The business of selling fruit trees and books is an occupation of which no man need be ashamed. Many a deserving young man has received an education and gained a foothold in life by spending their vacation canvassing the rural districts in the interests of some publishing house or nursery. The honest, respectable book agent or fruit tree peddler is a friend of humanity. He has carried fruit and flowers, and useful knowledge, to the utmost parts of of the country, and caused roses, beautiful shrubbery, and intelligence to bloom where once grew unsightly briers and weeds of ignorance. While we condemn fraud, evil, and rascality, let us not be too eager to depreciate the valuable service, or worth, of the honest, intelligent, trustworthy canvasser.—*Linden, in Husbandman.*

THE BEST HARDY SHRUB.

AFTER an experience of many years with the Japanese snowball (Viburnum Plicatum), I feel like according it first place in any collection of hardy flowering shrubs. It will never be common, however, owing to the difficulty in rooting new plants, but when once established the growth is vigorous, and seems to embody all the necessary requisites. Layering the young shoots is about as reliable a method of propagation as any, although some success may be had from the cuttings of the half-ripened wood. It is so far superior in every way to the old-time snowball that where the space is limited it should always take precedence over the latter. Of course its chief attractions is centered in its lovely round heads of snow-white sterile flowers, but the foliage at other seasons is also beautiful. The large, showy, deep green crimped leaves retain their healthful appearance all summer long, but do not assume any of the bright autumnal tints. High culture is needed to make the Japanese snowball of special interest. A specimen now before me, some fifteen years planted, is covered with large bunches of flowers, almost as fine as the ordinary garden hydrangea. Each individual flower is immense, but then the plant has been well cared for and the soil liberally enriched.—*Josiah Hoopes in N. Y. Tribune.*

When cellars are under an unwarmed part of the house, it is often difficult to keep them warm, even when banked. The cold comes through the floor overhead. Ceiling the under side of the joints with matched lumber will often remedy the difficulty. Many dollars could be annually saved in stables if they were lined with building paper, kept in position and protected with a lining of boards. The boards need not be more than half an inch thick, but should be well seasoned and the edges matched. Two half-inch boards with paper between make an excellent partition between a stable and a carriage-house, keeping the stable warm and the carriage-room free of ammonia, so destructive to paint and varnish.—*American Agriculturist.*

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., Aug. 20th, 1889.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, Chicago, Ill., June 5th, 1889.

AMERICAN SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., *Pres.*; A. M. McCullagh, Cincinnati, O., *Sec.* and *Treas.* Next meeting at Washington, D. C., June 11th, 1889.

REDUCED EXPRESS RATES ON SEEDS AND BULBS.

The committee appointed by the American Seed Trade Association have secured a lower rate on prepaid express packages from all the leading companies, making the price now charged a trifle less than by mail; this, added to the additional security and safety, makes it more valuable.

The rates are 10 cents for each package containing 24 ounces or less; when over 24 ounces, one cent additional for each two ounces. No package over four pounds carried at above rates, and when passing over the lines of more than one company the rate is not less than 15 cents for each.

CLEMATIS.

Clematis Ramona—Lately we made a call at the residence of Mr. C. H. Perkins, Newark, N. Y., who originated this variety some years ago. Mr. Perkins grows roses, clematis and a few things to perfection, and had a large variety in bloom. Ramona was quite distinct and outshone the whole, such a mass of bloom! a three year old plant literally covered with blooms eight inches across and many of the individual flowers with eight petals. This variety is very distinct, the plant is a strong, robust grower, blooms early and continuously. Mr. Perkins has many fine varieties of hardy roses, which he grows to perfection.

IF you want to be successful with, and reap the best results from your *Sweet Peas*, cut off the flowers before fading—never allow them to seed—and while growing provide suitable support for the vines, with rich soil and an abundance of moisture. Nothing surpasses these flowers for hand bouquets. Their various colored fragrant flowers are beyond comparison, and are justly admired by all.

THE variety of Gooseberry known as *Industry* was raised in Northumberland, England, in 1845, since which time many thousands have been yearly sent to this country, to Canada, New Brunswick, Nova Scotia, Austria, France, Germany, Belgium, Holland, Denmark, Poland, Saxony, Switzerland, &c. Perhaps no other variety of fruit has been so widely disseminated in so short a time, or generally, succeeded so well.

EARLY RIVERS.

MASSACHUSETTS HORTICULTURAL SOCIETY—ROSE AND STRAWBERRY EXHIBITION AT BOSTON.

This is one of the important yearly exhibitions of this Society, and is annually looked forward to with much pleasure by those who take part in them. Owing to the forward season, the exhibition was held at an earlier date than been previously fixed, and it would have been better had it been held still earlier. It turned out to be all right for the Strawberries, which were fine and plenty, but not so for the Roses; these were poor, indeed, but the weather alone was to blame. The elements seemed to be against them.

At the present time thirty-four states observe an "Arbor Day." The first Arbor Day in Nebraska was observed seventeen years ago; now she has growing within her boundary over six hundred million trees, affording relief from disastrous storms and drouths, and adding from ten to fifteen per cent. in the State valuation every year.

The State of Delaware has lately passed a law to protect the Peach Orchards of Lower Delaware from the disease known as the Peach Yellows. This makes it unlawful for any person to keep growing on his or her premises any Peach, Almond or Nectarine tree infected with this contagious disease.

Duchesse de Angouleme, or as now to be known and called, *Angouleme* pear, was discovered by M. Anne Pierre Andussun, a nurseryman at Anjiers, growing in a farm garden near Champyne, in Anjou, and having procured grafts of it sold the trees in 1812 under the name of Poire des Eparaznais. In 1820 he sent a basket of this fruit to the Duchesse d' Angouleme, with a request to be permitted to name the pear in honor of her; the request was granted, and the pear has since borne its present name—*selected.*

This pear well deserves its extended popularity; one of the hardiest varieties, succeeding on its own roots or on the quince, on a great variety of soils and in the hands of experienced or inexperienced cultivators.

FRUITS AS FOOD.

It may be positively asserted that even the modern housekeeper, intelligent above her predecessors though she may be, still fails to appreciate the value of fruits. Nothing among all the productions of our bountiful Mother can compare in richness and beauty, with their hues and flavors. Above all they give tone to the digestive organs, antidote biliary derangements, and afford an innumerable variety of dishes at once delicate and nutritious. Who rightly values the worth of the Northern apple, or of the date, that fruit which for three fourths of the year furnishes the staple food of an Oriental race?

Every breakfast table in the land ought each day to have a central dish of fruit, either cooked or in its native state. Oranges and melons, apples and grapes, figs and dates, currants and the royal line of berries, cherries and gooseberries, plums and pears, apricots and peaches, bananas and grape fruits, all are rounded in outline, exquisite in coloring and delicious to the taste.

In one respect all fruits are alike. They should be eaten only when perfectly ripe and as fresh as they can possibly be procured. The unfortunate denizens of large cities may be compelled to consume them after being hawked about the streets and plentifully sprinkled with dust, but that is the price they pay for other privileges.—*Good Housekeeping.*

REPORT OF SECRETARY OF AGRICULTURE.

The volume just received is one of the most important that has been issued from the department. It includes some fifty pages from the Secretary, one hundred from the Entomologist, seventy-five from the Buréau of Animal Industry, thirty from the Pomologist, with full and complete reports from the Experiment Stations, Microscopist, Chief of Seed Division, etc., etc. The illustrations and colored plates are numerous, many being full page plates. Every one interested in the cultivation of the soil, and its products, should carefully peruse and preserve this volume.

CHARACTERISTICS OF NITROGEN.

THERE is a substance which is invisible, which has neither odor nor taste, and in fact possesses no qualities of matter except weight and bulk, says the *Journal of Chemistry.* This is the gas nitrogen. which constitutes four-fifths of the atmosphere which surrounds us. It is apparently a dead and inert form or manifestation of matter, and yet it is perhaps one of the most important and useful of the elements, and if it should vanish from the universe life would cease to exist. This apparent paradox is explained by the fact that by its combination with otner elements the remarkable characteristics of nitrogen are awakened into action. The gas is neither poisonous, corrosive, explosive, nutritious nor medicinal; but combined with carbon and hydrogen it forms the deadly prussic acid; with oxygen and hydrogen, the strong corrosive nitric acid; with hydrogen alone, the strongly basic alkali ammonia; with carbon, hydrogen and oxygen, the terrible explosive nitro-glycerine; and with the same elements in varying proportions it forms the albuminoides, the gelatines, the glutens, and other strength giving elements of our food, of the indispensable medicinal agents, quinine, morphine, atropine, strychnine, veratrine, cocoaine and many others.

Although nitrogen is tasteless, it forms an indispensable part of the flavors of the peach, plum, apricot and other delicious fruits, as well as coffee, tea, chocolate and tobacco. Without smell, it is found in many of the most powerful and delicious perfumes as well as in the nauseating odors of putrefaction. Present in immense quantities in the air, it furnishes little or no support to vegetation, but combined with other elements the amount present in the soil determines its fertility and the amount of crops that can be raised upon it. Colorless and invisible, nearly every dye-stuff or coloring matter known contains it in a greater or less proportion. Harmless and powerless by itself, when combined with another non-explosive gas, chlorine, it forms the most powerful explosive known, of which a ray of sunlight is sufficient to arouse the terrible destructive power.

And yet, notwithstanding the pre-eminent importance of this element in the affairs of life, there are but few of its combinations which we can form directly. Millions of tons of nitrogen are all about us, but not a grain of morphine or theine, gelatine or albumen, analine or naphthaline can we make from it. Only the mysterious vital force working in the natural laboratory of the vegetable and and animal organism can build up most of these molecules from their ultimate elements and place the atoms of nitrogen in their proper position like the beams or stones of a building. Our wonder at the marvelous powers displayed by these organisms is none the less when we see what simple, common and uncharacteristic elements are used by them in making up their wonderful products, and we can only say that it is a part of the great and unsoluble mystery of life.

Neither can we explain satisfactorily from a chemical standpoint the properties and reactions of this strange element By itself it is nothing, but united with other elements, some almost equally inactive, the combinations thus produced manifest the most powerful and positive chemical and physical properties. It is like the springing into life of dead matter, but there is no system of chemical philosophy which can give a reason why it is so. It is the part of the chemist to observe and record the facts connected with the properties of different forms of matter, and in time we may from these facts construct a rational theory, but we are still a long way from a clear comprehension of the phenomena of the universe. There are about as many things in heaven and earth still undreamt of in our philosophy as there was in Shakespeare's time, and the further we advance toward the end the more the field widens and appears to be of illimitable extent.

SEASONED BY LEAVES. If soft wooded trees are cut in August or September and allowed to lie until the leaves wither and dry, it will be found that the wood is not only nearly dry and seasoned, but that there is a superior heating power in it not found in the same wood cut in winter and seasoned in the usual way. It has also been proven that the wood has become more durable and lasting.

PAPER AS A NON-CONDUCTOR.

THE advantages arising from the use of non-conducting walls for dwellings, cellars, cold storage warehouses, silos, etc., are not nearly as well understood as they should be. Of all the materials used in building, wood is the best, and brick is the next best non-conductor, while thick paper is useful in combination with other materials, from its air-tight qualities and great pliability. Wooden boxes of flowers and plants lined with thick paper are shipped thousands of miles in the dead of winter, and sometimes carried in a wagon for an hour in a zero temperature without injuring the contents.

WHAT MAY WE EAT?

We may eat potatoes and salt—and exist.

We may eat fish and become "cranks."

We may eat bread and butter, without limit, and die of dyspepsia.

We may eat meat only and become gross and course in mind and person.

We may eat fruit and content ourselves with the assurance that "in Adam all die."

We may eat anything and everything, miscellaneously given and carelessly received, and make of our stomachs a bric-a-brac repository and a physical junk shop.

But is it well to do this?

—*Good Housekeeping.*

CULINARY MAXIMS.

Beauty will buy no beef.

Enquire not what is in another's pot.

Better half an egg than an empty shell.

A good stomach is the best sauce.

Better some of the pudding than no pie.

He who depends on another dines ill and sups worse.

Make not your sauce till you have caught your fish.

He that dines and leaves lays the cloth twice.

He deserves not the sweet who will not taste of the sour.

He fasts enough whose wife scolds at dinner time.

He who would have hare for breakfast must hunt over night.

When a man cannot have what he loves, he must love what he has.—*Good Housekeeping.*

VENUS AS A SISTER WORLD.

WHILE watching these graceful windings of the planet, we naturally inquire as to its real condition. Readers are familiar with the idea that it is a world like our own earth, traveling in a smaller but otherwise almost similar orbit around the sun. On more minute inquiry we find that the likeness between it and our earth is in some points very great—greater, in fact, than in the case of any other planet. In the fundamental element of size they are almost alike, our earth being 7,900 miles in diameter, and Venus 7,500. The force of gravity on the surface of the latter is nearly nine-tenths of what it is with us. Its density is almost the same fraction as that of the earth. These facts show if transported to the surface of Venus we should feel more at home, so far as some essential features of experience is concerned, than on any other planet known to us. We should weigh just about nine-tenths of our present weight, and should find distances bearing much the same ratio to our muscular power of walking that they do in this world; while in all probabilty the surface rocks and earth, if such be formed there, would be compacted and constructed like those we daily see around us. This would not be the case on planets so much smaller than the earth, as Mercury or Mars, or so much larger as Jupiter, Saturn, or Neptune. Again, the year on Venus would be about 225 days in length, a good deal more like what we have on the earth than is the case on any other planet. In the length of the day we should find a still more homelike experience, as the difference would be imperceptible except to careful observation. Venus rotates in twenty-three hours, twenty-one minutes twenty-three seconds, and the earth in twenty-three hours, fifty-six minutes, four seconds. The day, of course, depends a little on the motion of the sun in the sky, but the difference between this as seen on our earth and from Venus would not not appreciably affect the similarity of the days in each. These likenesses to the length of our day and year and to our world's destiny would cause a similarity, in all probability, in the important matters of mountain form and of vegetation. In fact, so far Venus is nearly the twin sister of our world.—*Chambers' Journal.*

SUCCESSION OF FOREST GROWTHS.

IT is the prevailing and almost universal belief that when native forests are destroyed they will be replaced by other kinds, for the simple reason that the soil has been impoverished of the constituents required for the growth of that particular tree, or trees.

This I believe to be one of the fallacies handed down from past ages, taken for granted, and never questioned.

Nowhere does the English Oak grow better than where it grew when William the Conqueror found it, at the time he invaded Great Britain!

Where do we find White Pines growing better than in parts of New England, where this tree has grown from time immemorial?

Where can you find young Redwoods growing more thriftily than among their giant ancestors, nearly or quite as old as the Christian era?

Then one may ask the question, why have any succession of forest growths? I simply answer, because you cannot make something out of nothing.

Wherever we see a forest tree growing, there, our common sense teaches us, a seed has been deposited from which this tree has grown.

When a Pine forest is burned over, both trees and seeds have been destroyed, and as the burned trees cannot sprout from the stump like oaks and many other trees, the land is left in a condition well suited for the germination of tree seeds, but there are no seeds to germinate. It is an open field for pioneers to enter, and the seeds which arrive there first have the right of possession.

The Aspen Poplar, *populus tremuloides*, has the advantage over all other trees. It is a native of all our Northern forests, from the Atlantic to the Pacific. Even fires cannot eradicate it, as it grows in moist as well as dry places, and sprouts from any part of the root. It is a short-lived tree, consequently it seeds when quite young; seeds abundantly; the seeds are light, almost infinitisimal, and are carried on wings of down. It ripens its seeds in Spring; they are carried to great distances, and at the very time when the ground is in the best condition. Even on the dry mountain sides in Colorado, the snows are just melting, keeping the ground moist.

The seeds of this tree would require the greatest skill of the nurseryman, and very doubtful if he would succeed at all. The burnt land is its paradise; wherever you see this tree on high, dry land, you may rest assured that a fire has been there. On land slides you will not find its seeds germinating, although they have been deposited there equally with the burned land.

Next to the Aspens and Poplars, comes the Canoe Birch, and further North the Yellow Birch, and such kinds as can have the seeds deposited.

I have seen Acorns and Nuts germinating in clusters on burned lands, in a few instances, they had evidently been buried there by animals, and had escaped the fires.

I have seen the Red Cherry, *Prunus Pennsylvanicum*, coming up in great quantities, which might never have germinated, had not the fire destroyed the debris which covered them too deeply.

A careful examination around the margin of a burned forest, will show trees of the surrounding kinds working in again, thus by the time the short-lived Aspens (and they are very short-lived on high land) have made a covering on the burnt land, the surrounding kinds will be found re-established on the new forest. The seeds of the conifers carried in by the winds, Nuts and Acorns by the squirrels, the berries by the birds, the mixture varying more or less from the kinds which grew there before the fire.

It is an easy matter to find out the number of years since the fire, by counting the annual growths on the scarred trees around the margin of the burned district. A fire of twenty years ago will show plainly on the Pines and many other kinds.

It is wonderful to notice how far seeds of berries are carried by the birds. The Wax Wings and Cedar Birds carry seeds of our Tartarian Honeysuckles, purple Berberries, and many other kinds, four miles distant, where we see them springing up near the lake shore, where these birds fly in flocks to feed on the Juniper berries. It seems to be the same everywhere. I found European Mountain Ash trees last Summer in a forest in New Hampshire, the seeds of which must have been carried two miles as the crow flies.

Continued in June number.

HORTICULTURAL ART Journal.

June, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorialmanagement of T. B. JENKINS, Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 6.

THE NURSERYMAN'S DUTY REGARDING THE NAMES OF FRUITS.

BY H. E. VAN DEMAN.

EVEN the most ignorant horticulturist knows that there is need of some systematic method regarding the nomenclature of fruits. There are cases in which as many as twenty-two names are applied to one variety. There are also many varieties which have inapplicable and misleading names which ought never to have been given, and ought now to be replaced by better ones.

The nurseryman is not altogether chargeable with this fault, but in view of the fact that the American Pomological and other kindred societies have taken steps to simplify and correct the names of the entire list of fruits it certainly is the nurseryman's duty to put into practical effect this revised list. From the nature of the case it is impossible for this reform to come about through any other channel than the nurseryman's catalogue and the mouths of his many agents. So far as I know, one nursery firm, and that is Ellwanger & Barry, of Rochester, N. Y., has adopted this revised list.

It is a matter which is really not difficult if the nurserymen will only inconvenience themselves a little by either carefully studying the matter out and correcting their lists to accord with that adopted by the American Pomological Society or submit their catalogue to some committee or other authority whose duty it may be to make such corrections. The secretary of the American Association of Nurserymen, Mr. Chas. A. Green, of Rochester, N. Y., may be able to enlighten them upon this subject.

Let the nurserymen of America take up this matter in real earnest which was begun by our beloved Wilder, and complete it so far as may be possible, thus erecting a monument upon the foundation already laid and which will fitly commemorate the life of its founder, and at the same time be a blessing to the pomological world.

THIRTY-SEVEN states and one territory have already received the benefits arising from the Hatch appropriation made by Congress for experimental stations in regard to agricultural matters.

SUCCESSION OF FOREST GROWTHS.

Continued from June number.

While this alternation is going on in the the East, and may have been going on for thousands of years, the Rocky Mountain district is not so fortunate.

When a forest is burned down in that dry region, it is doubtful if coniferous trees will ever grow again, except in some localities specially favored. I have seen localities where the short-lived trees were dying out, and no others taking their places.

Such spots will hereafter take their places above the "timber line," which seems to me to be a line governed by circumstances more than altitude or quality of soil.

There are a few exceptions, where Pines will succeed Pines in a burned down forest. *Pinus Murryana* grows up near the "timber line" in the Rocky Mountains. This tree has persistent cones, which adhere to the trees for many years. I have counted sixteen-year cones on one of these trees, and examined burned down forests of this species. Many of the cones had apparently been imbedded in the earth as the trees fell, the head had opened the cones, the seedlings were growing up in myriads, but not a conifer of any other kind could be seen as far as the fire had reached.

In the Michigan Peninsula, Northern Wisconsin and Minnesota, *Pinus Banksana*, a comparatively worthless tree, is replacing the valuable Red Pine, *Pinus Resinosa*, and in the Sierras *Pinus Contorta* and *Pinus Tuberculata*, are replacing the more valuable species by the same process.

In these cases also the worthless trees are the shortest lived, so we see that nature is doing all she can to remedy the evil.

Man only is reckless, and especially the American man!

The Mexican will cut large limbs off from his trees for fuel, but will spare the tree. Even the poor Indian, when at the starvation point, stripping the bark from the heavy-wooded Pines, *Pinus Ponderosa*, for the mucilageous matter being formed into sap-wood, will never take a strip wider than one-third the circumference of the tree, so that its growth shall not be injured

Frequently we see articles in print, stating that Oaks are springing up in destroyed forests where Oaks had never grown before. The writers are no doubt sincere, but they are careless. The only Pine forests where Oaks are not intermixed, are either on land so sandy that Oaks cannot be made to grow on them at all, or so far North that they are beyond its Northern limit.

In the Green Mountains and the New England forests, in the Pine forests of Pennsylvania, in the Adirondacks, in Wisconsin and Michigan, except in sand, I have found Oaks mixed with the Pines and Spruces.

In Northwestern Minnesota, and in Northern Dakota, the Oaks are near their Northern limit, but even there the Burr Oak drags on an existence among the Pines and White Spruces.

In the Black Hills in Dakota, poor forlorn scrubby Oaks are scattered through the hills among the heavy wooded Pines. In Colorado we find them as shrubs among the Pines and Douglas Spruces. In New Mexico we find them scattered among the Pinons. In Arizona you will find them growing like Hazel bushes among the heavy-wooded Pines. On the Sierra Nevadas the Oak region crosses the Pine region, and scattering Oaks reach far up into the mountains. Yet Oaks will not flourish between the one hundredth meridian and the Eastern base of the Sierrat, owing to the aridity of the climate. Recently we found Oaks scattered through among the Redwoods on both sides of the Coast range mountains. Darwin has truly siad, "The Oaks are driving the Pines to the sands."

Wherever the Oak is established, and we have seen that it is established, wherever it can endure the soil and climate, it will remain there and keep on advancing.

The Oak produces comparatively few seeds; where it produces a hundred seeds the Ash and Maple will yield a thousand. The Elm ten thousand, and many others a hundred thousand. The Acorn has no provision made by nature, like other tree seeds. Many kinds have wings to float them on the water and carry them in the air, the wings placed in such a manner as to be carried by rotary motion, reaching a wonderful distance, even in a very light wind.

Nearly every tree seed, except the Acorn, has a case to protect it while growing, either opening and casting the seeds off to a distance when ripe, or falling with them to protect them till they begin to germinate. Even the equally large seeds of other kinds are protected in some way.

The Hickory nut has a hard shell, which shell itself is protected by a strong covering until ripe.

The Black Walnut has both a hard shell and a fleshy covering. The Acorn is the only seed I can think of which is left by nature to take care of itself.

It matures without protection, falls heavily and helplessly to the ground, to be eaten and trodden on by animals, yet the few which escape, and those which are trodden under are well able to compete in the race for life.

While the Elm and Maple seeds are drying upon the surface, the Hickories and Walnuts waiting to be cracked, the Acorn is at work with its coat off. It drives its tap root into the earth in spite of grass, and brush and litter. No matter if it is shaded by the forest trees so that the sun cannot penetrate, it will manage to make a short stem and a few leaves the first season, enough to keep life in the root, which will continue to drill in deeper and deeper.

When age or accident removes the tree which has overshadowed it, then it will assert itself. Fires may run over the land, destroying almost everything else, the Oak will be killed to the ground, but it will throw up a new shoot the next Spring, and when the opportunity arrives, it will make a vigorous growth, in proportion to the strength of the root, and throw out strong side roots, and after that care no more for its tap root, which has been its only support, than a frog cares for the tail of the tadpole, after it has got on its own legs.

There is no mystery about the succession of forest growths. Nothing in nature is more plain and simple.

We cannot but admire her wisdom, economy and justness, compensating in another direction for any disadvantage a species may have to labor under.

Every kind of tree has an interesting history in itself.

Seeds with a hard shell, or with a pulpy or resinous covering retarding their germination, is often the means of saving them from becoming extinct.

The Red Cedar, *Juniperus Virginiana*, reaching from Florida to and beyond Cape Cod, among the hills of Tennessee, through the Middle States and New England, scattered through the Western States and Territories, at long distances apart, creeping up the Platte river in Nebraska. I found only three in the Black Hills in Dakota in an extended search for the different trees which grew there. Found only one in a long ramble in the hills at Las Begas, New Mexico. Yet this tree has crept across the continent, and is found here and there in a Northwesterly direction, between the Platte and the Pacific Coast.

Only for the resinous coating protecting those seeds, this tree would not be found todry scattered over that immense region.

ROBERT DOUGLAS.

BAGGING GRAPES.

MANY make a practice of bagging the choice varieties of this fruit. The bags —thin manilla paper, one and two pound sacks —should be put on when the berries are about the size of peas, and before doing so, the poor and surplus bunches should be removed. As a rule, not more than two bunches should be allowed to mature on each lateral. Carefully draw the sack up over the bunch and pin over the cane or shoot on which the bunch grows. A good plan is to make a slit in one or each corner of the sack, so as to allow the water to escape. This saves the crop from all insects, birds, frost, mildew and rot, and enables the grower to allow the fruit to remain till perfectly ripe, the color is much improved, and it adds to the general appearance of the fruit.

Where it is done on a large scale, the work can be performed by women and boys at an expense of about half a cent a pound, and much more than this can be added to price of the fruit when brought into market. If you have a few vines of choice varieties growing near your dwelling, procure a few thin manilla bags from your grocer and put them on some of the finest bunches. You will be well repaid by the improved appearance and quality.

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., Aug. 20th, 1889.

EASTERN NURSERYMEN'S ASSOCIATION. — Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—W. H. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; A. M. McCullagh, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

THE California *Florist and Gardener* have been combined with the *Pacific Rural Press*, and will hereafter be issued weekly as one publication.

PEAR BLIGHT.—It seems that Le Conte is no longer free from this disease. Texas has reported the trees there as badly affected, and now the original orchards at Thomasville, Georgia, has been severely smitten.

HAMMOND & WILLARD, Geneva, N. Y., are introducing some new plums. As is well known, Mr. Willard has become one of the largest and most successful plum cultivators, and knows what is desirable for the market and family use. The *Stanton* speaks well for his judgment in this direction, and we look for something still better from this enterprising firm.

LEADING horticulturists have noticed and recorded the fact that whenever a fruit while growing rested on some support beneath it, the fruit always grew to a larger size. This may be accounted for on the theory that it allows the sap vessels of the stem to remain open and thus receive a larger supply of nourishment. Try this, some of the friends who want to grow a few pears or apples for exhibition purposes.

NEW STRAWBERRIES.—Seem to be plentiful this season. Several have been shown to us which are well worthy of cultivation. We also hear of a new berry which is being brought out by Mr. T. V. Munson, Denison, Texas, which he proposes to call "*Parker Earle.*" The berries are very large, rather long and tapering, dark scarlet, with a glossy surface. The foliage is very strong, and a deep, dark green. Another comes from Mr. B. O. Curtis, Paris, Ills., which he calls "*Edgar Queen.*" This is one selected from 5,000 seedlings, irregular in shape, of a large size and a beautiful bright red. Still another, and this comes from the well-known introducers of *Jewell* and other new fruits, Stephen Hoyt's Sons, and this they propose to call "*Yale.*" This is very productive, rather late, and long in ripening its crop; berries are even and uniform in size; dark crimson color

WHITE MOSS.

