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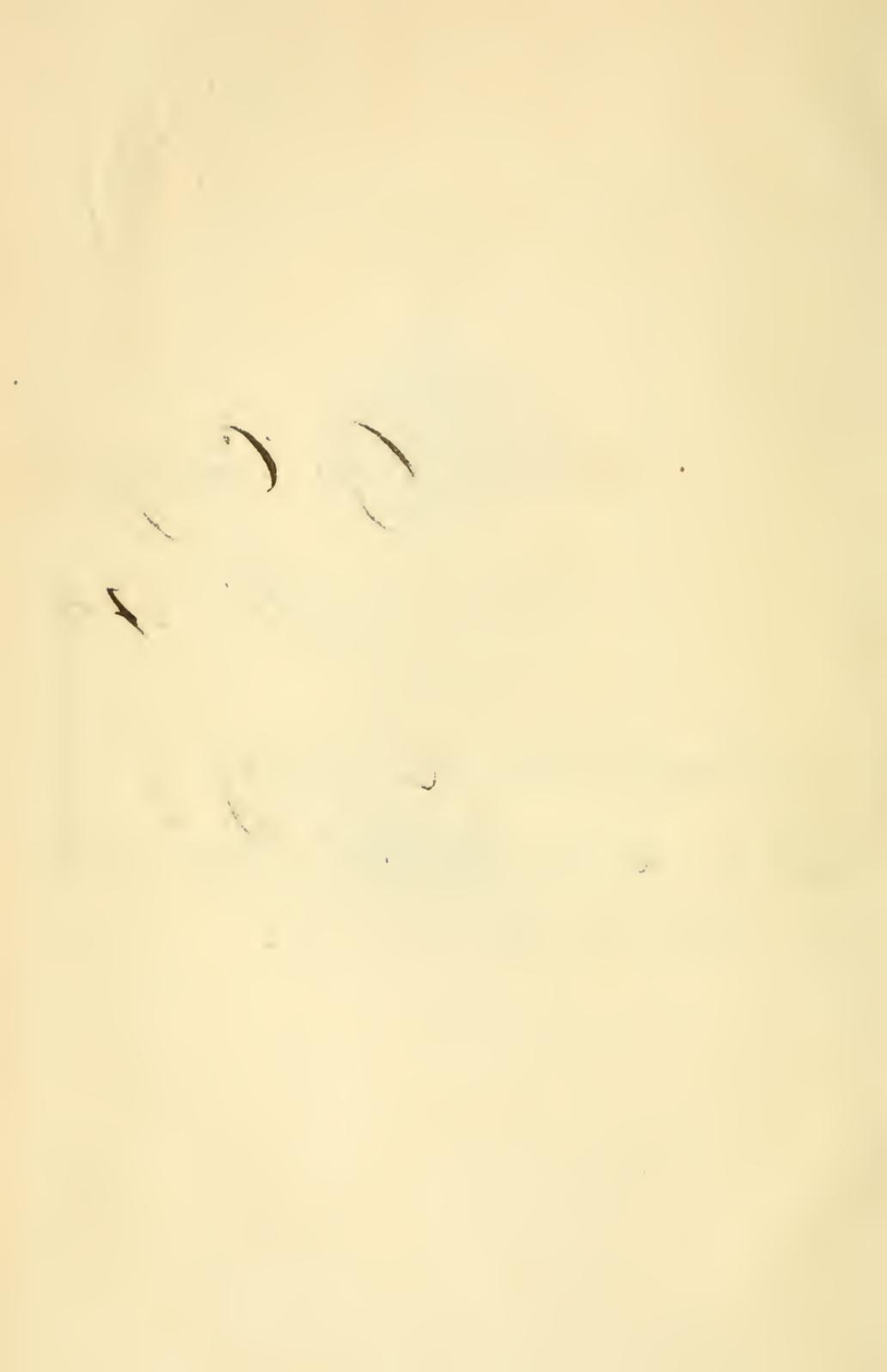
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THE MAGAZINE
OF
HORTICULTURE,
BOTANY,

AND ALL USEFUL DISCOVERIES AND IMPROVEMENTS IN
RURAL AFFAIRS.

“ Je voudrais échauffer tout l'univers de mon gout pour les jardins. Il me semble qu'il est impossible qu'un méchant puisse l'avoir. Il n'est point de vertus que je ne suppose à celui que aime à parler et à faire des jardins. Pères de famille, inspirez la jardinomanie à vos enfans.”—*Prince De Ligne.*

VOL. X.

1844.

EDITED BY C. M. HOVEY.

BOSTON:
PUBLISHED BY HOVEY AND CO., MERCHANTS ROW.

1844.

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P R E F A C E .

THE Tenth Volume of the Magazine, will be found equal in interest, to any which have preceded it. Notwithstanding the great amount of information which has been written upon almost every branch of gardening, there are yet numerous subjects which have scarcely been noticed, but which will continue to receive attention in future volumes.

The Tenth Volume will close what may be called the First Series of the Magazine. For the greater facility of commencing subscriptions, the next volume will begin a New Series, or the Eleventh Volume of the entire work. Two title pages will be given, in order that the enumeration of the volumes may be continued.

In the present volume, we have commenced the publication of a series of articles on the Insects which infest trees and plants, by that excellent entomologist, Dr. Harris. Two have already appeared, on insects which have but recently made their appearance, but which, should they be allowed to increase, will be highly injurious. These papers will be continued in our next, and future volumes, and will, we hope, be the means of aiding, by a knowledge of their habits, in the discovery of more effectual means for their destruction. An article on the ripening of the Pear, (p. 22,) by Mr. Walker, is deserving of attention: since the introduction of the numerous varieties of this fruit, which ripen from November to May, it is quite important that the best mode of preserving them should be known. Mr. Teshemacher's articles on the growth of plants in charcoal and guano, are subjects which will interest every cultivator. Mr. Carmichael's papers on pruning, and a continuation of our descriptions and engravings of pears, will be found valuable to the pomologist. The Reviews and Miscellaneous Intelligence in this volume, are unusually interesting.

The next Volume will contain several improvements. One additional feature, of no little interest, will be a *Foreign Correspondence*, which will appear in nearly every number, giving an account of the new methods of heating—brief descriptions of new flowers and fruits which are introduced into Great Britain—and notices of horticultural exhibitions. A series of articles on hardy trees and shrubs, describing the most ornamental and desirable, will be commenced. This we have had some time in contemplation, and with the increasing attention which is now devoted to plantations of trees for shade and ornament, we hope to make it valuable to all our readers. Engravings of a great number of new pears will appear, besides illustrations of modes of heating, plans of green-houses, &c. And when, in addition to these, we mention the notes of our tour among the gardens and nurseries in the vicinity of the cities of London, Paris, and Edinburgh, the past summer and autumn, we shall endeavor to make the New Volume one of the most acceptable we have yet published.

The dissemination of information, on all subjects connected with Horticulture, was the object and purpose for which the Magazine was established. How far the promises we held out at its commencement have been fulfilled, we leave to our readers to decide. If valuable Original contributions from our many correspondents—Reviews of all useful works—and the gleanings of Foreign publications, united to our own zeal and devotion to the science, could accomplish this, we feel confident of the result.

In conclusion, we must again call upon our many friends who have cheered us through the long period of ten years, to renew their exertions in our favor. From all our correspondents we trust we may still expect additional aid; for their past kindness, we return them our sincere thanks.

C. M. H.

Boston, Dec. 2, 1844.

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THE MAGAZINE
OF
HORTICULTURE.

JANUARY, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *A Retrospective View of the Progress of Horticulture in the United States, during the year 1843.* By the EDITOR.

IN again presenting our annual summary of horticultural improvement throughout the country, it is gratifying to be able to record the continued interest which is everywhere manifested in the various branches of gardening. At no period during the last five years has the amateur cultivator had so much cause for congratulation upon the increased attention given to horticultural pursuits, and the advanced state of horticultural science, as at the present time. With the return of greater commercial prosperity, and we hope continued, there seems to be a more general taste for rural life. Villa residences are objects which more and more engage the attention of gentlemen of wealth; and the possession of a cottage residence, even by individuals of limited means, is looked forward to with eager interest. This general desire for gardens and grounds has created a steady demand for trees, plants, shrubs, &c., and a renewed zeal on the part of our nurserymen has been exerted to keep up with the advanced condition of improvement.

The increase of horticultural associations during the past year, is another gratifying evidence of the dissemination of a love of gardening pursuits. In our last volume (p. 461), the report of the Cincinnati Horticultural Society shows with what zeal and spirit the amateur and practical cultivators of the West, have entered upon the task of presenting to the public the evidences of a more extended love for fruits and

flowers. Centrally located as the city of Cincinnati is, we look forward to great results from the establishment of this association.

To offer much that is entirely new is not to be expected; our object is to present in a condensed form, some of the principal subjects which have occupied the attention of amateur and practical cultivators, and to refer generally to articles which have from time to time appeared, during the year, for particular information. Increased attention has been devoted to fruits, especially pears, and we have been enabled to procure drawings and descriptions of a great number of the newest and choicest sorts, which we shall give our readers in this and succeeding volumes.

The season of 1843 has not been a very favorable one, though perhaps not so variable as that of 1842. The spring was cold and backward, and but little planting was done until late in April: succeeding this period, however, the weather was very good until about the middle of June, when a drought commenced, which, in the vicinity of Boston, lasted till August. Crops suffered severely. Strawberries, which were nearly at the height of bearing, just after it commenced, were cut short at once, and not half a crop gathered; the vines in some situations almost dried up. The raspberry vines also suffered severely. In August, several refreshing showers gave a new and fresh start to vegetation. September was, however, a cool and rather unpleasant month, accompanied with considerable rain, which kept back vegetation as well as the ripening of crops. October followed unusually cool, though not with any severe frost, sufficient to kill dahlias, except in very low situations, until the 30th of the month. On the 4th or 5th of November, however, the ground froze, and there was a constant succession of cold, frost, and snow through the month. December, up to this date (15th) has been cool, with several storms of snow. At Albany, N. Y., and the western part of Massachusetts, snow fell in October, and from that time, there has been a continued course of winter weather.

Potatoes suffered greatly throughout New England by the drought. Vines of all kinds were far better than the year previous; the warm weather of May brought them on rapidly, and had September been a dryer month the crop would have ripened well. In fruit there was a failure of the peach crop in Massachusetts, but a great produce in New

Jersey, the only one there, however, since 1840. Apples were not abundant. Plums were plentiful, but were much injured by the rains of August and September. The specimens of pears were never finer or more beautiful. The cold autumn injured the crop of Isabella grapes, and except in favorable situations, the fruit did not attain to any maturity.

HORTICULTURE.

The cultivation of choice fruits continues to attract general attention. The pear, in particular, has been eagerly sought after, and collections of the finer varieties have been made by many amateur cultivators. In a few years it will be no uncommon thing to find the smallest gardens containing an assortment of various fruits. By the aid of root pruning and judicious training, a large number of trees may be planted out on a small spot of ground, and attain a bearing age in a very short time.

The most important information of the year, in this department, is that contained in the 3d Edition of the London Horticultural Society's *Catalogue of Fruits*. In it is embodied the results of ten years experience since the publication of the 2d Edition in 1831. In order to give our readers everything new pertaining to fruits, we have reviewed at length the list of pears, plums, cherries, grapes, strawberries, &c., and extracted all the important information in relation to the newer varieties. This alone has rendered our last volume one of the most valuable to every individual interested in the cultivation of fruit trees. The *Catalogue* itself should be in the possession of every nurseryman who wishes to establish a correct nomenclature; it will greatly assist him in detecting synonyms, and correcting errors.

Cultivating the grape in houses glazed with open laps, as recommended in the article of Mr. Crawshay, in our last volume, (p. 86,) has been recommended in the *Gardener's Chronicle*, on account of the very superior quality of Mr. Crawshay's grapes, which took the premium before the London Horticultural Society. The climate of England and this country are so materially different, that it is impossible to say whether the same system will apply here, until fairly tried. We certainly have more solar heat, and

, consequently need the ventilating power of the spaces between the glass; but, on the contrary, we have driving storms of rain, which might essentially injure the crop if happening at some peculiar stages of its growth. But notwithstanding objections may be raised against the propriety of cultivating grapes on Mr. Crawshay's plan in our climate, we should still be highly gratified to see an attempt made in a small way.

In our volume for 1842 some excellent articles appeared on the destruction of the canker worm. In the last for 1843, is an elaborate paper on the Curculio, by Dr. Burnett of Southboro', communicated to the Horticultural Society, and kindly furnished us for publication. The habits and character of the insect are well described, and to those previously unacquainted with the curculio, in its different stages, it will afford the opportunity of better watching his depredations, and of suggesting a safe and speedy method of destruction.

The sexual character of the strawberry yet remains a subject of discussion. We have recorded our opinion (p. 415) in relation to it, and see no reason to alter it; when we are convinced to the contrary, we shall lose no time in informing our readers of the fact. We have already stated that we are instituting some experiments by which we think the question may be satisfactorily settled; yet we would wish cultivators to send us any information which may throw light upon this subject.

The good effects of root pruning we have incidentally noticed (Vol. IX. p. 404); we cannot, however, allow this opportunity to pass without impressing upon those who have overgrown trees, barren of fruit, or even young vigorous trees without fruit, the importance of root pruning. We know from our own experience that nothing can be more certain in its effects than root pruning. Judiciously done there is no danger of injuring the tree, and at least two or three years time are saved, by inducing an earlier period of fruiting than they would attain without pruning. A Washington plum tree, in our garden, several years old, which had never borne any fruit, was pruned in the spring of 1842, and the past summer it produced a liberal crop of fruit. By checking luxuriant wood, trees are induced to make short growths, which eventually become fruit spurs and bear abundantly.

The Franconia Raspberry has proved itself to be quite hardy (p. 332 of the last volume). This will give new value to this already celebrated variety, which, though well known around Boston, is yet rare in the vicinity of New York and Philadelphia. The Ohio ever-bearing Raspberry, of which considerable has been said in our previous volumes, has fruited with us, and we can recommend it as a valuable variety for general cultivation, and particularly for its ever-bearing qualities. Fruit was produced from June until frost. It more properly belongs, however, to the class of thimbleberries than that of the raspberry.

New fruits, particularly of native origin, appear to be on the increase. At the weekly exhibitions of the Massachusetts Horticultural Society, several new varieties of pears, apples and grapes have been presented, and some of them of much merit. Among the pears may be named the Lawrence, from Flushing, Long Island, and the Hull, (IX. p. 432) from Somerset, Mass., both superior varieties. Others of secondary quality have been exhibited. The Diana grape, a seedling from the Catawba, promises to be a very early and excellent variety; it has something of the appearance of the parent, but is lighter colored. A variety of seedling apples have been exhibited, for the particulars of which we must refer to the reports of the society during the year.

From the reports of the Cincinnati Horticultural Society there are a great number of apples, natives of the west, which appear to be valuable varieties; some of these have been alluded to by the Rev. Mr. Beecher, in his excellent article in our last volume (p. 81). He mentions three varieties as very superior. Mr. Ernst, of Cincinnati, has described the Broadwell apple in the same volume, (p. 51,) which we think the finest sweet one we ever tasted.

The committee on synonyms of fruits of the above society, have reported upon several varieties of native apples, presented for exhibition; and we shall take an early opportunity to give some account of them. The seedling strawberry raised by Mr. Mottier, of Cincinnati, is said to be a very large and fine variety. The Stone pear, described and figured in our last volume (p. 24) by Mr. Ernst, has been introduced into the vicinity of Boston, but its merits remain yet to be tested.

Some varieties of foreign pears have fruited the past year

for the first time in the country. Several of the sorts sent Mr. Manning by Dr. Van Mons, under numbers, have also fruited; but we have not been enabled to hear any particulars respecting their quality. The Van Mons Leon le Clerc pear has not yet fruited; but the coming season we expect specimens of it will be produced by several cultivators. As there are doubts about the genuineness of some of the trees, there being another Leon le Clerc, raised by Van Mons, the fruiting of the variety will decide which is the true one raised by M. Le Clerc of Laval. The new Banana (*Musa Cavendishii*) has fruited in the collection of D. F. Manice, Esq., Long Island, N. Y.

The introduction of Myatt's Victoria Rhubarb is a great acquisition; the past season we raised stems which weighed upwards of *a pound each*, without the leaf attached; and these from small roots only one year planted. It is a superior flavored variety, and must eventually displace the old kinds. The Tobolsk rhubarb has not yet produced sufficiently to test its true merits. It has the reputation of being the earliest variety cultivated. A new pea, called the Prince Albert, proves to be the earliest variety ever yet produced. Peas sufficiently large for eating were picked in our garden in forty-four days from the time of planting the seed. It is at least ten days earlier than any other variety. The Bassano Beet, from France, a turnip rooted variety, introduced a year or two ago, but not generally known till the past season, proves to be a new and desirable variety; early, and of excellent quality for the table. It is rare that such important additions are made to our list of culinary vegetables.

FLORICULTURE.

The increased facilities of importation afforded by the established line of steamships between Liverpool and Boston, have contributed greatly to the introduction of new plants into the vicinity of the latter city. Many of the rarer plants imported by the New York and Philadelphia nurserymen are also now received by this conveyance, less than fifteen days, on an average, being occupied by the voyage from Liverpool to Boston.

The greatest attention seems to have been devoted to roses: all the newest varieties have been imported either

from England or France, and there are now but few kinds of any merit but what have been added to our collections. The classes of Bourbon and hybrid Perpetuals, are great favorites with amateur fanciers of roses, and the new varieties are truly beautiful and deserving of all admiration. The liberal premiums given by the Massachusetts Horticultural Society, for the finest collections of roses, have created a spirit of emulation among the various cultivators, which has resulted in the exhibition of the most choice and splendid varieties.

Seedling productions are more and more attracting the attention of our amateur and practical men. On our recent visit to the south we were astonished to see the immense quantity of seedling camellias, azaleas, and roses. Mr. P. Mackenzie, of Philadelphia, and Mr. S. Feast, of Baltimore, have been very successful in producing new varieties of the azalea. We shall give some account of them under our usual head of Horticultural Intelligence. The collection of seedling camellias, formerly belonging to J. B. Smith, of Philadelphia, but now in possession of D. Boll, of New York, has produced some superior flowers. Besides the C. var. *Binneyi*, already described, one called *Caroline Smith*, and another, *General Washington*, are stated to be superb varieties. Mr. Boll is now sending out the three varieties. Our Floricultural Notices for the year are referred to for information concerning other sorts.

We regret that we cannot give a more favorable account of the cultivation of the Fuchsia, which does not seem to attract that attention among our cultivators it has in England. We think our horticultural societies should encourage the cultivation of such an ornamental tribe, by the distribution of premiums for the best 6 or 12 varieties. This would at once induce amateurs to add the new kinds to their collections, and in a short time we should see them in all their beauty. Some seedling dahlias, which are said to rank as first class flowers, have been raised by Mr. Schmitz, of Philadelphia and Mr. Read, of Brooklyn, New York. Mr. Schmitz took the first premium at the Pennsylvania Horticultural Society, for a stand, including 15 of his own seedlings. We should not omit to notice the great novelty and beauty of the seedling phloxes, raised by Mr. Carter of the Cambridge Botanic Garden; they are new in color, and excel any, so far as we have any knowledge, that have ever been produced in Europe.

Our correspondent, Mr. Teschemacher, has communicated an excellent article in our last volume (p. 168) on the application of guano and nitrate of soda to plants: to that article we must refer all who are in want of information on this subject. Mr. Teschemacher's experiments have been conducted with care, and we only regret that they have been brought to so sudden a termination by the destruction of the plants by fire.

The greatest novelty of the year has been the *Achimenes longiflora*. It is decidedly the finest acquisition to our greenhouse plants of late years. When the other new species are introduced, our greenhouses, in the autumn, may boast of as brilliant an array of blossoms as in the months of April or May. *A. pedunculata*, *ròsea*, *hirsuta* and *multiflora*, are all very elegant plants.

A short visit to Washington in October last, gave us an opportunity of seeing the plants brought home by the Exploring Expedition. A great many of them are hot-house plants—fruits of the tropics—and can never become generally grown. There are, however, some fine bulbs of the *amaryllidaceæ*, oxalises and other small bulbs, which will prove interesting to the lover of plants. A great portion of the seeds distributed, with the exception of the *Ericas* and some others, have not vegetated. Many of them had been gathered three years.

It was our intention to have devoted a few pages in the last volume to a review of the new or *one shift* system of potting plants, as it has been termed in England. Considerable has been written upon the subject in Paxton's *Magazine of Botany* and the *Gardener's Chronicle*, and the theory has several advocates. The practice we do not believe can be recommended as a general rule; some plants it is true, may be at once placed in a pot large enough never to require a shift, but others we are certain will be injured by such a course of culture. It will not be best to give up the old system till further evidence is given of the general superiority of the new plan. Where economy of room is an object, it must certainly be strongly objected to. In a future number we shall endeavor to give an account of the new system, with some of the arguments in favor of, as well as the objections against, it.

A great amount of useful information to the florist, in the last volume, will be found under our head of General No

tices, consisting mostly of extracts from that excellent paper, the *Gardener's Chronicle*.

LANDSCAPE GARDENING.

A taste for landscape gardening is gradually extending; and though we may not be able to point out many places of extent where the principles have been fully carried out, we may with pleasure refer to the increased attention which is now very generally devoted to a better arrangement of the grounds, and the plantations of trees, around the villa and cottage residences of the country.

In planting flower gardens, artistical effect is but little attended to. It is here, however, that amateurs often have the means of making a great deal out of a small spot of ground; lawns and pleasure grounds are only the accompaniments of the villa, while the flower garden is an appendage to almost every residence. To lay it out and plant in a judicious manner is consequently an object of importance. In the course of our last volume we have not given much in this department, but it is our intention, with the aid of engravings, to offer some hints in the present volume on the best arrangement of small flower gardens, in the different styles now generally adopted.

RURAL ARCHITECTURE.

A most perceptible improvement is everywhere apparent in the architecture of cottages and villas. The varied styles of Gothic and Italian have been introduced into the vicinity of our large cities, and the few examples of good taste already erected, have been the means of drawing more attention to architectural embellishment. These, with the assistance of books recently published on the subject, will eventually lead to a greatly improved style of building. Almost everything heretofore, has been modelled after the Grecian style, as if no other style would afford equal conveniences, and an equally appropriate appearance. But the change has begun, and when its good effects are duly appreciated, we shall hope to see all the varieties of style adopted, by which the beauty of our villages will be greatly enhanced. A serious fault in the erection of houses has been to entrust the whole erection, and too often the entire

design, to the hands of a carpenter. Our builders have not yet sufficient good taste, which can only be derived from a study of the best books, to undertake this. An architect should therefore be employed, and the additional expense incurred, will never be regretted by any individual who wishes to erect a handsome building.