EFFECT OF CAMPHOR ON SEEDS.

CERTAIN curious and all but forgotten experiences of much interest to agriculture and gardening have lately been revived by a German savant. Very many years ago it was discovered and recorded that water saturated with camphor had a remarkable influence on the germination of seeds. As of many other useful hints, the stupid world took no notice of this intimation; but a Berlin professor, having seen the record of it, appears to have established the fact that a solution of camphor stimulates vegetables as alcohol does animals. He took seeds of various sorts, some being three or four years old, and possessing a slight degree of vitality, and placed them between sheets of blotting paper. Some of these he wetted with pure water, and others with camphorated water. In many cases the seeds did not swell at all under the influence of the simple moisture, but in every case they germinated where they were subjected to the camphor solution.

The experiment was extended to different kinds of garden seeds, old and new, and always with the result of showing a singular awakening of dormant vitalism and a wonderful quickening of growth. It also appears from the professor's researches that the young plants thus stimulated continued to increase with a vigor and vivacity much beyond that of those which were not so treated. On the other hand, when pounded camphor was mixed with the soil, it appeared to exercise a rather bad effect upon the seeds. The dose in this latter case was possibly too strong. At all events, this action of camphor is worthy of an examination by seedsmen and gardeners, and even farmers might determine how far wheat and barley may be profited by the strange power this drug appears to possess over the latent life of vegetable germs.

BOOKS RECEIVED.—Report and Proceedings of Massachusetts Horticultural Society, Robert Manning, Sec., Boston, Mass.

NEW GRAPES.

BY GEORGE W. CAMPBELL, OF OHIO.

I AM asked to say a few words to you upon New Grapes—a subject which has engaged my attention for many years, and one which I believe has some attraction for every one. For who is there that does not feel a glow of pleasure at the thought of graceful vines, laden with their wealth of purple, gold, or rosy clusters, climbing upon the walls or twining upon the trellis in garden or vineyard, with rich promise of luscious fruitage to delight the palate, or yield their generous juices to make glad the heart of man, as they have through the long ages of the past?

But I must not dwell upon these thoughts and reflections, however alluring they may be, but approach the subject in a practical and business way, as a question of profit rather than of sentiment.

Of the large number of grapes which have been originated within the past 30 years comparatively few have become generally popular or valuable; and it is doubtless true, that from the long and attractive lists of our catalogues many might be rejected without serious loss or inconvenience. This will eventually come, through the introduction of new and better kinds; but for many reasons it is a slow and somewhat difficult matter. So many varieties have been brought forward with extravagant and extraordinary claims which have not been sustained, the careful and practical grape grower views with many grains of doubt, if not of suspicion, the new grape which is offered, as "earlier than the Hartford; as healthy and as hardy as the Concord; better than the Delaware: and whose fruit never rots, and foliage never mildews." By claiming too much, introducers of new grapes have often misled, and disappointed a generous, and perhaps too confiding public.

We have been striving, and hoping, and expecting to obtain the perfect grape, with all the excellencies, and at the same time suited to all localities. We have not found it, and we probably never shall. But we have varieties, that with intelligent care succeed admirably in particular localities, and are grown with both pleasure and profit to their owners.

The same varieties in situations unsuited to their special characteristics would only result in failure and disappointment.

When the fact is fully understood and acted upon, that varieties must be selected with reference to climate, soil and location, disappointment will be less, and success more certain.

We have now, also, reason to belive, that by the intelligent use of the new remedies which have proven so successful both in this country and in Europe, the area of successful grape culture will be greatly enlarged; and that many of the finer varieties may be profitably grown in localities from which they have hitherto been excluded on account of their liability to mildew and rot in unfavorable seasons.

The number of new grapes of more or less promise, which have been introduced within a few years past, has been so large that I cannot within the limits of this paper, do more than notice a few of those most prominent, and which seem most promising for permanent value. The points to be determined as to a new grape should be: "Do we need it? And is it, in any important respect, better than those we have already?" Unless these questions can be affirmatively answered, I should say there is no place for it, and no propriety in adding it to a list already too long, of varieties whose usefulness is certainly very limited, if not altogether doubtful.

The Niagara grape is comparatively new; and although it has not been found adapted to very general cultivation, is still one of the most profitable and valuable for such localities as are suited to its requirements. It has not proven as early, nor as hardy as represented by its introducers; neither has it been more exempt from mildew of foliage or rot of its fruit than the average. But its vigorous growth and abundant bearing, with quality and appearance good enough to satisfy the mass of buyers and consumers, render it one of the new grapes worthy to be retained and recommended, wherever it can be successfully grown.

The Empire State is a formidable competitor for public favor with the Niagara. It is about equal to it in vigor of growth, probably little, if any hardier in severe winters, but within my experience has better foliage, much less disposed to mildew. In productiveness, usually somewhat less than the Niagara, but to my taste, in quality greatly its superior.

Moore's Diamond is a still later introduction of which I speak from a limited experience; but with the hope of bringing out information from those who have grown it longer. With me it appears no hardier nor healthier in vine or foliage, than the Empire State. About the same in vigor of growth, but not as productive, with bunches and berries somewhat smaller. In quality, distinct and pure flavored, but not better.

Another white grape of the Labrusca class, as yet but little known, originated at Columbus, Ohio, and named "Witt," after its originator, by the Ohio State Horticultural Society, has the merit of hardiness and health of foliage, and is fairly productive of handsome clusters of good size, and fine quality. It is doubtless a Concord Seedling, and resembles the Martha in foliage and habit of growth, but its bunches and berries are much larger and its quality and flavor much better.

The Woodruff Red has many good points to commend it, although there are differences of opinion as to character and value. It originated near Ann Arbor, Michigan, and is claimed to be a Concord Seedling. It seems to have all the vigorous growth, health, and hardiness of its reputed parent; and to have all the requisites for a popular and valuable grape, as nearly suited to general cultivation as any variety, new or old, yet introduced. It bears abundantly, producing berries and clusters of the largest size, bright and attractive in color, and ripening with, or a little earlier than Concord. It is, however, a variety pronounced in character, and distinct in flavor, a pleasant mixture of sweet and vinous acid, with also somewhat of the "native aroma" called foxiness, which to the many, when not in excess, is an added charm, and to the few an unpleasness." As many as nineteen in twenty who have eaten this grape in my presence have called it excellent, and some have even pronounced it as good, or better than the Delaware. I cannot agree with this latter opinion, but I have long ago ceased to dispute or quarrel about matters of individual taste; yet I do think the Woodruff has more of the character-

LA REINE.

istics of a popular ano valuable variety for general planting for market and for profit than any other red grape within my knowledge. I would therefore plant it for the nineteen who are satisfied with and like it, and let the twentieth look out for something else.

The Eaton is another new grape, black in color, and I believe is called a Concord Seedling. It somewhat resembles the Woodruff in vigorous growth and healthy foliage; as to comparative hardiness, and period of ripening I cannot say. As I have seen and tasted it on several occasions, it has less of sweetness and also of the "native aroma;" its juice being rather thin, and acid. It is, however, large both in bunch and berry, quite showy and attractive in appearance, and perhaps good enough to be popular and profitable for market and general use.

A black grape of entirely different character is the Jewel, originated by John Burr, of Leavenworth, Kansas, which has been highly commended in some sections. The vine is of the Labrusca charaeter, hardy in winter, with healthy foliage, in general habit much like the early Victor. It ripens very early—at Delaware, from the middle to the last of August, according to the season; a little before Moore's Early. The vine is very productive; berries and clusters only medium, about the size of the Delaware, or a little larger; skin thin, but tenacious, will carry well. Flavor pleasant and sprightly, not foxy. It has small seeds, and though a little pulpy, is not acid, or coarse at the center. Its rather small size, and only moderate growth are about its only faults; and though to my taste not, as some have claimed, as good as Delaware, it is the best in qnality of any very early ripening black grape that I have seen.

The Moyer is a new grape from Canada, that I mention for the purpose of having its merits discussed. As I have grown it, it is not as vigorous as the Delaware, though the foliage appears rather thicker, and better able to resist mildew. I fear the size of the clusters are smaller than Delawares, and its claim for extreme earliness seems to be its prominent recommendation.

Another red grape of something the same character, not yet introduced to the public, seems promising. Specimens were sent me from Indiana last season. Others were brought to the winter meeting of the Ohio State Horticultural Society last December, by the Editor of the *Indiana Farmer*, and were found of excellent quality and remarkable for long keeping. A vine sent me for trial shows vigorous growth, with very large, thick and heavy Labrusca-like foliage. The grape resembles Delaware, with somewhat larger berries and clusters and deeper color. It is rich and pure flavored, without foxiness, and pronounced very good by all who tasted it. It was named by its originator Mary's Favorite. I am not informed whether it is to be propagated and offered for sale; but it appears to have merit above many grapes that are now on our lists.

The Downing grape, which was originated by Mr. Ricketts some years ago has been lately introduced by Mr. Burrows, of Fishkill, N. Y. Although it is said to have been successful in some places in New York, I have found it unusually subject to mildew of the foliage, and entirely unsuited to open air culture in my locality.

The Mills grape the past season failed to ripen its wood, by reason of mildewed foliage, which fell prematurely, and I should class it with the Downing, as only desirable for amateur culture in specially favorable situations.

The Ulster Prolific, originated by the late A. J. Caywood, has some claims for consideration, and will probably be found useful in many localities, for its hardiness and productiveness, with good quality of fruit, and healthy foliage. The vine is of moderate growth, berries and clusters medium, color rather dark brownish red

The Nectar, which was first called Black Delaware, by the same originator, is offered for sale, but I can only report vigorous growth and healthy foliage.

I may also mention Francis B. Hayes, by the originator of Moore's Early. The vine is healthy, and of Concord character, in growth much like Martha, and also in size and appearance of its fruit, but ripening earlier, less foxy, and better in quality. I do not think it is as good, however, or as promising for general use as the Witt grape, or the Colerain, another white Concord Seedling of similar char-

acter, which originated in Belmont County, Ohio.

I have, perhaps, pursued this subject as far as it is either desirable or profitable, at this time ; but contraey to the opinions I have seen recently expressed, I think our most popular grapes need improvement.

We need a grape having all the general characteristics of the Concord or the Worden, with a more tenacious skin, which will bear handling and shipping with less injury, with also better quality and better keeping qualities.

We need also a Delaware, with more vigorous growth, larger fruit and healthier foliage. Or if we could have a grape like the Delaware, borne upon a vine having the character of the Concord for health and foliage and adaptability to different soils and locations every grape-grower would at once recognize its immense importance.

All these, and even more, can be, and I am sure will be, produced through the agency of judicious and skillful crossing and hybridizing. Such improvements are necessarily slow ; and as experience has shown, the encouragement to the conscientious grower and originator of new grapes is not large ; but the work will still go on, and improvements will be sure, though it may not be rapid ; and out of the many that we now have, and more that will surely come in the future, selections will doubtless be made that will be adapted to all sections where grapes can be grown, and no place within this limit need be without successful cultivators of this delightful fruit so conducive to the comfort, the health, and the happiness of mankind.

BEFORE the war the high water mark in cotton was 5,300,000 bales. The crop of last year is not yet entirely out of the hands of the planters, but those whose business attention is absorbed by the staple, place it at 7,400,000 bales, an increase of 300,000 over the year preceding. This season, with average weather, it will be 8,000,000 bales, worth nearly $400,000,000, or five times the value of all the gold and silver produced in the United States in one year.

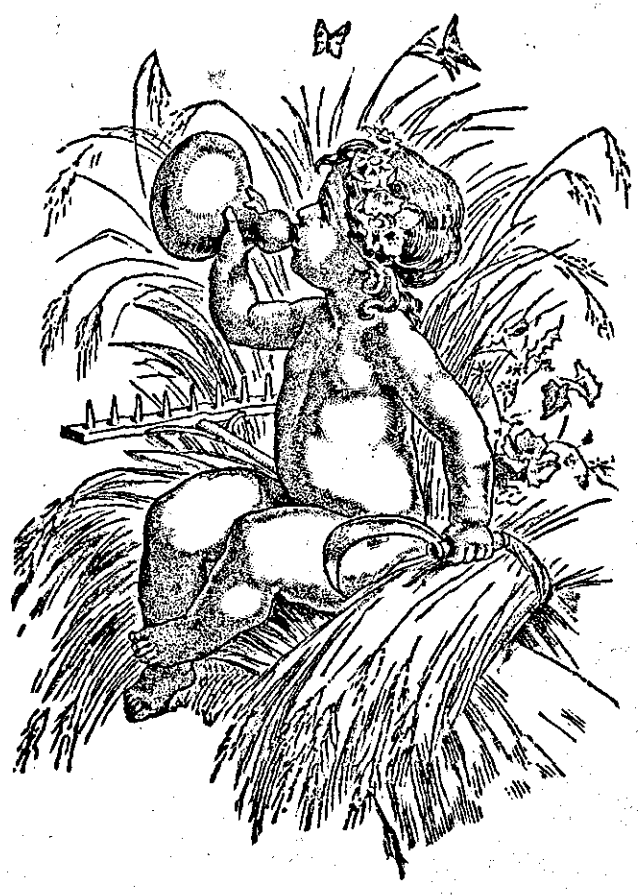
VINEYARDS IN WESTERN NEW YORK.

WE often hear of the "Chautauqua vineyards," and see them written about in the agricultural press of the country. Yet, in riding over the district, embraced, in about forty miles along the southeasterly shore of Lake Erie, extending back some three to five miles, we find that thirty-nine fortieths of the land is still devoted to farm crops, and but one acre in forty is planted, and scarcely two-thirds of the vines have come into bearing. Still, during the past season, 700 car loads of grapes were shipped from this region, on which was paid to the railroad, $100,000 for freights. The fruit was packed in two and a half million, ten pound baskets, which cost the grower $75,000. Fifty car-loads of wire will be used the coming spring, and $5,000 worth of manilla rope for tying. The Concord lead all other varieties, followed by Worden, Moore's Early, Pocklington, Niagara, Delaware, Brighton, Agawam, Lindley, Salem and Catawba.

Pear Blight. We hear very many complaints this season about leaf and twig blight in apples, pears and crabs, and we are asked for a remedy, and best means of preventing it. How many times has this same question been asked by interested parties, alarmed at the loss from this cause? We know of no certain remedy or preventive, but would recommend that orchards should be planted on a deep, well underdrained soil, naturally strong and rich. Do not plant too deep, and cultivate well, working the soil towards the tree and thus giving surface drainage. After cultivating three or four years the ground may be seeded, and the crop allowed to rot on the ground. Avoid manuring, for this only increases the danger of blight. Keep the surface cool and moist, not wet, and if growth is not sufficient apply some of the commercial fertilizers, or turn in one or more crops of clover.

JOHN HOPPER.

HORTICULTURAL ART Journal.



July, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. JENKINS, Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 7.

OUR PHOTOGRAPH OF NURSERYMEN'S ASSOCIATION MEETING IN CHICAGO.

THE fourteenth annual meeting of the American Association of Nurserymen was held in rooms of the Grand Pacific Hotel, Chicago, June 5th and 6th, President Geo. A. Sweet in the chair, with Chas. A. Green, Secretary.

Some three hundred members were in attendance from all sections, the West being more largely represented than the East; but, nevertheless, it proved one of the most interesting meetings ever held by the Society. The arrangements were perfect; a large dining room in the Hotel, away from the noise and confusion, was given up to the members. Many who made the Hotel their stopping place were not obliged to go outside; thus the whole time was given up to the business in hand. This strikes us as an excellent arrangement, and one that should not be lost sight of by future committees in making such arrangements. Another room, on a lower floor, was devoted to the articles on exhibition.

The proceedings opened at 10.30 Wednesday morning, Secretary Chas. A. Green calling the meeting to order, and in a few pleasant words, fitly spoken, presented the president with a gavel from the Eastern Nurserymen's Association.

Committees being the first thing in order, the following were appointed by the chair:

Committee on Exhibits — Franklin Davis, Baltimore, Md.; A. C. Griesa, Lawrence, Kas.; W. A. Watson, Normal, Ill.

Committee on Treasurer's Report—Samuel Lorton, Iowa; J. Van Lindley, North Carolina; Irving Rouse, Rochester, N. Y.

Committee on Final Resolutions — J. C. Plumb, Milton, Wis.; I. E. Ilgenfritz, Monroe, Mich.; Thomas B. Meehan, Germantown, Pa.

Committee on Necrology—N. H. Albaugh, Tadmor, Ohio; A. R. Whitney, Franklin Grove, Ill.; Silas Wilson, Atlanta, Iowa.

In answer to a call for information from the Committee on Stock, Mr. Bragg said he took no "stock" in the "stock" question. So after a few remarks from the chair, the matter was dropped, and not heard of again during convention hours; but only to be brought up again on the floors of the hotel, this forming a leading topic with that on the growth of stock through the country.

In his address on the Nomenclature of Fruits, Mr. H. E. Van Deman said :

"The members of this association have it in their power above all men to carry out this needed reform. But have you done so ? Have you ever made the attempt ? Why has not the association taken official action to establish uniformity of names for our fruits ? Certainly such a course would be most happy and profitable in its results. The nurseryman is the educator of the public as to the names applied to the fruits grown. Even the most ignorant tree peddler is taken every day by some one as authority in this matter, and how important that the lists put into his hands should be both uniform and correct. But how few nurserymen have made practical application of the rules that as members of one or more of the pomological or horticuleural societies they may have helped to make or endorse. A careful examination of the nursery catalogues shows an array of synonyms that is truly discouraging. We find the Ben Davis apple called New York Pippin in some of the eastern states, and Kentucky Red in the south ; we have Gilpin called Carthouse ; Romanite, Little Romanite, and Little Red Romanite, according to previous knowledge, or, it may be, the fancy of the nurseryman. Some still hold to the old, useless and long ago discarded appendage, "Pippin," which was first attached to Grimes Golden. The much simpler and equally intelligible name Westfield is often seen with the "Seek-no-further" attachment. Angouleme pear has its old prefix and suffix carefully preserved. Cumberland strawberry has its "Triumph" and Woodruff and Wyoming grapes have their "Red" superfluities. The crop of swelling "Wonderfuls" and overloaded "Prolifics" seems to be still growing.

It is easy to see how all this confusion and useless bombast is originated and propagated. Some nurseryman originates or purchases the stock of some new thing, and not to be outdone in a name he goes in for all the thing is worth, and perhaps more too. Or he may, in his honest, ignorant simplicity, have found some old variety and renamed it.

Might not this association take some action that would in a few years induce the nurserymen to submit their catalogues to a committee on nomenclature or same authority by which the names may be corrected, and the same fruits may in time have the same names in all places. Of course it will be impossible to change the local names, but the annoyance and inconvenience *of teaching the people the correct names will be far* less than to continue the present custom of everyone using such names as may suit their fancy.

The rules of the American Pomological Society regarding the naming of new fruits are quite sufficient, but they lack practical application by the nurserymen of the country. If they were lived up to, there would be great advancement in knowledge, and the confusion which now occurs would soon cease.

I would most sincerely and respectfully urge you as pomologists and as business men to not only take this matter into consideration, but to take steps to apply the ideas which, I presume, we all agree, are fraught with good."

This is a very important question and should not be forgotten or overlooked. [Ed. H. A. J.]

Mr. Franklin Davis, in speaking about the nursery outlook said :

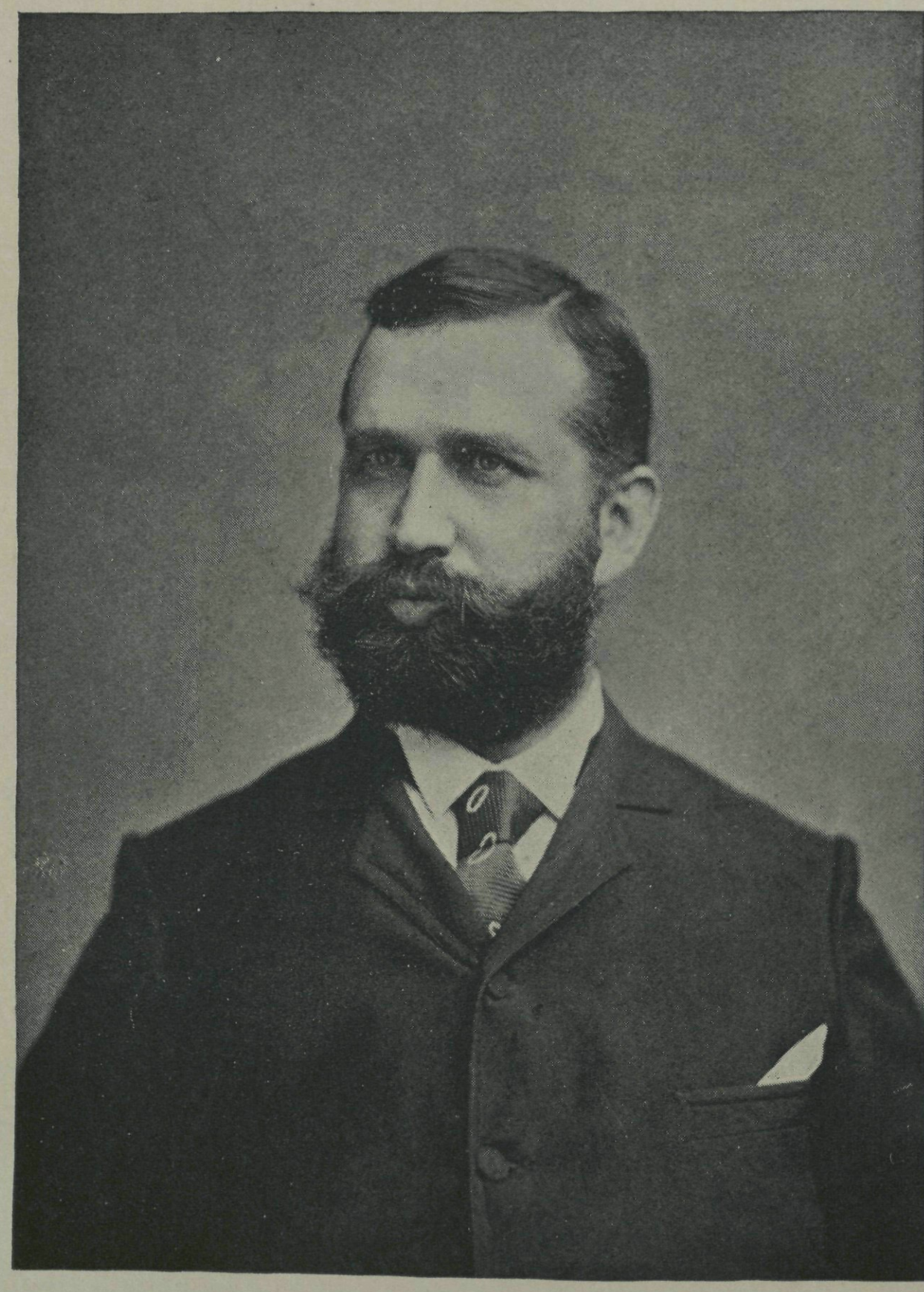
"The future is wisely hidden from us, our eyes are too dim and our vision too short to get even a glimpse of what is in store for us, no glass, however strong, can penetrate the misty veil that hangs between the present and future of the nursery business ; it is mainly from the past that we make up our conjecture of what the future may bring forth, therefore let us turn our faces backward and see what encouragement we can get from that direction. It is over forty years since we put on the harness and entered the nurserymen's race, little thinking it would continue up to the year 1889. Large numbers have dropped out, but their places have been filled and new entries have been made, until the track seems rather crowded at this time, yet we remember a neighbor commencing in a small way to grow trees ; his friends shook their heads and said it was a mistake, he could not find sale for his stock, but he did sell it, his son succeeded him in business, conducting it on a larger scale for a long time, and now a grandson is following in the same line, extending from year to year, until the magnitude of his business is truly wonderful.

Many have entered the business during these years and failed, and others will follow in their footsteps, but this is not always because of any lack of good opportunities in the business, but rather from unfavorable location, want of proper management, or lack of essential qualifications of the individual.

During these fifty years there has been a steady increasing demand for nursery products, and so it is likely to continue in the future as our country becomes more densely populated and the vast areas of unoccupied lands in the territories and newer states are brought under cultivation. The divisions and subdivisions that must follow this increased population in the older settled ones, together with the planting required to keep up the natural decline of the orchards, gardens and ground now in existence and to be planted, will require such an amount of nursery stock for future use that we cannot well comprehend the magnitude of it. It is not only the demand created by the natural growth of the country that we should consider but the increasing consumption of fruit on our tables, the method of preserving it for use out of season, with the demand for large quantities for exporting, all these tend to increase the demand and encourage the production of fruit, and make a demand for fruit trees. * * *

It is not wise to grow more than we can reasonably expect to dispose of at a profit, and to those who understand their business, who grow good stock and conduct the business in an honest and honorable way, we think the outlook is encouraging. * * * We must practice economy, study the best methods of doing the work, be careful in propagating, have eyerything true to name.

Do not worry about what your trade will call for ; propagate the best varieties, grow the best grade of stock and then sell it, and the outlook for the future of the nursery business will prove bright to you."



H. W. JOHNSON,

PRESIDENT AMERICAN SEED TRADE ASSOCIATION.

In reply to the question "Should Nurserymen use Fertilizers," Mr. Thomas Meehan, of Philadelphia, said :

"It seems to me like inquiring, might he eat beefsteak ? Some may, and some may not ; and some may at one time, when at others it would be improper. We have used them only to a limited extent. We use almost wholly manure from horse railway stables. It is so satisfactory that we desire no other.

We have been told by friends that this is wasteful ; that most that we pay for and haul away is but water, and in a whole cart load of stable manure all that is of use to a plant may be carried in a saucer. But this is true of almost everything. Water is the chief article we pay for in a Peach or a Watermelon ; and the whole profit a baker derives from a barrel of flour consists in the water he mixes with it to turn it into bread.

The bulk of what an animal eats is rejected. The proportion of food assimilated by the animal is ridiculously small, yet is that bulk of waste useless ? Would the animal thrive as well if only that which it assimilates were given to it ? No one will believe it ; and I equally believe that bulk is of great value in manure, though there be no great proportion of immediate value than in the food of animals.

It has been said of a Scotch Lord, who was enthused with agricultural chemistry, that he once told his farmer the time would come when he could carry the manure for an acre of ground in one vest pocket. "No doubt, my Lord," was the respectful reply, "and he will most likely carry the crop from that acre home in the other."

We have got no further than that to-day. The concentrated manure has not given us the great crops. Bulk, with all its hard labor, and supposed waste, is popular with all, only when it can't be had at reasonable rates, are commercial fertilizers popular at all.

The expression "reasonable rates" to my mind tells the whole story. No nurseryman can succeed without rich soil. A half starved tree is like a half starved animal. The spark of life is low. An accident to a man of low vitality may be fatal. The man with strong vital power will easily survive that which will kill the other. Transplanting is an accident, a blow at vital power. Mortality among trees where the ground has been allowed to become poor is always greater than where good food is continued with the trees. Many understand this, and will give more for trees from a well fed nursery than for trees from poor concerns. But usually the nurseryman cannot get more. His only comfort then, is that he doubles his acreage. He gets trees as large in one year as he would in two on poorer soil. He must have manure ; if he cannot get the bulky kind at a reasonable rate he must get commercial fertilizers.

It is to my mind wholly a question of profit and loss to be determined only by actual experience in each case.

But so much am I attracted by bulk, that in many cases where others would use commercial fertilizers I would prefer to plough in a crop of green clover, though I lost the use of the ground for a whole season. If the ground did not grow good clover, I would use lupins or green corn.

It may be gathered from my remarks that I think a nurseryman may sometimes profitably use commercial fertilizers, but that I think I should use them less than some others would, though favoring bulk as a very useful ingredient in a good manure."

Mr. Bragg, in speaking of "New Implements of Value to Nurserymen," more especially of the "Tree Digger," said :

"The force of circumstances will oblige you all to adopt it sooner or later. It will save you at least 500 per cent. in labor, besides trees are dug with very much finer roots than they can be with spades. The "Whitney" or "Western digger" you are all, or nearly all, acquainted with. As to its merits, never having used it I am unable to speak understandingly. Last year, at Detroit, my attention was called to a digger from the Miami Valley. After looking it over I concluded that it might do good work under certain circumstances. Should there be any one here who has used this new digger, I should like to have them inform the Association how it works.

The best digger is the one we all want, no matter where it comes from—Michigan, Illinois or Ohio. The old saying. "The proof of the pudding is the chewing of the string," would be a good plan to go by in purchasing a digger, and my advice to you is to buy one of each, try them all to your satisfaction, retain the one that suits you best, and lend the others to your neighbors. This at first may seem too expensive for some of you. If so, ask the proprietors of the different makes to each send you a digger on trial, you agreeing to retain and pay for the one that does your work to the best advantage."

It is very evident to all intelligent observers that the Tree Digger has become an indispensable article in the nursery, and in the hands of careful men will do successful work.—Ed. H. A. J.

Mr. Albaugh, in his remarks about packing and shipping nursery stock, says :

"I have seen trees delivered from boxes to farmers, where they were thrown bare into the wagon bed, the farmer then spending hours trading in the town, while the warm sun was beating down upon the naked roots, and then drive a dozen miles or more to his home, unhitch the team after dark in the barn lot, and leave the trees thus unprotected till morning, when a heavy frost occurred during the night, falling upon the unprotected roots. and then when his trees died, after being set, denounced the whole tribe of tree dealers and nurserymen as swindlers and frauds."

How can such trees live ?—Ed. H. A. J.

(Continued on page 53.)

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., Aug. 20th, 1889.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; C. W. Garfield, *Sec.*, Grand Rapids, Mich.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A. Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1889.

AMERICAN SEED TRADE ASSOCIATION.—W. H. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; A. M. McCullagh, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

THE WEATHER HEREABOUTS.—Several severe hail storms visited this section during the month of June. One, on the 9th, was very severe, and did much damage to young growing crops and greenhouses. We learn that in the southeast section of the city one man after the storm was over, filled his refrigerator with chunks of ice that fell during the prevailance of the storm, which lasted into the next day. Some of the Nurserymen, Florists and Gardeners caught it heavily. Late frosts, and excessive and heavy rains since, have had a very bad effect on growing crops. The Strawberry and Cherry crops, now ripening, have suffered through this unseasonable weather.

WHILE in Chicago we took a run out to the Parks, now becoming the pride and boast of this western Metropolis. Although the weather was cold and damp (it rained every day we were there) the bedding plants were looking well and made quite a show. We were told that over 200,000 plants had been used in filling the beds in Lincoln Park. The South Parks consumed over 250,000; here the planting was very fine; a sinuous flower bed nearly half a mile long and six feet wide, all as gaudy as the gayest coloring could make it. What a pity the deciduous trees and evergreens in these parks could not be brought to so high a state of growth. Whatever they may be able to do with plants, the conditions seem unfavorable to the development of many of the varieties of trees as now planted there.

MR. A. GLENN sends us (June 20th) specimens of Ostheim Cherry, grown at Columbus, Ind., on trees received from Prof. Budd in spring of 1886, then one year old. Mr. Glenn writes that the trees seem to be thrifty, healthy, and so far hardy. Compared with Early Richmond, the only kind grown there, Ostheim must be much later, for that variety was then all gone. The samples received were of a dark liver color, very firm in texture, of good xuality, and about size of Early Richmond.

STECHER LITH. CO. ROCH. N.Y.

HIBERNAL.

(Continued from page 51.)

Speaking of comparisons in forestry planting, Mr. Carpenter, of Nebraska, said :

"Last year, according to the statistics procured from Washington, Great Britian planted 4,287,000, France, 5,400,000 and Germany 13,000,000, deciduous forest trees, As seen from the foregoing these three great empires planted 23,687,000 while the books of the nursery I represent will show an actual sale for the year ending April 20th, 1889, of over 25,000,000, enough if planted four feet apart to make a timber belt around the globe overlapping the three greatest European countries by over 1,000,000 trees.

There are several other firms in Southern Nebraska whose sales run up into the millions, and there are to-day growing in three Southern Nebraska counties, Saline, Filmore and Jefferson, over 100,000,000 forest tree seedlings for the Fall and Spring trade.

We mention these facts because we have learned that even in forestry planting the United States leads the world, and that the state of Nebraska alone leads all Europe."

In view of the rapidly disappearing forests of the country, such information as the above is valuable and encouraging, and shows that, with care, those coming after us will be provided with what we now enjoy, and the country benefitted by the increased planting from year to year.—Ed. H. A. J.

Mr. Willard on the New Varieties of Plums.

IT has been said "that it is as well to be out of the world as out of the fashion," and this seem to-day to apply equally as strong to Nurserymen as to any other class of business men.

The people annually want something *new*, whether of value or not, seems to be a secondary consideration. New varieties are in demand, and the man or firm that cannot make a showing of them in some shape is regarded as not up to the times and hardly worthy of patronage. The sentiment of the age must be met. The small fruit growers have the honor of having shown more discernment in anticidating the wants of the public in this direction than their more conservative brethren who have confined their efforts more especially to the Tree trade, and as a result varieties of Strawberries, Raspberries and Blackberries have been multiplied almost without limit, each in turn adapted to all sections and conditions, and in point of productiveness far excelling its ancestry ; *in short*, fully fitted to meet the requirements of the 19th century in every respect.

Truly we are living in an age of progress, and while the small fruits have led the way, it is a matter of encouragement that a more lively interest is being awakened in the culture of the Apple, Peach, Cherry, Pear and Plum, and in which adaptability, productiveness and good quality are carefully studied, while new sorts are yearly being produced and tested to meet the wants of a fastidious people. Your Secretary has had quite an extended experience in the dissemination of new fruits, the reminiscences of which probably prompted him to ask from me a few words on New Plums.

The annoyance to which the Plum-grower has been subjected by reason of its capricious habits and the depredations of insect life has caused this valuable fruit to have been, until recent years, more or less neglected, while attention has been bestowed more lavishly upon the other fruits, but with the advent of "The Wild Goose" a new impetus seems to have been given to the development of new varieties of Plums, and the results have been satisfactory and profitable, with the probability that in the near future the growing of Plums for market may become one of the great industries of the country. Under such conditions it may possibly be well as an association for us to learn from each other what we can of varieties being brought out and tested of this most excellent fruit in our respective localities.

Downing tells us of *three* species of Wild Plums indigenous to this country—the Chickasaw Plum, the Red or Yellow Plum, and the Beach Plum, while a fourth, which has become naturalized in this country, had its parentage in Asia, and has given us many valuable seedlings that are grown with a remarkable degree of success to-day over a large portion of our country. It is of this species mainly that I shall speak, mentioning a few varieties that have come under my observation, some of which may be new to you, while at the same time I would not ignore the value of those sorts having their parentage from our Wild Plum that seem especially adapted to sections where the European varieties do not succeed, and I am sure it would be a subject full of in-

terest to this body if some party whose experience may have fitted him to do so, would give us a list of the newer varieties of value from the three first named sorts. Of some of the new varieties tested within the past few years we have found the following good enough to deserve notice :

The Field—Much like Bradshaw, ripening a little earlier ; very productive, inclined to bear early ; origin Schoharie County, New York.

Stanton's Seedling—Fruit medium size ; color, dark purple, with a beautiful bloom ; very productive ; ripens from Sept. 15th to Oct. 1st, and has been kept two weeks after ripening, with no tendency to decay. As a fine canning fruit it has no superior, and has fine quality as a table fruit.

Prince of Wales—A variety imported from England several years since ; intensely productive ; large, skin reddish purple and thick bloom . flesh greenish yellow ; very attractive and sells well in the markets, though not of the highest quality.

Middleburg—Fruit medium to large, dull copper color ; in shape and in keeping qualities much resembling the Prune, keeping a long time without tendency to decay ; hardy, and ripening about Sept. 15th ; a promising market variety.

Shipper's Pride—Tree very hardy ; productive ; origin, Cayuga County, New York ; promises to be valuable for market.

Gueii—Fruit very large, deep bluish purple, covered with thick bloom ; flesh yellowish green, coarse, sweet and pleasant ; great bearer and very early ; tree a hardy and rapid grower. This new variety is regarded as very valuable for market by growers along the Hudson river. Vigorous grower. First to middle of Sept. One of the best where a market Plum is wanted of dark color.

Hudson River Purple Egg—A large, dark, purple fruit ; considered very valuable as a market variety in some localities on the Hudson river. A fine grower and productive. September, and will be more sought after when better known.

Peters' Yellow Gage—This valuable variety, we think, was introduced by Ellwanger & Barry, quite a long time since, and yet for some reason has never been generally grown and recognized. Fruit large, nearly oval, bright marbled yellow ; flesh rich and juicy, quality very good and very productive. I have often thought that if confined to one yellow Plum this one would be my selection.

Canada Orleans—This variety has been grown some years in the vicinity of Hamilton, Ontario. Fruit medium to large, skin reddish purple, covered with a blue bloom ; flesh yellow, juicy, melting, very sweet and rich ; ripens early in August, and handles well.

With a growing demand for Damsons in all markets, considerable attention has been given them. As a class they are hardy and productive.

The French Damson has much to commend it. Tree a mucn better grower than Shropshire or Blue Damson. Very hardy and an annual bearer ; very productive; fruit medium; dark copper color, with rich bloom, and the *best* Damson for market purposes we have ever fruited ; ripens about two weeks later than Shropshire.

Shropshire Damson—A Plum of fine quality, as free from the attacks of curculio as the Common Damson, aud of same color. The flesh is amber colored, juicy and sprightly. In market it has commanded nearly double the price of the Common Damson, and is enormously productive. Last of September.

Frogmore Damson — Fruit small, intensely productive, and promises well. Originated in the Royal Gardens at Frogmore, England.

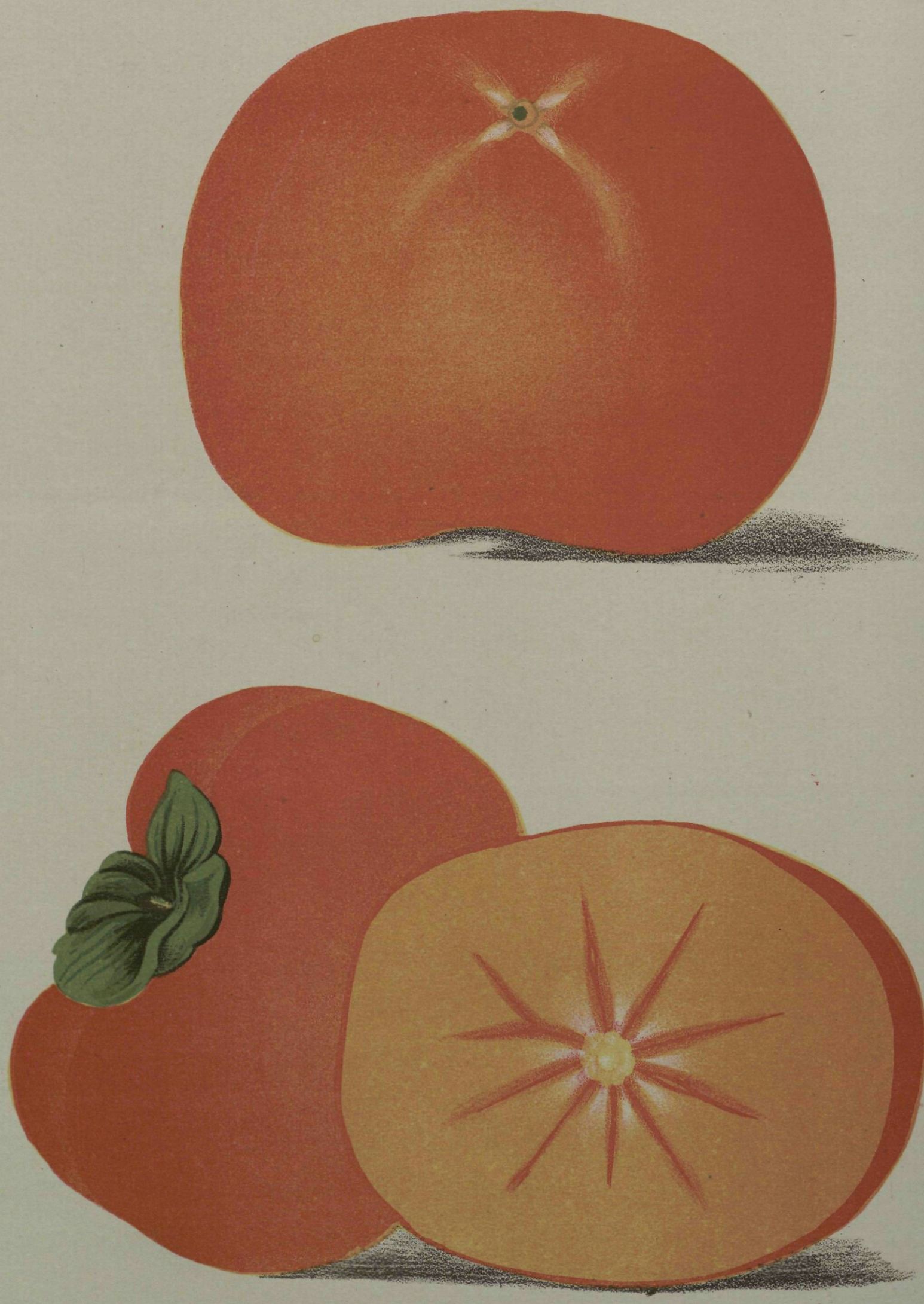
Farleigh Damson—Another of the same class from England, which promises well, after fruiting several seasons.

The following new European varieties are being tested, each of which promises well and may prove valuable acquisitions to our list : *Czar, Grand Duke, Rivers' Early Prolific, Black Diamond, Mallard, Bittern, Curlew, Heron, Late Transparent.*

A few years since a native variety styled *The Garfield*, possessing keeping qualities of a very marked character, was sent out by a member of this association from Ohio, which may be of value. Can anyone present say anything in its favor ?

The *Bohtan* and *Ogen* may have some value, the fruit of which is promising in appearance, while the trees seem hardy.

The Kelsey is not sufficiently hardy for the Middle States.



JAPANESE PERSIMMONS.

MEETING OF AMERICAN SEED TRADE ASSOCIATION, WASHINGTON, D.C.

THE seventh annual meeting of above association was held in rooms of the "Arlington House" Tuesday, Wednesday and part of Thursday, June 11, 12 and 13, with Vice-Pres. Jas. H. Allen, of Picton, Ont., in the chair. Five sessions were held, at which time was discussed matters of interest to the seed trade only. Secretary Rusk, of President Harrison's Cabinet, was invited to be present, but failed to put in an appearance This was done with a view of securing his co-operation in correcting some of the abuses the American seedsmen feel sore about. Several applications for membership were acted upon favorably to those aspiring to become members of the association, and many jokes passed at the expense of one another. While the members felt jolly, it leaked out that on the whole, the season had not been quite as good as usual. The attendance was good, though many members of the association had started on their European trips. The following officers were elected for the ensuing year: W. H. Johnson, Philadelphia, Pres.; J. C. Vaughn, Chicago, Vice-Pres.; Albert M. McCullough, Cincinnati, Sec. and Treas.; Frank I. Emerson, Omaha, Assistant Sec. The place of next meeting was fixed at Saratoga Springs, N. Y., in June, 1890.

Among those present were the following: E. D. Adams, John H. Allen, H. A. Adams, C. L. Allens, F. W. Barteldes, J. Bolgiana, D. I. Bushnell & Co., A. E. Brown, Mr. Burt, with S. L. Allen & Co., A. N. Clark, E. B. Clark, Geo Crossman, Comstock, Ferre & Co., B. P. Critchell, A. L. Dow, J. H. Dunlap, Z. DeF. Ely, F. I. Emerson, John Fottler, Griswold Bros., John Gardiner & Co., S. Y. Haynes, E. V. Hallock, Chas. Henderson, Peter Henderson, W. H. Johnson, W. P. Stokes, W. C. Langbridge, S. F. Leonard, A. Low, F. E. McAllister, Albert McCullough, J. C. McCullough, Wm. H. Maule, Wm. Meggat, Henry Nungesser, Northrup, Braslan & Co., E. B. Parsons, Price & Reed, Albany, N. Y., N. R. Rice, of J. B. Rice & Co., N. I. Robinson, Henry A. Salzer, La Cross, Wis., J. C. Vaughn, H. W. Wood, Richmond, Va., D. S. Woodruff. Quite a number of the members were accompanied with their wives, which made it all the more pleasant. So that on the whole it was a very pleasant visit to the capitol of the country.

PRESIDENT AMERICAN SEED TRADE ASSOCIATION.

HERBERT W. JOHNSON, the newly elected president of "American Seed Trade Association," is a native of Pennsylvania, born in Bucks County in 1850 of Quaker parentage. Mr. Johnson is well-known as the partner of W. P. Stokes, the firm name of which is Johnson & Stokes, located in Philadelphia, and was organized in 1881. The success of the firm has been phenomenal from the start, all their dealings having been characterized by care, promptness and reliability.

Mr. Johnson resides with his family, consisting of wife and two children, at Merchantville, where are located the "trial grounds" of the firm, and where extensive and interesting trials of various novelties in seeds and plants are made under his own personal supervision. No wonder that he enjoys the esteem and confidence of the "trade," and his popularity is shown by the positions to which he has been elected from time to time, and other positions of trust and honor enforced upon him.

Johnson & Stokes are well known as the originators and introducers of a number of good things in the vegetable line of real merit, among which we may name the following: CABBAGE — *Wonderful.* — Making enormous and solid heads seventy-five days after sowing. CABBAGE—*Johnson & Stoke's Earliest.*—Maturing in a very short period, with large solid heads. CABBAGE—*New Short Stem Drumhead.*—A very fine strain, and remarkable for the reliability of heading. WATERMELON—*Johnson's Christmas.*—Reliable parties tell us that they have for the past five years enjoyed this fine melon at Christmas and New Years. PEPPER—*Mammoth Golden Queen.*—This is of large size, perfect shape and mild flavor. POTATO—*Crown Jewel.*—Ripens very early, and is very productive; of superior quality. RADISH—*White Box.*—One of the very earliest, with a remarkable short top, rapid growth and perfect shape.

Besides the above, which we have briefly noticed, originating with the firm on their extensive seed farms, they have introduced a number of good things originating elsewhere, as they are always on the alert to get hold of the newest and best. No wonder then that they have several times been obliged to add more room in which to conduct their rapidly extending business.

A NEW GOOSEBERRY.

"We are sending you to-day, June 21st, a bearing shoot of a most excellent gooseberry, there will probably be a demand for, when better known. There is no fear about its selling here and giving great satisfaction, as it has been tried in several parts of England with the greatest success. We shall be sending plants in the fall and spring to several different states of the Union, and to Canada, for trial. The variety has extraordinary vigor, so we cannot see why it should not succeed as well, or better, in the United States as the Industry. The berries at this time of the year are decidedly larger, it is an enormous cropper and a more valuable gooseberry."

RICHARD SMITH & CO.

Worcester, England.

July 2nd, twelve days after the above was written, we received the branch of gooseberry fruit; the shoot was about eight inches long, of stout heavy growth, and large foliage, and had on it 28 large sized berries. We could find nothing with which to compare it with for size. Of course it was not ripe, and may not have been fully grown. [ED. H. G.]

FLORISTS CONVENTION.

Will be held in Buffalo, N. Y., Aug. 20th-22d. From the location of Buffalo, and the easy access thereto from every point, this should be largely attended, and should prove the best convention ever held by this society. The local organization is not so large as in some other cities—New York, Philadelphia, Boston, &c., but there are many attractions at Buffalo, and near it, not to be found at any of the places named—Lake Erie, Niagara Falls, etc., —which draws thousands every year from all over the world. Buffalo has a fine park and cemetery, and thousands of well kept lawns, and then when you are at Buffalo you are within two hours ride of Rochester, with her extensive nurseries. So we say be sure and attend the Florists Convention in Buffalo, and take in all the "side shows." Twenty-two railroads offer a rate of one and one-third fare, and tickets good for nine days.

The last day of the meeting of the American Seed Trade Association at Washington, was by far the pleasantest. Many of the members visiting Mount Vernon, and afterwards calling on Secretary Rusk at the Agricultural Department. Mr. Rusk informed his visitors, in the course of a very pleasant conversation, that had he received their invitation in season to attend their meeting, he would certainly have been there, he further expressed himself as in accord with their efforts to correct certain abuses in the seed trade.

IT IS WELL.

To know that the mission of a crank is to turn things over.

To be kind to yourself that the world may follow in your footsteps.

To think of the right thing at the right time, to do the right thing at the right time, to *be* right always.

To gather from the experience of those who have gone before, knowledge for present service and for the benefit of those who may come after.—*Good Housekeeping*.

ONE BRIGHT SPOT.

Wandering through life's wilderness,
I grope my troubled way,
Hope pointing on to plainer paths,
As day succeeds to day;
My guiding star oftimes obscured,
I still have One Bright Spot.

A worldly, weary pilgrim,
Oft times with measured tread,
Oft times with little sunshine,
To fall upon my head,
Oft times with loaded crosses
That may not be laid down,
But I know there yet remaineth,
If true, a victor's crown.

To win that crown and wear it,
All worthily and well,
Will bring full compensation
For woes that once befell;
When the "wicked cease from troubling
And the weary" no more roam,
That One Bright Spot I still shall have,
And that Bright Spot—My Home.

My home, O joy indeed, to know
That when life's race is run,
When breaks the resurrection morn,
And a new life begun,
That through gleams of golden glory,
Reaching up to heaven's dome,
That One Bright Spot will mirrored be
In an eternal home.

—*Good Housekeeping.*

STECHER LITH. CO. ROCHESTER, N.Y.

FUNKIA UNDULATA VARIEGATA.

HORTICULTURAL ART Journal.

August, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorialmanagement of T. B. JENKINS, Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 8.

OUR ILLUSTRATIONS.

A FRIEND, whom we esteem very highly, writes us criticising some of our illustrations of fruits in our last issue. He writes in a very friendly way, but deplores the fact that some things are exaggerated in size and color. There is some truth in this; but then this is a wide country, with many varying conditions, which, if not always stated, may mislead some. Our desire is to represent all we do as Nature made it. This, we think, is, and should be, good enough for all. But we cannot afford, from the income of this journal, to make all the colored plates specially for it; hence we take them out of stock which are made for the purpose of nurserymen effecting sales. Still we think there is a beauty about all fruits and flowers that is hard to portray on paper, and which representations look tame beside the original. We do not intend to overestimate any of the fruits, either in size or appearance.

CORRECTION.

The apple illustrated in our last, over the the name of "Hibernal," is, we believe, an error. This fruit was sent us from Missouri, and in some way, not being familiar with the variety, the names of several got changed. We now believe it to be good, fair representation of *Rambour Queen, No. 502*, of the importation of 1870 by the Department of Agriculture. At the time these fruits came to us from Missouri, we thought this was the handsomest apple we had ever seen, much like Oldenburg, but entirely out of its season.

The nomenclature of these "Russian" fruits is very much mixed, and a good deal of it uncertainty, as to the origin, attaches to many of those which promise to become popular. It is not generally known that many which have come to us from Russia are not natives of that country, but have been carried there from other parts of Europe, and in some cases may have been received here from the place where they originated.

Since the above was written, a friend of ours residing near here, writes us that he has fruited this variety (*Rambour Queen*) for the past eight years, and considers it of good quality and the "handsomest apple I have ever seen."

SOCIETY OF AMERICAN FLORISTS.

DO not forget the next meeting of this Society, which will be held in Concert Hall, Music Hall Building, Buffalo, N. Y., August 20–23, 1889. The officers are: President, John N. May, Summit, N. J.; Vice-President, Wm. J. Palmer, Buffalo, N. Y.; Treasurer, M. A. Hunt, Terre Haute, Ind.; Secretary, Wm. J. Stewart, Boston, Mass. All the railroads centering in Buffalo have agreed upon a uniform excursion rate of one and one-third fare upon the certificate plan, which is plainly set forth in the circular issued by the executive committee. A very interesting programme has been prepared and a large attendance is anticipated. Aside from what is to be learned from the discussions which will follow the reading of papers by some of the best florists of the country, and the exhibition of many new plants, with all the mechanical devices used by the trade. Much is to be seen in and around Buffalo: her numerous parks and drives and well-kept lawns are a credit to the city. Then there is Niagara Falls, twenty-three miles distant, one of the wonders of the world. The feature of the fourth day will be an excursion to this place, to which thousands from every part of the world go every season. To every florist of the country we would say, go! for you can make the journey one of pleasure and profit.

VEGETABLE GARDEN.

TOMATOES TESTED.

AT the Agricultural College, Michigan, 148 varieties of tomatoes have been tested. A large number of so-called varieties have been found synonymous, or so nearly alike they could not be readily distinguished; still the result of the work greatly simplifies the work of the gardener, who, when selecting, need only consider the groups and not the sub-varieties, which differ little from each other. For pickling and preserving the varieties known as the cherry, the pear and the plum tomatoes are commended. For ordinary cooking and table use, the apple-shaped variety is the best, as Advance or Hathaway's Excelsior for early, and almost any in the group of Cardinal, Paragon or Perfection groups for main crop. Of these latter, the Ignotum, of the Paragon group, is especially commended in the following terms: Among the older varieties the Ignotum deserves special mention. This tomato was obtained as a sport from *Eiformige Deuer*. This year (1888) it exhibited some tendency to revert, but it furnished us the largest and finest fruits we had. They were thick, solid and quite smooth. One of the earliest to ripen, its plants remained vigorous throughout the season, notwithstanding the dry weather, and still held a number of green fruits when killed by frost. The variety was tested by quite a number of specialists, and without exception they spoke favorably of it. Prof. E. S. Goff, of the New York experimental Station, writes: "Although the fruits were not very uniform, some were as fine as anything in the shape of a tomato I have ever seen; of good size, remarkably solid and perfectly smooth. With a few seasons' selection it will doubtless be unsurpassed." The Mikado is described as quite early, and averaging the largest of any tomato grown; the thin skin of Acme makes it tender for distant shipment.

MARTHA CRAB.