Around Boston and on the Hudson river several cottages and villas have been erected of great beauty. We shall at a future time notice some of them at length.

GARDEN ARCHITECTURE.

Great improvement in the construction of greenhouses has lately been effected. Formerly it was thought that any kind of a building which would protect the plants from danger of frost, was amply sufficient for all purposes. But the shed-like appearance of many of these structures, has been an objection to their introduction to the grounds of a neat garden. Span-roofed houses have in consequence been erected, and by attention to their construction, they have been made quite architectural in their character. Mr. Becar, of Brooklyn, N. Y., has a fine house erected in this style, and there are several others in the vicinity of New York. But one of the most complete is the conservatory in the nursery of Messrs. Hovey and Co., which is 84 feet long, 22 wide, and 10 feet high in front. We intend soon to give two or three drawings of it. A grape house, 200 feet long with a span roof, and one of the most extensive in the country, has been erected by Horace Gray, Esq., at his country residence at Newton.

The heating of greenhouses, frames and pits, has attracted a great deal of attention in England. A great many plans have been recommended as the most economical, but most of them are no improvement upon the old modes of brick flues or simple hot water pipes. The system now stated to excel most others, both as regards first cost and economy of fuel, with the most genial heat for the plants, is that of heating with water, circulating through brick gutters, originally, we believe, introduced into England by Mr. Corbett, about four years ago, and in connexion with this plan, broad tanks, called Rendle's system. It is quite singular that both of these modes were adopted by us long before they were known in England. As early as 1829

we first attempted to heat a small greenhouse by means of a brick gutter, but finally gave up the plan on account of not being able to connect the pipes with the gutter, in such a manner as to prevent continual leakage: and in 1839 we published in our Magazine (Vol. V., p. 418), a new and improved mode of heating pits, by *tanks* of hot water, illustrating our plan with engravings. That plan is precisely the same as that said to have been discovered by Mr. Rendle in 1841. Those who have read the account of his plan can compare it with ours, and note the exact similarity.

During the past autumn we have had erected in the nursery of Messrs. Hovey & Co., at Cambridge, a new greenhouse and propagating house, which is heated by water circulating in brick gutters; and so far it appears to work well. As it has just been completed, we shall wait for further trial, and note the results of the method at a future time. The house in which it is erected is span-roofed, 84 feet long and 25 feet wide.

COMMERCIAL GARDENS.

Nurseries are rapidly increasing in all parts of the country. A constant and steady demand for trees, perhaps more than equal to the supply, has induced a great many individuals to enter into this business, with the hope of securing their share of trade. We are really glad to see so much attention devoted to the cultivation of trees, shrubs, and plants, yet we cannot but think that those who have taken up the business, from a supposition that any one can follow it, will be much deceived in the end. If there is any business which requires a thorough knowledge of its duties, it is that of the nurseryman; years of labor and experience will alone enable him to successfully prosecute his business.

We alluded last year to the death of Mr. Manning, which occurred a short time previous to the appearance of our article for 1842. The nursery is now carried on by his sons, and we believe in excellent condition. Our notes made on a recent visit will be found in the last volume, at p. 425. Upwards of one hundred and sixty varieties of pears fruited the last year, and some of them quite new. Scions are furnished of all the kinds cultivated.

Mr. J. C. Lee and Messrs. Putnam of Salem, are, we believe, about entering into the nursery business. Mr.

Ives, whose grounds adjoin Mr. Manning's, has a variety of trees for sale.

Messrs. Hovey & Co. are rapidly filling up their grounds with trees. Upwards of six acres are already covered, and include all the best as well as the newest varieties of fruits to be obtained. Many of them are sufficiently large to fill orders. The stock of forest trees and shrubs is large and excellent. The greenhouse department now occupies two houses, 84 feet long each, and upwards of 3000 roses alone are cultivated, new catalogues of which have already been published.

The nurseries of Messrs. Kenrick's, Winship's and Hyde, are now well stocked with trees; that of Messrs. Winship being particularly noted for its great collection of ornamental shrubs and forest trees. Mr. W. Kenrick intends, we believe, the erection of a greenhouse for the growth of roses and other plants.

In the interior of Massachusetts there is a great interest felt in the planting of fruit trees. This has created a demand for trees, and in Worcester, Messrs. Colton & Co. and D. W. Lincoln, have very good collections. At Springfield there is also a young nursery lately commenced.

Around New York the same zeal continues to animate the nurserymen. Their catalogues, of which we shall speak at length at another opportunity, exhibited an immense amount of trees and shrubs; and great labor has been bestowed upon their publication. Messrs. Prince & Co., Wilcomb & King, Winter & Co., and Parsons & Co., have each extensive grounds. We have given an account of them from personal inspection, in our last volume (p. 41.)

Messrs. Downing & Co., Newburgh, have a good stock of trees, and have recently enlarged their grounds by the addition of upwards of ten acres. We shall soon give some memoranda of a short visit to their place last autumn.

In Philadelphia there is much activity among the florists. Mr. Buist has enlarged his grounds since 1841, and Mr. Mackenzie has erected another new and spacious greenhouse. At each place we saw great quantities of fine camellias, azaleas, roses, &c. A continuation of our tour in October last, will show the state of things in Baltimore and Washington.

The West is now making rapid strides towards horticultural eminence, and the enterprising nurserymen of Cincin-

nati, not willing that their Eastern friends should keep far ahead, have recently made journeys among us, and taken home the best selections they could make from the nurseries. Our correspondents, Messrs. Elliott and Ernst, passed the autumn in New York and Boston, and returned with all the choice fruits which the nurseries of the East afforded.

A correct nomenclature is now all that is wanting to facilitate a more speedy introduction of fine fruits. Cultivating the same variety under several names, is attended with sad disappointment to many cultivators. We offer our pages as a medium, through which the cultivators of the East and West may exchange information, and with our own assistance we trust that errors may be detected, and a nomenclature established as correct as that of the London Horticultural Society's catalogue of fruits.

GARDEN LITERATURE.

The principal publications of the year have been reprints and new editions. On the subject of agriculture there have been several volumes, some of which we have reviewed. Kenrick's *American Orchardist* has reached its sixth edition, and the seventh is now preparing for the press with some few alterations. The ninth edition of Bridgman's *Gardener's Assistant*, with several alterations and additions, making a volume of about 500 pages, is now issuing from the press. The *Transactions* of the New York State Agricultural Society, a volume of 500 pages. *Improvements in Agriculture, Arts, &c.*, by Hon. H. L. Ellsworth. *Manures*, a prize Essay by Dr. Dana. The *American Poultry Book*; and the *Vegetable Kingdom*, or Hand book of plants and fruits, by L. D. Chapin. The principal reprints have been Burger's *Economy of Farming*; *Lectures on the application of Chemistry and Geology to Agriculture*; *The Farmer's Manual*; the *Farmer's Mine*, or *Source of Health*; *Familiar Letters on Chemistry*, by Liebig; *The Silk question settled*, by Mr. Barbour, and some other smaller works and pamphlets. The periodical papers have been much improved. The *American Agriculturist*, by Mr. Allen, is well edited and has a goodly list of correspondents. The new volume commencing January 1. The *Cultivator* is about to appear in large octavo form, and commence a new series; we think the change a good one. The

Western *Farmer* and *Gardener*, since the establishment of the Cincinnati Horticultural Society, has given up its Berkshires, and in their place now presents occasional engravings of plants and fruits. The exchange we think will be generally liked by its readers. The proceedings of the Society are published at length. It is a cheap and useful work.

OBITUARY.

A short time since a pamphlet came into our possession containing a historical notice of the late Dr. Van Mons, of Louvain, the eminent cultivator of pears, who has done so much towards the production of new varieties during his life-time. We have not seen his death noticed in any of the London gardening periodicals, and until this pamphlet reached us, were not aware of his decease. He died at Louvain on the 6th of September, 1842. Dr. Jean Baptiste Van Mons was born on the 11th November, 1765, and was at his death 77 years of age.

We have not time or space in this article to enter at length into a notice of this distinguished man, whose name is familiar to all cultivators of the country. At the early age of 15, Dr. Van Mons was deeply interested in the cultivation of plants, and the production of seedling roses and annual flowers; and at the age of 22, he conceived the Theory, which, in the language of his biographer, has conferred on him "les plus beaux titres de gloire."

Dr. Van Mons, as early as 1823, published a catalogue of the seedling fruits in his collection, which amounted to upwards of 2000. From that time to 1834, his nursery was twice destroyed, yet notwithstanding these sad reverses, which would have damped the ardor of almost any other man, he continued with incredible perseverance to cultivate an immense number of seedling trees. In the *Annales de Physique Générale* he first commenced giving the descriptions of his fruits, and in 1833 he published his only work on fruit trees, entitled *Arbres Fruiteurs and their Culture*, 2 vols., 12mo.

The Historical sketch accords to Belgium the merit of having created the greatest intellectual movement which has marked the end of the last century, and particularly to Dr. Van Mons, is that country indebted. In the closing words of the writer, "Honneur donc, Honneur à sa memorie!"

ART. II. *Progress of Horticulture in Rochester, N. Y., and other portions of the Valley of the Genesee.* By P. B., Rochester, N. Y.

It does not really seem to be a matter of exact propriety, at any rate, of urgent necessity, to record the progress of anything, when that progress is exceedingly limited, characterized by no startling advances, but slowly and steadily wending onward, as if fearful of attracting public notice. Such is our progress in horticulture. And though there is little necessity for noting it, still there cannot be any great harm; besides showing that we maintain a progressive existence here, in regard to horticulture, it may be the means of stimulating some to further and more extensive improvements.

In relation to Rochester, my remarks will necessarily be quite general, as there are no particular instances of public or private gardens, or greenhouses that have arisen recently, within the precincts of the city, worthy of special notice. Our citizens, true to their utilitarian character, are bestowing their first and best attentions on that branch of horticulture that yields them the most *substantial* benefits, viz., *the culture of fruits*; during the past two years particularly, there has been a most pleasing anxiety manifested by almost every one possessing a garden, from the wealthiest to the humblest citizen, to procure choice fruits. And this is the consequence of superior varieties being sent into the market by a few gentlemen possessing good collections. Our city gardens are now beginning to produce the most beautiful specimens of plum, peach and cherry; of pears there is a great deficiency, though in the city and vicinity there are excellent pears of many varieties; the prevailing sorts are the Virgoulose, Stephen's Genesee, Bon Chrétien, Seekel, Winter Bell; all these do well, the Virgoulose particularly does extremely well.

The culture of the pear has been much retarded by the fact that very many of our citizens have trees said to be of the best kinds that have stood for five to ten years without bearing. We have recommended root pruning in such cases; many of these tardy bearers are proving themselves worthless.

But whilst the culture of fruit receives particular attention, I admit, and with pleasure state, that the ornamental

part is not *entirely* neglected, as the general neatness and comfortable appearance of our city very plainly indicates. The maple and the buttonwood are stationed along the sidewalks, to protect the dwellings from the summer's heat—the door-yards, too, have their respective ornaments, proportioned to the means, or rather taste, of the occupant, for it is not always the most wealthy that bestow most attention to the establishment of their homes. In another year we hope to be able to record some considerable improvements; several of our most tasteful citizens are now erecting elegant dwellings, among them I might mention a few of those who have the greatest portion of ground attached, viz. Ald. Aaron Erickson. He is erecting, and has almost completed, a tasteful, commodious dwelling, on Main street, east side of the city, adjoining the elegant residences of Wm. Pitkin and Silas O. Smith, Esqrs. His grounds are limited, comprising but two or three acres, but the site is excellent, and with Mr. Erickson's good taste and liberality will be, I am certain, one of the most complete establishments in our city. The kitchen garden is already laid out, and a large and well selected assortment of fruit trees planted, besides ornamental trees, shrubs, &c. Next spring he intends planting dwarf fruit trees; in fact his grounds will be made the most of, in every way. I believe he intends to build a grapery and greenhouse after the completion of his dwelling.

On the south side of the city, opposite the Mount Hope Cemetery, and adjoining the Mount Hope Garden and Nursery, J. D. Hawks, Esq. has just completed a beautiful Gothic dwelling, the first and only one of that style in our section of the country. His grounds are spacious, some fifteen or sixteen acres, and susceptible of great improvements; little is yet done towards it, with the exception of laying out the main entrance and planting forest trees, and some fruit trees; but with Mr. Hawks's excellent taste, and that of his accomplished lady, I am well assured that their residence will be one of the chief ornaments of that section of the city.

On the west side of the city, Amos Sawyer, Esq. has just completed a neat and comfortable dwelling, of moderate dimensions; the site is decidedly beautiful, on an elevated spot on the west bank of the Genesee, commanding a full view of the Genesee Falls, as well as of the greater part of the city. Mr. Sawyer's grounds comprise several acres,

and will be improved to the utmost. Mr. S. has probably bestowed more attention to the comparing of fruits, and ascertaining their qualities, during the past two years, than any other of our citizens; he is determined to collect the very best varieties for his new fruit garden, which he will commence planting next spring. A handsome plot of ground, in front, will be devoted to the ornamental part, which will not be neglected. Such instances, together with the general attention spoken of, mark our progress here in the city. Throughout the several beautiful villages that stud the valley of the Genesee, from Lake Ontario to the base of the Alleghanies, and amongst the farmers too, there is a great degree of improvement manifested, as well in the selection of sites for buildings, as in the *style* of building. But few are so negligent now as not to add, every season, a few choice varieties of fruit to those already possessed. Flower gardens and shrubberies are no longer objects of amazement; avenues of forest trees are not uncommon sights in the vicinity of dwellings; in fact the general neatness that pervades this beautiful section of country cannot fail to suggest to the traveller the steady march of taste and refinement, and the progress, though slow, of that art that transforms the wildest forest into a very Eden.

The natural beauty and advantages of the country here are attracting thither gentlemen of taste and fortune, to enjoy the retirement of rural life; and nowhere throughout the Union could their fortune or their taste be more pleasantly or profitably employed. Example is more powerful than precept; and their example will do more in one year for the advancement of horticulture than the most persuasive tongue or pen could in twenty.

In the course of a ramble up the valley in the month of September last, toward the latter part, I made a hasty visit to some of the best improved places on the way.

Among them the residence of J. R. Murray, Esq. of Mt. Morris, Livingston Co. stands first. Mr. Murray's place is comparatively new, but much has already been done. His elegant mansion occupies the most elevated position of the grounds, and has a most commanding prospect; several beautiful villages, Moscow, Geneseo, &c., are embraced within the view, and a large portion of the valley, with the finely wooded hills that border it, receding far in the dis-

tance. The grounds comprise about 300 acres. That portion through which the entrance runs, is covered with a young and thrifty growth of native trees, well cleared out and in excellent order. From the main walk, lateral walks diverge in all directions; these were kept in excellent order, and give to the grounds an elegant and tasteful appearance. On approaching the mansion, you enter on a beautiful, well kept, and spacious lawn; this will no doubt soon be planted with ornamental trees and shrubs, &c.

The flower garden is situated in the fork of two walks, one leading to the front door of the mansion, and the other to the gardener's cottage in the rear; it comprises about one quarter of an acre, surrounded by a neat Privet hedge, tastefully interspersed with grass walks, and containing a good collection of shrubs, herbaceous plants, and annuals.

The vegetable garden contains two acres, in a low part of the grounds, entirely out of sight in approaching the dwelling by the main entrance, enclosed by a close board fence; it is well arranged and in the most perfect keeping; along the fence is a row of dwarf pears in fine healthy condition. The orchard contains between thirty and forty varieties of well selected pears, an equal number of peach, of which over one hundred and fifty trees have borne the past season; among them are five seedlings, raised by J. R. Murray, Esq., senior, said to be superior fruit; ten varieties of plum, eight of cherry, five of apricot and five of nectarine; in all six or eight acres devoted to the culture of fruits. I also observed a plot of over an acre appropriated to the raising of young fruit and forest trees, strawberry, raspberry, &c.; here also I saw a bed of very fine sweet potatoes.

In the rear of the dwelling is a deep ravine, in which there are two fish ponds, with a good supply of trout; from these water is conveyed to the house by means of a forcing pump. A mushroom bed, ten by twenty feet was just formed, and about to be spawned when I was there, so that you will perceive the various departments are receiving due attention. I believe it is Mr. Murray's design to erect a greenhouse hereafter, and that alone is wanted to make this one of the most complete country residences within my knowledge. The good taste and liberality of Mr. Murray, has been much aided in making the place what it is, by the skill, industry and enterprize of Mr. Arthur H. Steen, his

gardener; he deserves great credit for the admirable condition in which he has every branch of his charge.

Adjoining the residence of Mr. Murray is that of G. P. Oliphant, Esq.; of this place, I cannot at present speak minutely; the grounds are very extensive; the orchard well stocked with the choicest fruits; the vegetable garden in the very best order; and the flower garden and shrubbery in good order and very well stocked. Mr. Oliphant, in addition to his own taste and skill, has a gardener whose experience and industry is well exemplified in the improvements he has effected during the past two years. At some future time I will notice this and some other places at greater length.

P. B.

Rochester, N. Y., December, 1843.

ART. III. *Gardening in the Vicinity of Flushing, L. I.; with some of the collection of plants of J. R. VALK, Esq.*

I AM one of those, whose taste and feelings very strongly incline to admire the beautiful productions of nature; and no greater delight can be afforded me, than the contemplation of the beauties of God's creation, in a well ordered flower garden with its surrounding or attached houses, for the cultivation of rare and superb exotics. In Europe, and particularly in England, elegant gardens are every where to be met with, and in most of them, as appendages, (without which they would not be complete,) we find green-houses and hot-houses, of every size and shape, which, containing as they generally do, very select collections of plants, are at all times worth visiting. With us these things are not exactly *as they should be*, and the *very best* collections of exotics to be found throughout the length and breadth of our land, cannot compare with many in Europe, or be named with such as are seen at Sion House, Chatsworth, or Wentworth, each as I have named them, under the care of Mr. Carton, Mr. Paxton, and Mr. Cooper.

I have been led to make these few remarks, from a train of thought resulting from a recent visit to Flushing, L. I., still a place of some note for its several nurseries, and once

boasting of the greatest establishment of the kind on this continent, that of the late William Prince & Sons. I remember well a day passed thereat in 1823; indeed it would be difficult to forget it, for the mind was completely absorbed in wonder and delight. Time brings about many changes every where, and we can see these abundantly exhibited in Flushing. Apart from the improvements visible at every step in new houses, streets, public schools, &c., we perceive a wonderful change in the nursery departments. Instead of two or three we now count five, and of these that of the Messrs. Parsons is decidedly the largest though but of recent formation. The *ancient* and *celebrated* "Linnæan Botanic Garden and Nursery," has now two sets of proprietors, William R. Prince & Co. and Winter & Co., both assuring the public that theirs is the veritable, true, and *genuine* establishment. I shall not undertake to say which is which; but of one thing I am perfectly certain, that neither of the parties can lay claim to what *was* the garden, &c. during the life time of the elder Prince. All these nurseries are pretty well stocked with fruit and forest trees, and ornamental shrubbery, and if a man, of peculiar fancy or fastidious taste, is not satisfied with what he may find in the whole five, I can inform him *of* a sixth, that of Ewbank & Son, but *where* it is located, of what size, &c. &c., I am in the dark, though Messrs. E. advertise a very respectable assortment of trees, shrubs, &c.

I visited them all, (except Ewbanks,) and though I found in each something to admire, and was greatly pleased with the taste displayed in that of Winter & Co., yet I was disappointed, in a very great degree, at the *almost total absence of glass*; for, if I except a few old fashioned and indifferent structures at Winter's, and a small and very poor house at Parsons's, there is nothing worthy the name of a green-house, hot-house, or conservatory, among the whole.

Remarking on this to a friend, and stating that my expectations had not been realized, I was informed that a visit to the residence of a private gentleman, (J. R. Valk, Esq.,) a short distance east of Parsons's nursery, might afford me much pleasure, as there I should find not only the objects of my delight, but see a building in progress of erection, (a Vinery,) probably the largest in the United

States. A walk of a very few minutes sufficed to bring us to "Carolina Hall." Stating the object of our visit, we were very politely referred to Mr. Howard, the head gardener, who took us through the houses. In the green-house, there is, I think, as fine a collection of the plants of that department as can be found. Of the camellia, the varieties number 134 distinct kinds, all full of healthy buds, and of rhododendron, I counted 21 superb specimens. The cacti are very numerous, and many of them as rare as they are singular. I noticed one, the "*Crassula icellata*," which is I think the only plant in this country. I also noticed very pretty specimens of *Lisianthus Russellianus*, *Pentstemon*, *Cobæa*, and *Murrayanus*, and several of the pine species from seeds brought over by the late Ex-Exp. In the stove, the centre of which is used for propagation, the plants are very choice and in beautiful order. Among them, I particularly remarked the *Ixoras*, *Poinsettia*, *Melastomas*, *Rondelètia*, *Æschynanthus*, &c., and the following in bloom: *Ipomæa floribunda*, *Ceropègia élegans*, *Passiflora Londónii*, *Ipomæa Horsfállia*, and *Técoma jasminoïdes*; this last, a beautiful specimen, and all of them trained up the rafters. In addition to the above, a fine plant of *Geissomèria longiflora* was just expanding its superb scarlet flowers, and a fine specimen of *Nepénthes distiltatòria* has been in flower, and *is now covered with seed*. It also gave me great pleasure to notice some 15 or 20 varieties of *Orchideæ*, all in pots and in good condition. These to my mind are, without exception, the most remarkable as well as the most superb class of plants that can be grown, and richly merit all the care that can be given them. Scarcely known in the United States, we occasionally meet with a few miserable looking objects, in a few of our nurseries, enduring a wretched existence for want of proper attention. Requiring *no more skill* than is sufficient to grow the generality of stove plants well, I am surprised at the want of taste exhibited, in their not being more generally introduced into all our first rate establishments. It is in contemplation by the owner of this collection, I learn, to introduce them *in all their varieties*; and when this is done, I shall look upon it as a new era in the plant culture of this country.

The Vinery, now building, will be, I am confident, the most magnificent structure ever put up. Just stating that

it is a span-roof house, I give you the dimensions: 184 feet long, 24 feet wide, $5\frac{1}{2}$ feet high at the sides, and 18 feet in the centre.* It will contain in all 106 vines, have a double trellis in all its length, for specimen fruit trees, and then have ample room left for a large collection of plants on the shelves over the flues. It is now about half finished. I was informed, that the spirited proprietor intends, during the next summer, to erect a house for Camellias, one for Heaths, one for Pelargoniums, and a stove of 100 feet for Orchideæ, and the general reception of its appropriate inhabitants. If these designs are carried out we may hail it as something entirely new, and as more nearly approaching the public and private establishments of our neighbors over the water.