JUST as we go to press we receive from J. B. Wild & Bros., Mo., a small box of this crab; to say that they are handsome conveys but a poor idea of their appearance. A beautiful soft creamy yellow, overspread with vermillion; on the sunny side the color fully as deep as in a highly colored Red Astrachan. Most of the specimens measure eight inches or over, and weigh three and one-half ounces; from the peculiar markings we have no doubt as to the variety. This is by no means a new variety, it has been grown in this section for some time, but never more than half the size, nor half so brilliant in color. If we were to truthfully represent this by a colored engraving, as it to-day appears on our table, some one would surely say that it was overdrawn as to size and appearance. Near them stands a plate of peaches, a new variety received from Illinois, every one of which measures within a fraction of twelve inches, smooth and handsome, and beautifully colored. No artist that we have ever seen can truthfully portray this fruit as it appears, were he

JONES' SEEDLING.

(From Tennessee.)

to do his best, it would fall far short of what it really is, and yet there are those who would accuse us of over-drawing and coloring these specimens—taking the best of everything, we say, we don't think it can be done—and why not select the best; whatever has been accomplished, or reached, can be done again. It is true that varieties do not succeed everywhere alike, but that is not the fault of the variety, simply the conditions that at the time surround it. Beautiful fruit and flowers—and what is there that is not beautiful—are without comparison.

THE GREENHOUSE.

Lantanas.

THE several species and numerous varieties of Lantanas form, when taken together, a group of useful free flowering or warm green house plants belonging to the Natural Order Verbenaceœ.

With the exception of a few varieties which are of trailing habit, the Lantanas may be described as being plants of shrubby habit and upright growth, having square stems, opposite petiolate, serrate leaves, and bright various colored flowers, which constantly change in hue and vary in color from yellow to deep orange or a rich rose. Unfortunately the foliage is strongly scented, and on this account its peculiar fragrance is not agreeable to many persons; so the genus has been sadly neglected. But I claim that the Lantanas rank among the best and most desirable of summer flowering plants for our climate, as they do equally well in hot, dry or wet weather, sun or shade, and there are no bedding plants that grow as rapidly, bloom more senteniously, or afford as great a variety of colors as the Lantanas.

The species are mostly natives of South America, from whence they were introduced many years ago, but they are seldom met with at the present day, and most if not all of those now listed are hybrids of the different species, on which they are decided improvements in being of a more dwarf, bushy habit of growth with a greater freedom of bloom, as well as in the size and color of their flower.

As summer blooming plants for the decortion of the flower border, or for bedding purposes, the Lantanas are unequalled, on account of the ease by which they can be propagated and grown, their free blooming qualities, as well as their possessing the capability of resisting drouth, growing well and flowering freely when most other plants are dried up from want of moisture. In bedding Lantanas it must be remembered that they will produce the best results when grown in deep common garden soil, and the plants should be rooted as early in the season as possible and grown on carefully until about the tenth of May, when they can be grown outside placing them about one foot apart each way.

As most varieties are of rapid, vigorous growth, they soon form large specimens, and when grown with a single stem and trained as standards, they present on the lawn, or indeed in any situation where they are placed, an effect that cannot be equalled by many other plants on account of their bright colors and constant summer and autumn bloom, and wherever room can be spared some should be grown especially for this purpose. They can be grown in large pots, boxes, or small tubs, and if properly trained and cared for will make in a few years grand flowering specimens. When thus grown they should be repotted every spring, using ordinary potting soil. Do not place them outside until all danger of frost is over. During the summer they should be well supplied with water, and as soon as the pots or tubs become well filled with roots give liquid manure at least once a week. In the autumn they should be brought inside before they are touched by frost, and placed in any situation where an average temperature of 50 degrees is maintained. Water sparingly until the first of March, then they can be started into growth and the young growth used for the purpose of propagation if necessary.

Amateurs often attempt to lift their plants in September with a view of preserving them over for another season, and a failure is generally the result. In order for them to preserve stock for another season's use a few of the small spring struck plants should be

(Continued on page 61.)

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. N. May, *Pres.*, Summit, N. J.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Buffalo, N. Y., Aug. 20th, 1889.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; Prof. A. A. Crozier, *Sec.*, Ames, Iowa.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—H. W. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; A. M. McCullagh, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

FUNKIA; OR, DAY LILIES.

(Subject of Illustration.)

FUNKIAS, of which there are several varieties, may justly be termed permanent bedding plants, and are well-adapted for planting on the lawn, as single specimens, or the margins of beds or borders. All the varieties delight in high cultivation, and do best in a deep, rich soil, where they can remain for at least several seasons without removal. Although the plants present a tropical appearance they are perfectly hardy.

The variety we illustrate in this issue is known as *Undulata Variegata*, (Media pictu), and is of more value than the plain varieties, for the reason that the variegation of its foliage makes it doubly attractive, and an object of admiration through the season, in flower or not.

CLEMATIS.—Jackmani and its varities now appear at their best, and make objects of floral beauty, no matter in what position they are seen; when planted near the dwelling house, as they often are. They should be well and frequently watered, and if treated to liberal doses of manure-water, the flowers will be all the richer in color and more plentiful. These make valuable permanent bedding plants; but for this purpose they should have some support to keep them up from the ground, say six to eight inches. A large bed on the lawn, so planted, makes a very striking object.

THOSE who take an interest in the work of the Agricultural Experiment Stations will be pleased to know that the report of the second annual convention of the representatives of American Agricultural Colleges and Experiment Stations held at Knoxville, is now ready for distribution. The Department of Agriculture undertook to report the meeting and publish the proceedings, and this work, edited by Prof. A. W. Harris of the office of Experiment Stations of the Department and Major H. E. Alvord of the Executive Committee of the Association, is now completed. The contents indicate incontestably an earnest desire among the gentlemen in charge of the Colleges and Stations to do the best possible work.

This publication is issued as Miscellaneous Bulletin, No. 1 of the office of Experiment Stations of the Department of Agriculture, W. O. Atwater, Director, and is published by authority of Secretary Rusk.

STECHER LITH CO ROCH N.Y.

MADAM PLANTIER.

(Continued from page 59.)

reserved when planting out and plunged in any partially shaded situation. During the summer keep them trimmed into shape, and about the middle of August take up and repot into pots proportionate to the size of the plants, giving good drainage and a compost of ordinary potting soil. Water carefully until growth commences. Bring inside on the approach of cold weather, and treat as above advised.

Indoors the plants are very subject to the red spider, and on this account they must be freely and freqently syringed to keep this pest in subjection.

Propagation is effected by cuttings of the half ripened wood, also by seeds, and if the young plants are rooted as early in the season as possible and grown on carefully, nice plants will be obtained by the middle of May. when they can be placed outside. In starting plants from seed it should be sown as early in the season as possible in a well drained pot or pan filled with light turfy loam ; sow thinly, cover slightly and place in a warm, moist situation, as close to the glass as possible. As soon as the young plants are well up and strong enough to handle they should be potted off and grown on as rapidly as possible until they are planted outside. The seedling plants will bloom earlier and more profusely if retained in their pots and plunged where it is intended they are to bloom, but it should be remembered that none of them may equal the following, which are the most distinct and desirable varieties briefly described :

Alba Grandiflora. A strong growing, free flowering variety, with large white flowers. Of strong growth.

Aurantiaca. An old favorite with rich chromo colored flowers. Of strong growth, and easily trained as a standard.

Diadem. A very distinct and beautiful variety, the deep rose colored flowers having a distinct clear yellow centre.

Delicatissima. A very beautiful variety of trailing habit, with lilac colored flowers. From its manner of growth and flowering it bears considerable resemblance to a Verbena. An excellent bedder, if strong and healthy plants are put out in May.

Distinction is a variety that well merits its name in having flowers of a rich orange yellow, which gradually passes off into rose.

Golconda. A variety with buff colored flowers, which gradually pass into a deep golden yellow.

Giselle is a beautiful variety of compact habit, the heads of bloom being very large, opening white and changing to deep rose, the young flowers having a conspicuous golden centre.

Harketts Perfection. A variety of strong growth, having beautiful variegated leaves, and large trusses of rich rose colored flowers. Deserving of a place in all collections.

Mad. Hoste is an excellent bedding variety, producing large trusses of lemon colored flowers, which gradually pass into purplish lilac.

Marshal McMahon. A variety of dwarf growth with brilliant orange red flowers. The flower trusses are almost as large as a Verbena, one of the finest Lantanas ever raised.

Meteor. Flowers pale yellow, gradually passing into rosy violet. A strong grower and an excellent bedding sort.

Raphael is an excellent bedder, of strong vigorous growth, with large trusses of orange rose flowers, which gradually change into purple.

CHAS. E. PARNELL.

TO THE SAGITTARIA.

(SELECTED).

Above those waters gleam thine arrows bright,
  Fair Sagittaria, the streamlet's queen!
  And here, in bridal purity, are seen
Thy fresh three-petaled blossoms, snowy white.

The knightly ferm-plume, nodding gallantly,
  Beholds thy beauty from the forest side,
  And creeping near, with blue-eyes opened wide,
The fond forget-me-not looks up to thee.

The shadowed stillness that enspheres thy home
  Thy green leaves pierce with silver pointed light,
And surely thou art dreaming rapture dreams,
  While still and oft, around and o'er thee, come
The birch tree's fragrance and the red bird's flight;
  With these and thee, how near me childhood seems!

Louise Vickroy Boyd.

CLETHRA ALNIFOLIA.

The alder-leaved Clethra, or as is sometimes called the "Bee Plant," is a native of the United States. Grows to the height of five to six feet; perfectly hardy in all the Middle states, and has an abundance of white flowers from July to September. This is deserving of wide and extended cultivation, for it produces an abundance of flowers when few hardy shrubs are in bloom.

Acuminata. Another American variety, growing further south, to the height of ten to fifteen feet; has an abundance of white, fra-

grant flowers.

Paniculata is another variety indigenous to this country, growing abundantly in the Carolinas, and producing an abundance of white, fragrant bloom. Several varieties, not near so common, need green-house culture.

A GREAT deal of disappointment and loss is every year experienced from the planting of poor seed. This trouble is increasing every season. Whether the seedsmen are intentionally dishonest or not, the annoyance and loss are the same to the purchaser. In this particular line of business the dealers independently refuse to guarantee what they sell, or to be responsible if seeds prove untrue to name or fail to germinate. This kind of trading is exceptional. The dealer in fertilizers must guarantee his goods. The farmer cannot avoid responsibility in the sale of everything his farm produces. The dealer in horses who should have the audacity to announce that he would not be responsible if the animals he sold turned out to be neither sound nor gentle, would hardly receive a liberal patronage. But seedsmen have assumed the right to say that all their sales shall be made at the purchaser's risk, and a stipulation to this effect is printed on every seed packet. This has been tacitly agreed to by farmers until the custom has almost the force of law. It does not prove that all seedsmen mean to be dishonest, but it affords every facility to such as are knavishly inclined to palm off old, inferior or worthless seeds with impunity. The yearly loss from poor seed is in the aggregate enormous, but it may nearly all be avoided if farmers and gardeners will take the right course.

THE New York State Fair will be held, the present season, at Albany, Sept. 12–19. As usual, liberal amounts are offered in premiums and unusual preparations made to make it a grand success.

THE Inter-State Fair opens at Elmira Sep. 17th and closes on the 27th. This is intended to take in all the territory of Southern New York and Northern Pennsylvania. Besides the usual attractions, there will be a grand bench show of dogs; wonderfully trained horses, races and other features.

THE Experiment stations of this country now employ over 370 experts in agricultural science and practice, and are supported by a national appropriation of $600,000, to which the States add about $125,000; $725,000 a year may seem like a large sum to expend annually for agricultural experiments, but it is less than 10 cents for each of the 7,500,000 farm-workers of the county, less than 2½ cents for each of the 30,000,000 of our population directly dependent upon agriculture for their support, and less than 1¼ cents for each of the 60,000,000 of our people who consume the products of our farms. The farming lands, farm implements, and live stock of the country are estimated worth $12,000,000,000. The experiment stations cost us, therefore, about $6.25 a year for every million dollars invested in agriculture. Or, reckoning the annual value of the products of our farms at $2,200,000,000, we are now spending about 33½ cents for every thousand dollars' worth of products, in an attempt to increase the value of those products in future years.

GOLDEN QUEEN RASPBERRY.

SINCE the introduction of this berry I have seen very little comment on it. Our plants this season have borne an abundance of *very fine fruit.* We are eating them now, and have been for the past two weeks. We certainly think this variety worthy of cultivation and should have a place in every man's garden. While it may not be wholly desirable as a shipping variety, on account of not being so firm as some other kinds, to our taste it has no superior as a table variety, and for local markets it certainly will prove a strong rival for first place. Color, a beautiful golden yellow. When the least overripe, tinged with a slight purple. Size of Cuthbert, and with us perfectly hardy. H. S. WILEY.

We are obliged to Secretary Goodman, Westport, Mo., for a copy of the thirty-first annual report of the Missouri Horticultural society, a volume of some 500 pages, containinff reports of State and county societies and many papers on horticultural topics of much value.

THE NATIONAL FLOWER.

The National Flower! What shall it be?
Wind, whisper it softly to me.
"Not the Arbutus, lovely and shy,
Hiding its head from even the sky,
Only loving the quiet nooks.
The song of birds, of rippling brooks,
In some lonely, shady glen,
Away from the busy haunts of men,
Exhaling there the breath of spring,
To winter's graves sweet offering;
Too short thy life, thy flowers too rare
For a whole nation's claim to share."

"Not the Laurel, whose glossy leaves
So soft adorn the festal wreaths,
Or round the victor's brow entwine
As tribute to his Gifts divine.
Long ages past the laurel's been
Emblem of greatness unto men.
The nation's flower should know no state—
No rich, no poor, no small, no great—
The laurel then men fain must see,
The Nation's Flower can never be."

Wind, wilt thou whisper again to me,
The National Flower, what shall it be?
"Something that grows without thought or care,
Springing up by the wayside everywhere,
Cheering the weary heart passing by,
Reflecting the sunlight unconsciously,
Surely, bright Goldenrod, it must be you!
Suggestive the rod, unless men be true;
Suggestive the gold; pure deeds must men shower
Along the world's wayside,—thou art the flower"

—*Good Housekeeping.*

PACIFIC COAST NOTES.

"ON my recent visit to California, Oregon and Washington Territory," says Mr. Chas. A. Green, "I was impressed with the beauty and vigor of the flowers, shrubs and trees, as well as with the fruitfulness of the orchards and vineyards. The effects of the currents of the Pacific Ocean on the climate on our western coast, even so far north as Alaska, is remarkable, and to this influence I largely attribute the success of the half hardy flowers and fruits. Fuchsias in San Francisco were often 10 to 20 feet high, and roses all along the coast were far more healthy and vigorous than in New York State. Shrubs and trees grow successfully there as far north as Tacoma, W. T., without protection, which would perish in New York State under the same circumstances unprotected.

Golden Gate Park, San Francisco, embraces 1,300 acres, taking in a large mountain. It is not entirely completed, but as far as complete the work is effective and pleasing. As every plant must be irrigated, the expense of maintaining is great.

The mountains along the stage road to the Yosemite valley are beautifully covered with forests, mostly "sugar pines" so called, many of enormous size. There are various spruces, firs and cedars often growing in fissures of rocks on abrupt mountain sides, where there is but slight trace of soil and where rain seldom falls. There was in June a profusion of flowers on these Sierra Nevada mountains, azaleas, lupines, Mariposa lilies, columbines, wild marigolds and others. Earlier in the season I am told these mountains are carpeted and ablaze with flowers, far more numerous than in June, when the soil becomes quite dry.

To say that certain flowers or fruits will thrive in a certain state is to make a wild statement of no value to the planter, for different sections of most states differ as widely as it is possible to imagine. For instance, Washington Territory west of the mountains has a moist, mild climate and is heavily timbered, while east of the mountain slopes the climate is very dry and there is no timber worth mentioning.

REDUCTION OF EXPRESS RATES.

Mr. Emery, chairman of the committe to whom was referred this matter, sends the following to members of the Nurserymen's National Association:

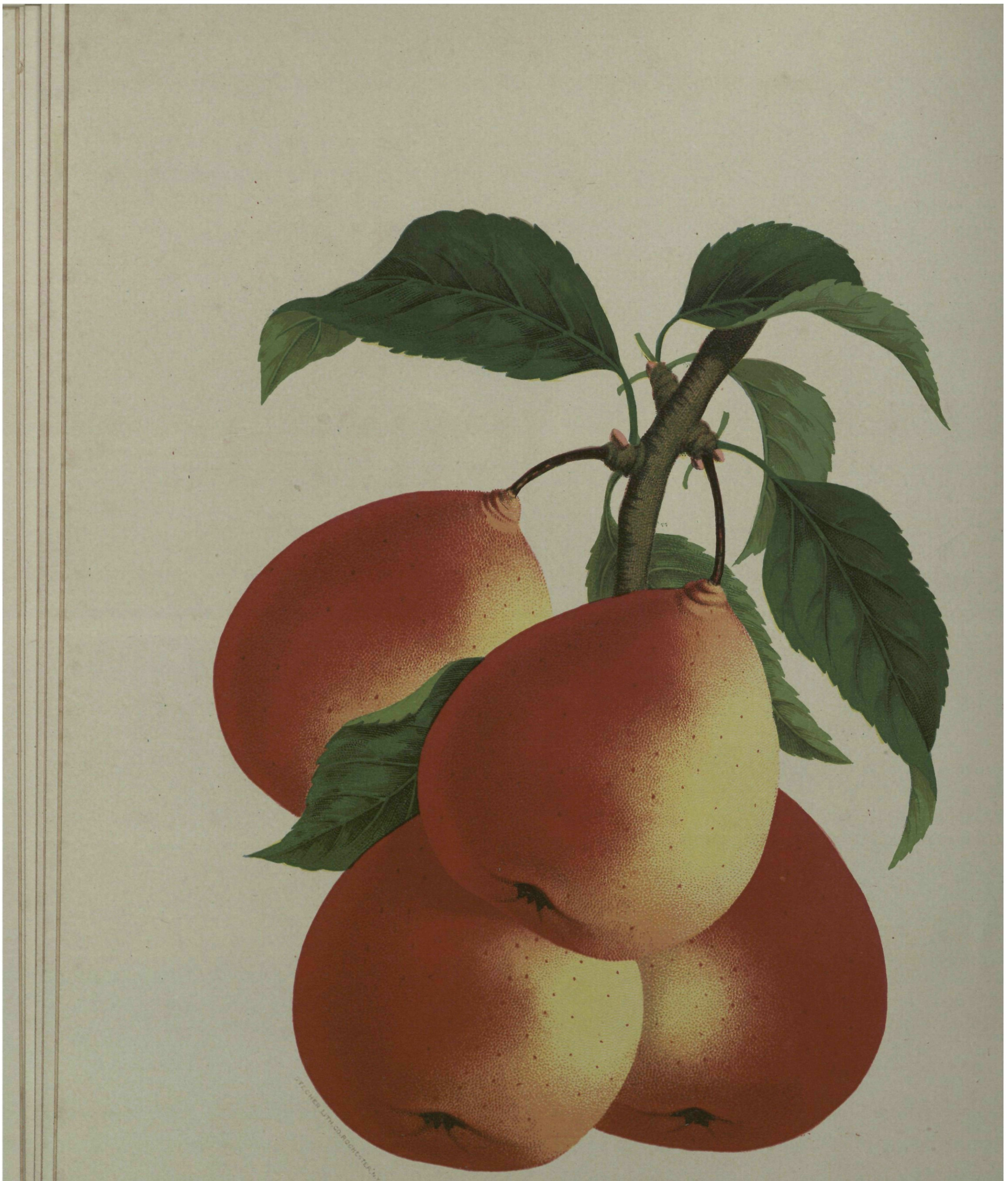
LAKE CITY, Minn., July 20th, 1889.

Dear Sir:

At the Annual Meeting held in Chicago, June 5, 1889, a resolution was unanimously passed ordering the Committee on Freight Reduction to take up the consideration of the tariff charged Nurserymen by the Express Companies, for carrying trees and plants. The present rates seem to be onerous, and it is believed that the proper effort on the part of your Committee may effect a reduction. Desiring to act intelligently in the premises, we will thank you, upon *the receipt of this circular*, to consult your books and advise the Committee the amounts paid by you from October 1st, 1888, to June 1st, 1889, upon account of express charges, upon freight received and also forwarded by you, each item SEPARATELY; also state approximately the amount of business you could give the Express Companies, if the rates were such that you could afford to ship in this manner. Upon the data thus supplied, your Committee will be enabled to base an argument, and will present the same to the proper officials, as soon as the Secretary of our Association reports funds on hand to meet the expenses of the Committee. Use all due diligence, as it is desired to bring the matter to a favorable termination prior to Fall Delivery. Address all communications to the undersigned, S. M. Emery, Chairman.

If Nurserymen do not respond promptly with their money and advices, I will be unable to undertake this work.

Respectfully, S. M. EMERY, Chairman.



VERMONT BEAUTY.

HORTICULTURAL ART Journal.

Under the editorial management of T. B. JENKINS, Horticulturist.

September, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 9.

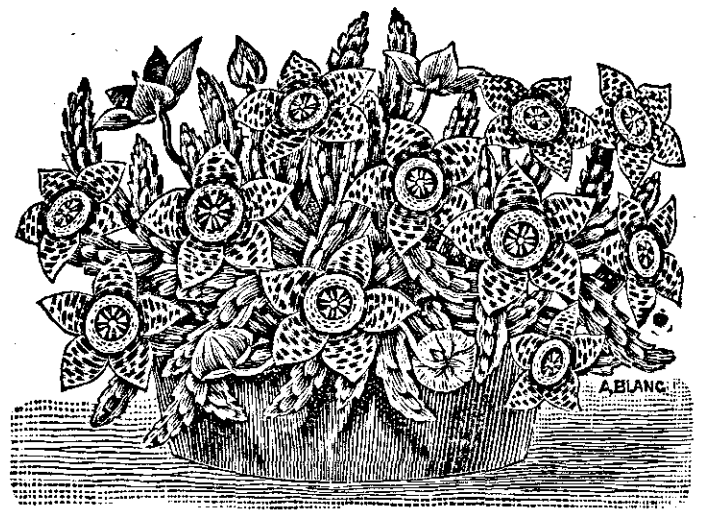
UNSIGHTLY LAWNS.

NOTHING adds so much to the appearance of a place, large or small, as a well kept lawn, and however beautiful flowers and trees are of themselves, a dark green sward sets them off like the back-ground to a picture, but the "lawns" we sometimes see during or after a few dry hot days in August should have some other name to distinguish them from what they might be, for they are unsightly objects. This may all be avoided, and without daily "sprinkling." When the lawn is first made see that the ground is well prepared, (it should be underdrained if not naturally dry) and deeply dug or plowed. No use to simply level and prepare the surface, it must be deep, so that the roots of the grass may go down and find a constant supply of moisture. If it could be done, it would be well to cultivate the ground intended for the lawn for several seasons before seeding down, not with any crop to exhaust the soil, but with a view of making the land more friable and in better condition. Something in the way of manure is desirable, and nearly always necessary, but it should be without the addition of weed seeds, for nothing can be more unsightly than a dirty lawn, and this is the source from whence it comes—seeds of weeds in the manures which are applied in the shape of top dressings. Better to take a little more time, and incur a little more expense in the beginning, and then the succeeding years will bring you the rich deep green that will be a source of pleasure, instead of the dried up brown patch so often to be seen. Nearly every seedsman has his favorite lawn mixture, and will tell you that his is the best; it may be so, but we would not recommend any mixture. Simply the Kentucky Blue Grass will give general satisfaction, and thickly sown on ground prepared as we have indicated, will produce a thick, soft, velvety turf.

IN yards and gardens, where there are large old trees growing, and it has been found advisable or necessary to trim off the side branches to any considerable height, thus leaving, in many cases, bare and unsightly trunks—these may be changed into living green by planting near them the Ampelopsis Veitchii. It will cling to the bark, as well as to a stone wall, and soon present, during the summer months, a beautiful picture.

THE GREENHOUSE.

STAPELIAS,



with Illustration of S. Variegata.

THE numerous species or varieties of *Stapelias*, or, as they are commonly called, Star Cactus or Carrion Flower, form when taken together a very interesting and singular group of succulent plants, belonging to the natural order *Asclepiadaceæ*.

They may be described as being low, succulent, cactus-like plants, with thick stems, which are furnished with very small fleshy scales in the place of leaves, and all are of low growth and compact habit, the most robust species seldom attaining a foot in height, and the larger proportion six inches, with numerous stems springing from one crown or stool. The flowers are large, five cleft, and of various colors. In some species they are beautifully variegated, in others the entire surface is covered with long silky hairs of a purple color. Their fragrance is far from being agreeable, as all have a peculiar and unpleasant odor, particularly the newly expanded flowers.

As before said the genus is a very extensive one, as there are over one hundred species described or noticed in botanical works. All are natives of South Africa, being found by the Cape of Good Hope and adjacent countries. To grow the *Stapelias* to perfection they should be given a compost composed of two-thirds sandy loam, one-third well-decayed cow manure, intermixed with bits of charcoal. In potting use porous or soft baked pots, and let them be proportionate to the size of the plants, and see to it that they are well drained, as this is quite an essential point. During the summer season, which is their season of growth, they require considerable water, but in the winter it is best to give them a season of rest, then they should be kept rather dry and in a temperature of from 50 to 55 degrees. Thus treated they can be successfully grown as window plants, and will bloom quite freely.

Propagation is effected by cuttings of the shoots, which should be dried a few days before planting. The most usual method is to cut off the shoots and lay them on a shelf in the sun until the cut is thoroughly dried, then insert in small pots filled with sandy loam, and when they are well filled with roots they can be shifted on into those of a larger size. The generic name was given in honor of J. B. Stapel, one of the early Dutch botanists.

S. asterias has dull purple flowers which are tipped with bright red and fringed with long silken hairs.

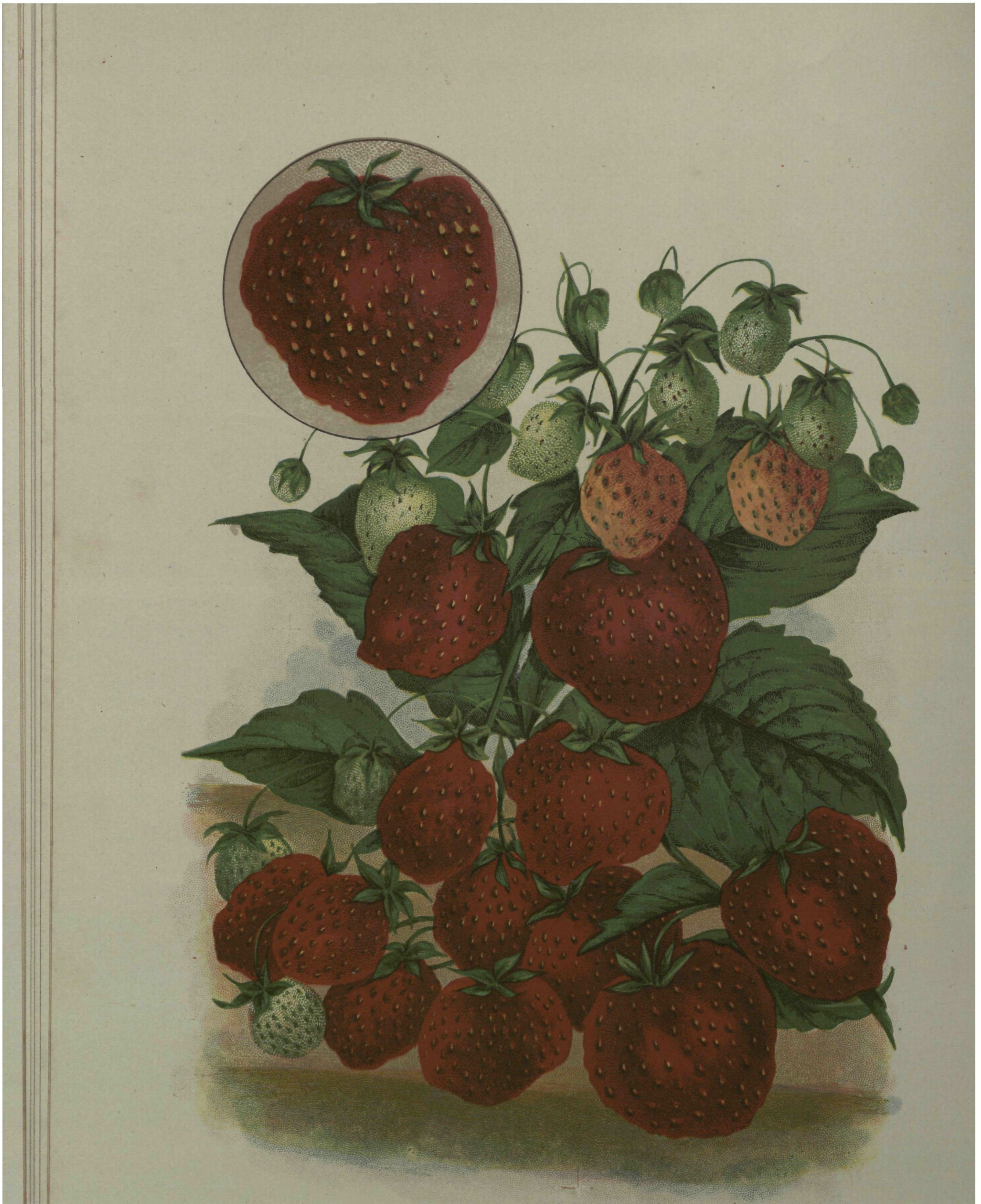
S. hirsuta.—Branches or shoots erect in growth; flowers about three inches broad, of a soft purple color.

S. lentiginosa produces a single stem with short branches, thus assuming a tree-like form; flowers pale yellow with three distinct brown rings, the entire surface being covered with small dark purple dots.

S. variegata is of low compact habit, with slender stems or shoots. Flowers pale yellow, blotched and marbled with purple. A very rapid growing and free flowering species.

CHAS. E. PARNELL.

A. BLANC & Co., to whom we are indebted for the illustration accompanying this article, have about twenty-five varieties of these very interesting plants. Although they do not really belong to the Cacti family, still they are generally grown with them, and only serve to still lend additional interest to this very interesting family of plants, the cultivation of which is rapidly extending, and well it may, for while they do not produce such an abundance of bloom, as do many soft-wooded plants, such as Geraniums, Heliotrope, etc., etc. They always present an interesting study, and are well adapted to house culture, for they never present a sickly or unhealthy appearance too often seen in plants of a more succulent growth, and we cannot do wrong in calling attention to their merits.



YALE.

STECHER LITH.CO.ROCHESTER,N.Y.

GOOSEBERRY MILDEW REMEDY.

SAYS the *Indiana Farmer*: A series of trials has been made on the suggestion of our State Botanist, Dr. J. C. Arthur, at the Department of Agriculture, with potassium sulphide (liver of sulphur) as a preventive of injury from disease of the gooseberry plant commonly known as "mildew," and due to a fungus parasite known to science as *Sphærotheca mors-uvæ* B. & C. The substance was applied in solution at the rate of one-half and one-fourth ounce to the gallon, respectively, commencing May 3, or soon as the leaves had begun to expand, and the application was repeated after every hard rain until June 24, nine sprayings having been made in all. The experiment was made upon a row of the Industry gooseberry containing five plants, and upon a plat of seedlings numbering 282 plants.

Toward midsummer the effect of the spraying became distinctly visible in the deeper green foliage and more rapid growth of the treated plants. On June 23 the two plants of the Industry gooseberry that received the spraying were noted as being entirely free from mildew, with the exception of a trace of it observed on a single fruit, while the three not being treated were quite badly affected. The fungus appeared as a downy coating near the ends of the new shoots, and also upon the berries. The new growth, as well as the crop of fruit, was very perceptibly greater on the treated plants.

In the latter part of summer, after the spraying had been discontinued, the mildew increased on the treated plants, showing clearly that the applications were beneficial, and also that they must be continued throughout the growing season to confer their greatest benefit.

J. H. RACE, in *Canadian Horticulturist*, claims that all that is necessary to produce satisfactory crops of the Gooseberry is plenty of sunlight, a free circulation of air, and unleached ashes, applied in the spring, immediately under the bushes.

AMONG Early Peaches, in England, nothing has yet been found as satisfactory as Alexander. It ripens earlier, and is more satisfactory than many others.

WE find the following correspondence in the *Canadian Horticulturist*, which is self-explanatory:

THE SIMON'S PLUM.

DEAR SIR:—I regret that through the effects of the late June frost, I am not able to send you a perfect sample of the Prunus Simoni, this year, my tree only bearing two specimens, and those not perfect. I send you one of them which was stung by the curculio, or some other insect, and dropped off, and though not quite up to your plate in size, in the July number, I think you will agree with me that it is considerably "*above one-quarter of it*," as it measures 5½ inches in circumference; and I think you will agree with me, also, that we must have a better strain of this plum than our pomological friend, Mr. Van Deman, is accustomed to seeing, or that our Canadian soil is better adapted to their growth than that of the States. (The quality I do not expect to be perfect in its present partially decayed state.) A. M. SMITH.

NOTE BY THE EDITOR.—The sample is very well represented in our colored plate in color and form, and in size it falls so little short, that the plate can hardly be called an exaggeration. Indeed there is upon the tree another which exceeds this in size, and when fully matured will probably equal the representation. We think, in this case, at least, that Mr. Van Deman's criticism was over severe. We may add that the aroma of this fruit is most agreeable, and the quality very good, indeed.

And the following from *The Garden*, August 31st, 1889:

PRUNUS SIMONI.

In California the fruit of this develops into a handsome oblate, deep purple plum, much larger than it appears in the engravings of the fruit grown elsewhere. It ripens very early, and is very durable when shipped, so that it promises to take a high rank among early market plums. The *Pacific Rural Press* observes that nurserymen are propagating it extensively:

Once more we desire to remind our readers that we are not growing any variety of tree or plant for profit—have none for sale, hence have none to "boom." This we often find makes a difference in commendation and praise. We only desire to represent things as we find them.

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. M. Jordon, *Pres.*, St. Louis, Mo.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Boston, Mass. 1890.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; Prof. A. A. Crozier, *Sec.*, Ames, Iowa.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—H. W. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; A. M. McCullagh, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

RESULTS OF PROPER ORGANIZATION.

HON. S. M. EMERY, chairman of the committee, appointed by the American Association of Nurserymen, for the purpose of securing lower rates on express lines, reports to Secretary Chas A. Green, of the American Association of Nurserymen, that a new classification has been agreed upon by the Express companies which amounts to a reduction of 20 to 25 per cent. on all express lines, on all shipments of trees and shrubs, boxed or baled. Such packages are now classified with produce. This is good news to fruit-growers, nurserymen and many others. The nurserymen may now congratulate themselves on reduced freight, reduced postage and reduced express charges. All this results from proper organization and the work of Secretary Chas. A. Green, who is indefatigable in his efforts to promote the interests of nurserymen individually and collectively.

NURSERIES OF LEWIS ROESCH, FREDONIA, N. Y.—We were in the neighborhood of Fredonia on the 1st inst., and made a call at these grape nurseries, with a view of seeing the Moyer and other varieties in bearing.

We found quite a planting of the Moyer, but little fruit, the late frost having cut off most of the crop. What there was, was in eating order, quite ripe, and was quite good. There is not much difference in the appearance of this, in fruit, and the Delaware — just about the same size and color, and, like that variety, though not ripe, the berries are in eating order about as soon as colored. The vines were very healthy and had made a vigorous growth. We should have been better pleased had we seen large bunches and more of them, but, as we were told, the frost had prevented this.

In Mr. Roesch's entire collection we noticed only one which was bearing at all full.

Nearly all the vineyards in this section have suffered severely, many losing from half to three-quarters of their crop.

The young saleable vines, of which Mr. Roesch has an immense stock, showed unusual signs of vigor. This may be attributed to the clean and thorough culture pursued here.

PARKER EARLE.

S. A. F.

THE fifth annual meeting of this society was held in Concert Hall, Buffalo, N. Y., August 20–23, and was a success in every way. In the increased attendance of its members and general good feeling as manifested from one to another, in the exhibition which it made, and in the discussions which took place at its meetings—all were of a high order, and reflected the greatest credit on its members. The programme, as laid out by the executive and local committees, was fully carried out, and passed off without a single break.

THE EXHIBITS.

The florists' exhibits were scattered throughout the ante-rooms adjacent to the hall. Some of them were very beautiful, while many were of the kind that are useful rather than ornamental. The B. A. Elliott Company of Pittsburg had an exhibition of plants. The Philadelphia Immortelle Design Company and C. S. Ford of Philadelphia had on display specimens of their immortelle work. J. C. Vaughan of Chicago showed seeds, bulbs, and tools. Bunker & Co. of Boston had a display of Italian wheat sheaves and fans. New carnation seedlings were displayed by Fred Creighton. The United States Nurseries of Short Hills, N. J., had a large and fine display of flowers. Peter Henderson & Co. of New York City had two baskets of bulbs of the true Bermuda lily. M. M. Bayersdorf, Philadelphia, and D. Wilhelmi of New York had extensive exhibits of baskets. William H. Hoehler of Philadelphia, taxidermist, had a beautiful display of white doves. F. E. McAllister, New York, exhibited seeds and bulbs. C. H. Joosten of New York displayed flowers. Prof. John F. Cowell of Buffalo had a pretty box of nasturtions. Craig & Brother of Philadelphia sent a number of plants, and Osman & Co., London, Eng., had a large exhibit of horticultural sundries. F. M. Hine of Buffalo had several cups of fancy pansies. The new Souvenir de Wootan rose was exhibited by E. Hibbard of Youngstown, O. James R. Witherspoon of Philadelphia showed a number of zinc sprinklers. W. C. Krick, Brooklyn, exhibited florists' letters. R. F. Laurence & Co., Buffalo, had on exhibition a very neat and convenient ladies' corsage bouquet-holder, which will hold a bunch or bouquet of any size. Henry A. Dreer, Philadelphia, had a fine display of ferns and palms. Four firms exhibited flowerpots: The Whilldin Pottery Company of Philadelphia, the Detroit Flowerpot Manufactory, Sipfle, Perkins & Co., Syracuse, and D. C. Schofield, New Brighton, Pa. A. Gilchrist, West Toronto Junction, Ont., had on exhibition a fine herbarium.

NEWLY ELECTED OFFICERS OF THE S. A. F.—During the third day of the convention recently held in Buffalo, N. Y., Mr. J. M. Jordan of St. Louis, was elected President. Mr. Jordan is a practical florist, and has one of the finest floral stores in that city, located on Olive street, St. Louis' principal thoroughfare. Mr. Jordan has over 100,000 feet of glass and employs some twenty men. Republican in politics, he has served several terms in the City Council, and was a member of the executive committee of his State in the Harrison campaign. The newly elected Vice-President is H. M. Norton of Boston, Mass., a gentleman well-known in floricultural circles, having been President of the local club and a prominent member of the Massachusetts Horticultural Society. Boston has now two officers in the S. A. F., for Mr. W. J. Stewart was unanimously re-elected Secretary the third time, thus showing popularity with his brother florists. Mr. M. A. Hunt, Terre Haute, Ind., was wisely chosen to take care of the society's funds, and right well will he do his duty as heretofore. So we can congratulate the society on the wise selection in its officers, and feel sure that greater results than have yet been attained are sure to follow.

WE were glad to see the increased attendance on the part of the ladies at the late meeting of the S. A. F. in Buffalo, and the courtesy extended to them by the local society. They always have turned out well, and nobly done their share of the work, but we think rather better than usual in Buffalo. What would the society be without its lady members, anyway? And who can tell the amount of good they have done the business, not only as growers but as purchasers?

PEAR—VERMONT BEAUTY.

See Illustration.

THIS new fruit, which we illustrate in present issue, originated some years ago on Grand Isle, Vermont, in Lake Champlain. The original tree, now standing on the fruit farm of Mr. Benjamin Macomber, (who has experimented largely with fruits) is from twelve to fifteen feet in height, and has been bearing for a number of years. Some three years ago, when the present owner, Mr. W. P. Rupert, showed us specimens of this pear, we thought it the handsomest fruit we had ever seen, and we think so still. We know the colored plate is very "highly colored," but not a bit too much so, and it can convey no idea of the quality, which is finer even than the appearance. When we remember the place of its origin, and know that it stands the severe cold of that region, and bears such handsome specimens as our engraving was made from, its value becomes apparent. It is true, it may be a little under size, or smaller than some we have in our mind, but for a dessert pear to eat out of hand, it is large enough, and comes at a season when there is a demand for just such fruit. We will let the well-known Dr. T. H. Hoskins further describe it, having seen the fruit and colored plates.

"I am glad to see the excellent picture of the Vermont Beauty Pear, and to notice that it in no way exaggerates its appearance, as is the case sometimes. In quality I rate Vermont Beauty as A 1, first among the acid pears, a class of which we have comparatively few, but which, when as fine flavored and juicy as the Vermont Beauty, are ahead of the sweet or neutral flavored sorts. I am sure it will take the lead among fancy dessert pears, as the Lady apple does among apples. As to the hardiness, my experience and observation put it with the very hardiest of our old sorts, fully up with Onondaga, Flemish Beauty, Howell, Jackson, Clapps' Favorite, etc., etc. The most piquant in flavor of any pear known. Its beauty, quality and hardiness will make it very desirable."

Mr. W. P. Rupert, Seneca, N. Y., now owns and controls the entire stock of this variety.

ONE of the greatest mistakes planters make in selecting for orchards for market purposes is in the number of varieties. The fewer the better for this purpose, only be sure it is one that will succeed, and that *one* is enough for the largest orchard, especially of winter fruit.

YALE STRAWBERRY.

See Illustration.

THIS is a chance seedling, originating near New Haven, Conn, The plant is a strong, vigorous grower, and has a perfect blossom. Flavor rich, sprightly and delicious. The Yale is late in ripening, prolonging the strawberry season some ten or twelve days; berry firm and desirable for canning, carrying well to market. Exhibited at the Massachusetts Horticultural Society June 17th and 18th, 1889, it was awarded the Silver Medal for the best seedling Strawberry never before exhibited. If the *Yale* shall become as popular a fruit as its namesake is as an institution of learning, the introducers, Messrs. Hoyts, may be proud indeed.

THE PARKER EARLE STRAWBERRY.

See Illustration.

SO many big stories have been told of new fruits, that statements in regard to new varieties are often received with doubt and attract little attention. Bearing this in mind, we will indulge in no strong adjectives regarding the "Parker Earle" Strawberry, a new sort originated by James Nimon, and introduced by T. V. Munson, of Texas. On June 14 we inspected a row of this variety grown under ordinary circumstances in northern New Jersey. The fruit had been ripening ten days previous, but still on one clump there was green fruit enough to mature at least two quarts more. The foliage is thrifty and plentiful enough for all demands upon it by all the fruit that could set. The fruit is good-sized, not monstrous, of fair shape, medium flavor, solid flesh, good color; it is also peculiar in becoming an ivory white in color just before ripening. Flowers bisexual. This is the only Strawberry of recent introduction that we have seen which possesses qualities placing it ahead of any of the standard varities. In the Texan markets it is stated that this variety sold the season through at nearly one-third more per quart than any of the others, excepting Cumberland Triumph, which brought the same, but is a variety giving small crops. Our engravings are direct reproductions from photographs, by the Rural New Yorker, one showing the productiveness of an average Plant; the other the average size of the berry. Those who know it say there is no occasion for exaggerating the good points of this variety.—*American Garden, N. Y.*

SALET

PROCEEDINGS OF "AMERICAN ASSOCIATION OF NURSERYMEN."—A Book of over 100 pages, compiled by the secretary, Chas. A. Green, have been received. This gives the proceedings in full, and we cannot do better than copy from the "Secretary's Prefatory Notes":

"The success of an association like ours may be judged by what? By the balance in the treasury? No, for a Wilder or a Barry may have bestowed a few thousand upon it. By the size of the reports? No, for they may be dull and uninteresting. By the list of members? No, for they may not half of them attend or be alive to the work in hand. By the number and length of the essays? No, for though exceedingly valuable, such essays are designed largely for paving the way to something more important. What then is more important, and what does indicate whether the society is alive or dead. The answer is *the discussions*. An essay gives the opinion of one man, while a discussion gives the opinion and sense of the entire membership present. * * *

I believe the report for 1889 will be worth much money to any enterprising nurseryman. I know of no book published that contains so much practical information for tree growers, or growers of plants or vines.

A friend who reads from over my shoulder says this is a witty report. Indeed, I have almost split my sides as I revised and corrected the proof sheets and copy.. The jokes and witticisms are fresh and make their appearance without effort. At first the unsuspecting reader may imagine that Messrs. Sweet, Douglass, Willard, Emery, Albaugh, Wilson, Kellogg and the host of other witty men are in dead earnest and that a storm is impending, but gradually the light dawns and the true inwardness is apparent.

The officers have received much encouragement from the support given by the members at the recent Chicago meeting. Not only was money freely offered, but kind and appreciative words that are better than money. Officers alone cannnot make a society successful. Hearty sympathy and co-operation among the members is necessary, and this is not wanting in the American Association of Nurserymen. We have reason for congratulation on our financial condition. Two years ago the treasury was exhausted in meeting the expenses of important measures, leaving no funds to meet the current expenses of 1888. The recent successful meeting in Chicago has, with close economy in expenditures, enabled the society to meet the expenses of two years with the receipts of one year, and yet a small surplus in the treasury." * * *

To all of which we give our hearty assent and a loud amen.

NEW FRUITS.

AFTER one has succeeded in raising something that is worthy of dessimination, it is only fitting that renumeration should follow, but it is not everyone who knows how to best accomplish this. It seems to us that the plan hit upon by Mr. H. A. Jones, of Himrods, N. Y., is as good as any, or one to be commended at least. He says he has a new pear which he describes in a circular before us, and offers to send to anyone, who will pay the express charges, sufficient fruit for examination and testing, thus placing within reach of intending purchasers an opportunity of first seeing and trying the fruit. Of course this does not carry with it any evidence as to the growth, etc. of the tree, but it strikes us as being an improvement over the old plan, which we are glad to note.

NEW PEACH.—Mr. Willard, Geneva, N. Y., sends us, August 23d, samples of a seedling peach, claimed to be a seedling of Early Rivers. The fruit is very much like that variety in size and appearance, but it is a perfect free-stone. The flesh is very white and solid, and of excellent quality, and we should think there was room for it.

NURSERIES OF W. P. RUPERT & SONS, NEAR GENEVA, N. Y.—We were much pleased to see, during a recent call at these nurseries, so many evidences of prosperity and improvement. No one, that we know of, is more deserving of the success which has followed the efforts of the senior member, and few have done more to improve our hardy fruits than has Mr. Rupert. During the last ten years, more than twenty-five varieties of Russian fruits have been thoroughly tested here, two of which—Yellow Transparent and Longfield—have been largely grown and distributed, and now they come to the front again with a new pear—and several more new fruits in the back-ground waiting to be further tested.

DR. I. M. HEXAMER, with Mr. John Thorpe, as assistant, was strongly indorsed by the Society of American Florists, as Commissioner of Agriculture and Horticulture for the World's Fair in 1892. And when the time comes, we hope to see these gentlemen appointed.

OLD THINGS UNDER NEW NAMES.

The American Garden.

PRESIDENT Baird's suggestion to the New Jersey Horticultural Society, that all horticultural societies should firmly resist the practice of introducing old things under new names, was certainly timely and ought to be heeded. The practice is getting far to common, and results in much useless expense, waste of time, and in sore disappointment to the fruit-loving public. Progressive growers desire to test everything that gives even the least promise of value, but why should they buy back the once discarded Topsy as "Everbearing Tree" blackberry, at seven dollars per plant? or why should anyone who already has the Botan plum, or Cumberland strawberry, or Strawberry tomato (Alkekengi), pay a big price for Abundance, Jumbo, or Cape Gooseberry, respectively? Why burden our list with Delaware winter apple, Great Ontario strawberry and many other "novelties," and pay excessive prices for them, when the old Lawver and the Sharpless, respectively, will do just as well.

So also with an endless number of new vegetables, although the many differing strains, due to careful selection, offer at least a plausible excuse. What we want are better fruits and vegetables, not merely new names. Horticultural societies should insist upon it that all novelties are to be sufficiently tested, so that trustworthy reports upon their merits may be had before their introduction. We cannot safely rely on the veracity or judgment of all introducers of novelties, and their unwillingness to let members of fruit committees, etc., test such fruits previous to their introduction, may be accepted as *prima facie* evidence of the introducer's lack of faith in the merits of his own novelty.

There is not a more honorable and respectable body of business people in the country than our nurserymen and seedsmen. They cannot afford to see their enviable reputation endangered without vigorous protest, and they should sit down more severely than ever upon every attempt to be made by the more careless or less scrupulous among their members to palm off old things, especially if once discarded as worthless, under new names, upon the uninformed buyer.

The practice recently adopted by a number of leading seedsmen, of sending sample packets of seeds of new vegetables to a number of gardeners for testing before they are introduced, is a most commendable one, and worthy of imitation by all. It is evidence of their honesty of purpose to introduce none but really meritorious novelties. The difficulty which nurserymen have to face in a similar innovation, is the comparatively long time required for fruiting their novelties, especially of tree fruits. Members of fruit committees should be prepared for testing such by means of grafting and budding on seedling or other trees of bearing age.

We insert the above because it is the truth, well said, and an echo of our own sentiments on an abuse which should be frowned down by all intelligent and right-thinking people.

THE NATIONAL FLOWER—OUR SAY.—Every lover of flowers has a favorite, and naturally wants to see it adopted as the National emblem of the country. So it seems hard to agree on any one. Would it not be a good plan to have one for each State? and then more would stand the chance of being suited. One is hardly enough for the country. England, Ireland and Scotland have each one flower. All are under one form of government, and these singly or collectively are not near so wide in extent of territory as some of our States. Some think one flower for each State would be more suitable — thus Massachusetts could have her May-flower, while New York chose the Golden Rod. But if we are to have only one for the whole country, then we say, decidedly, the apple-blossom is our choice.

AMONG the many nursery catalogues which find their way to our table, few are of such value as those issued by Mr. P. J. Berckmans, Augusta, Ga., and intending purchasers in that section should carefully examine the contents and see the many good things contained therein, and how conservatively they are described.

THE apple crop of Western New York, for the present season, now appears to be a total failure; and the indications point to a much less supply of grapes, plums and other fall and winter ripening fruits.

CLETHRA ALNIFOLIA.

See page 62.

HORTICULTURAL ART Journal.

Under the editorial management of T. B. JENKINS, Horticulturist.

October, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 10.

AMERICAN NURSERYMEN ARE NOT THE ONLY ONES TO BLAME.

Nurserymen in this country very often get blamed for making mistakes and blunders in propagating and sending out varieties of fruits, and sometimes justly too, but the following correspondence between two well-known houses, eclipses anything we have seen previously, and shows the risk and uncertainty there is in importing new varieties. Withholding the names, we give the correspondence in full: The first letter is from the purchaser in this country, and the reply, given by the firm who made the double blunder, and who would have us believe in the wonderful power of American soil and climate.

DEAR SIR:

Your bill of February 24, 1887, charges us with 100 Red Defiance Currants. They were carefully planted and cultivated, and we have just been through and examined the product, affixing labels to designate the colors. Forty per cent. are white, ten per cent. half pink, and the remainder red, apparently of more than one variety. Fortunately we have not compromised our reputation by the sale of any; but we took cuttings, presuming that we had purchased something at a high price which was new and superior. Some of these cuttings are now fruiting with the same strange mixture.

The freight, and charges for packing, etc., was more than the original cost. The after expense and losses you can estimate.

We do not know what reparation you are accustomed to make in such cases, but as the introducer of the Industry Gooseberry here, we should suppose you would wish to stand well in our board.

Respectfully,

GENTLEMEN:

We are duly in receipt of your favor dated July 12, 1889, and in reply, as your complaint is the only one we have received in regard to Red Defiance Currants, we would attribute the change of color to the effect of your climate or soil. We are certain no mixture has occured here, as our own is perfectly distinct and correct.

We are, yours truly,

WINDOW GARDENING.

HOUSE PLANTS must have fresh air, suitable soil, be well drained, judiciously watered, and kept clean, if we would be successful and have well grown, handsome plants in our window-garden. Plants need a full bath once a week. They should be taken to the kitchen. Make a weak soap-suds just warm in a tub; tie a piece of cloth over the pot to keep the earth in, then with a small piece of sponge wash every leaf on both sides, not touching the flowers. When all are done rinse off in clear tepid water, and wipe off the pots. When dry, carry back to the window and see if they do not repay you for your trouble. If this is done weekly you will never see an insect of any kind on your plants, for they will not have a chance to become established. I have proved this by experience. But just let them alone two or three weeks, and you will have more than you want.

Plants, like children, cannot be neglected a day without showing it. And now I must say what I ought perhaps to have said in the beginning. Don't think you can make your window-garden a success unless you are willing to work for it, and are not afraid to put your hands right in the soil. A few moments' work each day, perhaps, but it must be everyday. And it won't do to let Bridget or Mary do it for you.

I said that plants must have a suitable soil to grow in. Of course you can buy your soil all prepared for your plants, but you can prepare it yourself if you have a garden. If you want to use it in the fall you must begin in the spring. Grass sods cut in the spring and piled together, grass side in, will make good soil. It should be turned over twice during the summer to help it decay, and you can add all weeds (before they seed), chamber-slops, soap-suds, and dish-water, if care is taken to throw on fresh earth now and then to keep the odor down. You will need some well-rotted cow-manure (never use horse-manure for plants in-doors or out-doors); it should be like rich black earth. When ready for use this soil can be sifted through coarse wire netting to get out the roots and stones; then the manure mixed with it—about one-third of the latter. Mix well and let it stand a few days before using. This will grow anything you will be likely to have in your window, unless it be begonias, gloxinias, primroses and ferns, which like, instead of so much manure, some fine leaf mold.