Respectfully, yours, &c.

A SUBSCRIBER.

New York, Nov. 14th, 1843.

ART. IV. *Some hints on the culture of, and the best method of ripening, the Pear as an article of Commerce.* By S. WALKER.

You will probably recollect that I have, during the present year, placed upon the table of the Massachusetts Horticultural Society, many specimens of pears, (var. Vicar of Winkfield,) gathered at intervals of seven days, commencing on the 30th of August and ending on the 5th of October. Those specimens were also shown at the Fair of the New York American Institute. At the request of the corresponding secretary of that institution, the subscriber submitted a written communication, containing some of his own views, on the culture of the pear, as an article of commerce. As that communication was not intended for publication, except so far as it may appear (if it should be deemed worthy of any notice) in the transactions of the Institute, I have thought, if it contains any hint that might

* The nursery of Horace Gray, Esq., near Newton, near Boston, is 200 feet long and 25 feet wide, with a span curvilinear roof.—*Ed.*

be useful to the science of horticulture, that its appearance in your valuable magazine might not be unacceptable to your readers; I therefore place it in your hands, with some additions and alterations, for publication, or to be "laid on the table," as in your opinion it shall deserve.

The respective weight of each specimen pear, alluded to as above, was, at the time it was plucked from the tree, as follows, viz. :

The specimen gathered on the	30th August,	weighed	$3\frac{3}{8}$	ounces.
"	"	6th September,	$4\frac{1}{8}$	"
"	"	13th "	$5\frac{3}{8}$	"
"	"	20th "	$5\frac{5}{8}$	"
"	"	27th "	$8\frac{1}{2}$	"
"	"	4th October,	$8\frac{3}{4}$	"

It may be proper here to state, that the best specimens on the tree were gathered at each time, and that all the specimens were from the same tree.

From the above statement, it will be perceived that the greatest increase in the fruit was between the 20th and 27th of September.

The object of gathering the pears as early as the 30th August, when the fruit had not attained only about one third of its size when matured, was to test its capacity of ripening when thus early gathered, and also to ascertain which of the specimens would be of the highest flavor,* and in the best order for the market and the table, when they should become perfectly ripe; and further to learn, from observation, in how many days† each specimen, after it was plucked from the tree, would be in the best state for the dessert.

The writer had another object in view, and which he would respectfully bring to the notice and favorable consideration of all the horticultural societies in the United States, it is *the growth and ripening of the pear as an article of commerce.*

* The specimens gathered on the 20th and 27th of September and 4th of October, were very much alike as to flavor. If they were not better they were fully equal to any gathered at a later period.

† In about thirty days the specimens of the 20th and 27th of September and 4th of October, having been kept in a temperature of about 65 degrees of heat, were fully ripe.

The capabilities of our country to produce beautiful and high flavored fruits, is acknowledged by almost universal consent. Our *apples*, *pears*, and *grapes*, are perhaps superior to any in the world. It may be a question with some, whose opinions are entitled to great respect, whether I have not rather overrated the quality of our *grapes*; I would therefore state, that from the best information and from some experience, such as my various opportunities at the exhibitions of fruits in our country have given me, and among those the specimens exhibited in the Horticultural room of the New York American Institute,* and for several years at the hall of the Massachusetts Horticultural Society, that the specimens of foreign *grapes*, when raised under glass, in various parts of this country, have proved not only large in the berry, but equal, if not superior in flavor, to any ever produced, as a general crop, by the cultivators in England.

The size, color, and flavor of our *apples*, after repeated trials in England, have been acknowledged to be superior to any imported into that country.

Our *pears* have not, as yet, undergone such a trial in the foreign market that would warrant the subscriber to speak with equal confidence as to their respective merits, in the opinion of the cultivators of England; but he entertains no doubt that they will bear a comparison with the best specimens in Europe. When the cultivators of fruits in our own country shall raise *pears for exportation*, and shall have made themselves well acquainted with the varieties *best adapted for that purpose*, and shall have also ascertained their time of ripening, and all other particulars, (including the best mode of packing,) for making the cultivation of the pear a staple article of commerce, then, and not until then, will the pear be cultivated in the best manner, or the skill and enterprise of our horticulturists be fully developed. From this view of the subject, it appears to the writer necessary that the cultivator should be put

* These specimens were from the Hon. Thomas H. Perkins, of Brookline, Mass., consisting of thirteen varieties of foreign grapes. Mr. William Quant has the care and management of Mr. Perkins's fruit establishment, and it is but justice to Mr. Quant to say that the fruit was not only large and fair, but that it was well ripened, rich and high flavored.

into possession of all the practical information which the fruit growers in the country are possessed of, viz :—

1st. With a knowledge of the best soil and situation for the successful raising of the pear, as it regards quality and quantity.

2d. That he should ascertain the varieties that ripen at such periods as are best adapted for a foreign voyage, and would be best suited to the markets of certain ports; as also their flavor, color, general appearance, and *peculiar adaptation to the wants and taste of the people of the country to which they are to be exported.*

3d. The cultivators should also be put into possession of all the best information, from *practical experience*, as to the time the various sorts should be gathered, and the time they will become ripe in a temperature of 40, 50, 60, 70, 75 and 80 degrees of heat, to enable him to export his fruit successfully to a foreign market, and also to bring his fruit into the home market as circumstances may require. The information or knowledge of the effect of heat on the ripening of the pear, would enable the cultivator and dealer in fruit to execute an order for this delicious fruit, in varieties of from one to ten sorts, if suitable notice is given, and thereby gratify the taste of those who may consider the dessert as an important part of an excellent dinner; for the time, Mr. Editor, is not far distant, when the dessert will be considered, if not the most important, at least one of the parts of a good dinner, that cannot be dispensed with.

To accomplish the results, above stated, I would respectfully suggest that large premiums should be offered by all the various horticultural societies in the Union, for the best communication on the ripening of fruits, (particularly the pear,) stating the best time for gathering certain varieties of the finest pears, and their respective time of ripening in *different degrees of heat*, stating also the treatment of the fruit from the time it was gathered until it became fully ripe, with such other information which may be found necessary to the successful ripening of the pear or other fruits. With this information, and the wonted energies of our cultivators, it would not be many years before a new and productive source of commerce would be opened in the various ports of our country.

S. WALKER.

P. S.—Since the above was written I have ripened nearly all my winter specimens of pears. The specimens which were matured in a close desk, the temperature of the room being kept from 60 to 70 degrees of heat during the day and 50 to 55 during the night, were all very much superior to those which matured in a room of lower temperature. I am under the impression that if all the winter varieties of pears were kept (to ripen) in tight drawers or boxes with covers, (tin boxes* with close covers I think would be preferable,) where each specimen could be kept in an upright position, and the temperature of the room kept up to 65 degrees of heat, day and night, that the flavor would be very much improved. I would further suggest, that all the winter varieties of pears should be removed from the cold fruit room, about three weeks before the usual period of maturity; or, in other words, three weeks before the specimens *begin* to mellow. After the fruit is placed into the drawers or boxes, it should be handled as little as possible, and when ripe, or nearly ripe, always by the stem. If the fruit is to be transported any distance, say only an eighth of a mile, after it is perfectly ripe, it should be carefully packed in cotton or other very soft material, as all the yellow skinned varieties are very much injured in their appearance if they come in contact with any hard substance. Ripe pears lose from 50 to 75 per cent. of their value in the market by being chafed, though it be but slightly.

Time, Mr. Editor, and further improvements by our fruit-loving cultivators, will no doubt throw further light on this subject. I submit these few remarks as hints, I trust they will be received by your readers as such; and if any of your correspondents have any information on the subject matter of this communication, I hope they will let us have it. We want more light. Let it come from the east and the west, from the north and the south—light—we want light!

S. W.

Roxbury, Dec. 1843.

* A French writer of some eminence, M. Loiseau Deslongchamps, in the *Mémorial Encyclopédique*, for 1838, has recommended zinc boxes.—*Ed.*

ART. V. *Grafting Grape Vines—and a remedy for the Peach Worm (Ægeria Exitiosa)*. By JAS. CAMAK, Esq., Athens, Ga.

How can I better fortify myself against the incredulity of cultivators of the grape vine, on the subject of grafting, than by referring to French authorities? In that country, it must be admitted, that, from the importance of the grape vine as forming the basis of an extensive commerce, and also of an extensive domestic consumption, cultivators know what are the best modes of propagation. And there, also, scientific men who have written on the subject, may be supposed to have fortified their positions by a close and careful examination of the best modes in daily use.

They have, in France, two ways of grafting grape vines, which are described as follows in the *Annales de l'Agriculture Française* :—

1. The stock is split perpendicularly in the middle to the length of six centimetres; and the graft, fourteen centimetres long, cut into the form of a wedge, is introduced and sunk well into the cleft.

2. By laying the root bare to fifteen centimetres below the first small roots, making a perpendicular cleft, placing the graft in it, and surrounding it with a band of rushes and grafting wax

Now as to the point in dispute—the fitting of the bark of the scion and stock to each other.

M. Poiteau, in *Le Bon Jardinier*, directs that the bark of the scion must be made to fit exactly to that of the stock.

M. Thoüin, on the other hand, in the *Cours de Culture et de Naturalisation des Vegetaux*, says that the exact coincidence of the bark of the scion and stock is not necessary, because the sap rises by vessels dispersed in the woody substance. M. Thoüin, moreover, strongly recommends the second mode of grafting above described, saying that the failures will not be more than five in one hundred.

Allow me, next, to quote the late Mr. N. Herbemont, of Columbia, S. C., a most successful cultivator. After referring to the usual modes of grafting, as applied to fruit trees, he says :—“ But let vines be grafted in this manner, unless the operator knows the particular requisite for the vine, and the probability is that he will scarcely succeed one in five

hundred trials. The mode of grafting which I practise usually, and which is attended with no difficulty, and very seldom fails, is as follows: All I do is to take away the earth round the vine, to the depth of four or five inches; saw it off about two or three inches below the surface of the ground. Split it with a knife or chisel; and having tapered the lower end of the scion in the shape of a wedge, insert it in the cleft stock so as to make the bark of both coincide (which is perhaps not necessary with the vine); tie it with any kind of string, merely to keep the scion in its place: return the earth to its place, so as to leave only one bud of the graft above the ground, and the other just below the surface, and it is done." (See *Farmer's Register*, Vol. I, page 494.)

If, now, any one doubts that grafting grape vines is as simple a matter as I have represented it to be, I can only say, let him go and get personal experience on the subject by the only legitimate mode of getting it, that is by seeing, hearing and trying for himself.

By the way, why is it that there is so much confusion among nurserymen and cultivators in this country, in respect to that most excellent grape, the Chasselas? Hardly any two of them describe it alike; and but few of their descriptions, that I have seen, agree with the descriptions of the true Chasselas by the French, in the *Annales de l'Agriculture Francaise*. Can it be that climate, soil and culture cause the difference? I copy the French descriptions, hoping to aid in settling the matter:—

Chasselas de Fontainebleau, ou mieux, de Thoumery.
Grappes à gros grains, peu serrés. Il y a le noir, le violet, le rouge, le rose, le blanc, et le hâtif. C'est le plus cultivé pour la table, comme étant le meilleur.

Chasselas doré, bar-sur-Aube ou, raisin de Champagne:
Feuilles lacinées, grandes, bien avant;—grappes grandes et grosses;—grains d'inegales grosseurs, fondans et sucrés. Il mûrit très bier dans la ragon de Paris. Il faudrait, pour qu'il n'arrivât pas en maturité que les automnes fussent froides. Très cultivé. Situation à l'est.

Compare these descriptions with most of those that are common in this country, and one is at a loss to account for the difference. I have seen the white, golden and Fontainebleau Chasselas, and white sweet water all set down as synonymous. Mr. Kenrick alone, as far as I have seen,

seems to appreciate the true characteristics of the white and golden Chasselas.

In the *Annales*, the kinds of soil suitable for grape vines are described with singular felicity, corresponding so entirely with the results of my own experience that I must add a free translation of so much as relates thereto; being entirely satisfied that very many of the failures in vine culture in the United States result from negligence in this particular:—

Calcareous, sandy, flinty or rocky soils suit all the varieties of the grape; so also do granitic sands mixed with vegetable earths; volcanic earths likewise; and all lands that are light and warm and dry, lying in gentle declivities, affording an exposure to the south, reflecting the sun's heat, and being open to the action of the sun and wind. In all places, under circumstances such as these, the most delicate and richest grapes and wines are produced. In shaded situations, as well as in very stiff lands, both grapes and wine are of inferior quality. In wet soils they are worthless.—Here is the whole matter in a very few words.

The usual remedies for, and preventative of, the attacks of the *Ægeria Exitiosa* on the peach tree, are very troublesome in their application, and, in addition to this, require to be repeated every year. I propose a preventative that is cheap, easily applied, and so far as my experience has gone, is perfectly effectual. Take fish brine,—I use mackerel brine,—add to it an equal quantity of water—make a slight excavation in the ground, around the stem of the tree—pour into this, in the fall or spring, a pint of the diluted brine, taking care that it shall cover effectually the part of the tree in which the worm lives, and the work is done. The trees I made the application to were $2\frac{1}{2}$ and 3 inches in diameter at the ground. To smaller trees a smaller quantity of brine should of course be applied. The trees treated thus have stood now for four years, without any farther application to them, and without the appearance of a particle of gum about their roots; and, of course, without being disturbed by this most mischievous depredator. How long before another application of the brine will become necessary remains to be seen.

JAS. CAMAK.

Athens, Ga., Dec. 7, 1843.

ART. VI. *Some Remarks on the Sterile Character of the Hautbois and Hudson Bay Strawberries.* By Dr. J. H. BAYNE, Alexandria, D. C.

I perceive by the last number of your magazine, you have copied an article of mine on the cultivation of the strawberry. I am very glad to find the theory which has prevailed with the cultivators of that delicious fruit, for some time, is now considered exploded, and that the causes of frequent unproductiveness are explained. Upon inquiry I still find some intelligent horticulturalists in this region laboring under the same erroneous impressions. In the last number of your journal you state it unequivocally as the received opinion at this time, that there is no necessity of making any distinction in regard to the sexual character of plants when forming new beds. In reference to your seedling I had come to different conclusions, and in part from your previous suggestions, together with the experience of distinguished amateurs and cultivators, published in your magazine and elsewhere. In consequence of what I had read, and believed, with regard to the two sexes in the strawberry, I adopted the plan, in forming beds of your seedling, to place them in juxtaposition with the melon, and the result was so favorable as to exceed my greatest expectations.

If there should not be this defective organization in the flowers of your seedling, I think it might safely be pronounced the *ne plus ultra*. Its magnificent size, unsurpassed productiveness and superior flavor, give it a decided preëminence over every other variety; and will, when more extensively known, drive all others out of cultivation. The old Virginia only will be retained on account of its early maturity.

In order, however, to become a complete proselyte to your theory, it will be necessary to have a few more facts explained.

Some five or six years since I procured a few plants of the Hautbois variety. Every plant but one died; that grew luxuriantly, and multiplied so rapidly that I was able in a short time to plant out considerable beds; but to my great disappointment they proved entirely unproductive. I next cultivated them distinctly, observing to destroy carefully every runner throughout the year, and although the

plants grew most vigorously, they yet failed to produce fruit. Unwilling still to abandon them, I planted them in the proximity of the melon and other large varieties, but under no circumstance have I ever been able to obtain a single berry. In every instance they bloomed most profusely. My conclusions then were that the original plant was female, and that there was not sufficient analogy in any other class to be fructified by them.

It has also been the practice of market gardeners and others cultivating the Hudson Bay, that in the formation of beds it was necessary to select a certain proportion of both sexes to ensure abundant crops. The first and second years after adopting this plan the beds would yield heavy crops, but inasmuch as the sterile plants multiplied so much more rapidly than the fertile, that in the farther transplantation from these beds, without an eye able to detect the different sexes, you would have them in a very few years comparatively worthless. The flowers on the barren plants were so prominent that you could discriminate them at the distance of ten feet, and on those plants you would only occasionally have a defective berry. In the cultivation of this variety for the last three years I have excluded every sterile plant, and formed my beds with the fertile ones, by planting them in the vicinity of the melon or Southborough Seedling. My beds so far have been invariably very productive; but whether it can be attributed certainly to that circumstance I will not at present determine, as I have never yet cultivated them remotely from all others.

In conclusion, I still entertain the opinion that some varieties will flower abundantly, and under any mode of culture which may be adopted will still continue sterile.

JN. H. BAYNE.

Alexandria, D. C., Nov. 25, 1843.

The facts stated by our correspondent in relation to the Hautbois and Hudson Bay Strawberry, are somewhat singular, and we do not know as we can answer them satisfactorily. But so far as they have any bearing upon the theory of Mr. Longworth we shall offer a few remarks.

The diœcious character of strawberries, or at least the separation of the sexes in the same variety, is an anomaly.

We will take it for granted that a new variety of strawberry is raised from seed—that it comes into bearing, and is found to be sterile when placed by itself—but that in the vicinity of male plants it produces fruit. Now will it ever depart from its sterile character? Will the runners, which are emitted from the old plant, prove to be both male and female, or will they take the habit of the parent? Mr. Longworth states himself that they would not “produce a plant of a different character were they to run for *fifty years!*” (Vol. VIII. p. 259.)

If it is argued that of course the variety will not change, how comes it that there are male and female Hudson Bay, and, as Mr. Longworth states, also male and female Keen's Seedling? How happens this deviation from a known law? Will it not be more reasonable to suppose that they are two different strawberries; that only one is the Hudson Bay, and the other some different and worthless variety, which, by carelessness, has become intermixed. To us this seems very probable. It is well known that Mr. Keen never produced but one plant originally of his seedling, and yet we hear of male and female Keen's seedling.

Here we have a direct contradiction. A plant will not be produced of a different character were they to run *fifty years*, and yet Keen's Seedling, raised from a *single seed* in 1821, has male and female plants. Before making statements on this subject, would it not be well to ascertain correctly, if possible, what the variety really is upon which such experiments are tried? It would certainly tend to give such statements more weight. Mr. Longworth had his Keen's Seedlings from Philadelphia, and the Keen's Seedling of most of the Philadelphia Gardens is the *Methven Scarlet*. Here we think we have some idea of his male and female plants; one being the Methven, which is known to often produce sterile plants, and the other some different kind. Mr. Longworth's theory is exploded by his own assertion, that a strawberry will not produce a plant of a different character “were it to run for *fifty years.*” If there is in reality such a thing as one variety all fertile and another all sterile, there is no such thing as male and female of the same variety.

The barrenness of the Hautbois strawberry, under the experiment of our correspondent, goes to prove, if it proves anything, that plants may be what are called female or

fertile, and yet, though in the vicinity of male plants, produce no fruit; whether from a constitutional or organic defect remains unknown. Never having cultivated the Hautbois to any extent we cannot speak from experience. It scarcely seems probable that the Hautbois family will not hybridize with other strawberries, when we have repeated instances of hybrid productions where there is far less affinity.

The oftener our attention is called to this subject, the more we feel confirmed in the opinion that the theory of Mr. Longworth is entirely unfounded: that there is no such thing as male and female plants, though certain causes may produce, as we know they have, fertile and sterile ones.

In conclusion, we shall be pleased to gather up all the facts we can in relation to this subject, and would therefore invite our correspondent to try further experiments, for the purpose of deciding, to the satisfaction of all cultivators, this interesting question.—*Ed.*

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

Salt Ley for the destruction of the Curculio.—Our correspondent, Mr. Ernst, of Cincinnati, Ohio, who visited the East last fall, has, on his return home, given some account of his visits to the gardens and nurseries in the vicinity of Boston, in the *Daily Atlas* of that city, a newspaper under the management of Mr. Russell, formerly publisher of the *New England Farmer*. In one of these letters, we find, among others, an account of the excellent nursery of Messrs. Hyde, of Newton, and also the detail of a mode of destroying the curculio by means of salt ley, as practised by these nurserymen. Mr. Ernst states that a few years ago, Messrs. Hyde found it impossible to save any plums from the ravages of the curculio; and they were advised to resort to saturating the ground for some distance around the trees with salt ley, and since its application they have found no difficulty from the curculio. The salt ley is the soap boiler's refuse, a highly saline substance; the query to Mr. Ernst is, "whether this saline substance does not destroy the curculio in its grub form in the earth;" if so, then the difficulty in the way of a plentiful crop of this very fine fruit is entirely within the control of the cultivator, at so cheap a rate, that no one need hesitate to employ it. Mr. Ernst recommends to cultivators in the West, a fair trial of this simple plan of getting rid of so destructive an insect as the curculio.—*Ed.*

The Nectarine Plum.—In the number of your Magazine for October last, I was glad to perceive thy notice of the Nectarine plum, which has formerly been called the “Wheeler plum” in this vicinity, from the fact of its having been introduced many years since by the late Henry Wheeler, who lost the label of the tree, and with it, its name. It has, however, been for some time past fully identified as the true Nectarine plum, and cultivated here under that name. I speak of this, because, at the time of the recent annual exhibition at Boston, in a conversation with a cultivator of considerable note, he informed me that he was growing trees of the kind for sale, and somewhat pertinaciously insisted that the true name was the “Damask Orleans.” Where he found his name I did not ascertain.—*J. M. E., Worcester, Dec. 1843.*

ART. II. *Retrospective Criticism.*

New Seedling Grape.—(Vol. ix. p. 381.)—Friend Hovey: At the time of the annual horticultural exhibition in Boston, in 1841, while making a call on Dr. Shurtleff, at Brookline, I ate some grapes from a seedling vine growing in his yard, which bore for the first time that season. They were some of the last that remained on the vine, and were very ripe. The Isabella grape growing near by it, had only changed its color in part, being of a light purple. This shows the early maturity of this new kind. On my return home, I wrote a notice of it, which was published in the *Spy*, and was copied somewhat extensively into other papers.

Having published what I did, I intended to say nothing more about it till I had myself tested its value by cultivation. But I notice an article in the October number of the Horticultural Magazine, in which it is stated that the grape spoken of in the *Spy* is not a new variety, but one which was described in Vol. I of the Horticultural Magazine. This statement appears to be made on the authority of Dr. Munson, of New Haven, who says he has cuttings of the vine. Now I do not know from what vine his cuttings came, but of one thing I can assure him, that if they are from that described in the magazine, they are not of the kind I described. A few facts will prove this. The vine I described, came from the seed in 1838, and bore for the first time in 1840. It is a rather small grape, about the size of the sweetwater, somewhat of an oval form, and a *very dark* purple, or what would generally be called *black*. The grape referred to by Dr. Munson was described, if I reckon right, in 1835, (that being in the first volume of the magazine, eight years since,) and of course must have been in bearing *three years before the other came from the seed*. It was, moreover, of a lilac color, and the size of the black Hamburg.