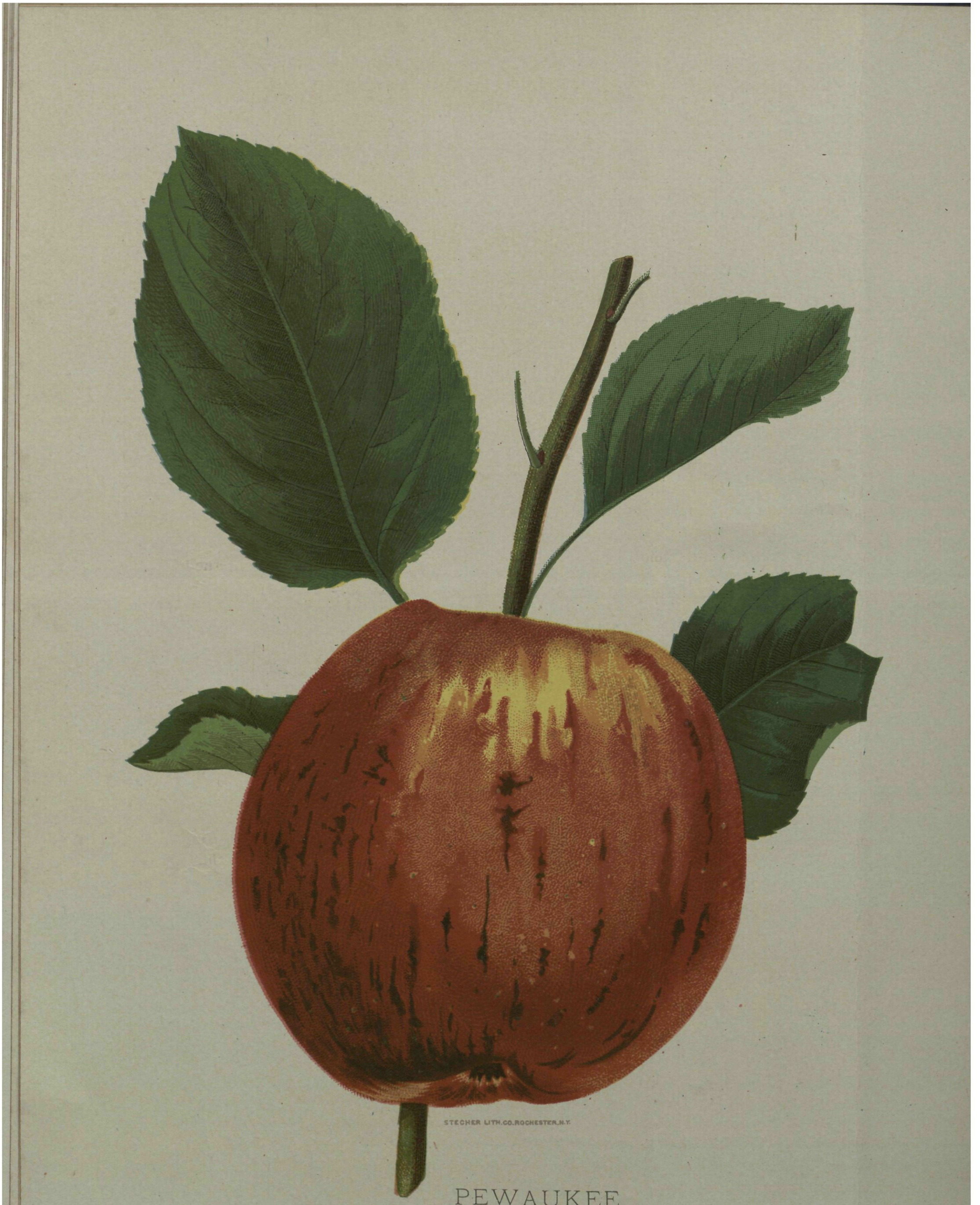
What kind of pots shall we use? The common unglazed porus pot is considered the best for the healthy growth of the plant, but the glazed pot can be used successfully in the house if the drainage is properly attended to. One thing, they look better and do not dry up as quickly.

Perhaps you may think, as many other people do, that plants are not healthful to have in the house in winter. Now you can set your mind at rest, for the doctors and the scientific men have experimented and compared notes, and finely have decided that plants are healthful. They have gone farther and now assert that they are positively beneficial for invalids and those who suffer from lung troubles. "They exhale a certain amount of ozone and vapor, which maintains a healthy dampness in the air, and besides are destructive of the microbes which promote consumptive tendencies in human beings." Mind one thing. The plants must be healthy ones, and thin-leaved varieties are preferable to thick-leaved ones.

Original, in GOOD HOUSEKEEPING.

Hyacinths grown indoors will be a success if the following rules are observed: "Fill your glass with water, throwing in a small piece of charcoal, and let the lower part of the bulb just touch the water. Put them into a cool, but not a damp place, away from the light, and leave them till the glasses are filled with roots and the leaves have begun to develope; then give them as much sun and light as you can, adding, if necessary, occasionally a little water. Unless the water becomes muddy never change it, and don't put the pots and glasses into a cellar where the atmosphere is damp, or into a cupboard where there is no atmosphere at all. A spare room where there is no fire and plenty of air is best."

The Mariposa Big Trees (Sequoia gigantia), are wonderful. I measured one, 80 feet in circumference. There are 600 in the Mariposa Grove. It resembles the cedar in texture and color of wood, and is a conifer.



PEWAUKEE.

ARTISTS ON STONE.

THE LITHOGRAPHERS' ASSOCIATION. — SECOND ANNUAL CONVENTION HELD IN BUFFALO, N. Y.

ALTHOUGH of recent organization, the National Lithographers' Association is now a strong union of interest, over 70 establishments being represented in it. Out of its foundation have grown valuable results.

By association and personal acquaintance of its members, who have generally accepted the opportunity to give their personal experience and suggestions for the general good of the entire trade and salvation of the lithographic business, it has arrived at safer, more equitable and profitable schedules to guide the craft in the matter of estimating and fixing prices on reasonable and known data regulating and entering into the real cost of production, and has demonstrated that lithographic proprietors are now alive to the best interest of their business charges, and as prudent in their transactions as in well-regulated concerns and organizations in other lines of business.

The lithographic business of the United States has of late years assumed colossal proportions. With the introduction of steam machinery and multiplex time-saving appliances, the cost of production has been so greatly reduced that it has been, properly speaking, a necessary adjunct to commercial circles. Lithography was invented by Alois Senefelder, who was born Nov. 6, 1771. Under his skillful management it was perfected to such a degree that no process, except that of photo-lithography, has equalled its progress, or supplemented the completeness of his work. The only progress made in the history of its development, is in the perfection of his ideas and experiments.

The lithographic business has had a wonderful development in the United States, particularly during the past 20 years. The total capital invested is over $25,000,000, and the number of hands employed over 30,000. There are, according to statistics, 256 establishments, operating over 1,200 lithographic steam presses in the United States to-day. An immense tributary interest has developed with it.

The business has however, as a natural result, been burdened with abuses which have become in many instances so glaring that united action has become necessary in the eradication of the more flagrant ones. With this object in view, the National Association was formed in Buffalo on Oct. 5, 1888, at which officers were duly elected. Mr. Julius Bien of New York was called to the presidency; Mr. Thomas Calvert of Detroit, was selected vice-president, and Mr. H. T. Koerner of Buffalo, was unanimously chosen for its secretary and treasurer.

The reforms instituted by this association are now matters of history, as the proceedings of the convention just closed amply testify, and the association starts upon its second year with the proud distinction of having gathered statistics of inestimable value in the furtherance of the objects which called it into existence, and in securing a membership of over 70 of the best-known and pioneer establishments in the United States, from New York to San Francisco, and from Minneapolis to Galveston, representing an aggregate capital of $17,000,000, and employing a total of over 20,000 hands.

EXPERIMENTS IN THE TREATMENT OF PEAR LEAF-BLIGHT, AND MILDEW ON APPLE FOLIAGE. — The Department of Agriculture at Washington, D. C., has made some important discoveries in the treatment of this nursery pest, as set forth in a circular, No. 8, which is of interest to all nurserymen in the United States. Mr. B. T. Galloway, Chief of this section of Vegetable Pathology, claims that this little parasite is a plant, which lives for a certain period, produces bodies analogous to seed, and then dies. Want of space prevents us from making quotations from the pamphlet before us. But we would advise every nurseryman and fruit-grower in the country to become acquainted with the contents.

PREVIOUS to the year 1840, there was nothing in existence to indicate the forthcoming nursery center which Rochester has since been noted for. In the fall of that year the first nursery partnership was made, and operations commenced on six acres of land, selected for that purpose, but in time it grew till it covered nearly, if not quite, six hundred acres.

Malay

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. M. Jordon, *Pres.*, St. Louis, Mo.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Boston, Mass. 1890.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; Prof. A. A. Crozier, *Sec.*, Ames, Iowa.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—H. W. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; Albert McCullough, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

HORTICULTURAL SOCIETIES.

THE Thirty-second Annual Meeting of the Missouri State Horticultural Society will be held at Lebanon, Mo., December 3d to 5th, 1889. Leading topics will be discussed, and interesting papers read. Reduced rates will be given, and entertainment provided for delegates.

L. A. GOODMAN, Sec'y,
Westport, Mo.

THE Illinois State Horticultural Society will hold its winter exhibition at Hamilton, Ill., December 10 to 12. Apples will be the leading attraction. Special classes are made for varieties grown in northern, central and southern Illinois, twenty-three first premiums and an equal number of second premiums being offered in each class. Premiums are also offered for collections of pears, grapes, vegetables and canned fruits. This ought to bring together a splendid collection, representing every part of the state.

THE question where the World's Fair of 1892, in commemoration of the landing of Columbus, shall be held, is before the American people, and they must settle it through Congress at the coming session. Public opinion has indicated, with sufficient emphasis, that it must be held in one of the two great cities of the continent, in New York or in Chicago.

THE Park Commissioners of this city have decided to purchase 685,214 trees, to be planted this fall, at an expense of $1,167, and strange to say, they have to go outside of our large nurseries to obtain them. $12,000 has been voted as the amount to be spent on gravel for the roads. So it seems that after all Rochester is not quite asleep in the matter of parks for the people.

WE are under obligations to President Chas. S. Pope, Manchester, Maine, for report of Maine State Pomological Society for the year 1888, to which we hope to be able to refer to again.

EDGAR QUEEN.

THE PEWAUKEE APPLE.

Subject of Illustration.

[*From O. J. Farmer.*]

ORANGE JUDD FARMER readers can see herewith an excellent illustration of the Pewaukee apple, a seedling from the Duchess of Oldenburg. It was drawn from one of a half dozen received from J. F. Bowman, Forgy, Ohio, is natural size and was selected as being the most typical of the specimens received. Mr. Bowman, to whom the proof was submitted, writes: "The engraving is very good. The size is correct—about an average of the crop which the trees bore this last season. This valuable variety has not received the attention it really deserves. The trees from which the specimens sent you were picked came through the severe winters we have had since 1878. The Pewaukee apple trees in my orchard were one year old from graft when planted in 1878, and at no time have they shown any signs of injury, while such varieties as Northern Spy, Maiden's Blush, Rambo, Early Harvest, Buckingham and Rawles' Janet, were entirely killed. No tree in the orchard compares with it for beauty of form and productiveness. From the one-year-old trees set in the spring of 1878 I picked five bushels to the tree of the finest specimens. I know of no other variety to compare with it for a mid-winter market apple. It certainly will prove very profitable to the large apple growers. I think one reason for the little attention it has had since it has been introduced, is the very inferior plate of so called Pewaukee. I consider it very incorrect." The plate, which Mr. B. sends, is surely not a good representation. The quality is not what one would desire in an ideal apple—what there is of it is good, but there is hardly enough for a family apple, though the "hide" would make a market for it."

Mr. Bowman called our attention to the colored plate of this apple which has heretofore been used to represent this variety. We saw at once how far it was out of the way, and now present what we believe to be a correct engraving of this fruit.—ED. H. A. J.

A purple-leaved Lilac has been produced in England with foliage as deep in color as the Purple Beech. This would seem to be a desirable addition to colored foliage.

THE HORSE CHESTNUT.

THE Horse Chestnut ought to be expunged from the list of ornamental trees. It is a nuisance from the time the blossoms appear until the boughs are bare. It might be valuable to reclaim barren fields, because the parts which it drops during the year would make quite a large addition to the mold which renders the earth of forests so rich. The blossoms become a crushed mass of nastiness when they fall. When the nuts begin to drop, passers-by need helmets to protect their heads. Besides, the litter of the fallen burs is very disagreeable. When soaked with the rains of autumn, the burs color the walks and everything with which they come in contact, and do not disappear until thoroughly incorporated with the mold of the fallen leaves from the same tree. The leaves, with their large, sprawling stems, cover the walks as with a mat, and are more disagreeable than the litter of the burs.

The Horse Chestnut grows rapidly, and this fact seems to be its only recommendation. Why should not the native Chestnuts of our forests be planted instead of the worthless tree now so common? The nut of the native Chestnut is an article of commerce, and if boys are to club Chestnut trees let them do it to some purpose. The nuts of the horse Chestnut are worthless except for medicine. A sufficient supply for medicine can be obtained without cumbering city streets with the disagreeable tree.

Although Rochester has great nurseries, but little taste has been displayed in adorning the streets with shade trees. Native trees have been too much neglected, while the horse chestnut has prevailed too mightily. It is to be hoped that in time there may be some organization to influence the planting of our streets. Many towns have rural art associations which consider the demands of a town as a whole, from year to year, and make recommendations. Our city park authorities ought to have some supervision of such matters, but hitherto they have not directed there attention to tree planting in the city at large. The commissioners of the new parks would perform a public service by making some recommendation concerning the planting of our streets with shade trees.—*Rochester Democrat and Chronicle.*

SEEDLING APPLE FROM THE PACIFIC COAST.

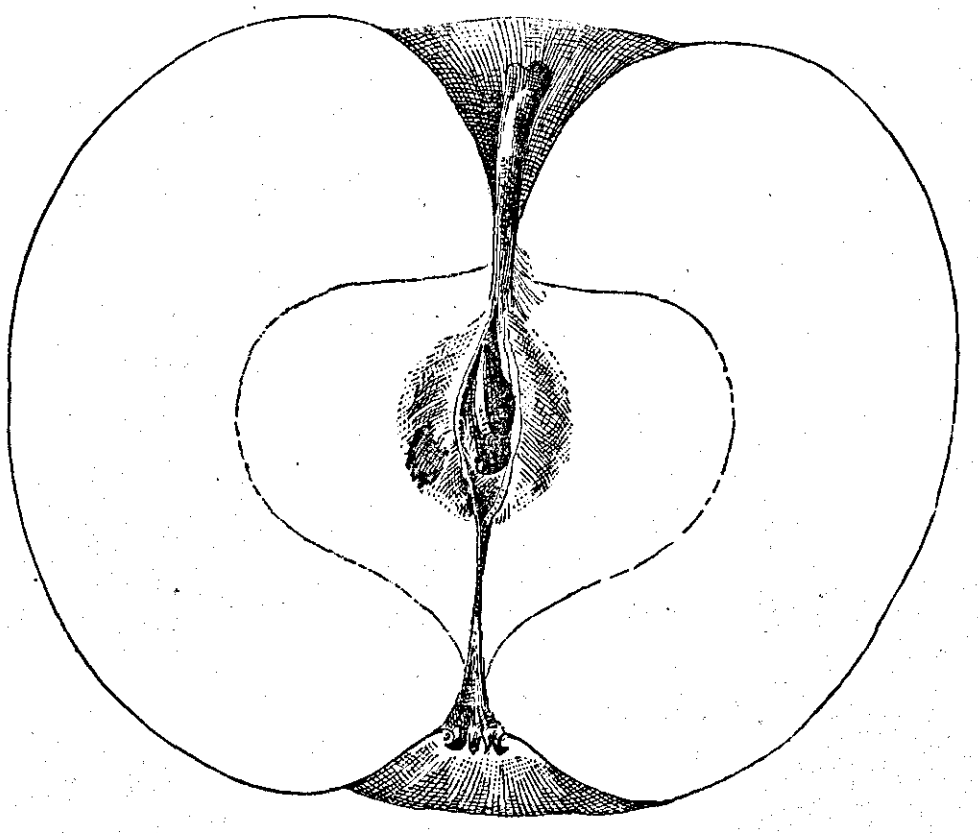
LEWISTON, IDAHO.

Editor Hort. Art Journal:

THINKING it might interest you somewhat, as a novelty, I send you an apple from one of the oldest apple trees on the Pacific Coast. The seed of which was brought from Buffalo, N. Y., by Rev. Spaulding, missionary to the Nezz Perce Indians, and planted here over 50 years ago. There are some four or five of the old trees; the one from which the specimen is taken is some 7½ feet in circumferance near the ground, is quite tall, and bears annually about a ton of apples.

During the winter of 1861–62 the mercury was frozen as solid as a piece of lead for some time; but, notwithstanding the vicissitudes of climate, the old tree is still vigorous. We do not consider the apple worthy of propogation here, as there are so many varieties that do well and are so much superior; but yet it is better than many that cumber the nurserymens lists. Yours truly,

JNO. H. EVANS.



SEEDLING APPLE.

The above was duly received by mail, in good condition, having stood the long journey well, and we present herewith an outline drawing of the same.

In appearance it was not much unlike a Swaar, light golden yellow, smooth, but entirely different in texture, flesh white, fine grained, rich and high flavored, and while not so good as some we have seen and eaten, still it was, as Mr. Evans writes, much better than many which are now being pushed, and lauded to the skies, and with its good quality and productiveness surely has an "iron clad" constitution. Mr. Evans did not write what its season was, but it had the appearance of being a good keeper.

Correspondent of *Boston Pilot*, writing from Rochester, N. Y., has this to say of our fair city:

"ROCHESTER, N. Y.—There is not, probably, in the United States, a lovelier or a healthier city than Rochester. The Genesee river, diversified by picturesque cataracts and spanned by stately bridges, runs through it, a feature of perennial beauty in the landscape, and an important factor in the material prosperity of the city for the water-power it affords to mills and manufactories. A few decades ago, before the development of Minnesota as the great wheat raising and flour manufacturing center, the Genesee Valley wheat was famous; and Rochester was known far andwide as the Flour city. But the vast wheat fields of the west, and the facilities for transportation, whereby flour in vast quantities could be shipped from Minnesota to New York city without breaking bulk, for far less cost than from Rochester to New York, made wheat-raising in the Empire state comparatively purposeless; and the thrifty denizens of Rochester and the fertile country round about, addressed themselves successfully to fruit and flower raising. Indeed, to such proportions has floriculture attained in Rochester that it boasts the largest nurseries in the world—those of Ellwanger & Barry—and the poetically inclined among its people vary the old name in significance, though not in sound, by calling it the Flower City.

THE FLOWER GIRLS.

NAMING FRUITS AND VEGETABLES.

DEPARTMENT OF AGRICULTURE.

Office of Experiment Stations.

The Association of American Agricultural Colleges and Experiment Stations at its Knoxville meeting in January, 1889, appointed a committee to devise methods for co-operative work in horticulture and especially in testing new varieties of fruits and vegetables. This committee called a meeting of station horticulturists at Columbus, Ohio, in June, 1889, for consultation. At this meeting a committee on the nomenclature of vegetables was appointed. The report of that committee, together with the rules for nomenclature formulated by them, is presented herewith.

REPORT OF COMMITTEE.

The committee believe that all interests will be subserved and that dignity will be secured, by simplicity and good taste in the nomenclature of kitchen-garden vegetables. To this end they have formulated a series of rules on the naming of vegetables, by authority from the Convention of Horticnlturists of the Experiment Stations held in Columbus, Ohio, on the 13th and 14th of June last.

Reform in this department of horticultural nomenclature should be prosecuted as vigorously and successfully as it has been in the nomenclature of fruits at the hands of the American Pomological Society. The committee are confident that brevity, accuracy, and good taste in the naming of vegetables are perfectly compatible with the purposes of trade, and therefore solicit co-operation in this work not only from all writers upon horticultural topics but also from all dealers in garden seeds and supplies.

A name is bestowed upon any plant solely for the purpose of designating it; it is not the province of a name to describe the plant. All description is properly a part of the text. This description should present a characterization of the variety, rather than a mere list of adjectives intended to catch the eye. The committee desires to suggest that a variety never be described under a name which is accepted as a synonym; if the synonym is used as a leader, it should stand only for the purpose of making a reference to the proper name; as, *Ivory Ball.—See White Apple.*

L. H. BAILEY,
E. S. GOFF,
W. J. GREEN.

RULES.

1. The name of a variety should consist of a single word, or at most, of two words. A phrase, descriptive or otherwise, is never allowable; as *Pride of Italy, King of Mammoths, Earliest of All.*

2. The name should not be superlative or bombastic. In particular all such epithets as *New, Large, Giant, Fine, Selected, Improved,* and the like should be omitted. If the grower or dealer has a superior stock of a variety, the fact should be stated in the description immediately after the name, rather than as a part of the name itself; as, "*Trophy,* selected stock."

3. If a grower or dealer has procured a new select strain of a well-known variety it shall be legitimate for him to use his own name in connection with the established name of the variety; as, *Smlth's Winningstadt, Jones's Cardinal.*

4. When personal names are given to varieties, titles should be omitted; as, *Major, General, Qneen.*

5. The term *hybrid** should not be used, except in those rare instances in which the variety is known to be of hybrid origin.

6. The originator has the prior right to name the variety; but the oldest name which conforms to these rules should be adopted.

7. This committee reserve the right, in their own publications, to revise objectionable names in conformity with these rules.

MISJUDGING FRUITS.

Wickson's work on California Fruits, in the portion devoted to plums, says that *Prunus Simoni* has a "sweet, rich, aromatic and delicious pineapple flavor."

Remarking upon the above, the *Country Gentleman* says: "This will surprise anyone familiar with its worthless character, which can hardly be so greatly changed when cultivated in California."

* A *hybrid* is the product of true species. There are few, if any, instances of true hybrids among common garden vegetables. The union of varieties gives rise to a *cross.*

OVER AND OVER AGAIN.

Over and over again
  My duties wait for me,
They ever come in monotonous round,—
  Breakfast and dinner and tea,
Smoothing the snow-white clothes,
  Sweeping and dusting with care.
There is ever some task in my little home
  To brighten it every-where.
What may I claim for my duties' fee?
  Are these endless rounds of tasks to be
Naught but a dull monotony,
  Over and over again?

Over and over again
  The sun sinks low in the West,
And always over and over again
  The birds come back to the nest.
The robin sings to his loving mate,
  Close, close to my cottage door,
The same glad song I have heard him sing
  For many a day before.
What does the robin say to me?
  If the heart is tuned to love's glad key,
No task can be dull monotony,
  Though over and over again.

—GOOD HOUSEKEEPING.

THE CULTURE AND USES OF HARDY HERBACEOUS PERENNIALS.

J. W. MANNING.

THERE is such a diversity of situation and native habitats of Hardy Herbaceous Perennials that no general rule can be given as to their culture. Most varieties are admirably suited to any common garden soil, while the model soil for a border of hardy plants is a good, deep loam, well enriched with manure and deeply and finely worked previous to planting the subjects, then, with proper care as to keeping away weeds, etc., often no further care is needed for several years. There are, however, some hardy plants which, on account of their native habitat, are not adapted to a flat border, but which require a well drained, dry soil; others a moist situation; while others prefer and even do best on a parched soil of the poorest description. These, should have special cultivation.

As to the use of perennials, such is the variety of form, foliage, flowers, and habits of growth, that one can find such as are adapted to produce any result desired in our gardens. Where can one find among tender plants anything to rival in sub-tropical effects a well-made bed of Yuccas in full bloom, or a well-grown specimen of the Variegated Giant Reed (*Arundo donax, var. variegata*), or a clump of Zebra or Striped Grass? or what can surpass the broad foliage of the Acanthus, or the Giant Rhubarb? and where can one form of bedding plants such charming clumps of ornamental foliage and fragrant flowers as can be produced with the White Plaintain Lily? These and a thousand other examples could be mentioned where most desirable pleasing results can be formed with hardy plants.

THE FLOWER BORDER

Is one of the most desirable adjuncts to any well-kept place, but it should not be badly made or put carelessly together as is often done, as many people think that if hardy plants are such, they need no particular care or attention, but that if stuck in the ground they should produce the best results possible, without further care.

Now any fair-minded person must know that any plant, to produce the best results, must have good care and cultivation. Let one plant the fashionable coleus and geranium in a bed of rocky gravel, without nourishment, and he gets poor results. Now why not the same with other plants, whether hardy or tender? If every one would bear in mind the axiom, that what is worth doing at all is worth doing well, and apply it to the garden, one would no longer allow his garden to become tangled masses of weeds and a few desirable plants. A flower-border should, first, be in good soil; if not already such, make it good; mix throughout the present soil a good lot of good, rich loam, also liberally manure the whole, and then thoroughly mix the ingredients even to the depth of two feet, and you then have a good foundation for a hardy border, which will give results worthy of the name. The border may be situated in front of a bed of shrubs, in which case care must be taken to prevent the roots of the shrubs from drawing away the nourishment from the soil of the border.

Dig deeply between the shrubs and border to cut such roots as may have entered into the latter; in this way no bad result follows such a situation. But, to produce the best results, let not the bed of shrubbery be of formal shape, and the border a dotted, mixed, misstudied choice of plants, which would only produce a miserable effect, but let the edge of the shrubbery be broken, and let the perennials enter into the spaces between the shrubs, and thus produce charming effects of flower and foliage among the whole. There is no shrubbery, properly such, with sufficient space between the plants for development, but that may be increased in beauty by the use of perennials along the edge

(Continued in November number.)

PARSON'S SWEET.

HORTICULTURAL ART JOURNAL.

Under the editorial management of T. B. JENKINS, Horticulturist.

November, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 11.

SEASONABLE.

THE SEASON AND CROPS—Hereabouts, now closing, has been remarkable in many ways, but especially so in the even and low temperature and in the amount of rainfall. Many fruits have suffered for the usual amount of sunshine, and as a consequence are deficient in quality and late in ripening; but after all the season has been a long one. At this date we usually have had severe hard frosts, but so far are about free from them up to this time. Apples hereabouts are a failure, but we shall not suffer, for already heavy shipments of this fruit have been made from more favored sections—and while many of these are very nice, clean and bright looking, they however lack the quality of our Western New York apples.

The Naples (Ontario Co.) Grape Growers' Association has shipped but fifty-five cars of grapes to Boston this season, as against ninety-four last year, proving the crop to be but little more than half as large; but owing to better prices received, the revenue is nearly as great. The three grape basket factories of Naples have made 450,000 baskets this season, worth $18,000, which are all sold. These represent 1,800 tons of grapes, of which the town of Naples raised about 800 tons. The remainder of the baskets were used chiefly by growers on Canandaigua lake. The net revenue from these grapes will not fall far short of $125,000. In our own city markets we see no difference in the supply, and the quality seems about as good, and, of course, the prices have not varied, but Rochester is, to our opinion, the poorest market in the world for fruits, quality and prices.

WHAT A DIFFERENCE!—We read that whole sections in New Jersey have agreed to dig up and destroy their vineyards, the rot compelling them to thus destroy what, at one time, promised to be a paying industry, while in Western New York preparations are making to largely extend the large area thus planted. For, notwithstanding the many unfavorable conditions with which grape growing is surrounded, it is still a paying crop—more so than many others, and all that is wanted to make it still more so, is the proper selection of varieties, the right location and thorough preparation before planting, and when the fruit is ready for market, judicious handling.

THE GREENHOUSE.

THE numerous species and varieties of Aralias form, when taken together, a very ornamental genus of trees, shrubs, and herbs, belonging to the natural order Araliaceæ.

The genus is rather an extensive one, but of no value as far as flowering plants are concerned, all the species being plants of an ornamental character, the great majority of them being peculiarly adapted for the decoration of the mixed flower border or lawn during the summer months, the greenhouse or conservatory during the winter season, and while small they are excellent window-garden plants, and in this paper I propose to notice only those species that are grown for inside or conservatory decoration.