I may add, that if the grape I described do not prove much better than any other known variety of native grape, for open culture in this climate, I shall be greatly disappointed. A person, whose opinion is entitled to the most entire respect, informs me that he has eaten of the fruit this season, and that it is so decidedly superior to the Isabella, Catawba, *Crehore*, or any other native variety, that the best of them do not deserve to be classed with it. When I saw the vine it was of slender growth, as

seedling vines of that age generally are. But I understand, that the present year it has assumed the appearance of an adult vine, and made a strong and vigorous growth, even more so, as I am informed, than the *Isabella*.

My object in writing this is, firstly, to prevent the confusion respecting the two varieties, which it was the tendency of the article, under notice, to produce; and, secondly, to clear myself from the imputation of recommending an old, and perhaps discarded fruit as something new and valuable. I should not have published what I did on "mere report," nor without the evidence which I had, of the most satisfactory nature. Having said this, I leave it to thee to do me justice, and to make the correction in such way as thou may choose.—*Respectfully, thy friend, John Milton Earle, Worcester, November, 1843.*

[We cheerfully give place to Mr. Earle's note, knowing, from our acquaintance with him, that he would not intentionally make any statement which he did not believe to be correct. We know nothing of the vine otherwise than what is stated in the address of Dr. Munson, referred to in our notice of the grape. There are however, in connexion with the above note of Mr. Earle, one or two questions which we would like to ask.

Our correspondent states that the vine was raised from seed in 1838 and bore fruit in 1840. Can this be? The period seems altogether too short for a seedling vine to produce fruit, yet it may have been so; but it certainly is an instance of great precocity. Again, if a grape so celebrated was raised as long ago as 1840, how happens it that its merits were never known to the cultivators around Boston, only through the medium of the Worcester papers. It seems to us that a variety so far excelling all others, would have been familiar to the amateur cultivators around Boston some time ago. Our correspondent compares it with the *Crehore*, now called by the Massachusetts Horticultural Society the *Diana* grape, and remarks that it does not deserve to be classed with the new seedling. This is certainly great praise. Yet so far as we have any knowledge, the *Diana* grape was first brought to notice last year, and of course its qualities are not sufficiently known to test its merits with any other kind. We think this comparison is altogether hasty and gratuitous. We shall leave the subject here in the hands of our friend Dr. Munson and our correspondent, and we shall be glad to learn that the Dr. was in error, and that we have in reality, at last, secured that important acquisition, a native seedling grape, equalling the foreign varieties.—*Ed.*]

A full index to the Magazine.—I purchased of you in August, 1841, a full set of your work, and I have derived much pleasure from it; and I have thumbed the volumes over more than once. While I clearly recollect that certain things are contained in the volumes, I am often at a loss where to find them, and I have felt the loss of a good index to the *matters*. You give an elaborate index to the plants. If you could also give a good index to the *matters*, it would, in my view, enhance the value of the work. Index making is, I know, an irksome task, and it may not pay you. For instance, I wished to find the article on the "Belgian modes of grafting and budding," and under neither of these heads did I find it; but when I found the article by a different kind of search, I then found it was indexed under the head of "*trees and shrubs*." (Vol. 1.) This is a difference of judgment as to the heads to be used. At another time I wished to refer to the mode of raising celery detailed in vol. i. p. 236; but

it is not named in the index, being an incidental extract in a review. That and many other such things would often be of great value in an index.—*Yours, Respectfully, J. H. James, Urbana, Ohio, Nov. 1843.*

[With the commencement of a New Series, at the close of this volume, we intend to make several improvements in our magazine, and among other things a more full and systematic index by which every subject can be referred to with the greatest facility. We have more occasion probably than any one else to refer to back volumes, and we have no trouble in finding any particular subject. Yet it is probable that the index is so familiar in its arrangement that we can do so with more facility than others. No one can be at a loss to find any *plant*. All the *Miscellaneous Intelligence* can be referred to by the table of contents; and it is only the small amount of incidental matter in the reviews which cannot be easily found, under our present arrangement. A *general index* we shall, however, introduce into our New Series.—*Ed.*]

ART. III. *Massachusetts Horticultural Society.*

Nov. 25th.—Exhibited. Fruit: From the President of the Society, specimens of a seedling pear, sent for exhibition from Messrs. Wilcomb & King, nurserymen, Flushing, L. I. The following letter accompanied the fruit:—

M. P. Wilder, President of the Massachusetts Horticultural Society. Sir,—We send by Harnden & Co.'s express, a box of pears, and if thee should think proper to present them to the Horticultural Society, we would thank thee to do so. It is a native of Flushing. It produces abundant crops every year; is in eating over four months,—say from the 10th to 2d month (from October to February.) It is not inclined to rot or shrivel, as is the case with some of our winter pears. We think it possesses as many good qualities as any late fruit we have seen, but this we leave to the better judgment of the Horticultural Society. The tree is of fair growth and very full of thorns, and appears to be a cross of [between] the old St. Germain and St. Michael, as it resembles both of them in wood, foliage and fruit; and there is no other variety in the neighborhood of it. We intended to have sent the fruit to Boston last year, but were disappointed. We call it the Lawrence pear. *Respectfully, Wilcomb & King, Flushing, 11 mo., 20, 1843.*

The committee of fruits, on trial of the specimens, were of opinion that it might be classed with the very best pears. Our own opinion, from only this trial is, that it appears to be an excellent late variety, but not what would be termed *first* rate. We have a drawing and description made from one of the best specimens, which we shall present in our pages at a future time. It is a sweet, tender, melting and juicy fruit, without much flavor, resembling somewhat the Columbia Virgoulouse, which also originated at Flushing, and is figured and described at page 252. In general appearance it approaches the Urbaniste.

From S. Walker, Vicar of Winkfield, Passe Colmar, and a variety imported for the Beurré de Capiaumont pear, but probably not true: the specimens of the Vicar of Winkfield, better known perhaps as the Monsieur le Curé, were found, on trial, to be very fine, and an excellent dessert

fruit. Pears without name from Capt. Lovitt. Lewis pears from E. Marsh, Quincy.

Dec. 2.—An adjourned meeting of the Society was held to-day,—the President in the chair.

A letter was read from J. A. Bolles, Esq., Secretary of the Commonwealth, transmitting a copy of Hitchcock's *Geology*.

A Finance Committee, with the Treasurer, were voted a committee to examine the books and accounts of the Mount Auburn Association, and receive the amount due the Society.

H. M. S. Fairbanks was elected a member of the Society.

Adjourned one fortnight to December 16th.

Dec. 2.—*Exhibited*. Fruits: From S. L. Goodale, of Saco, Me., Mac Laughlin pears, a native variety, first noticed in our Magazine (Vol. viii., p. 62), by Mr. Manning. We had not the opportunity of tasting the variety, but the committee consider it, with Mr. Manning, an excellent fruit. From S. Pond, Beurré Diel, Dix, Duchesse d'Angouleme, and Napoleon pears; the Beurré Diels were from a young tree and remarkably large and handsome. From H. Vandine, Delices d' Hardenpont (?) Marie Louise and New Long Rosewater (Prince's *catalogue*) pears. From George Howland, New Bedford, very large and beautiful apples, called the 20 oz. apple, grown on his farm in Cayuga Co., N. Y. The variety, whatever its true name may be, is remarkably fine, handsome and good,—the color, green, nearly covered and striped with light red. Golden Ball apples, from S. W. Cole. Fine specimens of Lewis pears, from E. Marsh, Quincy. Wells's pippin apples, a very good fruit, from B. V. French. Handsome specimens of the Minister apple, one of the very best kinds, and Winter Nelis pears, from E. M. Richards.

Dec. 16th—An adjourned meeting of the Society was held to-day,—the President in the chair. No quorum being present it was adjourned one week to December 23.

Dec. 23d.—An adjourned meeting of the Society was held to-day,—the President in the chair.

Mr. C. M. Hovey, from the committee appointed in relation to the Amendment of the Constitution, made a report which was laid on the table for future action.

W. A. Parker, and John Cummings, Jr., of Boston, and Seth E. Hardy, of Cambridgeport, were elected members of the Society. George W. Gordon, consul to Rio Janeiro, was elected a Corresponding member of the Society. Meeting dissolved.

Exhibited.—Fruits: From the President of the Society, a variety of winter pears, as follows:—Beurré d'Arenberg, Glout Morceau, Passé Colmar, Vicar of Winkfield. The Beurré d'Arenberg were of good size, and of the most superior quality. They were grown on an old tree grafted five or six years ago; this variety keeps well, does not shrivel in ripening, and is fully equal to the reputation it has acquired, of being the "king of pears." It grows and bears well, as a standard, and either on the quince or pear stock. From Capt. Lovitt, Glout Morceau and Easter Beurré pears. From Dr. E. W. Bull, presented by Hovey & Co., Peck's Pleasant, Jabez Sweet, Hartford Sweet, and Seedling apples. The latter variety was considered an exceedingly tender and juicy fruit, and only lacked flavor to give an equal rank with the best apples. From Joseph Ballister, Fameuse, or Pomme de Neige apples, beautiful and good.

has been so moderate that there is now only three or four inches of frost in the ground. This open weather has been favorable for bringing produce to market, and in consequence there has been a supply fully equal to the demand.

Vegetables.—Potatoes are now in rather better demand, and prices little firmer. Should the weather continue mild, the arrivals of Eastern will keep up the stock; common are doing better, and with a slight advance, though the principal inquiry is for Chenangoes; Eastports remain the same, with a moderate stock. Sweet, as the season becomes advanced, are higher. In turnips, no change, with a good supply. Onions are firm by the bunch and good yellow by the bushel, now command our quotations readily: the stock is small. Beets, carrots, and parsnips without alteration. No radishes have yet come to hand. Horseradish is higher. Cabbages are very scarce, and good Drumheads command high prices with quick sales: Savoys are also in request; the whole stock is limited, and not of so good quality as usual. Lettuce comes in of good size. Celery is tolerably abundant and very good. Parsely is higher. Within a few days there has been an active demand for squashes, and the prices of those of good quality, of either of the sorts named, have advanced to our quotations. Autumnal marrows are poor and do not keep well.

Fruit.—The fruit market is very still; there has been no alteration in prices of apples since December, when our quotations were advanced about 25 to 50 cents per barrel. Immense quantities of apples have been brought to this market from western New York, over the Western Rail-road. Pears are quite abundant for the season: good Beurré Diels may be bought at fair prices, as also Passe Colmars, the Vicar of Winkfield, and some others. Dix are all gone. The Beurré d'Arenberg has been brought into the market, we believe for the first time, in any quantity; Baking are abundant, at the usual rates. Cranberries are still scarce and high, but the shipping demand is not so great at this season. Quinces are yet abundant and prices very low. In no previous season have they been known so plentiful. Barrels of them could now be purchased in the market. Grapes are plentiful and cheap. Lemons are very abundant. In nuts there is considerable doing, but no change in prices.—*M. T., Boston, December 29, 1843.*

HORTICULTURAL MEMORANDA

FOR JANUARY.

FRUIT DEPARTMENT.

Grape Vines.—Pruning will probably by this time have been mostly done. Where it has been omitted, it should be finished this month. In our last number, we gave some hints on the mode of pruning, and it will be unnecessary to repeat them again. Cuttings wanted for raising young vines should be cut into pieces of about four buds each, tied in a bundle, and the lower ends placed in a box of earth in a cool situation, where there will be no danger of breaking until they are wanted in March.

Peach Trees, or other fruit trees in pots, may be brought into the graperly or greenhouse the latter part of the month, if early fruit is wanted.

No out-door work can be done this month.

FLOWER DEPARTMENT.

Camellias will be opening their buds, and will need attention; give liberal quantities of water, and occasionally a very light syringing over head. If any of the plants need top dressing, it should now be done. Ill shaped plants should be tied up to a neat stake. Cuttings may be put in with success now, and planting seed should not be delayed. Cuttings put in in July, may be potted off till the latter part of the month.

Chinese Primroses should be shifted this month into larger pots.

Schizanthuses will again require to be shifted into No. 3 pots.

Cyclamens will be showing their flower buds, and must have liberal supplies of water.

Oxalises Hirta and Boweii, now past flowering, may be watered more sparingly.

Verbenas will now require attention. Commence shifting into the next size pots, and prune off straggling shoots.

Azaleas will soon swell their flower buds, and will need larger supplies of water.

Ericas will need attention; keep the shoots on young plants topped, in order to make them bushy.

Cactuses may be given more water this month. Now is a good season to graft young stocks.

Roses will need occasional pruning: keep the plants open in the middle, and cut out all weak wood.

Pansy Seed may be sown this month for producing young plants to turn out into the ground in May.

Tree Paeonies, in pots, may be brought into the house for blooming early.

Dahlia Roots should be looked after as the season advances. See that they are in a sound condition; such as have the appearance of rotting had better be potted in light earth, and placed in a warm situation.

Greenhouse Plants of all kinds should be shifted or top-dressed; the pots washed, the shoots tied up to neat stakes, and the names legibly written on a good label. A great many sorts may be propagated this month.

VEGETABLE DEPARTMENT.

Making Hot-Beds.—Towards the latter part of the month, operations should be commenced for making hot-beds and bringing forward cucumbers, lettuce, tomatoes, radishes, &c. The manure should now be placed in a heap, and turned over twice, shaking it well up each time, and about the 20th or 25th it may be made up into a bed, and the frame and sashes put on. In a few days after it will be ready for sowing seeds, either in the ground or in pots or boxes.

THE MAGAZINE

OF

HORTICULTURE.

FEBRUARY, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes and Recollections of a tour through Hartford, New Haven, New York, Philadelphia, Baltimore, Washington, and some other places, in October, 1843.* By the EDITOR.

(Continued from Vol. IX. p. 410.)

New York, October 16th.—Having left New Haven late on the evening of the 12th, we arrived in New York early the next morning, but from other engagements did not find leisure to visit any gardens until Monday the 16th.

Nursery of Messrs. Hogg & Sons, Yorkville.—Our last visit to Mr. Hogg's city garden was in the fall of 1841, when we gave some account of it, (Vol. VII. p. 363.) We then mentioned that he had commenced the formation of a new nursery at Yorkville, in anticipation of the destruction of the one he then occupied in Broadway. The corporation having long since laid out a street directly through the grounds, they commenced in 1842 to grade and level the land, and Mr. Hogg then had to remove from the premises to the spot he now occupies.

The nursery is very pleasantly located on the eastern side of the third Avenue, on 86th street, about five miles from the city, and a short distance from Hellgate Ferry. It contains, we believe, upwards of 12 acres; the soil is a deep rich loam, on a stiff, gravelly subsoil, very well adapted to the growth of trees, and being rather an elevated situation, is not subject to early frosts.

Three large green-houses have been erected, forming three sides of a square; and the materials were nearly

ready for building a propagating house, in the rear of the house on the south side; the length of the whole being upwards of 200 feet. The main house, which is span-roofed and running north and south, was principally filled with camellias; that extending from it, on the southern angle, with roses, geraniums, &c.; and the house on the east with cactuses and a miscellaneous collection of plants, the whole in very good health, but from the recent completion of part of the houses, not yet put in order for the winter. When the whole range is finished and the plants well arranged, Messrs. Hogg will have a fine opportunity to show to advantage their excellent collection.

In the nursery, being yet young, the trees were not numerous, but we noticed many plantations of stocks, and other quarters of worked trees, one and two years from the bud or graft. The collection of pears, apples, peaches, &c., is very good. The collection of herbaceous plants for which the nursery has always been noted, was arranged in beds just at the entrance to the grounds; but as the season was late, and cool nights had destroyed the beauty of the plants, we saw no flowers deserving of note. We remarked, however, a fine stock of many things, particularly *Spiræa japonica*, one of the most showy of the genus. Several large beds of the Tuberose, grown for the bulbs, were in the most vigorous condition. It has been thought by many amateurs that the Tuberose could not be grown to perfection in our climate; but Messrs. Hogg, as well as Mr. Feast, of Baltimore, produce roots equal to those imported from Italy. In England the cool summers do not allow the production of good bulbs; but under our clear sky, and almost scorching sun, there is no difficulty, if the young offsets are well managed, in raising an abundance of roots.

Among the ornamental shrubs we noticed a fine lot of Chinese arbor vitæ, from seed; they stand the winter without the least injury, and we must again advise the trial of this fine species in the latitude of Boston, where it is rarely seen; believing that the difference of temperature between the two cities cannot be so great as to destroy the plants. Of *Ròsa Harrisonii* Messrs. Hogg have a fine stock, as well as several seedlings raised from it, some of which they think excel the parent, being quite as free bloomers and full as double. We believe they are not named otherwise than the Seedling Scotch.

The Harrison Rose does not strike from cuttings, neither does it root easily from layers, nor is it prolific in suckers; and from these causes it has very slowly found its way into our gardens. Messrs. Hogg, however, informed us that it is easily multiplied by cuttings of the *roots*, which make plants in a short time and bloom abundantly the second year. Unless budding on the Boursault, or some other stock is adopted, propagation from the roots should be resorted to.

The father and two sons are now engaged in the business, and we hope, from the increased facilities of more land, they will be enabled to make up for the loss of their city garden, which, from its situation, near Broadway, afforded them an opportunity of supplying large numbers of bouquets during the winter season.

Green-house and Seed-store of Dunlap & Carman, Broadway.—Our correspondent, Mr. Dunlap, has now located himself in Broadway, in connection with a young man, son of Mr. Carman, of Fort Washington. Since our notice of Mr. Dunlap's place, in 1841, he has been engaged in trade, in the city, with Mr. Niblo, at his garden, and had charge of the plants, and, in connexion, a seed-store. This connexion was dissolved in the course of the last season, and Messrs. Dunlap & Carman now occupy a store at 535 Broadway.

In the rear of the store a new green-house has been erected, 100 feet long, 25 feet wide, and 12 feet high at the sides, with a span roof. The walls are built of brick, without side lights, and in a substantial manner. This house adjoins, in a transverse direction, another one about 50 feet long, which runs directly back from the store, and may be occupied either as a show-room for plants or for the purposes of a seed-store. It will be an admirable place to show off dahlias, or any other flowers, to great advantage, from the fine light on all sides. At the time we were here, the house had just been built and no stages had been erected. The large house has a border about two feet wide, and then a walk about three feet wide, all round; leaving a raised platform of brick work, ten inches high, with a stone curb, through the centre of the house, upon which the plants are placed. Immediately, in the centre of the range, is a handsome fountain from which the water falls into a large basin, in which are numbers of gold

fish; this being opposite to the range extending from the store, has a fine effect upon entering from the street.

The house having but just been completed, the plants had not yet been arranged for the winter. Most of Mr. Dunlap's collection at Haarlem will be brought into the city, and as there are many fine large specimens of camelias, when the whole are in bloom, the appearance of the house will be very beautiful. Mr. Dunlap's seedling camellia, americana is one of the finest American seedlings.

Those of our friends who visit New York city, will find it a pleasant way of spending a leisure hour to take a walk through Messrs. Dunlap & Carman's premises. They would scarcely believe, on entering the store, that there could be found sufficient room, in so central and crowded a portion of the city, for the erection of such large houses. It is but a short distance from Niblo's garden.

Brooklyn, Oct. 17th,—Multiflora Garden, Mr. Maynard. The dahlia season being now at its height, we visited the garden of Mr. Maynard, who has a large and fine collection, and found one of the most brilliant displays of fine flowers. Dowager Lady Cooper, Widnall's Queen, and several others, of the same standard of beauty, were loaded with flowers, notwithstanding a great number had been cut a day or two before for the exhibition of the Brooklyn Lyceum.

The experience of the past season has suggested some new ideas relative to planting. Generally, dahlias flowered more sparingly last summer than for several years previous. This was, and we doubt not truly, attributed to the drought of June and July, which injured the plants so much that they did not fully recover; when the rains of August came on, it gave them renewed vigor, and just as frost overtook them they were showing an abundance of buds. Our conversation with Mr. Maynard, turning upon this subject, we remarked, that though the generally received opinion was, that early planting was attended with the most success, still we believe, under some circumstances, that the very reverse was the fact; that indeed, on the average, late planting would be found the safest and best, but that depended upon the season. About the 10th of June may be set down as the safest period to plant out dahlias; but if the weather had been wet the latter part of May, and there appeared any signs of drought, it would

be better to defer planting until the appearance of rain again, when they should be set out. Now although this might not be till the middle of July, much better blooms would be obtained in September. But if April and May had been rather dry months, then June would be the best period to plant out. Dry weather, if of long continuance, immediately after planting out, injures the plants seriously for the whole season, and often renders them a prey to red spiders and other insects. Mr. Maynard, in corroboration of this, showed us a small lot of dahlias, which were not planted out till August, and they were now coming into flower stronger and better than those planted early. Our remarks of course apply to dahlias set out for prize flowers. As ornaments of the border, for general cultivation, they had better be set out in May and a second planting made later.

Garden of Mr. Kent.—Mr. Kent, though professionally a market gardener, has one of the finest collections of dahlias in the vicinity of New York, and his success in growing them appears to equal, if not surpass, any of the amateur cultivators in the neighborhood. The Fair of the American Institute had been opened on the 10th of October, and as Mr. Kent had filled one of the stands, his flowers were principally cut to replace those which had faded. But notwithstanding this we found many very superior blooms remaining, and some of them the rarest varieties. Oakley's Surprise was opening a splendid flower; Sir R. Sale, a fine purple variety, was also expanding a superb bloom; the Emperor of China, a very good, second rate flavor, with exquisite blooms, of Widnall's Queen, Dowager Lady Cooper, Bridesmaid, &c. Mr. Kent obtained, and meritoriously too, the gold medal of the Institute for the finest collection exhibited at the last fair.

Mr. Kent has raised a number of seedling dahlias, and some of them proved to be fine varieties, particularly a yellow, raised from Argo, which has the fine color of the parent, and a much better formed flower. Mr. Kent, however, informed us that Argo was a poor variety to raise seedlings from, as he found them to partake too much of the bad habit of growth, &c. of the parent; only one out of many plants of this variety proved to be worth saving. Mr. Kent intends to try some of the other seedlings another season, as they do not always show their true character the first.

One of Mr. Kent's practices, which he adopts very generally, to procure good blooms, is to shade the flowers. This is effected by means of small earthen pots, of a round form, swelling out below the rim, so as to hold the flower without injuring the petals; these are about five inches in diameter, and made with an open bottom, in which a small pane of glass is set. The object of the glass is to allow sufficient light to the bloom, so that it may not be deficient in its proper colors; for being placed over the bud just as it begins to open, if it was opaque, the flowers, if light kinds, would be nearly colorless. The object of the pot is as much to produce a moist atmosphere around the bud, as to shade it; the pot becoming warmed by the heat of the sun, the air inside is rendered much warmer than the outer air, while the moisture which is deposited at night by condensation, owing to the cooler temperature of the outer air, is a reserve during the day. These pots are placed on a flat board about six inches square, with a hole in one side to let in the stem. This is nailed, nearly in the centre, to an upright stake, which is pushed into the ground, more or less, (having them of different lengths,) to suit the height of any particular bloom. The pot is placed on when the bud begins to show color, and is not removed till sufficiently expanded for cutting. From the good effects we saw of these shades, under Mr. Kent's practice, we would advise amateurs, who wish to produce fine *show flowers*, to make use of them. Their cost would not exceed four cents each, and in a collection of one hundred plants, a hundred pots would be sufficient to shade enough blooms to make a good selection for a stand of twenty-four or thirty-six.