To grow these Aralias to perfection, they should be given a compost composed of two-thirds turfy loam, one-third well-decayed manure, and a slight sprinkling of bone dust. In potting use porous or soft-baked pots, and let them be proportionate to the size of the plants. See to it that they are well drained, and in repotting, which should be done as often as the pots become well filled with roots, great care should be taken to avoid injuring their leaves. As the plants are so near being hardy, they do not require a very high temperature during the winter season; a temperature ranging from 40 to 50 will answer very well. During the summer season the plants should be plunged in a partially shaded situation, and the pots turned occasionally so as to prevent them from rooting into the earth. Water should be given whenever necessary, and early in September the plants should be taken up and repotted before they are brought inside. It is well to sponge off the leaves occasionally so as to keep them clean and free from all insect pests, and when the plants are in a state of growth they should be watered liberally, both overhead and at the roots.

When grown in groups or as single specimens for the decoration of the mixed border during the summer season, the Aralias should be given a deep, well-enriched border, and well mulched with coarse littery manure as soon as dry, hot weather sets in. Water should also be freely given during seasons of drought. The plants should be placed outside about the 10th of May, and taken up and carefully potted before cold weather sets in.

Propagation is effected by seeds and cuttiugs, and if the young plants are well cared for and repotted as often as they require it, nice specimens will soon be obtained.

The following are the most distinct and desirable varieties:

A. elegantissima is a very beautiful plant, having a straight, erect stem which is furnished at short intervals with digitate leaves on long foot stalks mottled with green on a dark ground. The leaflets are filiform, deeply and unequally serrate and gracefully pendulous. In color the foliage is deep green shaded with brown.

A. filicifolia, stems and leaf stalks purplish, marked with oblong white spots; leaf stalks sheathing at base, expanding into a broad leafy limb. Plant well furnished with foliage and of very graceful habit.

A. guilfoylei. The leaves of this species are composed of from three to seven stalked oblong elliptic leaflets, which vary from two to three inches in length, and are evenly margined with creamy white and splashed with gray.

A. papyrifera is the Chinese Rice-Paper Plant and is a native of the Island of Formosa. It is a highly ornamental plant, attaining a height of five or six feet. The leaves are from eight to twelve inches long and five or seven lobed; both these and the branches are clothed with a crown, which soon falls from the upper side leaving it quite smooth. From the pith of this plant the beautiful rice paper of the Chinese is made.

A. reticulata is a very distinct free-growing species, and when well grown a fine decorative plant. Leaves alternate strap shaped while young, becoming larger with age, of a dark-green color, reticulated with a lighter shade of green. It requires a winter temperature of 50°.

A. Sieboldii forms on a straight stem an umbrella like head. Leaves large, firm in texture, digitate in shape, and of a deep glossy green color. A native of Japan and one that is almost hardy.

A. Sieboldii variegata is a Japanese variety of the foregoing, from which it differs only in the leaves, which are blotched and margined with white.

A. Sieboldii variegata aurea is another Japanese variety of *A. Sieboldii*, having the dark green leaves richly blotched and margined with yellow.

A. Veitchii has narrow digitate undulated leaves of a deep-green color above, underneath being dark crimson. As it is a native of the South Sea Islands, it requires an average winter temperature of 55°. One of the most beautiful of decorative plants.

CHAS. E. PARNELL.

PURPLE MAPLE.

OUR NATIONAL PARK.

THE so-called Yellowstone national park is not a park at all in the common sense of the word. It is a vast area of land on the backbone of the continent. It includes 3,000 square miles of territory and is twice as large as the state of Delaware. This tract is not so deservedly noted for its scenery as for its unique, igneous phenomena—the geysers and the hot springs. Only three areas on the earth's surface are noted for such phenomena. One is Iceland, one New Zealand and the other is our Yellowstone Park. Scientific men once made pilgrimages to Iceland to see the geysers. The great geyser of Iceland is still unsurpassed. It throws water to an estimated height of 350 feet. But in the number of its geysers no tract exceeds the Yellowstone park. Here there are thirty or forty patches of geysers and hot springs. The Castle geyser alone covers an area of fifteen acres. So in their number and area the geysers and hot springs of the Yellowstone exceed all others. There are over seventy geysers in the park and about three thousand hot springs. The opening up of the Northern Pacific railway has greatly increased travel to the national park. The first authentic account of the Yellowstone region was written in 1869. Government expeditions were sent out and a few years later the whole tract was set aside as a park.

CHINESE QUINCE IN AMERICA.—Our friends of the *Garden and Forest* are not often caught napping; their wish that the Chinese quince, *Cydonia sinensis*, might flourish in this country, was anticipated long before the wish was uttered. It flourishes greatly in the South as far north as Virginia. We have seen its fruits that would weigh three or four pounds which, we are told make excellent preserves. Some of our Southern readers may be able to tell us why it is not cultivated for market, as it is entirely worthy of being.—*Am. Garden.*

We have never seen any that would weigh three or four pounds, but hereabouts it fruits abundantly, very much so; and several years ago we had a lot of this fruit gathered and cooked. We thought then that it would pay to grow to form the basis of all jellies, using other fruits for flavoring and coloring. It certainly made a very excellent jelly and very freely. ED. H. A. J.

EVERGREENS FOR THE PLAINS.

Great difficulty has been experienced in getting evergreens that would grow on the arid plains of the West. The difficulty seemed to be in getting the seeds to germinate and to nurse the young plants through the first few years. Mr. C. S. Harrison, located at Franklin, Neb., has overcome this, and tells all about it in his circular which he issues.

CALIFORNIA FRUITS AND HOW TO GROW THEM.—Mr. Nickson has given us a book of 575 pages which must be a valuable addition to the horticultural literature of the Pacific slope. Enjoying unusual facilities the author has given many facts in the growth and shipment of California fruits, especially in oranges. Full page engravings of several fruits are given, and an excellent representation of the Navel orange as a frontispiece

---

KNOWING the value of this fruit, we copy from an exchange the following, which we believe to be true, and to be commended:

THE USES OF THE LEMON.

Lemonade, made from the juice of the lemon, is one of the best and safest drinks for any person, whether in health or not. It is suitable for all stomach diseases, excellent in sickness, in cases of jaundice, gravel, liver complaint, inflammation of bowels and fevers; it is a specific against worms and skin diseases. The pippin crushed may be used with sugar and water and used as a drink. Lemon juice is the best antiscorbutic remedy known. It not only cures the disease but prevents it. We advise everyone to rub their gums with lemon juice to keep them in a healthy condition. The hands and nails are also kept clean, white, soft and supple by the daily use of lemon instead of soap. It also prevents chilblains. Lemon is used in intermittent fevers mixed with strong, hot, black coffee without sugar. Neuralgia, it is said, may be cured by rubbing the part affected with cut lemon. It is valuable also to cure warts. It will remove dandruff by rubbing the roots of the hair with it. It will alleviate, and finally cure coughs and colds, and heal diseased lungs, if taken hot on going to bed at night. Its uses are manifold, and the more we employ it internally the better we shall find ourselves. A celebrated Doctor in Rome is experimenting with it in malaria and fevers, with great success, and thinks that in time it will supercede quinine.

ACCORDING to the *American Agriculturist*, which is generally very accurate in such statements, over 200,000 cows and sixty millions of dollars are invested in the milk business of New York City. Five States contribute to the supply and three hundred miles is the distance it is sent to the consumers.

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. M. Jordon, *Pres.*, St. Louis, Mo.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Boston, Mass. 1890.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; Prof. A. A. Crozier, *Sec.*, Ames, Iowa.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—H. W. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; Albert McCullough, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

HORTICULTURAL MEETINGS, ETC.

THE Winter meeting of the Ontario F. G. A. will be held in Windsor (Ont.) during the second week in December, and a general invitation is extended by the officers to all interested, whether members or not, to attend. The object is to advance the interests of the province by encouraging the fruit industry. And this seems to be the objective point in holding the Dominion Convention in February next, at Ottawa. The Minister of Agriculture is in sympathy with this movement, and $3,000 has been appropriated for the expenses. So it seems that our brethren are alive.

"S. A. F." Proceedings of Fifth Annual Convention held in Buffalo, N. Y., August 20th to 23d, 1889. We are under obligations to the secretary, Mr. W. J. Stewart, for this very complete volume of over one hundred pages of the proceedings, and giving a list of members and their post-office addresses.

THE twenty-second annual report of the Ohio State Horticultural Society for 1888-9 has been received. This, like all its predecessors, is a very valuable volume of nearly two hundred pages. President Tryon in his annual address, says:

The improvements in the cultivation and training of vineyards have been even more marked and important than in other fruits, because earlier attention was drawn to their wonderful products for commercial purposes. Ohio can never repay the debt it owes such men as Ernst Bateham, Warder, Campbell, Kirtland, Elliott, Springer, Dunham, Storrs and others, who set on foot the movement which led to the organization of this society and laid the foundation for the growth and dissemination of this valuable knowledge.

IN the September issue of the *Journal of Mycology*, published quarterly by the section of vegetable Pathology of the U. S. Department of Agriculture, Dr. Erwin F. Smith contributes a paper on "Peach rot and peach blight," embodying the result of his observations in Michigan, Maryland, Delaware, and other peach growing sections of the United States. The loss from peach rot is often enormous, some years amounting to nearly the entire crop. At all times it is considerable. In 1888 on the Delaware and Chesapeake peninsula the loss during one week amounted to nearly half a million dollars. The loss this year was also serious.

Dr. Smith gives minute directions how to overcome this fungus, and parties interested should not fail to write the Department for the above.

THE Agricultural Department of the United States government made a very large and creditable display at the Paris Exposition, and those who contributed have been rewarded for their efforts. We recognize quite a number among the list of successful competitors whose goods are deserving of the rewards.

PRESIDENT DROUARD.

THE GARDEN.

CULTURE AND USES OF HARDY HERBACEOUS PERENNIALS.

Continued from page 80.

and between the spaces. A group of Lilies towering above the dense foliage of the shrubbery, a mass of Barrewort in healthy growth in the partial shades, a group of Cardinal-flowers in their showy beauty, or a clump of fall-flowering Phlox, add charms which are most attractive.

A careful selection is necessary for such a border in order to prevent bad results. Do not select too many tall-growing plants, which will require staking, or overshadow in size the shrubs; rather a few select specimens, which will give a variety and add charm. To the front of the border use lower growing plants, with an occasional medium-sized one at irregular intervals. Do not be formal, but rather approach Nature in her kindly variety. Use low-growing plants freely, even towards the rear of the border, where they may be seen through vistas of other taller plants, their carpets of foliage and flower giving good effects.

If the border is against a wall or building, one need not be so careful about using the larger-growing perennials, as they will give a desirable variety of flower and foliage which is well set off usually by the background; but if, however, such detracts from the whole, cover the detracting object with Climbing Roses, or Clematis, or Ivies, or Woodbine, or others of the numerous climbers, which will add great charm to the whole. Here one need not fear the invasion of roots and shading of branches, and many charming results may follow, since all classes may be freely used. By a careful use of the evergreen varieties, including shrubs and evergreens, one might produce fine foliage results in winter, as well as flower results in summer.

Another and common form of the herbaceous border is situated in the kitchen garden, or along the back portion of lot divisions along the fences. Here one may introduce the greatest variety of all classes, as one may use the tall, coarse-growing, but showy flowers, as Sunflowers, Asters, Oxeyes, Virginia Speedwell, Coreopsis Tripteris, and many others of tall growth, yet by no means wanting in beauty. From the tall plants at the back, one may graduate by sizes to the smallest low-growing species of Moss-pinks, Creeping Veronicas, Dwarf Phlox, and the innumerable similar material of similar habit.

The tall varieties to the rear set off with their foliage the flowers of the less tall ones, and each in turn, by association and contrast, show each other to the best advantage. However, let it not be understood that we mean to construct a floral stage as seen in flower exhibitions, which is the worst form possible for the garden, but rather, in planting, do not use single specimens, but plant in groups of several plants of the same species. Neither repeat the same species at regular intervals, in the manner of patch-work, but let each good thing be well represented; if not well in two or three clumps, put all in one, and the one will produce results much more satisfactory.

Do not persist throughout in having the taller plants at the back invariably, but occasionally let a clump of medium sized plants stand forward from its companions and allow some of the smaller growing kinds to surround it, and let the low Moss-pinks, or other creepers, run into the space to the rear, and give pleasant vistas of foliage and flower. Do not leave any bare soil unless you desire so to do. Much finer results are produced by the use of creeping plants and low dwarf species, to entirely cover the surface.

Many bulbous plants are all the better when seen arising through a carpet of verdure, while such carpets give them shade and retain moisture, which is most thankfully received by them. A group of Lilies, Hardy Amaryllis, or Flame-flowers seen arising from a bed of Moss-pinks, or Veronicas or Forget me-nots, are much more effective than when simply surrounded by dusty soil. Once thoroughly made, a border need not be disturbed for several years, unless some plants get too large, and take up too much room, in which case take up the clump and divide it on a wet day, or if you desire to replace some plant with a new one, it can be easily done; but as to digging up the soil with spades, etc., spring and fall, it should not be done, as more plants are destroyed in this manner than improved. Rather mulch, if the soil is bare, with some light, sweet dressing.

If the border is away from any sheltering fence, or if one desires to screen it from the kitchen-garden, put up a trellis to the rear, and cover it with climbers, of which there is an all-sufficient variety to produce charming flower and foliage effects.

THE ROCKERY.

The best possible rockery is Nature's, and she is also the best teacher as to how to form an artificial one.

If one has a group of irregular ledges on his grounds, he needs no more to produce one of the finest of rockeries. Here, in sunny situations, on the least amount of soil, Sedums and Sempervirums will thrive and blossom gloriously; on deeper soil, on sunny slopes, the Alpine Rock Cress will supply flower and fragrance to early spring, the Drabas will lend charming tufts of evergreen foliage, while the Eryssimum will lend it color in such profusion. In the fissures the various Armerias, Arenarias, Achilleas, Asters, etc., etc., will thrive and beautify, while the shaded, damper situations will give abundantly the meagre wants and desires of the numerous other beautiful and hardy plants so little known, and yet which are so beautiful. Here the Primrose is at home, many charming Ferns, and a long list of showy plants.

The almost perpendicular surfaces can easily be made beautiful with the Evergreen Ferns, the Arctostaphylos, and others. No class of gardening is so fascinating as this. The infinite variety of foliage, flower, and habit of the Alpine and Rock Plants is such as to give constant pleasure.

If one is not so fortunate as to possess a natural rockery as described, he may produce one, but must use care in so doing. A tumbled pile of rocks, destitute or mostly so of soil, *will not* produce good results. The rocks should be of as varied shapes as possible, with but few smooth ones. Do not make a geometrical figure of your your rockery, but let it be of uneven form. Be sure that the soil is firmly pressed into all the crevices between the rocks to completely fill them, and let there be a connection with the soil below that the roots of the plants may have a sufficient depth of soil to allow them to withstand all drought, also to allow good drainage.

Let it not consist of one mass of rock, but let there be patches of soil in some cases of consider able extent. Let one edge of some rocks appear above the surface of the soil to allow an overshadowed crevice, which will delight some fern or other plant best suited to such a situation. Let there be many crevices; some in open, sunny spots, some heavily shaded; also little pockets for rare plants suited to them. Bury the rocks so as not to expose too much surface, and if desirable cover such as may be too conspicuous with some dwarf trailer. Do not raise the rockery too high from the general surface of the ground, as too much drainage will result.

One of the simplest and most effective rockeries is to half bury stones of various forms and sizes in bankings. In this one may easily produce good results. A few medium-sized stones, half buried in the border, often serve to grow difficult subjects, However, let us say that many Alpines give very satisfactory results in common borders, as they only require drainage, and here do not suffer as much from drought as they would in a rockery. Give them plenty of drainage by the use of leaf mould and sand, and place a few large pebbles about the crown of the plant, and often as good results occur as when planted in rockeries.

In such places one can easily arrange a rock garden of lasting beauty, and one which will give flowering effects from earliest April to hard frost, and year after year, while the various Evergreen plants, suited to such situations, prevent any undue bareness of surface in winter.

Bogs, sluggish or rapid streams, lakes, and ponds can all be made places of interest and beauty by a careful selection of plants suited to such situations, of which there is an all-sufficient variety.

Nor do not forget that all of these are of easy culture, and once obtained and reasonably used, will bloom each year in increasing beauty, and, instead of a yearly output of so much money for a repetition of this or that piece of flashy patchwork, you can obtain a permanent and lasting result of much greater beauty. The choice is whether you will have your garden occupied a third of the year by a few families of plants, not particularly distinguished for beauty, which may bloom well or not, and present as little variety as possible, or will you have your garden a home for a selection of the most varied and beautiful of Nature's floral productions, presenting a continual succession of lovely and ever-changing forms and colors during three-fourths of the year.

A SOCIETY WOMAN'S REBUKE.

A few years ago a strange mistake was made in New York society. Two ladies of the same name gave an entertainment within a few doors of each other's houses. Many persons got into the wrong house. The hostess who gained that day the admiring comments of all New York was the one who received perfect strangers as if they were her best friends, and made them her friends by that gracious reception. She knew how awkwardly they would feel when they found out their mistake; she did all she could to prevent their feeling awkwardly while with her.

The other lady, less well-bred, said to a person who had come into her house, under a mistake, "I think you have got into the wrong house."

"Yes, Madame, I have," said he. "I thought before I entered it, that this was a *lady's* house."

It was a terrible revenge, but, under the circumstances, an entirely justifiable one.—*Ladies' Home Journal.*

GATHERING ROSES.

THE SEED TRADE.

AN AMERICAN SEED FARM.

FEW of our readers can form a correct idea of the magnitude of this business as carried on by some of the growers in this country. There are many large nurseries scattered over the country, and many thousands of acres are given up to the culture of trees and plants. But we think, on the whole, much more is devoted to the growth and culture of seeds; for, aside from that which is produced for home use, much is now grown for exportation. many varieties maturing much better here than elsewhere; and if labor was not so costly, this country would soon lead the world in the production of seeds. We transfer to our pages what a correspondent of the *American Garden* saw at one of the seed farms of W. Atlee Burpee, in Bucks County, Pa.

A blaze of fiery color seen from the car windows is evidence enough that we are passing the Fordhook Farm of W. Atlee Burpee—a man who needs no introduction to anybody on the American continent who has a garden. Soon comes the Doylestown Station, and we are quickly winding along the roads, through the fields, and over the hillsides of a fine old Bucks County farm, to a lookout from which we view a wide stretch of this magnificent rolling farming land of rich and fertile Pennsylvania. * * * *

At the entrance from the highway we had passed the splendid two-acre bed of Scarlet Salvia which flashed its welcome while yet we rode with the iron horse. Many flower seeds are well and often better grown in Europe, but our hot climate is just suited to this flame-colored beauty, and our English, German, and French brothers are all glad to buy Salvia seed from Fordhook and three other American stocks. Just beyond was a gang of boys harvesting the fruit of an old boyhood favorite, the "Cherry Tomato" or Alkekengi, lately "introduced" as Improved Ground Cherry and Cape Gooseberry. It is a delicious thing anyway, and deserves a place among choice dessert fruits. I refer to the variety having yellow fruit encased in a husk which protects it from decay; the purple-fruited sort is only partially enhusked, readily decays, and has a poor, rank flavor. The quarter-acre here is of course only grown for seed. Now long, bright bands across the fields of Balsam and Phlox dispute attention with plots of smart Peppers and areas of Tomatoes. And we hurried on to the place of central interest.

This is the great trial ground, of which it is useless to attempt an account, for there are only one or two short rows of a variety and the vegetable trials alone number 2,386, to which we must add 2,097 of flowering plants, to make a bewildering array which are the constant study, throughout the season, of two or three trained observers, whose duty is to carefully note and record every valuable characteristic and fault. Though description fails, yet the trial ground is the most important feature of the seed farm. For here are tried all the new introductions obtainable in any country, alleged new things, new seedlings, production of the hybridizer's art, and discoveries from the fields and woods not before "introduced" to cultivation. Secondly, the trial ground serves the purpose of detecting spurious "introductions" or reintroductions of old varieties under new names by ignorant or unscrupulous parties. Here also, the various selections and strains of standard varieties from different sources are compared side by side. A notable example is the first early smooth pea of nearly as many names or prefixes as there are prominent seedsmen, on which each one strives to outdo his competitor in earliness and productiveness. By these trial-ground comparisons, one may know exactly the comparative merit of his own and other stocks of the same variety. This principle holds good for many varieties of largely cultivated vegetable and flowering plants.

Thirdly, and not least in importance, are the yearly tests here for vigor, quality, and trueness to name and type, of all the varieties of seeds offered for sale by the house of which the seed farm is a part. This includes different parallel tests of the stocks of each variety from different sources, and also tests of surplus seeds left over from the previous year's sales. Apart from, but in close relation and recorded with this trial-ground work, are the yearly tests of all seeds for vitality, conducted in special germinating pans or in earth in the greenhouse. In these means it is seen that the careful seedsman has, in fact, a laboratory and balance-wheel for the proper guidance of his business on the sound basis of honesty, fact, and high quality.

In passing through the long lanes of the trial ground we may notice a few interesting things which the early September storms did not destroy. *Lupinus subcarnosus* (Texas Lupin) is a pretty introduction from Texas. Its deep blue fragrant flowers in large spikes, and pale green, dainty, thrifty foliage, are well worth attention. *Cylanthera pedata* is a graceful and attractive, though less known sister of *C. explodens:* the latter is chiefly noticeable for its exploding seed pods, whilst this is a really beautiful and graceful climber, bearing ornamental fruits. *Rumex roseus* is a strikingly handsome rosy flowered sorrel. The dwarf single *Zinnia tenuifolia*, with its conspicuous little maroon-colored flowers, is evidently a desirable border plant, though hardly to be compared with the elegant liliput-flowered Zinnia of which in another field Mr. Burpee has an acre or so in seed bearing; the liliput plant is of medium size, while the flower is truly liliputian for a Zinnia, only one to two inches in diameter, covering a wide range of color, and very graceful and pretty. But we must pass on, only noting the worthy appearance of *Bidens ferulæfolia*, *Dolichos atrosanguineus*, *Galactites tomentosa*, an ivy-leaved Cypress Vine, a luxuriant mass of cultivated Pennyroyal demanding a trial for lawn use under trees, the scarce and valuable *Torenia Fournieri*, and scores of other things that now we have no space even to mention, for we must see more of the seed crops.

Of the 103 acres in Fordhook Farm, 65 acres were this year in seeds—25 of flower seeds and the balance of vegetables. A 103-acre farm is not a large one, but when devoted to seed growing it compares with big stock and grain farms as a watch factory does with a woolen mill. The soil is a heavy loam, well drained by nature and art, hence well adapted to its uses. Soil is of great importance in seed growing. This would not produce good Sweet Corn and many other things. In general, it may be said that the right soil for producing seeds of a given family is the same as would produce the best development in the plant for its ordinary uses. Though this is not true of Wheat, for example, the best seed of which is grown on gravelly loam, while the commercial crop prefers a heavy soil. Thus it is that Fordhook Farm can produce only a small portion of the seeds required for the trade of the house of Burpee. Here are grown chiefly the varieties that do best on this soil, and the original "stock seeds" to be furnished to hundreds of skilled growers in other parts of this country and Europe.

Among vegetables those which thrive best here are Tomatoes and Peppers, of which there are 8 acres of one and 6½ of the other, a few acres of new Beans, a large area in new Cucumbers and Melons (this year a failure from excessive rains). Ruby King, covering three acres, is Mr. Burpee's choicest Pepper, now the leader on two continents, and favorably known for its mild, sweet flavor and excellence for salads and pickles. Golden Upright has a pretty yellow fruit, and here demands an acre to itself. Celestial is a beautiful plant with its small red and yellow fruits, the color depending on maturity. Coral Gem well sets off its half-acre bed with gem-like fruits. Procopp's Giant is a monster Pepper, often six inches long, thick in proportion, and of irregular shape, borne on a small plant all out of proportion to its burden of fruit. Red Etna is a distinct new Pepper; fruit of medium size, erect on its stem, sweet and mild; plant compact and of medium size.

The wild native Red Pepper of Texas and Mexico is under culture with the hope of gradually ripening it earlier, so that it may be grown out-doors at the North. Mexicans mix this with the Yellow Alkekengi, cook and keep the product in jars for flavoring meats.

Tomatoes develop in perfection here. Of all the large sorts, Matchless and Ignotum are placed at the head for smoothness, solidity (often nearly minus a seed cavity), and quality, though not so rich flavored as Turner's Hybrid (Mikado), which is also the most profuse bearer and very healthy. Dwarf Champion, with its distinctive foliage, semi-erect habit, and handsome fruit, is a pleasure to grow and salable in market, but its quality is so poor that no real Tomato lover would allow it on his table.

Advance, in spite of the great rivalry in so-called early varieties, at Fordhook is still the earliest good Tomato, fully as early as Prelude and twice its size. Lorillard succeeds well out-doors, and is remarkably solid. The unequalled Peach Tomato, which has been a joy on our own table, keeps up its beauty and fine character in this large field culture. It is highly prolific, seems perfectly healthy, never even specks like most other Tomatoes, and has a decidedly beautiful peach-like appearance.

A White Cucumber is an interesting novelty. It came from Palestine, where it is said that children are sent off to school each with three small Cucumbers and a piece of bread for luncheon. The White Pearl is a pure white when of table quality, and lemon yellow when ripe; the flesh is crisp, mild, and pleasant. Curiously enough, the fruit clusters around the "hill" so closely that some rest on top of others; unfortunately, or otherwise, it seeds so poorly that it can be only a fancy variety for home gardens. Now we must skip the Fleshy Bean that is sliced for use like a Cucumber, the Alpine Strawberries, the mammoth Onions, and a pretty red-stalked Corn, to pass on to the most remarkable of new vegetables.

This is a true, large-seeded dwarf Lima Bean, a type that gardeners and seedsmen have been striving for these many years. Of the three types of Lima Beans—large Lima, Dreer's Lima, and Sieva—dwarfs of the two last named have been produced heretofore, but careful examination of the plants, the seeds and the growing crops puts beyond dispute the fact of this being of the true large Lima type. The plants grow 18 to 24 inches high, are stocky, well branched, and well loaded with their burden of the big pods so familiar on the climbing variety. * * * *

We can only spare a pleasant memory for the seven acres of Phloxes in 26 colors; the 5½ acres of Balsams in 28 varieties, some of them superb sorts, excellent even as florists' cut flowers; the long-named *Petunia hybrida grandiflora superbissima*, seed of which costs $50 an ounce to produce; the nearly three acres of Poppies, including the gorgeous Shirley, long-enduring Fairy Blush, and the handsome California Golden Gate; the acre and a half of Japanese Nest-egg Gourds, and scores of other interesting things. The distant green-houses even were skipped in the programme, the seed-cleaning methods were hastily viewed, the hospitable home, and the musketry-like parting salute from half a hundred collie dogs in their kennels as the visit was ended—these all swell the regrets and pleasant impressions of too short a day at Fordhook Farm. E. H. L.

A NEW MAGAZINE.