We here saw a bed of our seedling Strawberry, which in 1842 did not produce scarcely any fruit, and Mr. Kent concluded at once that it would be so poor a bearer as not to be worth cultivating; he therefore let the bed run to weeds, intending to root the plants up; but forgetting to do so, the bed, last summer, was one mass of fruit, so profusely covered as to be almost red with the berries, and this, too, in the absence of any other variety in its vicinity.

We found Mr. Kent dibbling out his cabbages for his spring crop—a vegetable which he raises in abundance, and carries the first to market. We also saw large beds of celery, of which he grows great quantities every year; the past season it rusted badly, and some of the rows were

much injured by this disorder. Mr. Kent attributed it to the dry weather of June and July. All the kinds of market produce are cultivated by Mr. Kent, with great success. Mr. Kent also cultivates large quantities of carnations and other flowers, for the Fulton market.

Residence of N. J. Becar, Esq., Henry Street.—At the time of our last visit, the new range of houses was unfinished, though nearly completed, and the season being earlier, the plants remained in their summer quarters, in the open air. Now, however, we found the greater part of them arranged in the houses, particularly the camellias in the large green-house; and a more robust, healthy, and vigorous looking collection of plants we never saw; though indeed we may say, that this has been obtained at some sacrifice of free blooming. Latterly, quite a change has taken place in the opinions of cultivators of the camellia in regard to the soil. Seven or eight years ago peat was the principal compost made use of, but gradually more loam was intermixed, till now the greater part is pure yellow loam, with a small portion of peat, manure, and sand. The consequence is, that while the one enfeebles by the redundance of blooms the other strengthens by the partial loss of flowers. The use of heath soil or peat, as it is commonly termed, in the proportion in which it was formerly employed, though given up by most English cultivators, is still continued in France, even by so eminent an amateur as the Abbé Berleze. It will do while the plants are young, but they soon need more nourishment than it will afford. Good fresh loom, of an adhesive character, is now the principal component, although we would not advise too free a use of it, unless strong plants alone are wanted; the great vigor which it imparts to the plants, prevents their giving such a quantity of flowers as would be expected. Mr. Becar's plants are all tied up to neat green stakes, and their stateliness—deep green foliage—clean wood, and handsome form, struck us with admiration. Only a few more buds were wanting to make them the height of perfection in the way of camellia cultivation.

In the reserve houses we found a great number of young stocks and seedling camellias coming on, which looked in fine condition. From the seedlings some good kinds may be expected as Mr. Becar has expended much care in the impregnation of the varieties. A good collection of pclar-

goniums and roses we also noticed, and a variety of miscellaneous plants.

In the open garden the lateness of the season had effaced its greatest beauty. The cool nights had destroyed the brilliancy of the verbenas, petunias, roses, &c., and we only regretted that our visit had not been earlier or later, that we might have seen the attractions of the garden, or the still greater splendor of the green-house.

(To be continued.)

ART. II. *Experiments on the Cultivation of Plants in Charcoal.* By J. E. TESCHEMACHER.

I PERCEIVE in the horticultural papers received by the last steamship, that there is an animated discussion on the value of charcoal in horticulture, and that Mr. Robert Rigg, an excellent chemist, has proceeded so far as to publish a book, with the extraordinary assertion that carbon is a compound body made of plants. Assent to this proposition cannot of course be expected from chemistry, in its present state; but we do not know to what strange discoveries the searching inquisitiveness into the laws of nature, of the present age, may lead.

Having made various experiments on the action of charcoal, for the last two years, I have concluded to add my share to the discussion.

The first view I took of the value of charcoal in horticulture, arose from the arguments on the different powers of well rotted and of fresh manure; my prejudice from constant practice being rather in favor of the former. And one of my *imaginary* reasons for this prejudice, (for proof was not to be expected,) was that the carbon of the vegetable part of the old manure was reduced by fermentation and complete decomposition (*combustion*, *Liebig*) to the finest possible state of comminution, such as is totally impossible to imitate by the most laborious mechanical pulverization. In this finest of all states, carbon, if used at all by the living vegetable, could be most easily appropriated. My experiments were, therefore, all made with

finest pulverised wood charcoal I could procure, such as is used in making gunpowder :

1st. I planted a young, thrifty plant of *Dáphne odóra* in this charcoal altogether ; in 12 months it was alive, the leaves quite yellow. On examining the roots they had not in the least increased or altered. I then repotted it in loam with one quarter charcoal and watered with a very weak solution of nitrate of soda ; in four weeks the leaves had become of a dark blackish green, and the plant was beginning to push vigorously.

2d. I planted a fine root of *Fúchsia fúlgens*, with a stem, in charcoal alone. It immediately began to vegetate ; the leaves were, however, extremely diminutive and soon dropped off ; the flowers appeared also diminutive and finally dropped off likewise just after opening. It then, with the others, went to rest ; but to my surprise, in August it again began to vegetate and went precisely through the same process as in spring — others which were by its side remaining dormant — after this it went again to rest.

3d. I potted several seedling camellias in one quarter charcoal, one quarter old manure, one half loam ; these grew with great luxuriance, and the color of the foliage was dark, healthy green.

4th. I potted several young pelargoniums with various quantities of charcoal, never exceeding one quarter, often very much less. In these the effect was the same, both coming very near to the luxuriance and size of foliage of those treated with Guano.

In August last, I made up my mind to re-pot and top dress a large number of exotic plants, of various kinds, many of which were in a bad state from neglect ; of these the chief number were camellias. I made up a compost, consisting of about two thirds Roxbury fresh loam, and one third a compost, chiefly consisting of old manure ; to this I added about one fortieth part of charcoal, and had the whole very carefully and intimately mixed ; with this I operated. In September, when I thought the earth had got well settled round the roots, I began to water, every Saturday, with water in which Guano had been mixed, in the quantity of about one ounce to ten gallons.

I was perfectly astonished at the alteration which appeared in about four weeks, in the general health of all the plants — it seemed to me like magic ; and many who visited

the Public Conservatory, previous to the late calamitous fire, can bear testimony to their beauty and luxuriance. The earth of one large camellia, (double white,) with about 250 blooms was nearly altogether changed, the tub having fallen off with much of the earth. I hardly expected to save the blossoms, but they opened in as great splendor as the others. It seems to me that the period of the opening of the flowers was also generally accelerated. We had 20 or 30 out the first week in November, and the first week in December, just previous to the fire, I counted above 500 in full beauty; this was certainly earlier than we had them in previous years.

Passiflora Loudonii, which, under the best of common cultivation, has always yellow and unhealthy looking leaves, was placed in this mixture with the addition of charcoal drainage. The rapid change in its appearance was surprising, and although, from unavoidable circumstances, it was removed into this soil just previous to flowering, yet instead of being checked, fresh flower racemes shot forth, and, with the others, opened their beautiful blossoms in the greatest splendor; the foliage becoming of a fine healthy green and spread open, not curled in at the edges.

I had several other experiments in progress on the use of charcoal, some of which I had hoped would have thrown light on its immediate action on the roots of plants—a subject on which we are at present in the dark: unfortunately, these with many others were destroyed by accidental fire.

My impression from these trials is, that although charcoal alone is nearly useless, yet when mixed in due proportion with the earths and salts, usually found in soils and manures, its presence is highly beneficial, and greatly promotes the luxuriance of vegetation, as far as regards stems and leaves. Of its value in the production of flowers and seeds, I am not, for the reasons before stated, able to give an opinion of any worth.

It may be thought, and probably is in part true, that much of the luxuriance of the last named experiments arose from the use of Guano water; but from other experiments with charcoal, instituted for the purpose of making comparisons with Guano, and in which of course none was used, I cannot hesitate to believe that some portion of this

luxuriance was also due to the charcoal. I trust, therefore, that other horticulturists, who have the means, will undertake farther experiments on this subject, so that we may not in this country be behind the rest of the world, in the astonishing advances which are every year being made in that most delightful of all pursuits—Horticulture.

Yours,

J. F. TESCHEMACHER.

Boston, Jan. 24, 1844.

ART. III. *Remarks on the Strawberry, its diœcious character, habits, &c.* By G. W. HUNTSMAN, Flushing, L. I. New York.

HAVING read the articles that have appeared in your Magazine of late, on the Strawberry, and having been a close observer myself, for some time, of the habits and nature of the plant, I wish to make some remarks on it.

You are right in regarding the Strawberry anomalous in reference to its diœcious character. In point of fact the different varieties may be classed under three divisions.

1st. Those in which the *male* and *female* organs are both perfect.

2d. Those in which the male organs are perfect, but the rudiments of the fruit more or less incomplete—and,

3d. Those in which the rudiments of the fruit are largely developed, but the stamens incomplete.

Those in the 1st and 2d divisions seem to merge into each other, and it is sometimes difficult to say to which a plant belongs. Plants belonging to the first division are considered good bearers, but the fruit is generally small. As to varieties belonging to the 2d division, not much need be said as it is admitted on all hands that they are not valuable for general cultivation. The rudiments of the fruit being so imperfect as frequently not to swell at all. The 3d division, on account of its great productiveness, offers the greatest field of interest, although it has presented subjects for conflicting opinions. Your seedling may be considered as a type of this division—the stamens being not

more than one third or one fourth the length of those in the other two. That these distinctions do really exist, any one at all acquainted with the organs of fructification, may in a very short time become convinced.

For want of more appropriate terms we may name the varieties belonging to the 1st and 2d divisions *staminate* plants—and those belonging to the 3d *pistillate*. Much confusion, to me at least, has arisen from writers not defining their terms, and from different writers applying the same term to different kinds of plants, &c.

This much premised, we now come to consider the main questions in debate—and if I understand the subject, they may be stated thus: Will any or all of the *pistillate* varieties produce fruit without being impregnated by *staminate* plants? And if so, will the fruit be as abundant and fine as if they had been so impregnated?

The truth seems to be that one or more varieties of *pistillate* plants *will not* produce fruit unless impregnated by *staminate* plants, while others under favorable circumstances, will.

Last summer I obtained a dozen plants of the variety called new Black musk Hautbois, from the nursery of Messrs. Winter & Co. These plants, as well as all those in the bed from which they were taken, were *pistillate*. They were taken up with balls of earth and carefully planted in my garden. When they had been in bloom some time, I observed that the ovules did not swell, and suspecting the cause, I procured a few *staminate* Hautbois plants from a neighboring garden, and impregnated with these some of the blossoms of my plants, all of which produced perfect fruit—those not impregnated produced none. Now this proves that there is at least one *pistillate* variety of the Hautbois that will not bear fruit without being impregnated by *staminate* plants. And it furthermore shows that this variety cannot be impregnated by any other kind but the Hautbois—for the bed in the nursery from which my plants were taken, although surrounded by more than a dozen other kinds, many of which were *staminate* plants—did not produce a berry. And the plants taken to my garden were planted within a yard of a large bed of *staminate* plants, where, if it were possible to impregnate the Hautbois with another kind, they were certainly in a fair position.

That there are some varieties of *pistillate* plants that will bear fruit without being in the neighborhood of *staminate* plants is, I think, well authenticated—among which may be reckoned the Hudson's Bay, your seedling and others. But that they would in some seasons, and under some circumstances, fruit better if placed near a bed of *staminate* plants is, I think, very probable. May it not be that in a wet season or under some other unfavorable circumstances, the anthers do not shed sufficient pollen for free fructification? More careful experiments are needed on this subject, and those which you intend to make will, I hope, throw some more light on it. There is another question I wished to touch upon, but I will defer it till a future opportunity.

Yours respectfully,

G. W. HUNTSMAN.

Flushing, L. I., January 16, 1844.

The object of our remarks, on this subject, has been to call out any information which may throw light upon the question under discussion, viz: whether the Strawberry is in reality a diœcious plant, and whether it is necessary that some varieties should be placed in the vicinity of others in order to secure a crop of fruit. We have already given our views at some length on this point, and, while we await the result of further experiments, we are much pleased in being able to record the opinions of others, especially those who have so carefully watched the habits and nature of the Strawberry, as our correspondent.

The necessity of well defined and appropriate terms, in discussing this subject is, we are aware, of much importance, and the suggestion of the writer that *pistillate* and *staminate* plants should be adopted, in preference to male and female, or sterile and fertile, is perhaps a good one, and should receive general assent. It will certainly express the proper state of the plants, whether constitutionally defective, or accidentally so from improper cultivation of either of these organs.

The facts in relation to the Hautbois are singular, and tend to corroborate the opinion expressed by Mr Bayne and others, that they can not be fertilized by any other than their own class.

The conclusions arrived at by our correspondent are, that there are some varieties of *pistillate* plants that will bear

fruit without being in the neighborhood of *staminate* plants ; but that they would in some seasons, and under some circumstances, fruit better if placed near a bed of *staminate* plants is, he thinks very probable. The question is asked whether it may not be that "in a wet season, or under some other unfavorable circumstances, the anthers of these kinds do not shed sufficient pollen for free fructification ? This is, as he says, the point on which more information is needed. To us it seems the main point on which the whole question rests. In our own seedling the stamens are not wanting, but the filament is quite short, and hence under unfavorable circumstances of too high cultivation, too wet a season, or other causes, the pollen is not freely distributed, and the immense number of pistils, from the great size of the embryo berry, are not properly fertilized ; sometimes those nearest the base beginning to swell up, while those in the centre are quite dried up, thus forming an imperfectly ripened fruit.

We hope Mr. Huntsman will continue his inquiries on this subject farther, and communicate the results to us, as well as his ideas upon any other question which may be interesting to our readers.—*Ed.*

ART. IV. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals ; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates ; with additional miscellaneous information, relative to new plants. In monthly numbers ; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural Intelligence. New Azaleas.—In a previous volume (VII, p. 223,) a correspondent has described fifteen varieties of azaleas, raised by Mr. Mackenzie of Philadelphia: some of them have proved to be remarkably fine, particularly *A. Copei*. Since then Mr Mackenzie has constantly been producing seedling varieties, and at our visit to his place in October last, he promised us a list of some of his later seedlings, which he can recommend as really distinct and beautiful. The following is a list of the names with a short description of each.

- No. 13. *Watsonia*. Large orange red, very fine.
- “ 44. *Remingtonia*. Large rose pink, superb, the largest of the tribe.
- “ 45. Bright Rose. Very fine.
- “ 46. Bright Cherry color. A very superior flower.
- “ 52. *Carminè Rose*. A fine shaped flower.
- “ 54. *Surpass Smithii*. Very superior to the old *Smithii*.
- “ 51. Bright Salmon. Superb.
- “ 50. Rosy purple. Shape of *variegata*, magnificent.
- “ 71. Large violet colored.
- “ 73. Pale flesh colored. Shape of *variegata*.
- “ 72. Similar to *spléndens*, but superior.
- “ 16. *Mackenzieana*. The finest lilac and the best shape out.

Mr Mackenzie has many seedlings which will bloom the coming months—and should any of them prove fine, we are promised some account of them. *P. Mackenzie, Philadelphia, Dec., 1843.*

New Plants in Philadelphia.—At a late meeting of the Pennsylvania Horticultural Society, held in December last, the committee on New Plants, Flowers, Fruits and Vegetables, presented their annual report, and from it we extract that portion relating to new flowers: The fruits will be named under our Pomological Notices. It will be recollected that the Society makes an annual appropriation of one hundred dollars to be awarded for plants that are strictly new, or for the first time presented before the society. The

committee report the following as coming under this class of objects:—

1. A new plant of the natural order Melastomacææ, supposed to be a new species of the genus *Lasiandra*—exhibited by Robert Buist.

2. Six seedling Azaleas raised from the seed of the Chinese kinds or *indica* and *phœnicea*, impregnated with *Rhododéndron hybridum* and *Azalea ledifolia*—exhibited by Peter Mackenzie.

3. A seedling *Caméllia japonica*, exhibited by Peter Mackenzie—[described in our Vol. IX, p. 149.]

4. A seedling tea rose exhibited by Peter Mackenzie.

5. Three seedling Azaleas exhibited by Peter Mackenzie.

6. A seedling *Cèreus* exhibited by Peter Mackenzie.

7. A seedling *Cèreus* exhibited by Wm. Chalmers, Jr.

8. A new *Diplacus*, raised from seed brought home by the United States Exploring Expedition—exhibited by Robert Buist.

9. A new species of *Francisea* exhibited by P. Mackenzie.

10. A seedling pæony, described as the product of seed obtained from *Pæonia Moútan papaveracea* impregnated with the pollen of the *P. Moútan* var. *Bánkсия*—exhibited by John Sherwood. [The seed was sown in 1838. It is described as a beautiful hybrid, flower quite double, petals large, white shaded in the lower half with delicate pink, and had from the attachment of its claw one fourth of length, a broad blotch of deep carmine. The species was exhibited last May, and was the first flower on the plant.]

11. A dozen seedling carnations, and a seedling ever-blooming rose, raised from the seed of Bourbon Madame Desprez—named Henry Clay—exhibited by Peter Raabe.

14. Seedling dahlias, twenty in number, exhibited by Gerhard Schmitz, and seedling Junipers, Pines, Thuja, &c., from seeds by T. Hancock.

The only objects which the committee deem worthy of premium are

1. To Robert Buist for the *Melástoma*, a premium of five dollars.

2. To Peter Mackenzie for Azaleas, a premium of five dollars.

3. To John Sherwood for a new *Pæonia*, a premium of five dollars.

New Seedling Chrysanthemum.—At the previous meeting of the society, Nov. 21, Mr Robert Kilvington presented a

new seedling chrysanthemum, named Mrs. Cope, in honor, we presume, of the lady of the President of the Society. A premium was awarded for it. Mr. Kilvington has been very successful in raising seedling chrysanthemums, and at the same meeting he was awarded a *special* premium for a beautiful display of seedlings.

Mr. Feast's Seedling Azaleas.—Mr. Feast is now offering for sale plants of his new seedling *Azalea cremèria*, which is stated to be a cross between *Rhododendron* and *Azalea phænicea*. It has very dark green foliage and large clusters of rosy crimson flowers, very showy. Mr. Feast has numerous other seedlings, many of which are said to be exceedingly beautiful.—*Ed.*

Dilleniaceæ.

CANDOALLEA

tetrândra Lindl. Tetrandrous Candollea. A green-house plant; growing 2 feet high; with yellow flowers; appearing in spring; a native of Swan River; increased by cuttings; grown in peat, loam and sand. *Bot. Reg.* t. 50, 1843.

A new and rather interesting green-house plant, with oblong cuneate dentate leaves, and solitary yellow flowers, at the termination of all the principal shoots; remarkable also, “for the large size and orange color of the aril of its seeds.” It is a native of Swan River, and was raised from seeds received from thence. This species grows freely in any good soil, but prefers a compost of peat, loam and sand. It blooms well in a pot, but when it can be turned out into the soil does much better; but whether potted or planted out, like many New Holland plants, the neck (or base of the stem) should be a little elevated, to prevent any danger of damp in winter. Water liberally in summer and more cautiously in winter. Easily increased by cuttings under ordinary management. (*Bot. Reg.*, Oct.)

HIBBERTIA

perfoliata Hugel Thorough-wax Hibbertia. A green-house plant; with yellow flowers; appearing in April and May; a native of New Holland; increased by cuttings; grown in peat loam and sand. *Bot. Reg.* t. 69, 1843.

“Really a beautiful Swan River shrub, particularly well adapted to pot culture, on account of the neatness of its appearance at all seasons.” The shrub is erect in its habit, with obovate, oblong, perfoliate glaucous leaves, from the axils of which spring the flowers, which are large, bright yellow, and as showy as those of the old *Hibbertia volùbilis*, and quite free from the offensive odor of that species. When

the plant first flowered it was of one uniform glaucous hue, almost as much so as the fruit of the plum when ripe and covered with bloom; this appearance gradually goes off and the foliage comes out a deep green. It flowered in the garden of the London Horticultural Society in May last. Its treatment is similar to all New Holland plants: the compost loam, peat and sand in equal parts, and the pots well drained. In the summer season its needs an airy situation, but should be shaded from the hot sun. Increased freely by cuttings. (*Bot. Reg.*, Dec.)

Saxifragææ.

SAXIFRAGA

ciliata Royle Fringed Saxifrage. A hardy perennial; growing a foot high; with white flowers; appearing in May: a native of Northern India; increased by division of the root or by seeds; grown in any good soil. *Bot. Reg.* t. 65, 1843.

A robust and hardy perennial, similar in habit and treatment to the common species of our gardens, and growing freely in an open border not subject to damp in winter, nor too much exposed to the sun in summer. The leaves are ovate and obtuse as to the ends, and extremely hairy; the peduncle slender; the inflorescence an erect but lax spreading panicle. Dr. Royle, describes it in his *Illustrations of the Flora of Himalaya*. The drawing was made in the garden of the London Horticultural Society, in March, 1843, and the plants were raised from seeds received from the Botanical Garden of Saharanpur. (*Bot. Reg.*, Dec.)

Cactææ.

Epiphyllum Russellianum. *Pax. Mag. Bot.*, Vol. X. p. 295. This beautiful species is figured in Paxton's Magazine for December. In our Vol. VI. pp. 75, 100, we have already recorded a full description of it, and we notice it now merely to call the attention of cultivators and amateurs of the tribe to its great beauty and merits. In habit it is similar to the old *E. truncatum*, but is more slender and shorter jointed, but unlike that species it produces its flowers from March to May. Mr. Paxton states that its "principal merit is in the hue of its flowers, which is most peculiar and exquisite. It excels that of almost all Cactæ, and even a majority of orchidææ. It is like that of *E. truncatum*, and also of its variety *violaceum*, yet different from both. We can only describe it by saying the violaceous tint is not upon the crimson scarlet as in other flowers. It

is not spread over part of the surface of another color, merging into it in places. It is really *mixed* with the crimson in the texture of the flower, so as to produce one uniform color."

It succeeds very well if reared from a cutting, and grown on its own roots, and in this state makes a capital plant for placing on a high shelf or pedestal, where its shoots gracefully depend; it will moreover, grow stronger and have a fine effect when in bloom, if grafted standard high on the *Cereus triangularis* or *speciosissimus*. We must again recommend the *E. Russellianum* as worthy of a place in every collection of plants.

A fine show of various species and varieties of *Cactæ* will be in bloom in the collection of Hovey & Co., from February to May. Besides the generally cultivated kinds there will be several new seedlings received from Mr. Feast of Baltimore, some of which were raised by himself and others received from London.

Elæagnæcæ.

ELÆAGNUS

parviflora *Wall.* Small leaved Oleaster. A hardy (?) shrub; growing 10 feet high; with white flowers; appearing in June and July; a native of Kamaon; increased by seeds or suckers. *Bot. Reg.* t. 51, 1843.

In the climate of England this is a hardy shrub, or small tree, growing freely in any good loamy soil. It flowers in June and July. The leaves are oblong, and of a silvery hue. The flowers, which are small and whitish, appear in short, dense corymbs, and though rather inconspicuous, are "deliciously sweet." Dr. Lindley thinks this species is the *Elæagnus refléxa* of the Continent. It was raised from seed received from Dr. Royle, in the garden of the London Horticultural Society. (*Bot. Reg.*, Oct.)

Myrtæcæ.

BARRINGTONIA

speciosa Showy Barringtonia. A stove plant; growing 10 feet high; with white flowers; appearing in spring; a native of India; increased by cuttings; grown in loam, sand and peat. *Fax. Mag. of Bot.* Vol. X. p. 241.

A splendid stove plant, or shrub, of the Myrtaceous family, growing to the height of six or eight feet. The branches are numerous and spreading. "The leaves often a foot or more in length, of a strong and firm texture, with a lucid surface, and of a beautiful bright green. The flowers are numerous, large and white, with a vast number of stamens of a deep sanguineous purple. They are produced from

the upper parts of the branches, and flower chiefly in the evening.”

It has flowered, we believe, for the first time in England, in the collection of Col. Baker, of Salisbury, who has had the plant thirteen years. Its treatment has been as follows: The first plant, when about eight feet high, was headed down, and the top of it, about a foot long, was put in as a cutting. It rooted and grew freely. The third year, the top was taken off and treated like the parent. The plant which has now flowered, is four years old; it was topped a year ago last March, and was kept without a drop of water from November till March. It was then started into growth. In May, it had made shoots four feet long, when it was turned out of the pot, the soil shook away, and the roots cut back. It was then potted in a twelve-inch pot, in a mixture of charcoal, loam, sand and peat, and, on the 4th of June, threw up a fine spike of flowers. It is highly fragrant. Readily increased by cuttings. (*Pax. Mag. Bot.*, Dec.)

Leguminosæ.

BOSSIAEA

paucifolia *Benth.* Few-leaved Bossiaea. A green-house plant; growing 2 feet high; with crimson and yellow flowers; appearing in July; a native of New Holland; increased by cuttings; grown in peat, loam and sand. *Bot. Reg.* t. 63. 1843.
Syn. *B. virgata.* *Hooker in Bot. Mag.* t. 3986. 1842.

When well managed, a pretty little green-house shrub, with small, oblong, linear foliage, “gaily sprinkled with yellow and crimson blossoms.” Like many New Holland shrubs, it possesses but little beauty unless carefully grown; it should not be allowed to grow straggling, but should be kept dwarf, when it forms a compact bush. Its cultivation is simple. It should be potted in rough peat, mixed with little loam and sand; and the stem should be little elevated to prevent damp. It requires a good supply of water in summer. Readily increased by cuttings. (*Bot. Reg.*, Dec.)

OXYLOBIUM

obovatum *Part.* Obovate-leaved Oxylebium. A green-house plant; growing a foot high; with yellow and brown flowers; appearing in April; a native of New Holland; increased by cuttings; grown in peat, loam and sand. *Pax. Mag. Bot.* Vol. X. p. 243.
Syn. *O. euneatum.*

A very showy species, with leaves like the *O. retusum*, that is, obovate, with the broadest part at what is generally the pointed end. They appear in whorls of three, and

from the axils the flowers appear in dense capitate, many-flowered, racemes, of a deep yellow and rich brown. This species, like most of the New Holland plants, requires some skill in its management, and when properly treated, blooms most prodigally. Neglected, however, it is an indifferent looking plant. Introduced about two years ago. The soil should be rough peat, loam and sand, and a bushy habit given to it by repeatedly pinching off the young shoots. It is increased by cuttings. (*Pax. Mag. Bot.*, Dec.)

Anacardiaceæ.

DAVAUA

longifolia Lindl. Long-leaved Davaua. A half-hardy shrub; growing 4 feet high; with white flowers; appearing in June and July; a native of South America; increased by seed or cuttings; grown in any good soil. *Bot. Reg.* t. 59. 1843.

In the climate of England, this is a pretty evergreen shrub; but, in our gardens, except at the south, it would probably require the protection of the frame or green-house. It has oblong, linear leaves, and the flowers, which are greenish white, and quite small, appear in short, dense corymbs, at the axils of the leaves, so as partially or quite envelope the shoots. The genus has considerable affinity to *Rhus*, smelling of turpentine, and having a caustic juice. Increased by cuttings or seeds, and cultivated in any good soil. (*Bot. Reg.*, Nov.)

Sileneæ.

VISCARIA

oculata Lindl. Dark-eyed Viscaria. A hardy annual; growing a foot high; with rose or lilac flowers; appearing in summer; a native of Algiers; increased by seeds. *Bot. Reg.* t. 53. 1843.

Syn. Lychnis oculata Jas. *Backhouse.*

A hardy and pretty annual, similar to the old *Agrostemma Cœli rosa*, but distinguished from that by a dark eye, a short and slightly emarginate appendage to the petals, and the surface of the seed vessel rough, with fine granulations. The flowers are of a deep rose color, or lilac shade. The seed may be sown in patches, in April or May, in any good soil, and thinned out to proper distances. They do not transplant well.

The genus *Viscaria* of Röhling, adopted by Endlicher, is distinguished from *Silene*, by having five styles, and from *Lychnis*, by its ovary being imperfectly five celled. It includes the *Agrostemma Cœli rosa* of Linnæus, and the *Lychnis viscaria*, *alpina*, *læta* and *corsica* of authors. (*Bot. Reg.*, Oct.)

SILENE

speciosa Pax. Showy Catch-fly. A half-hardy perennial plant; growing a foot high; with scarlet flowers; appearing in the autumn; increased by division of the root; grown in any good soil. *Pax. Mag. Bot.* Vol. X. p. 219.

A very brilliant species, similar to *S. laciniata*, but of a better habit, and with flowers of a more splendid hue. The leaves are opposite, sessile, long and lanceolate, and the flowers in axillary and terminal panicles. The petals are divided into two principle segments. The plant is supposed to have been brought from some of the Continental gardens into the London collections. Its management is rather delicate. It should be grown in a porous and very fibrous loamy soil, with a small portion of rough peat and but little sand; and the pots well drained. It may be wintered in the green-house, or in a dry, airy pit. Increased by division of the root or by cuttings. (*Pax. Mag. Bot.*, Nov.)

Ericaceæ.

RHODODENDRON

aprilis Herb. (Garden variety.) A hardy shrub; growing 4 feet high; with pink flowers; appearing in April; a hybrid variety; increased by cuttings and grafting; grown in loam and peat. *Bot. Reg.* t. 62. 1843.

One of the elegant hybrid productions of the Rev. Dean of Manchester, from the seed of *Rhododéndron pónticum*, fertilized by the evergreen Davurian Rhododendron. The flowers are of a delicate flesh color, tinted with pink, and have a peculiar soft and exquisite appearance. It flowers in April, from whence its name. The foliage is only moderately large, and the head of flowers of good size. It is not yet in the hands of the trade. (*Bot. Reg.*, Dec.)

In the collection of Hovey & Co. the following Azaleas will be in bloom in February and March:

A. variegata, *ledifolia*, *phœnicea*, *Danielsiana*, *speciosa*, *speciosissima*, double red, *purpurea superba*, *formosa*, *purpurascens*, *Còpei*, *ignescens*, *spléndens* and *superbissima*; besides several seedlings, raised by Mr. Feast, of Baltimore, and several by Mr. Mackenzie, of Philadelphia.

Gesneriæ.

ACHIMENES

hirsuta Lindl. Hairy Achimenes. A green-house plant; growing a foot high; with rose-colored flowers appearing in summer; a native of Guatemala; increased by offsets of the roots; grown in peat, loam and sand. *Bot. Reg.* t. 55. 1843.

“Another acceptable addition to the charming genus *Achimenes*,” which will probably be as great a favorite as any of the species. It approaches nearest to *A. pedunculata*, and like that species, is disposed to bear little bulbs at

the axils of the leaves and branches. The foliage is large, cordate, serrate and hairy; the flowers are of a fine rose color, delicately spotted in the throat, and about two thirds the size of *A. longiflora*. The flowers are solitary at the axils of the leaves, on long slender peduncles. Its cultivation is the same as that of the others; that is, it should be potted in light compost, consisting of peat, loam and sand. The roots should be potted as soon as they commence growing in the spring; shift as the plants require it, and water freely at the roots in summer, but very little over head.

The introduction of this species was rather singular, and shows the importance of carefully examining the earth, moss, &c., in which the plants are often packed for exportation. The *Achimenes* was hidden among a mass of Orchidaceous plants, imported from Guatemala, and sold at auction a few months ago. Mr. Henderson, who purchased them, accidentally detected it; and thus a plant, which must have been often sent home with fruitless care on former occasions, was received without any attention whatever. (*Bot. Reg.*, Nov.)

multiflora Hooker. Many-flowered *Achimenes*. A green-house plant; growing a foot high; with lilac flowers appearing in summer; a native of Brazil; increased by offsets; grown in sandy loam and heath soil. *Pax. Mag. Bot.* Vol. X. p. 223.

The present makes the sixth species which has been introduced within two or three years, viz., *A. longiflora*, *grandiflora*, *rosea*, *pedunculata*, *hirsuta* and *multiflora*; add to these the old *coccinea*, and we now have seven species.

In general appearance, this comes near to *longiflora*, both in size, shape and color of the flowers. The foliage is shortly petiolate, ovate, and rather coarsely serrate; the peduncles, as in the others, axillary and solitary. The flowers are nearly two inches broad, of bluish tint, with a dash of pink, which gives them a lilac shade; and the edge of the corolla is strongly and prettily fringed. This and the profusion in which they are produced, renders the *multiflora* a distinct and desirable plant, equally admired with the *longiflora*. It requires nearly the same treatment as the other species, but is rather more impatient of moisture; the pots, therefore, should be well drained, and not too large for the plants. Its native place, according to Dr. Hooker, is "on dry banks in woods, in the province of Goyaz, Brazil." (*Pax. Mag. Bot.*, Nov.)

Hybridization has already commenced between the dif-

ferent species introduced; as yet, however, no remarkable varieties have been obtained; but there is no doubt, with skilful management, many new and extremely beautiful varieties await the experiments of cultivators.

Scrophulariàcæ.

TETRANEMA, (from *tetra*, four, and *nema*, a filament, on account of their being four filaments in this genus,) *Benth.*

mexicànum, *Benth.* Mexican Tetranema. A greenhouse plant; growing a foot high; with purple and white flowers; appearing in summer; a native of Mexico; increased by division of the root; grown in leaf mould and sandy loam. *Bot. Reg. t. 52, 1843.*

Syn: *Pentstèmon mexicànus Hort.*

Under the name of *Pentstèmon mexicànum*, this plant has been received from Belgium, where it was introduced from Mexico. But Mr. Bentham, who has given particular attention to this class of plants, is of opinion that this is certainly a new genus, very near *Pentstèmon*, with the same calyx and corolla, but without any trace (or very little) of the sterile stamen, so conspicuous in *Pentstèmon*. It is a greenhouse plant, growing eight to twelve inches high, with an almost stemless habit, and with a "profusion of little corymbs of showy purple and white flowers, which rise up from among the leaves on long purple scapes." It should be kept rather dry in winter, and in spring repotted in a light free soil, chiefly leaf mould and sandy loam, and placed in the greenhouse, where it will flower all summer. It is propagated from seeds or cuttings. Probably in our less humid climate it might be managed as a frame plant, and turned out into a dry border in summer. It is a very pretty plant. (*Bot. Reg.*, Oct.)

VERONICA.

speciosa Paxl. Showy Speedwell. A greenhouse plant; growing from twelve to eighteen inches high; with blue flowers; appearing all summer; a native of New Zealand; increased by cuttings; grown in light open compost. *Pax. Mag. Bot. Vol. X. p. 247.*

A very showy and beautiful species of the *Verónica*, brought from New Zealand in 1841. Its general aspect is that of *Lisiánthus Russelliànus*, but it is a robust growing, decidedly evergreen shrub, with an abundance of neat foliage, and an extraordinary number, as well as succession, of flower spikes, about three inches in length, densely clothed with deep blue blossoms. These flower spikes appear singly at the axil of every leaf, and as the blossoms fade off from blue to white, they give a pretty variety to the plant. Add to this that its habit is particularly clean

healthy and compact, with a profusion of bright green shining foliage,—and the species may be considered as a very beautiful and desirable plant. It should be grown in a light open compost, full of fibre, and placed in a moderately large pot. It begins to bloom in August and continues till December. Propagated by cuttings. (*Pax. Mag. Bot.*, Dec.)

Amaryllidaceæ.

ALSTRÆMERIA

lineatiflora *Fl. Peruv.* Lined *Alstræmeria*. A greenhouse plant; growing eighteen inches high; with pink striped flowers; appearing in summer; a native of Peru; increased by division of the roots; grown in loam, peat and sand. *Bot. Reg.* t. 68, 1843.

Very similar to the old *A. Pelegrina*, and like that species, “one of the finest of the genus.” The flowers are of a delicate pink shade, each sepal distinctly lined with pale green, and the two upper ones spotted with crimson. Its habit and mode of growth are like the other species. The roots are tuberous, and spread horizontally, and in consequence the plants require large pots, which should be half filled with potsherds. The soil in which it thrives best consists of half loam, and the other half peat and sand. Keep rather dry till January, when the roots should be repotted. Increased from seeds, and by offsets from the roots. All the *Alstræmerias* are pretty plants and deserving of cultivation, but we rarely see them in our collections; the *A. psittacina* is the most common. (*Bot. Mag.*, Nov.)

Iridaceæ.

ELEUTHERINE, *W. Herb.* MS.

anónala *Herb.* Anomalous *Eleutherine*. A greenhouse bulb; growing eight inches high; with white flowers; appearing in spring; a native of the West Indies; increased by offsets; grown in light soil. *Bot. Reg.* t. 57, 1843.

A “singular little plant,” with stems of white flowers, somewhat resembling a *Moræ'a*, or a *Márica*; but though allied to both belonging to neither. The learned Dean of Manchester, who has studied this family carefully, has placed it in the genus *Eleutherine*, established by him some time ago, when attempting an arrangement of the *Sisyrinchiums*; the type is the *Márica plicàta* of the *Bot. Mag.* It flowered in the garden of the London Horticultural Society, and its origin is unknown. Cultivated the same as other *Iridaceæ*. (*Bot. Reg.*, Nov.)

Liliaceæ.

Lilium testaceum, which we noticed in our last volume, (IX. p. 185.) is figured in *Pax. Mag. Bot.*, Vol. X. p. 221, where a highly finished drawing is given. In addition to what is stated in our previous notice, we learn the following in relation to the treatment of the species:—"Properly managed they are among the noblest flowers we possess. Yet good specimens are far from frequent. The principal thing that they require is rich, but light soil; such as an open, fresh loam, with a proportion of rotten dung incorporated. The latter both enriches the other earth, and serves to keep it light. They should not be grown more than one or two years in the same soil. In multiplying this, and the rest of the species, a single scale, taken from the bulbs, will suffice to produce a young plant; and some clever propagators will even make four or five plants of each scale, by slitting it into as many pieces. (*Pax. Mag. Bot.*, Nov.)

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Remarks on new Dahlias.—The Dahlias enumerated by "A Subscriber" are some of the most uncertain bloomers in cultivation: and if he succeeded with them in the year 1842, the chances were that he failed in the following season. Sussex Rival I should not advise him to retain in a limited collection; it is seldom good, and is too small. Fanny Keynes never was, even at the best, more than a second-rate flower; it is of a common color, and totally destitute of style or character. Ruby was a good flower in its time, but is quite gone by: it is too much quilled for the present day; besides, it is thin and wanting in color. Egyptian King is a good flower when in perfection, but is very uncertain. Scarlet Defiance never was good, although it sometimes promises well early in the season; later, it becomes quilled, flat, and deeply-serrated on the edge of the petal. I noticed, during the year 1842, that every Dahlia, of which the color had any tendency to scarlet, was deeply notched—indeed to so great an extent, as to give the petal the appearance of a saw; the indentures were, in some instances, more than a quarter of an inch deep. This did not happen to dahlias of any other color than red or scarlet: nor did it again occur during the season just past, even in the flowers in which it

was most conspicuous during that preceding. I apprehend that any solution of this unusual, and to me inexplicable circumstance, is impossible; but it is clear that the color of the flower, or whatever gives rise to it, made it susceptible of some influence from which flowers possessing other colors were exempt. Essex Vivid is a very uncertain bloomer; it is never really full, an often single or semi-double. Hylis is a flower of good color, and is firm and clean in petal; I have often regretted that it should be no better than it is, for, notwithstanding its defects, it possesses style. Metalla was a good dahlia, and is even now sometimes seen in good character; but I have seldom known it to be so bad as during the present year: the petal is, however, generally very crumpled. I have seen Conductor occasionally very beautiful, but this is very seldom: it is usually flat, much quilled towards the centre, and too uncertain a bloomer for a small collection. I have not grown the Bishop of Salisbury. The last dahlia season was altogether the best in my recollection; but no doubt, in consequence of the very dry weather that occurred during the blooming time, in a sandy soil many would fail that might have done well enough in the same soil in a wet season. This would be especially the case with thin flowers, which would, under such circumstances, be thinner in petals than usual, and soon show the disc; whilst very double flowers would, from the same cause, more rapidly expand, and lose their scaly centres. Having now made free with the characters of "A Subscriber's" flowers, I would venture to recommend to him a dozen of which I think he will report favorably—some of them he no doubt possesses, viz: Turvill's Essex Triumph, Trenfield's Admiral Stopford, Smith's Sir R. Sale, Edward's Mrs. J. Richardson, Thompson's Vivid, Widnall's Queen, Jackson's Lady Cooper, Hudson's Princess Royal, Bragg's Antagonist, Dodd's Prince of Wales, Mitchell's Mrs. Kelly, Keynes' Standard of Perfection. Essex Triumph is the flower that was so successfully exhibited at the meetings of the Floricultural Society of London. It is far from being faultless, but is constant, and one of the most desirable dahlias grown: it is very globular, and always perfect in the centre; its defects are too great a length of petal, and want of substance in the back ones, which generally become flimsy or die before the bloom is in perfection; another fault is, that notwithstanding its fine dark color, there is a silvery white hue over the face of the petal, that gives the flower a dull appearance. Adm. Stopford this year was the only rival that could successfully compete with Essex Triumph, and the best blooms I have seen were of the former; but this will not, I imagine, generally be the case, for it is not constant, and in less favorable seasons is not good in the centre; the petal is broad and bold, and the color, though variable, is very good and glossy. Sir R. Sale is another flower approved by the Floricultural Society, and was proved to be one of the best of the season. Mrs. J. Richardson, a white and purple, was also submitted to the same test, and justified the opinion given of it; it is a very useful flower and one of the best of its class. Vivid, though not by any means a first-rate flower, is an acquisition, and the best scarlet we yet possess. Widnall's Queen is too well known to require comment; it is generally classed as a liliac, but is certainly nearer rose color than any other dahlia at present in cultivation. Lady Cooper and Princess Royal are very beautiful when well grown, but are generally too hard and scaly in the centre. Antagonist, though un-

certain, is quite an acquisition; the white is very pure and the petal good; the centre is the point in which it fails. Dodd's Prince of Wales is decidedly one of the best yellows, although the color is not very pure, and the centre apt to be sunk; but the latter fault does not interfere with the globular form and general outline, and therefore does not detract much from its value. Mrs. Shelley was much exhibited last season, and was, with me, the finest flower in the garden; every bloom came perfect, save a little disposition to quill in the centre, which, increasing towards the end of the season, made the back of the petals too visible. Standard of Perfection is a new dahlia; it is hazardous, therefore, to offer a very decided opinion upon it; it may, however, safely be stated that it possesses style and character of first-rate order, and although not a large flower was the most successful seedling exhibited in the present year, and was the only dahlia of 1842 that was placed in the first class by the Floricultural Society.—(*Gard. Chron.*, 1843, p. 877.)

Zinc Labels to write on with a common pencil.—Slightly rub with pumice stone the part of the label upon which you wish to write, then write upon it with a common lead pencil, and when the letters have been exposed to the air for two or three days they are indelible. If you wish to efface the writing, you must rub the label with the pumice stone, and if the labels become covered over with earth or oxide, rub your finger, slightly wetted, over them, and they will re-appear. Old zinc is preferable to new for this purpose. M. Paul Manoury, gardener in the Garden of Plants, of Caen, made this discovery several years ago.—(*Rev. Hort.* translated in *Gard. Chron.*, 1843, p. 911.)

Pear Training.—Going over the pear quarter at the Royal Gardens at Versailles, I found from the head gardener, that he considered the tying down the branches a sufficient check to over growth, without the assistance of root pruning, except as regards any very free growing varieties. Nothing could, to my mind, exceed the neatness and good bearing of the pear trees; they were of a conical shape, and all the branches tied down so as to present the appearance of a conical chandelier, and of course much more bearing wood obtained than in the trees which were stunted by root pruning.—(*Gard. Chron.* 1843; p. 841.)

ART. II. Foreign Notices.

FRANCE.

Cercle Generale de Horticulture de Paris.—In our volume for 1843, (IX. p. 66.) we gave an account of the *first exhibition* of this Society, recently established, and we now offer the report of the *second*, knowing from the high character of the exhibition, it will interest all amateurs of flowers and fruits.