The *Arena* is the title of a monthly to be issued in Boston. The first number will appear December 1. It will be devoted to the discussion of the leading social and political issues, and the publishers expect to number among its contributors the ablest thinkers of the present time. Rabbi Solomon Schindler will contribute an article on "Trend of Religious Thought in Germany," and H. O. Pentecost, of the *Twentieth Century*, an article on "Capital Punishment" for the first issue. Other leading writers are also to be heard from in season for the first number of the proposed magazine. Its form and general character of make-up will be similar to the *North American Review*.—*Boston Herald*, Sept. 29, 1889.

California Views in Natural Colors.—This is an interesting book of 30 pp. with 13 full page colored engravings setting forth the fruit industry of California. A great many statistics are given and much cultural matter, which must prove of value to those now resident there, or who may think of making that State their home. Its author, Mr. W. R. Nutting, was the first to advocate, through the press, the organization of the now well-known California Fruit Union.—*California View Pub. Co., San Francisco, Cal.*

CHAMPION.

HORTICULTURAL ART Journal.

December, 1889.

TERMS, $3.00 PER YEAR. - SINGLE COPIES, 25c.

Under the editorial management of T. B. JENKINS, Horticulturist.

VOL. IV. ENTERED AT THE POST OFFICE AT ROCHESTER, N. Y., AS SECOND-CLASS MATTER. PART 12.

JAPANESE MAPLES.

See Page 91.

THE lovers of rare trees and plants, in this country, are indebted to Japan for the numerous varieties of these beautiful trees. In no other class that we know of is there such a diversity of color and form as in the Japanese maple, and nature seems to vie with herself to see how odd she can appear in the foliage of these trees.

Most of the varieties seem to succeed here, make moderate growth and come through our winters uninjured. They are of dwarf habit, rarely growing over 8 to 10 feet in height, and are well adapted for planting in clumps on the lawn, or on the edges of plantings of large growing trees. Some of the varieties have highly colored leaves, some from a pure white variegation to pink and dark purple, and others have foliage in comparison to the finest lace. A few of the more distinct varieties are illustrated on page 91. Brief descriptions are as follows:

Acer Polymorphum (Fig. 6). This is the normal form or type of this interesting variety of trees. The growth is slow and shrubby-like, with small foliage, bright green in spring, changing to a rich dark crimson in autumn.

Acer Sanguineum (Fig. 5.) This is sometimes called the Blood-leaved Japan maple, of dwarf habit, foliage deeply lobed and serrated, and of a deep reddish crimson about midsummer. This is a charming variety.

Acer Aureum (Fig. 4). Sometimes called Golden-leaved Japanese maple. The character of this is very effective, and as the light shines through the rich green and gold of its foliage it has the appearance of rich amber.

Acer Rosea Marginatum (Fig. 3). This is very distinct. The growth is slow and the foliage small, deep green deeply margined with rosy pink.

Acer Ornatum (Fig. 2). Decorated. The foliage of this is like lace, rich dark purple with a weeping habit.

Acer Dissectum variegatum (Fig. 1). Cut-leaved Japan maple. Foliage rose color changing to deep purple, deeply cut and dissected into shred-like divisions. Very distinct and beautiful.

The Japanese maples, when grown in pots, make fine ornaments for the conservatory or cool greenhouse in the early spring months. They should, however, be shaded from the direct rays of the midday-sun, or their foliage will surely burn and become disfigured. We are indebted to Mr. F. W. Kelsey for the cut with which we illustrate this article. Mr. Kelsey has sold vast numbers of these popular trees in the vicinity of New York which succeed admirably.

THE GREENHOUSE.

The several species or varieties of *Chamærops* form, when taken together, a small genus of low-growing evergreen plants belonging to the natural order Palmaceæ.

They may be described as being extremely ornamental Palms, of free growth, having fan-shaped leaves, the base of the petioles being enclosed among layers of coarse, fibrous matter. The flowers, which are comparatively insignificant, are produced in spikes from among the leaves; sometimes they are perfect, while at others the sexes are separate. The fruit is a one-seeded berry.

The various species are found scattered throughout the north of Asia, Africa, the south of Europe, and in this country as far north as the Carolinas. On this account they are quite hardy, and so can be wintered over in any situation where an average temperature of 42 is maintained.

To grow the Chamærops to perfection they should be given a rich, turfy loam, and liberally supplied with water, both overhead and at their roots, during their season of growth. At this time also, liberal applications of liquid manure will be of decided benefit. In the winter, or whenever the plants are in a state of rest, do not water so liberally, nor yet permit them to become absolutely dry. In potting use porous or soft-baked pots, and let them be proportionate to the size of the plant, and see to it that they are well drained, as this is a most essential point. When repotting, carefully avoid mutilating their roots.

On account of their dwarf habit, and requiring a low temperature during the winter, they are excellent window-garden plants, and when so grown the leaves should be sponged off occasionally to remove dust, etc. During the summer the plants can be plunged in any desired situation, care being taken to see that they are properly supplied with water. They can be placed outside about the tenth of May, and should be repotted and brought inside about the middle of September.

Propagation is effected by seed, also by taking off and rooting the suckers which are sometimes produced, and if these young plants are liberally cared for and repotted as often as necessary, nice specimens will soon be obtained. Those wishing only one or two plants will find it much better to purchase, rather than to attempt to raise the plants from seeds or cuttings, as well-started plants can be readily obtained, at a very moderate price, of any of the principal florists.

The generic name is derived from "chami," dwarf, and "rops," a twig, most of the species being of dwarf growth.

The following are the most desirable varieties, briefly described:

C. excelsa is a native of the East Indies, where it attains a height of twenty or thirty feet. The fan-shaped leaves, which stand quite erect, are of a deep green color, and split deeply down into segments. The petioles are from two to five feet in length, enclosed at the base in a dense mass of rough fibres, and armed at the edges with small, teeth-like spines.

C. Fortnnei, Mr. Fortune's Chamærops, or, as it is often called, the "Chusan Palm," is a native of Northern India, where it attains a height of ten or twelve feet. The fan-like leaves are split into segments about half way down, and are supported on unarmed petioles one to two feet in length.

C. Chumilis is a native of the south of Europe, where it attains a height of eighteen or twenty feet. Its leaves, which are glaucous on both sides, are divided into segments about one third of their length. The petioles, which are also glaucous, are two or three feet in length and armed at their edges with stout spines.

C. hystrix is a native of the Southern United States, and is a somewhat rare species, having fan-shaped leaves which are glaucous on the under side; petioles triangular and glaucous, the stout stems being clothed with woody fibre and long, woody spines.

C. Palmetto is a native of the Southern United States. It is a slow-growing but valuable species. Leaves glaucous-green in color, fan-shaped, and divided into long, narrow segments.

CHAS. E. PARNELL.

We are under obligations to our friend, Judge Samuel Miller, of Bluffton, Mo., for samples of fruit. Mr. Miller, like many others, has been very kind in furnishing us many fine specimens, and these are very necessary in conducting a journal of this kind. There is only one trouble in receiving samples from Mr. Miller; they are so much larger and finer than those grown by the more careless, that they are often not recognized.

STECHER LITH. CO. ROCH, N.Y.

WHITE GEM WATERMELON AND PEACH TOMATO.

VARIETIES OF JAPANESE MAPLES.

See Page 89.

HORTICULTURAL ART JOURNAL

An Illustrated Monthly Journal,

DEVOTED TO THE INTERESTS OF

NURSERYMEN, SEEDSMEN, FLORISTS AND RURAL HOMES.

SUBSCRIPTION PRICE, - - - $3.00 per Year.
SINGLE COPY, - - - - - - - 25 Cents.

PUBLISHED ON THE 15TH OF EACH MONTH.

SOCIETIES.

SOCIETY OF AMERICAN FLORISTS.—J. M. Jordon, *Pres.*, St. Louis, Mo.; W. J. Stewart, *Sec.*, 67 Bromfield St., Boston, Mass. Next annual meeting in Boston, Mass. 1890.

EASTERN NURSERYMEN'S ASSOCIATION.—Headquarters at Rochester. W. C. Barry, *Pres.*; Wm. Pitkin, *Sec.*, Rochester, N. Y.

AMERICAN POMOLOGICAL SOCIETY.—P. J. Berckmans, *Pres.*, Augusta, Ga.; Prof. A. A. Crozier, *Sec.*, Ames, Iowa.

AMERICAN HORTICULTURAL SOCIETY.—Parker Earle, *Pres.*, Cobden, Ills.; W. H. Ragan, *Sec.*, Greencastle, Ind.

AMERICAN ASSOCIATION OF NURSERYMEN.—Geo. A. Sweet, *Pres.*, Dansville, N. Y.; Chas. A Green, *Sec.*, Rochester, N. Y. Place of next meeting, New York City; June, 1890.

AMERICAN SEED TRADE ASSOCIATION.—H. W. Johnson, Philadelphia, Pa., *Pres.*; J. C. Vaughan, Chicago, Ill., *Vice-Pres.*; Albert McCullough, Cincinnati, O., *Sec.* and *Treas.*; F. I. Emerson, Omaha, Neb., *Asst. Sec.* and *Treas.* Next meeting at Saratoga Springs, N. Y., June, 1890.

OUR ILLUSTRATIONS.

The new peach *Champion* is claimed to be a seedling of *Old Mixon Free*, first discovered in 1880 by Mr. I. G. Hubbard, Nokomis, Ills. Mr. Hubbard is an extensive peach grower, and regards this as one of the most profitable sorts he has in cultivation. Mr. Hubbard sent us several specimens, from which the engraving was made. We measured one, and found it ten inches in circumference; flavor rich and delicious. We are told that this tree has fruited abundantly after withstanding a cold of eighteen degrees below zero the preceding winter. Ripens at place of origin about August 5th.

White Gem Watermelon and Peach Tomato.—These are varieties of recent introduction by the well-known seed house of W. Atlee, Burpee & Co., Philadelphia, Pa. Both are very distinct in their appearance and general character.

Crab apple, *Martha.*—This was illustrated in a previous number (March, 1887,) but our friends in the Southwest (Missouri) thought we had not done this popular variety justice, either in size or appearance; so, during the past season they sent us a basket of fruit from which the present engravings were made. We think this is destined to become one of the most popular—if not the most popular—of all this class of fruits.

Plum *Fellemberg.*—This is also known as *Italian Prune*, and is popular in many parts of the country. It is fine for drying, as it parts readily from the stone; flesh juicy, rich and delicious. The tree is a vigorous grower and is very productive. Ripens in this section during September.

AMERICAN HORTICULTURAL SOCIETY.

OFFICE OF SECRETARY,
GREENCASTLE, IND., Dec. 1, 1889.

The ninth regular meeting of the American Horticultural Society will convene in Austin, Texas, on Monday, the 17th of February, 1890. Members of the Society and horticulturists generally are invited to attend this important meeting, which promises to equal the great California meeting of two years ago in its results.

Full particulars in regard to railroad rates, program of meeting, etc., will be published soon. The Secretary will take pleasure in giving all needful information concerning this meeting to those applying by letter.

All memberships in the Society have now expired. Renewals may be made by forwarding the fee ($2.00) to the Secretary. Any person is eligible to membership who feels an interest in promoting the cause of American horticulture.

W. H. RAGAN, Secretary, A. H. S.

MARTHA CRAB.

EARLY RIVERS PEACH.

Editor Horticultural Art Journal.

I notice the illustration of the above in a number of your excellent Journal, and write this for information.

Some six years ago I grew this peach which was a cream colored clingstone, with a red cheek. Mine was received from what we deemed a reliable source and a question arises whether the specimen sent you is the true one or something else? Will some one who knows tell how this is? All your illustrations show the skill of the artist, but it seems to me that it should state where a fruit is from. A Winesap, Jonathan or a Ben Davis, grown in New York, and the same grown here on our river hills, would not be recognized as the same varieties. That some of the tree agent's illustrations may be overdrawn may be true, but I have not yet seen any picture in the interest of a reliable nursery that I cannot match in reality.

I intended to send you some of our best native persimmons, but the best specimens got stolen. Weather still rather mild for this time, Nov. 25th., mercury has been down to 21 degrees. S. MILLER., Bluffton, Mo.

Our attention has before been called to the colored plate of RIVERS EARLY PEACH, and we must say that, as usually grown here, the engraving was too large and too highly colored, just how much, we will leave others to say. Early Rivers as grown here in perfection may be described as rather large (for one ripening so early in the season) color creamy white with a pink cheek, flesh rich and melting, with a peculiar nectarine-like flavor. We agree with our friend that it would be advisable in all cases, to say where the subject illustrated was produced. We do not think the subject written about was so mnch too large, as too highly colored, and our lithographer now at my elbow, could tell an interesting story if he were allowed. It is more than possible, in fact, we think likely, that we have been again imposed upon, and the peach we illustrated as Early Rivers is in reality Early Louise. We are now investigating it further, but believe it so.

OFFICE OF THE SECRETARY, AMERICAN ASSOCIATION OF NURSERYMEN.

Rochester, N. Y., Dec. 1st., 1889

DEAR SIR: Our Secretary has recently returned from New York City, where he has been looking around preparatory to the coming meeting of the American Association of Nurserymen, which is to be held in that city on the first Wednesday in June next.

We can get excellent accomodations at the Park Avenue Hotel, located on Fourth Ave. between 32nd. and 33d. Sts., nine blocks south of the Grand Central depot, three blocks from Broadway, convenient to railroads, elevated street cars and places of amusement, yet away from the bustle of the business streets. It is a large, new, fire-proof hotel, possessing every modern convenience. The hall for sessions is in the hotel, also exhibition room, etc. The hall has seated 700, and is the most quiet room in New York, being cut off from all street noises, which have so annoyed us in the past. The hall, exhibition room, etc., are offered free for our use.

The price of board and rooms will be reduced to $3 a day from $3.50.

The hotel sets an elegant and well furnished table, and is first-class in all respects. We are confident you will be pleased with it, but if you can suggest a better place for headquarters please do so.

Special low rates are expected by railroads, as usual. A local committee has been appointed to look after entertainments, excursions, etc. There are many points of interest about New York: Central Park, Prospect Park, the Statue of Liberty, Coney Island, Long Branch, the *$10,000,0000* bridge and the many beautiful suburban places, will be points worthy of a visit.

In Central Park is the American Museum of Natural History, covering four floors of an immense building, also another large building devoted to art, and near by the Menagerie, all free to everybody. If any of our western members have not visited Central Park, with its 600 acres of lawn and foliage, and Prospect Park equally as large, a rare treat is in store for them. A ten days session is proposed, which provides ample time to take in everything.

You are especially invited to suggest topics for discussion, or anything that may occur to you that will add interest to this meeting, which we hope will be one of the most useful and entertaining in the history of our Society. If you have a paper to read, or if there is any subject that you would like to have brought before the meeting, please report to the Secretary at once, as the programme will be made out early.

Our Association may be congratulated on the successful action of Hon. S. M. Emery and his committee, in securing reduced express rates, through a new classification. This, following closely on the reduced freight rates, obtained by the same committee, should teach us the value of association. Should it not make every Nurseryman feel that it is his duty to join our Society and do all in his power to promote its welfare.

Please respond with suggestions for the coming meeting without delay.

GEO. A. SWEET, President.

ANTHONY LAMB, Vice President for N. Y.

LEO. WELTZ,
S. D. WILLARD,
S. M. EMERY,
} Executive Committee,

CHARLES A. GREEN, Secretary.

MISSOURI STATE HORTICULTURAL SOCIETY.

LEBANON, Mo., opened its doors and with warm-hearted hospitality welcomed those who attended the thirty-second annual meeting of the State Horticultural Society. It seems to have been a grand success in the attendance, and in the enthusiasm manifested from the commencement to the close. President Evans was presented with a gavel made from the wood of the Bartlett pear and Ben Davis apple, two of Missouri's popular fruits. Vocal and instrumental music enlivened the proceedings each day, and a plentiful show of fruits, flowers and vegetables elicited words of admiration from all the visitors. Although we were not present, we take pride and pleasure in recording these proceedings, for it shows that the people of Missouri are alive to the importance of these yearly meetings, and to the good which comes from the interchange of opinions and discussions. Many interesting papers were read and discussed. We wish that in every county and state in our broad land these meetings could be successfully duplicated.

The election of officers resulted as follows: President, J. C. Evans, Harlem; vice-president, N. F. Murray, Oregon; secretary, L. A. Goodman, Westport; treasurer, D. S. Holman, Springfield.

The next place of meeting was left with the executive committee.

THE Annual meeting of the State Horticultural Society recently held at Indianapolis, was a complete success, as seen in the large attendance and close attention given the reading of carefully prepared papers, and the discussions that followed. The retiring president, Dr. Furnas, wrote his address from California to which state he has recently moved, but has not lost faith in Indiana occupying the front rank as a horticultural state. Prof. Troop presented a very lengthy report on the work done horticulturally by the State Experiment Station.

DR. FURNAS sent to the exhibition a sweet potato weighing sixteen and one-half pounds.

MISSOURI NURSERIES.

JUDGE SAMUEL MILLER recently made a visit to the nurseries of Stark Brothers, located at Louisiana, and writes *Colman's Rural World* of what he saw. We well remember the time when about all the trees raised in America, were grown at or near Rochester, N. Y., but this has wonderfully changed, and now, some of the largest nurseries are west of the Mississippi river. Continuing, Mr. Miller says that about 700 acres are here devoted to the growth of fruit and ornamental trees. About $5.000 having been spent on the "home place" in tile draining. The cellars, and houses for storing roots, trees and plants were all constructed on the most approved plan. The tool houses have the appearance of small arsenals, as the implements are all bright and in proper order. The moss and straw piled up in stacks of immense size and the packing boxes stacked up like a fortification. All this means a trade in nursery stock that may not have its equal on this continent, if in the world. "Oh how insignificant all my fifty years of nursery business seems, all combined, when compared with this stupendous establishment where they count by millions. I was sorry that time would not permit me to see the following week's packing, when over four hundred men would be engaged on the packing ground".

HORTICULTURAL SOCIETIES.

THE Florida Horticultural Society will hold a special meeting at Ocala under the auspices of the "Semi-Tropical Exposition" beginning Monday Feb. 3rd., cash premiums of $625.00 are offered and will be paid when and to whom awarded, and $5.00 each are offered for the best plates of seventy named varieties of oranges——who outside of Florida would suppose there were so many?

THE Annual meeting of the State Horticultural Association of Pennsylvania will be held at Mifflintown, Pa., Jan. 15th. and 16th., 1890. These meetings are usually well attended by all the best and most intelligent fruit growers and much interest manifested in the meeting.

STECHER LITH. CO. ROCH, N.Y.

FELLEMBURG.

PLUMS IN ENGLAND.

From a paper read by Mr. T. F. Rivers at the Horticultural Club. From *The Garden.*

* * * People are, however, more interested in sorts of plums than in the niceties of cultivation, and it is generally supposed that a tree will grow anywhere, and, as a matter of fact. when planted for the supply of an ordinary household, both for the kitchen and dessert, the choice of sorts is an important matter, the plum being so generous when well preserved that it will provide the table with a wholesome and delicious fruit all the year round. I will for convenience divide the use of the fruit into two sections—the dessert and the still room. Taking the dessert first, the earliest of these which ripens when the Bigarreau Cherries have become a source of regret, as things to look back to, is the Jaune Hative, or White Primordian, a pretty little yellow plum, which, though very early, is not valuable for any other quality, and has now almost fallen out of cultivation. Rivalling this sort in precocity, and infinitely superior in flavor, we have the Early Favorite. This is a delicious Plum which in warm seasons will ripen on a pyramid at the end of July, and on a wall about the middle of the month. The Early Green Gage is a very pleasant addition to the Plums of this month. It is not quite equal in flavor to the recognized Green Gage, but it is exceedingly good. I have lately been able to make an addition to July dessert Plums by the Stint. This is very rich and good, and is so dwarf in its habit that it takes no more room than a good-sized Gooseberry bush. The Precoce de Bergthold, Early Mirabelle, and St. Etienne are all pleasant early Plums, but too small for useful cultivation.

In August we are well provided with dessert Plums; the earliest to ripen is The Czar, followed by the De Montfort, Early Transparent Gage, the Oullins Golden Gage, Denniston's Superb, Mallard, McLoughlin's, Yellow Imperatrice, Green Gage. The Oullins Golden Gage is sometimes classed as a market Plum. and therefore a culinary fruit. Grown on a wall it attains a very large size, and is one of the most delicious, being singularly delicate in flavor. It was imported some years since from France, and was raised, I believe, in the district of Oullins, near Lyons, in France. The tree grows rapidly and vigorously, and a specimen tree produced some years since about 10 bushels of fruit, which were sold at 9s. per sieve. This was about twenty years since. The profit derived from one tree, multiplied by 200, seemed to promise very fairly. They were planted, and in a few years the 200 trees were as large as the original, and are now capable of bearing the same quantity. These trees have never paid their expenses; the fruit is too soft for carriage, and the wood in this country never appears to be capable of ripening enough to give the necessary vigor to the bloom, and my 200 trees, instead of producing, as they ought, £4 10s. per tree. will have to be destroyed to make room for other kinds. These are some of the chances of fruit growing. The dessert Plums of September are numerous. The Green Gage will not be over, and we have the Bryanstone Gage, a later variety of the Green Gage; Golden Esperen, the Purple Gage. the Jefferson, Kirke's, Violet de Galopin, Angelina Burdette, Decaisne, Reine Claude de Comte Athems, a very fine Plum of recent introduction; Guthrie's Late Gage, Boulouf, Abricote de Braunneau, Transparent Gage. All these are fine dessert Plums, and will certainly suffice for the dessert table during September. In October the list of dessert Plums becomes smaller, the Late Transparent, the Reine Claude de Bavay, Golden Transparent, Coe's Golden Drop, the Blue Imperatrice, Ickworth Imperatrice, and Grand Duke will last during the first fortnight of this month, Late Rivers coming at the end.

Although the Plum takes rank as a dessert fruit, I think this quality mainly exists in the varieties of the Green Gages, and its real importance lies in its economic value as a culinary and preserving fruit, and here it is unsurpassed. It is very hardy, enormously productive, and forms an important article of food, and therefore always commands a leading position in the fruit markets. To obtain a good price it is important to plant those sorts which are either early or late, but it is, of course, inevitable that these conditions cannot always be maintained. Owing to the good fortune of my father in raising a very early variety, I have been successful in realizing a good price, and the Plum which has done me yeoman's service is the Early Prolific or Early Rivers. In some years this fruit has been gathered on July 20; in ordinary summers the gatherlng commences the last week of July. The next to ripen is a seedling of my own, The Czar, which has become almost as popular as the Early Rivers. I have recently raised three early Plums, which I think will prove valuable for the market. These are the Bittern, Curlew and Heron. After The Czar, I have The Sultan, a very large red Plum, then the Belle de Louvain. With this Plum the glut sets in, and the market is amply supplied with Victoria, Diamond, Mitchelson's, Belgian Purple, Prince of Wales, Prince Englebert. These are the principal midseason market Plums. The later market Plums which generally give an increase of price are Pond's Seedling, Autumn Compote, Archduke, and the Late Orleans. I find the Early Orleans so delicate in the skin that it is difficult to pack without being injured, and the noble-looking fruit, the Cox's Emperor is liable to the same defect; this latter bears such quantities of heavy Plums that they rot on the tree in damp weather. The last Plum to gather from the tree is a variety from Yorkshire; this is the Wyedale. The fruit will hang until the end of Novemher, and although very acid to the last, it is pleasant to be able to gather fresh Plums.

The Monarch, a recently introduced Plum, I believe, will be a valuable market Plum. It is ready to gather generally about the 25th of September. It is a very large purple fruit, hardy, and of excellent quality either for preserving or cooking. The Grand Duke is another late seedling: the fruit is very large, and on a wall it attains a very good flavor. I do not, however, think that it is desirable to plant it on a large scale for the orchard—the fruit is too heavy to resist the autumn gales. The Autumn Beauty or Belle de Septembre is a valuable late Plum, and in some soils succeeds well, but I think it does not flourish in all districts.

THE KITCHEN GARDEN.

THE Bulletin of the Horticultural Department of the Experimental Station of Cornell University, for the month of October, is devoted to the Tomato, and is a very interesting and instructive publication of twenty pages, and shows the relative value and earliness of a number of well-known kinds. As a result of the seasons experiments, the following summary embraces the desirable points to be observed:

1. Frequent transplanting of the young plant, and good tillage, are necessary to best results in tomato culture.

2. Plants started under glass about ten weeks before transplanting into field gave fruits from a week to ten days earlier than those started two or three weeks later, while there was a much greater difference when the plants were started six weeks later. Productiveness was greatly increased by the early planting.

3. Liberal and even heavy manuring, during the present season, gave great increase in yield over no fertilizing, although the common notion is quite to the contrary. Heavy manuring does not appear, therefore, to produce vine at the expense of fruit.

4. The tests indicate that poor soil may tend to render fruits more angular.

5. Varieties of tomatoes run out, and ten years may be considered the average life of a variety.

6. The particular points at present in demand in tomatoes are these: regularity in shape, solidity, large size, productiveness of plant.

7. The ideal tomato would probably conform closely to the following scale of points: Vigor of plant, 5; earliness, 10; color of fruit, 5; solidity of fruit, 20; shape of fruit, 20; size, 10; flavor, 5; cooking qualities, 5; productiveness, 20.

8. Solidity of fruit cannot be accurately measured either by weight or keeping qualities.

9. Cooking qualities appear to be largely individual rather than varietal characteristics.

10. The following varieties appear, from the sason's work, to be among the best market tomatoes: Ignotum, Beauty, Mikado, Perfection, Favorite, Potato Leaf.

11. The following recent introductions appear to possess merits for market: Bay State, Atlantic, Brandywine, Jubilee, Matchless, and perhaps Lorillard, Prelude and Salzer.

12. The following recent introductions are particularly valuable for amateur cultivation: Dwarf Champion, Lorillard, Peach, Prelude.

THE WINDOW GARDEN IN DECEMBER.

Plants require all the sunlight it is possible to give them at this season. The days are short, and many of them are cloudy, and plants suffer in consequence. But few flowers can be expected this month. Care must be taken to see that they do not get too much water. Evaporation takes place slowly now, and watering too much is quite sure to injure them by making the soil sodden. The plants will not be making much growth, therefore the roots will not be in proper condition to take up the water. Do not give more water as long as the soil has not a dry look on its surface. This advice has been given so often as the golden rule to be followed by the grower of plants who would be successful in their culture, that it seems hardly necessary to repeat it, but it is one that cannot be wisely ignored; therefore it cannot be impressed too forcibly on the mind.—*Ladies' Home Journal.*

FRUIT ROOM.

ATTACHED to every dwelling house, of any pretentions, there should be a fruit room, this is just as necessary as a store room, closet or pantry, of course it need not be large or expensive. It should however, be made frost proof, well ventilated and constructed in such a manner that the contents should be secure from rats and mice. Into such a place should be brought from the orchard, the fruit carefully handled and kept in barrels, on shelves or in bins. The winters supply of vegetables may be kept in such a place in connection with fruit and if due regard be had, to light and ventilation, will be satisfactory. Fruit and vegetables should never be stored in an ordinary cellar, over living rooms, for the gases which naturally arise from such a place are injurious and offensive. The fruit room should have daily attendance, and the fruit looked over and examined, and of course that which has commenced to decay removed. In such a place may be kept the fruit which has been preserved in jars through the summer and fall, as this too, needs the same low even temperature.

The consumption of fruit is daily and rapidly increasing, and we hope to see the day when it will be found in some shape, alongside of the most common every-day article of diet. If more attention was paid to this matter, it would be better for our people.