The second exhibition of this Society was given from the 19th to 25th September, at the Orangerie of the Louvre. As this was the only autumnal show in or within 30 miles of Paris, a good sprinkling of fruit, plants,

and Cut Flowers was anticipated. Country florists and amateurs who make but one annual visit to the capital, look forward with anxiety to the spring and autumn shows, which are considered as botanical *réunions* from the most distant parts of France. Alas for the disappointment that awaited them! for a more meagre display has been seldom witnessed, even in Paris: the room was not above half filled, and the Society is much indebted to Messrs. Cels for sending a very large collection of about 500 plants. Past failures have not taught wisdom to the Societies here, and to whatever cause it may be attributable in this case, whether to the long continuance of cold and wet in spring and summer, the dry hot weather in August and September, or the preposterous regulation of keeping open the show for six days; certain it is that but few fine specimens of rare or good plants were to be seen, and the necessity of replenishing cut flowers, such as Roses and Dahlias, every other day, was quite sufficient to deter very many from exhibiting. These observations are not applicable to the fruit, but even in this department but comparatively few persons showed; nevertheless some of it was splendid, especially Pears, Apples, and late Peaches, which were all that could be wished; the Grapes were far inferior to those of last year; some of the bunches of Gros ribier de Maroc, Gros Damas Blanc, Chasselas de la Palestine, de Bar sur Aube, Muscat d'Alexandrie, and Cornichon Blanc, were very large, but none of them had that luscious golden appearance which generally characterises the Grapes here. The Melons, of which there were only three or four varieties of Cantaloupe, had nothing to recommend them. The Cayenne Pines, both Lis and Epineux, were very fine, and weighed from 10 lbs. to 12 lbs. each. There were also two seedling Pines of great beauty, and very large fruit; one of them of a remarkably waxy sea-green color. As to Vegetables, there were literally none, except Patates and Aubergines; one of the former, however, weighed 5 lbs. Cut flowers (Dahlias and Roses), were numerous: but the late dry weather has been any thing but favorable, and the blooms were generally small. Mr. Laffay exhibited a seedling Perpetual Rose, named *La Reine*, which appears to be an hybrid, between *Quatre Saisons* and *Ile de Bourbon du Luxembourg*; the flower is very large, petals well formed and cupped, and of a bright rose, the odour like *Quatre Saisons*, and of the same habit of growth; it is not, however, very double, but notwithstanding, it cannot fail to become a favorite, and will be, no doubt, in every good collection, when it is let out, which will be as soon as he gets 200 subscribers at one guinea each. The Society offered silver and bronze medals, which were awarded for the following subjects. For the finest collection of Fruit, 1st prize, M. J. L. Jamin; this contained 110 varieties of Bergamot, Beurré, Doyenné, and other Pears, 20 varieties of Apples, besides Plums, Peaches, Grapes, and certainly was a splendid collection. Among the Pears were Bergamotte de Pentecôte, Crassane, Libettent, Beurré d'Aremberg, d'Anjou, d'Angleterre, Moiré, Incomparable, Capiaumont de Flandres, Doyenné Gris, Doré, d'Hiver, Louis, Colnar d'Hiver, Blanc d'Aremberg, Bezi Sanspareil, Belle de Berri, Bon Chrétien d'Eté, Napoleon, Gros Colnar, Van Mons, Enfant Prodigue, Ferdinand de Meister, Marie Louise, Louise Bonne d'Avranche, Passe Colnar Doré, Prince de Ligne, Van Mons Léon Leclerc, Williams, Duchesse d'Angoulême, St. Germain d'Hiver, Panaché, Reine des Pays Bas, Saint Michel d'Archange, Chaptal, Catillac

Belle Angevine, &c., &c. *Apples*, Hawthorndean, Beauty of Kent, Alexander, Pearmain, Belle Josephine, Gravenstein Pippin, Quarendon. *Pears*: Mirabelle d'Octobre, Coe's Golden Drop, Waterloo, Imperial, Koetche d'Italie and d'Allemagne. *Peaches*: Galande, Bourdine, Téton de Venus, Violet Nectarine. *Grapes*: Pied de perdrix, black Hamburg, &c.; 2d Prize, M. Boissy, for 40 varieties of *Pears* and *Apples*. For the finest specimens of *Fruit*: 1st prize, M. Souchet. This contained 16 varieties of *Pears* and *Apples*, and 2 of *Peaches*; not simply one or two, but a basket of each kind, all equally large and in excellent condition, and certainly was a splendid collection; the varieties were, *Pears*: Beur-ré d'Été, Incomparable, D'Arenberg, Saint Germain, Doyenné d'Été, Belle Angevine, Bon Chrétien de Curé, Doyenné d'Hiver, Cratsane, Duchesse d'Angleterre, Grosse de Bruxelles, Catillac. *Apples*: d'Api de Canada, and Calville Blanc. *Peaches*: Bon Ouvrier and Belle Beausse; 2d Prize, M. Lepere, for Bon Chrétien Colmar, Doyenné doré, Doyenné d'Hiver, Incomparable, Duchesse d'Angoulême, St. Germain, Beur-ré d'Arenberg. *Apples*: Calville blanc and de Canada. *Peaches*: Belle Beausse, Bon Ouvrier, Bourdine, and Téton de Venus; this collection was also excellent, but the specimens were neither so numerous or large as the former. *Grapes*: 1st prize, M. Barbot, for Muscat Blanc, Violet de Frontignan, d'Alexandrie, Chasselas blanc Musque, Noir Musqué, de la Palestine, Rose, Violet, de Bar sur Aube, Suisse, Petit Gromier, Gros Gromier du Cantal, Frankantal, Bourdelais, Gros Maroc Hatif, Gros Ribier de Maroc, Gros Damas blanc, Poulart du Jura, Madeleine blanc, Noir, Ciota, and Cornichon blanc. *Pine-Apples*: 1st prize, M. Bergmann, for Cayenne Lis, and Epineux. *Seedling Pine-Apples*: 1st prize, M. Gontier, for two fine plants in fruit for the first time. *Hot and Greenhouse Plants*: 1st prize, Messrs. Cels, for a large collection, containing upwards of 200 specimens of Palms, Orchidaceæ, Ferns, &c., &c., both in and out of bloom; among them were *Areca sapida*, *Caryota urens*, *Chamæops excelsa* and *humilis*, *Chamædorea elatior*, *elegans*, *lindeniana*, and *oblongata*, *Cocos australis* and *nova species*, *Desmoncus polyanthos*, *Euterpe globosa*, *Fulchironia senegalensis*, *Gulielma speciosa*, *Latania rubra*, *Oreodoxa regia*, *Thrinax argentea* and *parviflora*, *Seaforthia elegans*. *Orch.* *Oncidium flexuosum*, *papilio*, and *trulliferum*, *Acropera Loddigesii*, *Catasetum cristatum*, *Epidendrum cochleatum*, and *Zygopetalum maxillare*, *Alctris fragrans*, *Archimenes longiflora* and *pedunculata*, *Echmea fulgens*, *Centradenia rosea*, *Begonia coccinea*, *dregii*, *fischerii*, *manicata*, *peltata*, and *zebrina*, *Cecropia digitata* and *discolor*, *Cedrela odorata*, *Cerbera fructicosa*, *Crinum amabile*, *Clusia rosea*, *Cycas circinalis* and *revoluta*; *Doryanthos excelsa*, *Dracæna Draco*, *elliptica*, *terminalis*, for. var., and *umbraculifera*, *Echites melaleuca* and *paniculata*, *Gloxinia discolor* and *rubra*, *Gesnera zebrina*, *Inga Harrisonii*, *Justicia carnei* and *cristata*, *Nepenthes distillatoria*, *Strelitzia angusta* and *reginæ*, *Stephanotis Thourarsii*, *Zamia muricata* and *pungens*, &c.,

Cacti: 1st prize, Messrs. Cels, for a large collection, containing 120 varieties of *Echinocactus*, *Echinopsis*, *Mammillaria*, &c., among which were some very fine specimens of *aulacogonus*, *cornigerus*, *erinaceus*, *ancistratus*, *unthus*, *formosus*, *tortuosus*, *scopa*, *marum*, *cirrhifera*, *elephantidens*, *caput Medusæ*, *spinossima*, and *senilis*; 2d prize, M. Modeste Guerin, for 50 vars. of *Echinocactus* and *Mammillariæ*. *Roses in pots*, 1st prize,

M. Paillet, for 60 vars. of Bengales, Thés, Bourbons. and hybrids, among which were some tolerably good plants of Clara Silvain, Belle Octavie, Carmin d'Yebles, General Sayez, Fredric, La Pactole, Barbot, Triomphe de la Guillotière, Bougère, Gombault, Princesse Marie, Niphotos, Comte de Paris, Arance de Navaro, Triomphe d'Orleans, Reine Victoria, Manzcals, Thérèse, Isabelle, Comte d'Eu, Prince Charles, Docteur Roques, Reine, Comice de Seine et Marne, Grand Capitaine, Rivers, Prince Albert and Clémentine. 2d prize, M. Levêque, for 60 varieties. *Cut Roses*, 50 varieties, 1st prize, M. Gauthier, for Prince Albert, Comte de Paris, Madame Luffay, Bernard, Coquette de Montmorency, Reine des Anateurs, Rivers, Joséphine, Améne Duval, Gloire de Guerin, Belle Fabert, Reine Victoria, Louis Bonaparte, Isaure, Fulgorie, Luxembourg, Aurore, Hélène, Bougère, Lamarque, Paul Joseph, Madame Desprez, Bouquet de Floce, Comice de Seine et Marne, Jaune Desprez, Docteur Roques, Emile Courtier, Aimée Vibert, &c. 2d prize, M. Margottin, for 30 varieties. *Seedling Rose*, 1st prize, M. Luffay, for Hybrid perpetual, La Reine. *Neriums*, 1st prize, M. Mabire, for album duplex, atropurpureum, odoratissimum, (very fine), nigrum, speciosum, candidissimum, cupreum, elegans, gran litorum, novum, lacteolum, Mabirii, ochroleucum, purpureum plenum, roseum grandiflorum, splendens coccineum, macrophyllum, maximum, splendidissimum, striatum plenum, venustum and puniceum. *Dahlias in pots*, 1st prize, M. Barbier: 2d prize, M. Dufay; both these collections were poor, the varieties being those which are cultivated for the markets. *Cut Dahlias*, 1st prize, M. Sontip, for Poiteau, Miss Chester, Favourite, Reine des Fées, Prince of Wales, Reine d'Or, Patentée, Caroline Walner, Antagonist, Beauté de Paris, Annibal, Akhbar Khan, Orion, Evêque de Nanum, Thiers, North Midland, Beauty of Sussex, Virgil, Sir F. Johnson, Dame de Beauté, Henri IV., Liberty, Die Wiesse Dame, Vandal Queen, Charivari, Eximia, Baronne Gerard, Héloïse, Mary Jane, Surprise, Alba purpurea superba, Boule d'Or, Perfection, Mrs. Shelley, Lady Cooper, Pierre Pnget, Miranda, Dumont d'Uville, &c.; 2nd prizes to M. Roblin and M. Uterhart. *New Plants*, prizes to M. Thibaut, for Phlox Van Houttei, Cypripedium barbatum, Griffonia purpurascens, Pitcairnia punicea, Dionæa muscipula, Begonia manicata, and hydrocotylifolia. Prize to M. Salter, for Archimenes pedunculata, and two seedling Fuchsias, Audot and Le Chinois. *China Asters*, prize to M. Pansart, for 25 varieties, very poor. *Fuchsias*, prize to M. Malingre, for 15 very old varieties, every one of which (except Chandlerii) is now cast aside by English growers as worthless. M. Trepet Leblanc exhibited several seedling plants of Daubentonia Tripetiana, in bloom, and although the seed was only set in February last, some of them were five feet high; the bright orange scarlet flower gives this plant a very gay appearance, but its straggling habit of growth deteriorates from its general merits.—*Paris, 29th September, 1843. Gard. Chron., 1843, p. 694.*)

 ART. III. Domestic Notices.

Destruction of the Public Conservatory by Fire.—We regret to state that the large and fine collection of plants belonging to the Public Garden in

Boston, was destroyed by fire on the morning of December 6th. The fire took from the wood-work near the smoke-pipe from the furnace, where it runs up through the floor in the centre of the house, and all the timbers under the floor had become half consumed before it was discovered by the gardener, who sleeps in a room below the conservatory. The crackling of the fire aroused him from his sleep and he immediately gave the alarm. Horses were despatched for the engines, which soon arrived, and the fire was soon got under. Not a single plant in the house was burnt or scorched, but the great heat, arising from the burning timbers, and the deleterious gases generated, completely baked the plants. In the gallery the wood of the passion flowers and other plants was dried to a crisp. In addition to this the night was exceedingly cold (14°), and the air which rushed in at the places broken in the roof to admit the water (salt water), would alone have nearly ruined the plants, without the assistance of fire. We visited the conservatory the day following the fire, and the fine large camellias and rhododendrons which we had only a short time ago alluded to when speaking of the new arrangement of the interior (Vol. IX. p. 379), presented a ruinous condition. Early in the autumn Mr. Teschemacher had, with his own hands, top-dressed and repotted all the camellias, and they were rapidly recovering, under his good management, from a sickly state, just as the fire occurred. On one white camellia we counted hundreds of flowers which were in full beauty the day previous. In this collection was one of the largest plants of the *Camellia Fløyii*. All the plants on which Mr. Teschemacher had tried, and was still trying, so many interesting experiments with guano, nitrate of soda, charcoal, &c., were among the rest, entirely lost.—*Ed.*

Purchase of the Latin School House by the Massachusetts Horticultural Society.—This Society has recently purchased the old Latin School-house in School Street, for the sum of \$18,000, possession to be given in June. The Society have already chosen a committee for remodelling or rebuilding the same as soon as operations can be commenced. It is the expectation of the Society that they will be able to complete the new building so as to hold their annual exhibition in it in September next. The Society is in a flourishing condition, and we are happy to learn that they have secured so central and excellent a location.—*Ed.*

Rats fond of the Tigridia pavonia (Tiger flower.)—Would it not be well to state that rats are very fond of the bulbs of the *Tigridia* (Tiger flower)? I put a quantity of them in my cellar this fall, and on looking over my roots a few days since, I found that the rats had eaten them up entirely. Yours, J. M. E., Worcester, Dec. 1843

Horticultural Society in New Jersey.—The amateur horticulturists of New Jersey have lately formed a horticultural society, and organized by the choice of the following officers:— R. S. Field, Esq., Princeton, *President*. Hon. W. Wright, Newark, Richard Fetters, Esq., Camden, Chas. Bispham, Esq., Mt. Holly, A. N. Archer, Esq., Burlington, Chas. C. Yard, Esq., Trenton, Roswell Colt, Esq., Patterson, *Vice Presidents*. Ira B. Underhill, Burlington, *Treasurer*. William White, Esq. Laurenceville, *Corresponding Secretary*. W. W. King, Burlington, *Recording Secretary*. Yours, T. Hancock, Burlington, Dec. 1843.

Beurre Spence Pear.—Having seen in your Magazine for October, that the Beurre Spence pear has been exhibited before the Massachusetts Horticultural Society by Mr. Vandine, of Cambridgeport, and it being the

first time I have heard of its fruiting in this country, and as there has been some doubts of there being such a pear, will you be so good as to give a description of it in your Magazine.—*Yours, W. Reid, Murray Hill Nursery, New York, Dec. 1843.*

[The pear was not the true Beurré Spence.—*Ed.*]

Horticulture in the vicinity of Boston.—We lately gave an extract (p. 33,) from one of Mr. Ernst's letters upon the state of gardening in the vicinity of Boston, detailing Messrs. Hyde's mode of destroying the curculio. As our readers may be desirous of knowing what strangers, who visit us, say of our gardens, we take the following notes from the letters, communicated by Mr. Ernst to the *Daily Atlas* of Cincinnati, in regard to the four principal nursery establishments around Boston.

Mr. Kenrick's.—In my visit to Mr. Kenrick's extensive fruit and ornamental establishment, at Brighton, I regretted to find him absent from home. This deprived me of the pleasure of an interview at his beautiful location. Mr. K.'s collection is very large, to which he is making constant and extensive additions, by importations from Europe. There being no one at hand to explain, I took a hasty ramble over his extensive grounds, and departed, in the hope that I should have found time to again visit him.

Messrs. Winship's.—In the vicinity of Mr. Kenrick's, there are other public nurseries. The Messrs. Winship is among the oldest and largest. They are perhaps the most extensive, in the *ornamental* line, of any establishment about Boston; their grounds are beautifully located, seven miles from the city, on the Worcester Rail-road, which runs directly through them, making them, by this easy and pleasant mode of access, a place of great resort. Every thing is tastefully arranged and neatly kept.

Messrs. Hyde's.—In my visit to the Messrs. Hyde, of Newton, I was much interested. In these gentlemen, I found the true New England character exemplified, "a place for every thing and every thing in its right place." In connection with their farming and fruit operations, they are doing considerable in the nursery way. One of them with delight, pointed out to me the various interesting objects of the place; among the rest a great elm, under the shadow of whose boughs, his ancestry, for three or four generations back, were wont to rest their weary limbs, from their toilsome but cheerful labor. In speaking of the fine appearance of their crops and trees, on land which had been so long in use, he observed that they were *obliged to manure highly*. In answer to an inquiry as to what it had cost them, he said that they had paid as high as \$500 per annum for manure; and they found the more they bought and put on the land, the better they could afford to pay for it. I mention this fact for the benefit of such of our farmers as have not yet discovered that there is some value in this article, and that they may be induced to try the experiment.

Messrs. Hovey's.—In my visit to the new grounds of the Messrs. Hovey at Cambridge, I was much pleased with the enterprising spirit with which they are progressing in their operations. The location is a fine one for a public nursery, and they have made a good beginning. They have erected a handsome and spacious green-house. Their collection of plants is good, especially in that of the rose, which is large and very fine. Their collection of dahlia's is also good. They have quite a respectable number of fruit and ornamental trees, to which they are making rapid additions, and will without doubt, rank in a very short time among the best establishments in the country.

Mr Ernst concludes his letters with the following remarks on Horticultural taste in the vicinity of Boston:—

A few remarks on Horticultural taste that exists about Boston, and I will close for the present. When a Cincinnatian finds himself within its suburbs and the region around, the first thing that will forcibly strike his eye, is the high state of cultivation to which industry and perseverance have brought the face of a rough and rocky country from what he would look on at home as beyond recovery, but which now abounds in blooming and fruitful fields and gardens. The next thing, is the perfect respect which is paid to men's rights; he will observe, to his surprise, as he passes along the roadside, that it is not necessary to build high fences, with heavy gates and bars, bolts, and locks, to keep out the intruder from appropriating to himself the fruits of his industry; he will see that their fences and gates are merely ornamental appendages, over which the branches of trees hang with their ample loads of golden fruit, as well as gorgeous flowers, perfectly within reach of the hand; yet no man or woman with the least pretensions to respectability, would presume to disturb what is not their own, or enter those premises, without being invited by the owner. He will see no hogs, cows, dogs, or other animals roaming at large, ready to pounce in, if a gate should by some unlucky chance be left loose, to destroy the labor and expenditure of years. I do not however wish to be understood that there is nothing to find fault with; this is not my object. These are some of the fruits of Horticultural taste, as bearing on those who raise fruits for their living or comfort. Another great advantage is, it has discriminated between the value of good and common fruits, vegetables, &c., in offering proper rewards to those who produce the best of these articles, and fixing a value on men and their productions in proportion to their worth. The consequence is, that a reputation for correctness, honesty, and intelligence, is looked to as of more consequence in those whose business it is to supply the public wants, in the various departments of Horticulture, than in the low price of the articles.—*A. H. Ernst. Spring-Garden, Jan. 3d, 1844.*

ART. IV. *Obituary Notice.*

DEATH OF J. C. LOUDON, Esq.—It is with feelings of the most painful regret, that we announce the death of this distinguished writer and most estimable man, whose works are familiar to every lover of horticulture, and whose labors as conductor of the Gardener's Magazine for *nineteen years*, have had such an influence in promoting a taste for gardening, not only in England, but on the Continent and throughout our own country. The January number of the Magazine, which was to commence the new volume, has been made the last which will ever be published, and is paged as a continuation of the last volume, so as to close up the work to that period. The loss of Mr. Loudon's Magazine cannot be made good. It was the first which was ever published, and though numbers have sprung up since and many are now in circulation, yet none of them ever approached near his. No writer ever had a more happy facility of *popularizing* the subjects on which he wrote, than Mr. Loudon, and his originality of ideas, as well as his independence of their expression, upon everything connected with gardening and rural improvement, gained for him friends

wherever his works were read. The following notice of his death is copied from his own Magazine, now closed forever:—

On the 14th of December, 1843, died at his house at Bayswater, JOHN CLAUDIUS LOUDON, Esq., who for nearly half a century, has been before the public as a writer of numerous useful and popular works on gardening agriculture, and architecture.

Mr. Loudon's father was a farmer, residing in the neighborhood of Edinburgh, where he was highly respected; but Mr. Loudon was born on April 8, 1783, at Cambuslang, in Lanarkshire, where his mother's only sister resided, herself the mother of the Rev. Dr. Claudius Buchanan, afterwards celebrated for his philanthropic labors in India. Dr. Buchanan was several years older than Mr. Loudon, but there was a singular coincidence in many points of their history. The two sisters were, in both cases, left widows at an early age with large families, which were brought up by the exertions of the eldest sons; and both mothers had the happiness of seeing their eldest sons become celebrated. Mr. Loudon was brought up as a landscape gardener, and began to practice in 1803, when he came to England with numerous letters of introduction to some of the first landed proprietors in the kingdom. He afterwards took a large farm in Oxfordshire, where he resided in 1809. In the year 1813–14–15 he made the tour of northern Europe, traversing Sweden, Russia, Poland and Austria; in 1819 he travelled through Italy; and in 1828 through France and Germany.

Mr. Loudon's career as an author began in 1803, when he was only twenty years old, and it continued with very little interruption during the space of forty years, being only concluded by his death. The first works he published were the following:—*Observations on Laying out Public Squares* in 1803, and on *Plantations*, in 1804; a *Treatise on Hothouses* in 1805, and on *Country Residences*, in 1806, both 4to; *Hints on the Formation of Gardens*, in 1812; and three works on *Hothouses*, in 1817 and 1818. In 1822 appeared the first edition of the *Encyclopædia of Gardening*; a work remarkable for the immense mass of useful matter which it contained, and for the then unusual circumstance of a great quantity of wood cuts being mingled with the text: this book obtained an extraordinary sale, and fully established his fame as an author. Soon after was published an anonymous work, written either partly or entirely by Mr. Loudon, called the *Greenhouse Companion*; and shortly afterwards, *Observations on Laying out Farms*, in folio, with his name. In 1824 a second edition of the *Encyclopædia of Gardening*, was published, with very great additions, alterations, and improvements; and the following year appeared the first edition of the *Encyclopædia of Agriculture*. In 1826, the *Gardener's Magazine* was commenced, being the first periodical ever devoted exclusively to horticultural subjects. The *Magazine of Natural History*, also the first of its kind, was begun in 1828. Mr. Loudon was now occupied in the preparation of the *Encyclopædia of Plants*, which was published early in 1829, and was speedily followed by the *Hortus Britannicus*. In 1830, a second and nearly rewritten edition of the *Encyclopædia of Agriculture* was published, and this was followed by an entirely rewritten edition of the *Encyclopædia of Gardening*, in 1831; and the *Encyclopædia of Cottage, Farm, and Villa Architecture*, the first he published on his own account, in 1832. The last work was one of the most successful, because it was one of the most useful he ever wrote, and

is likely long to continue a standard book on the subjects on which it treats. Mr. Loudon now began to prepare his great and ruinous work, the *Arboretum Britannicum*, the anxieties attendant on which were, undoubtedly, the primary cause of that decay of constitution, which terminated in his death. This work was not, however, completed till 1838, and in the mean time he began the *Architectural Magazine*, the first periodical devoted exclusively to architecture. The labor he underwent at this time was almost incredible. He had four periodicals, viz: the *Gardener's, Natural History*, and *Architectural Magazines*, and the *Arboretum Britannicum*, which was published in monthly numbers, going on at the same time; and, to produce them at the proper times, he literally worked night and day. Immediately on the conclusion of the *Arboretum Britannicum*, he began the *Suburban Gardener*, which was also published in 1838, as was the *Hortus Lignosus Londoniensis*; and in 1839 appeared his edition of Repton's *Landscape Gardening*. In 1840 he accepted the editorship of the *Gardener's Gazette*, which he retained till November, 1841; and in 1842 he republished his *Encyclopædia of Trees and Shrubs*. In the same year he completed his *Suburban Horticulturist*; and finally in 1843, he published his work on *Cemeteries*, the last separate work he ever wrote. In this list, many minor productions of Mr. Loudon's pen have been necessarily omitted; but it may be mentioned, that he contributed to the *Encyclopædia Britannica* and Brande's *Dictionary of Science*; and that he published numerous supplements from time to time of his various works.

No man, perhaps, has ever written so much, under such adverse circumstances, as Mr. Loudon. Many years ago, when he first came to England, (in 1803), he had a severe attack of inflammatory rheumatism, which disabled him for two years, and ended in an ankylosed knee, and a contracted left arm. In the year 1820, whilst compiling the *Encyclopædia of Gardening*, he had another severe attack of rheumatism; and the following year, being recommended to go to Brighton to get shampooed in Mahomed's Baths, his right arm was there broken near the shoulder, and it never properly united. Notwithstanding this, he continued to write with his right hand till 1825, when his arm was broken a second time, and he was then obliged to have it amputated: but not before a general breaking up of the frame had commenced, and the thumb and two fingers of the left hand had been rendered useless. He afterwards suffered frequently from ill health, till his constitution was finally undermined by the anxiety attendant on that most costly and laborious of all his works, the *Arboretum Britannicum*, which has unfortunately not yet paid for itself. He died at last of disease of the lungs, after suffering severely for about three months; and he retained all his clearness and energy of mind to the last. His labors as a Landscape Gardener are too numerous to be detailed here, but that which he always considered as the most important, was the laying out of the Arboretum, so nobly presented by Joseph Strutt, Esq., to the town of Derby.

Never, perhaps, did any man possess more energy and determination than Mr. Loudon; whatever he began he pursued with enthusiasm, and carried out, notwithstanding obstacles that would have discouraged any ordinary person. He was a warm friend, and most kind and affectionate in all his relations of son, husband, father and brother: and he never hesitated to sacrifice pecuniary considerations to what he considered his duty. That he was always most anxious to promote the welfare of gar-

dening, the volumes of this Magazine bear ample witness; and he labored not only to improve their professional knowledge, and to increase their temporal comforts, but to raise their moral and intellectual character."

Since the above was prepared, we have received the following from a friend in New York, and though not written for publication, as we know it will interest our readers, coming from one who has enjoyed Mr. Loudon's acquaintance and friendship, we are sure our correspondent will excuse us for inserting it.

No one can feel deeper sympathy than myself, in relation to the death of that child of nature, Mr. Loudon. I was much grieved, for I had the pleasure or rather privilege of his intimate acquaintance. I spent some time with him and partook of his hospitality on two occasions; and will never forget his simple kind heartedness and edifying conversation; and such an admirer of America and its liberal institutions, I only wish he had been spared to pay us a visit: one of his enlarged and benevolent mind would look on every thing in its true light, unswayed by that narrow prejudice so common among the many who have come to these shores on tours of observation. How he would have admired our stately forest trees,—wood-clothed mountains and *ocean* rivers,—and what a faithful account he would have given, and how he would have clothed it in his nervous style (I mean on these subjects), for Arboriculture was his hobby, as that *monument* of his diligence and untiring research, Loudon's *Arboretum* testifies, and which was the great occasion of his pecuniary trials; indeed he told me that he had his heart set on its completion, and (it is his own words), although his publishers told him it would ruin him, if carried through, he could not yield to their advice, as his whole mind was bent on it, and at length it was completed, and you know how nobly he executed the task. He told me himself it was well patronized by the nobility and public, but the capital was very heavy and returned comparatively slow,—hence his trials; and withal he was so upright in the whole matter, as to make every order for his work be paid over to his bookseller. There is no danger now that he is gone of his family suffering; the English public are too noble minded to allow this. Nor will his merit go unrewarded; the government have settled pensions on worth not half as meritorious as his, and I have an idea that they will yet bring it before the premier, who you know is a man of great liberality. I suppose you noticed Mr. Loudon's rejection in October or November last of a *Loudon Testimonial*,—he seemed quite offended at the very idea of such a thing,—and on this account I admired him ten times more. Mrs. L. is a very fine lady and so is her sister; they were all most attentive to me. I had scarcely reached my friend's house,—it was the very next day that his servant called with a note from him welcoming me to London, and inviting me out to their charming residence on Porchester Terrace,—I was so engaged I could not go as soon as they expected,—but when who should come in one morning but Mr. and Mrs. Loudon themselves to urge me out in person,—it was very kind, for I had no claim on them whatever.—
G. C. T.

In allusion to the *Arboretum*, a note in the December number of Loudon's *Magazine*, states that there are 350 copies remaining unsold, and if these were disposed of, the income from all his works would go to his family. We mention this, believing that there are many gentlemen in this country who would willingly aid Mr. Loudon's family in this manner.

REMARKS.—The month of January up to the date we now write (29th), has been one of the coldest for some years, and the last five days unusually severe. There being but little snow upon the ground, the frost has penetrated very deep. The thermometer on the 25th did not vary but about 6° in 36 hours, that is, from 0 to 6 above; and with a keen cutting wind it was one of the coldest days to bear. The continuance of this severe weather has frozen up the harbor of Boston, and even Long Island sound to such an extent, that the Steamboat lines from Stonington and Norwich have been discontinued. Since February, 1836, no such cold weather has been experienced.

Vegetables.—Our quotations show quite a change in potatoes this month; this is in part owing to the weather, which has shut out arrivals, and in part to the loss of large quantities by frost, which were stored in cellars. Within a few days prices have advanced and there is now but little doubt they will go higher, in consequence of the causes we have just named. Turnips are in better demand, and prices firmer with a slight advance. Onions are now quite scarce. No radishes have yet been brought in. There is a fair supply of Savoy cabbages, but other sorts are scarce and small. Brocolis and cauliflowers, particularly the latter, are very scarce and prices high. Lettuce now comes in of good size and handsome appearance, and fair prices are obtained. Spinach is not so abundant as usual at the season. Considerable quantities have been lost by the severe cold. Parsley remains the same. The stock of squashes is now greatly reduced, and those of good quality command our highest prices; good sound marrows of the true kind are very scarce.

Fruit.—The fruit market is now rather still, but considerable has been doing. It appears from the freight list of the Western Rail-road that upwards of 10,000 barrels of apples have come to the city through that source; at least 5000 have come direct from Albany or by the way of New York by water, making a total of 15,000 barrels supplied to the Boston market. From this it may be seen how limited a stock the whole produce of the New England States would have been the past year. Valuing the apples at \$2 per barrel, which is low, and \$30,000 worth of apples alone have been received from New York. The announcement of this fact is sufficient to induce our farmers to pay more attention to fruit. Of this supply the whole portion has been purchased between Albany and Syracuse, perhaps as far as Rochester. The greatest portion of them have been *Greenings*, which were very large and handsome; a few were *Russets*, and the others miscellaneous sorts. The *Swaar* apple, recommended by Judge Buel, is a superior fruit and so much sought after, that scarcely any could be obtained for this market: the *Wine* apple is a superior fruit, but from its great size it does not carry well, and consequently keeps poorly: a variety, called the *Egg-top*, from near Syracuse, appears to be a very saleable apple; it is oval, with a yellowish skin, nearly covered and striped with a brilliant, glossy red; and is a tender and excellent fruit. Our fruit growers must not confine themselves too much to the *Baldwin*, but try other sorts. Pears are now limited to the *Easter Bourné*, *Vicar* of *Winkfield*, *Bourné d'Areberg*, and one or two other sorts; Baking remain the same. Cranberries are without alteration. Grapes are abundant. Good *Havanna* oranges are not abundant. Walnuts are dull, but in *Chesnuts* something is doing and prices have advanced.—*M. T. Boston, Jan. 29, 1844.*

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

FRUIT DEPARTMENT.

Grape Vines, except in graperies where it is desirous to force forward the crop, there will be nothing to do this month; in ordinary greenhouses the buds will not swell till March. If the vines are now to be started into growth, it should be done very gradually, beginning with a temperature of 50° and increasing gradually to 55°, 60°, &c. As soon as the buds are well broken, give more air, and see that the main shoots are tied firmly to the trellis. Cuttings for young plants may be put in this month and forwarded in a hot-bed if one is at hand.

Peach Trees in pots may be brought into the greenhouse for a succession.

Scions of fruit trees may be cut now, as well as at any other time.

Root-grafting may be performed now, if the roots have been laid in where they can be readily procured.

Pruning Orchards, when there is a great deal to do, may be commenced the latter part of the month.

FLOWER DEPARTMENT.

Camellias will now be in full beauty, and will require to be regularly supplied with water, occasionally using guano water, or liquid manure of some kind. Straggling plants should now be headed in, if good formed heads are wanting, and as soon as done blooming, those that need it should be repotted. Cuttings may be put in now, and those of last summer may now be potted off. Inarching and grafting may be commenced this month.

Dahlias. In extensive collections it will soon be time to commence the propagation of the rare kinds; the roots may now be potted for that object, and placed in the greenhouse or in a moderate hot-bed. Seeds may be planted.

Roses will now be coming into full bloom. Water freely, syringe occasionally, and keep off the red spiders and green fly. Repot young plants and put in cuttings of such sorts as are wanted.

Pelargoniums may be repotted this month, using a richer and better soil than the last time.

Azaleas now coming into bloom should be freely watered.

Verbenas should be repotted this month.

Cinerarias will require shifting again this month.

Heliotropes should be repotted this month.

All the species of *Achimenes* should be potted this month.

10 Week Stocks should be repotted. Sow the seeds now for a crop of young plants to turn out into the border in May.

Pansies, *Phlox Drummondii*, *Brachycome*, and other fine annuals should be sown now, for transplanting.

Gladolus cardinalis should now be potted.

Fuchsias should now be attended to; the old earth shook off and repotted into fresh soil.

Calceolarias will now need repotting.

Plants in Frames, after the continued cold and confinement, will need frequent airings the first fine weather, to prevent damp.

THE MAGAZINE

OF

HORTICULTURE.

MARCH, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes and Recollections of a tour through Hartford, New Haven, New York, Philadelphia, Baltimore, Washington, and some other places, in October, 1843.* By the EDITOR.

(Continued from p. 43.)

Washington, October 19th.—We left New York on the morning of the 18th, and passed through Philadelphia and Baltimore to Washington, where we arrived at 2 o'clock on the morning of the 19th. Having in our volume for 1842 (VIII. p. 121,) given a detailed account of the nurseries and gardens in the city, and not expecting to find many great improvements since that time, the record of which would interest our readers, we only remained until the morning of the 20th, when we set out on our return to Baltimore.

Experimental Garden of the National Institute.—Since our notes alluded to above, the only particularly new movement in gardening, is the establishment of the garden of the National Institute. The ship Vincennes of the Exploring Expedition, arrived home in the spring of 1842, bringing Messrs. Pickering and Breckenridge, the botanists attached to the Expedition, who brought with them, in addition to great quantities of seeds, bulbs, &c., upwards of one hundred species of live plants. These were, for the time, deposited in the greenhouse of Mr. Douglas, until a building could be erected. For this purpose a small piece of ground was selected, in the rear of the new Patent Office, and in the autumn a house was completed about thirty feet long, and the plants removed thereto, where they were under the charge of Mr. Breckenridge. Many of the plants increasing

considerably in size, the greenhouse was enlarged the last summer, by adding twenty-five or more feet, so that it is now nearly or quite sixty feet in length, and about seventeen feet wide; divided into two parts by a partition; one being in reality a hot-house for the tropical species. At the time of our visit, this had just been completed, and a square of ground, containing perhaps half an acre, including the house, was to be fenced off for an experimental garden.

We were fortunate in finding our correspondent, Mr. Breckenridge, at home; and we had the pleasure of looking over the plants with him. Many of the species are quite rare, and now introduced for the first time. The following is a list of the more prominent plants:—

Æschynánthus new sp., *Æ. grandiflorus*, *Clerodéndron* sp., *C. speciosissimus*, *Crinum amabile*, *Mimosa sensitiva* (true,) a small shrub, *Gardènia Thunbérgia*, *Strelitzia spathulàta*, *elongàta* and *júncea*, *Ruèllia* sp., *Agàti grandiflòra*, *Casuarina indica*, or spear tree, from the South Sea Islands. *Arduina grandiflòra*, *Laúrus* sp. from California, *Diósma* sp., *Genista* sp., from the Canary Isles, *Phlómis Leonùrus*, Californian rose, single, *Oxalis elongàtus*, *Babiàna rubro cærùlea*, and many other bulbs, amaryllises, crinums, &c. &c.

In addition to these, of which there were in some instances, duplicate plants, Mr. Breckenridge had collected many fine plants together, and as they were in good health, the collection presented a very fine appearance. Another season, under his attentive care, we may look for a better development of the habits and character of many of the more rare and tropical species. Mr. Breckenridge will also, by that time, have multiplied many of the plants, to such a degree, that they may, if such is the intention of government, be distributed among nurserymen.

Of the seeds brought home, a larger part, we believe, lost their vegetative powers. Many of the seeds of Pines, of California, such as the *P. Lambertiana* have been distributed, and in some instances, have grown; the ericas, from the Cape, have also proved good; but the greater portion of miscellaneous seeds, collected at the various places where the Expedition touched, have not vegetated even under the best care; at least such has been our experience, and the experience of many of our friends.

From the garden, we visited the institute, and examined

some of the beautiful ferns which form part of the immense *herbarium*, collected by Messrs. Pickering, Breckenridge and Rich,—but no arrangement of the collection has yet been made, though Mr. Rich has long been at work, and the specimens were piled up in the sheets just as they were dried. We trust that measures will be taken by the Institute, to have all the specimens properly put up in good paper, ticketed and arranged according to the Jussieuian or Natural system, and a complete and correct list of the entire collection published.

Linnaean Hill, Nursery of Mr. Joshua Pierce.—At the time of our previous visit to Mr. Pierce's nursery, we did not find him at home; we were more fortunate this time, and had the pleasure of walking through the grounds with Mr. Pierce.

The nursery department has been much improved since 1841, and we found a great number of trees under cultivation. The first object which Mr. Pierce pointed out to us, was a quarter of apple trees, grafted on the roots, as has been recommended in a previous volume (VI. p. 249), they were the third year from the graft, and were from seven to ten feet high, and proportionally stout and strong; straight from the ground up, without any one being able to detect but what they were seedlings, so clean were the stems. Another lot near by, had been grafted only two years, and were from six to eight feet high; but sufficiently large for transplanting successfully. After seeing the good results of this mode of grafting, we must commend it to the attention of amateurs as well as nurserymen. The trees are certainly handsomer than ordinary grafted trees, leaving out the saving in labor, by performing the operation in February and March, when no out-door work can be done.

Mr. Pierce neglects his greenhouses, giving his attention to the nursery; yet he is always at work raising new seedlings. We saw great quantities of camellias, of all sizes, from seedlings of last year up to blooming plants. Mr. Pierce has already raised two varieties, which are said to be very beautiful: *Caméllia* var. *Piercei* is described as a pure white, and Gen. Wayne, red; a third, we believe, is called Dick Johnson, also a good flower, but not equal to the first two. Mr. Pierce has also succeeded in raising some very good varieties of the *rubifolia* rose.

The Chinese double purple azalea has proved quite hardy

in Mr. Pierce's garden. That pretty shrub, the *Pyrus japonica* is readily raised from cuttings of the root, which make plants more speedily than layers and with little care. If nurserymen would only cheapen the price for this beautiful shrub, it would be oftener planted; for it is worthy a place in every garden.

We here noticed some very fine specimens of the Swedish juniper, an evergreen tree, perfectly hardy, and rarely seen in our gardens. Its upright growth, light green color, and good form of the tree, render it a fine plant in ornamental plantations. Some of the trees were ten feet high, and clothed with foliage from the ground up. Of sugar maple, sycamore, tulip tree, and other ornamental trees, Mr. Pierce has a very fine collection.

Garden of Dr. J. S. Gunnell.—The only objects of interest here were the large number of young seedling camellias. The old greenhouse has been lengthened by the addition of twenty-five feet, and we found it now nearly or quite filled with camellias. Since 1841, the Dr. has flowered two very fine seedlings, viz.: Thomas Jefferson and George Washington, both of which have been described in our last volume (IX. p. 261). A great many seedlings were budded for blooming the present winter.

Dr. Gunnell now finds it most convenient and better for the health of the plants, to keep them in the house all summer. By washing over the under side of the glass with whiting, the rays of the sun are obstructed, and there is not the least danger of burning the leaves. In the open air, the plants are not so easily shaded: the high winds often blow over and break the plants; and they require more frequent watering. This has been the practice of several cultivators in Philadelphia; and unless a suitable place is properly prepared for the plants, we are inclined to think they would suffer less in the house than if exposed in the open air. In the garden, the lateness and coolness of the season had checked the roses, and only now and then a good bloom was to be met with. The camellias were all in good health.

Nursery and Garden of Wm. Buist.—The roses in the open border were here the most interesting objects. The winters in this latitude are so mild that the larger part of the Tea and other generally termed tender roses live out the year round. It may from this be readily judged how much finer

the blooms must be from strong plants, four feet high and well established, than from those annually turned out of pots into the ground. Stout and vigorous suckers are thrown up which are terminated with immense clusters of flowers. Growing in this way we saw the blush and yellow Tea, Triumph of Luxembourg, Lamarque, and other equally fine kinds in great perfection. Young plants of the newer sorts were Le Pactole, Ida Percot, Wm. Wallace and others. Pyramids of the cypress vine which we noticed here on our previous visit, had been in flower from the ground to the top of the pyramid; but the chilly nights of October, rather unusual for the season, had checked the growth and blooming of the plants.

Flower Garden of John Douglas.—During the summer just past, Mr. Douglas had erected a fine building upon his land, the lower floor of which he will occupy himself as a seedstore and general warehouse for garden tools, books, &c. It was not yet completed, but would be in readiness for his spring trade, which, in Washington, commences in February. The range of greenhouses adjoins the store, and is very convenient for the purposes of exhibition and sale, nearly or quite all of the plants being raised at his father's garden about two miles from the city.

Mr. Douglas had just commenced moving in the camellias and other plants which, owing to building and the danger of injuring them, were not brought in sooner. The camellias we found in the very best health—the plants are grown in a compost of nearly or quite three quarters good rich loam, and a quarter only of leaf mould, manure and sand; and the foliage was abundant—of a rich green tint, and the shoots were covered with plenty of good prominent buds. The use of more loam and less peat is a recent improvement on the culture of camellias in Washington. Two years ago we found nearly every plant in the collection of Dr. Gunnell, grown in two thirds or more of peat, and the plants showed at once the condition of the roots. Mr. Douglas stated to us that since he had made use of more loam, he found the plants required less water and far less attention, and there was no danger of losing a plant if, accidentally, watering was overlooked for a day or two. As the camellia is destined to become so popular a plant, and as so many collections are mismanaged, we are particular to point out all the improvements which are made in

the cultivation of this most brilliant ornament of the greenhouse. Mr. Douglas intends to rebuild his greenhouse in beautiful style the coming summer.

We only regretted that our time would not permit us to call at Mr. Douglas's out of town garden, where he had a collection of roses in full bloom, and many other fine plants. When we visit Washington again, we shall endeavor to make a longer stay with our friends, whose kind attentions to us, and whose invitations to remain, we were obliged to refuse, in consequence of the near return of another month.

Baltimore, Oct. 20th.—We left Washington in the early train of cars, and arrived in Baltimore about 8 o'clock in the morning. Though so early in the season there was a hoar frost through all the low lands on the route of the Rail-road between each city. Such severe cold is rarely experienced in this latitude in October.

Nursery of Mr. Samuel Feast.—A recent domestic affliction prevented us from seeing Mr. Feast on our visit to his garden; and his son walked round the grounds and through the houses with us. All the plants were taken into the houses, though all were not yet arranged for the winter. In the camellia house we noticed a fine collection of plants including excellent specimens of Mr. Feast's seedling *Feastii*, now offered for sale. It is said to be very beautiful. It is of strong and rapid growth, good erect habit, and with large deep green foliage: the flowers are white, delicately spotted, and flaked with pale rose, the spots so minute sometimes as to be scarcely discernible a few feet from the plant. It is of the form of *imbricàta*, perfectly double and five and a half inches in diameter. The whole of the plants appeared in excellent health. From the camellia house we went through the range devoted mostly to azaleas, and a great portion of them seedlings: all appeared in the best health, and covered with buds. Mr. Feast has now for sale small plants of his new *Azàlea cremèria*, which is a cross between the azalea and rhododendron, having large clusters of rosy crimson flowers. He has also other new seedlings of much merit, in addition to older kinds raised during the last five years.

In the different departments we found the Cactuses, and other plants, all in better health than when we were here in 1841. One or two small houses had recently been erected, and these were nearly filled with plants.

In the open ground we found a collection of seedling dahlias, some of which appeared to possess considerable merit; but the frost of the previous night had touched the plants and injured the flowers. We noticed several large beds of tuberoses, grown for the roots, which were very vigorous and strong. We saw the original plants of Mr. Feast's seedling *rubifolia* roses. They are immense growers, and had made shoots fifteen feet long during the season; the rapidity with which they grow, renders them highly valuable; perpetual pink had a cluster of flowers expanded—it is the only fall flowering variety, from whence its name. All the Tea and Bengal roses were planted out in beds in the garden, and many of them were yet blooming freely; showing the value of these classes in prolonging the blooming season until severe frost.

Flower Garden of Mr. John Feast.—Mr. Feast continues to extend and enlarge his grounds. He had recently purchased a piece of ground in the rear of his premises, and was making preparations to build a long range of houses, for roses and other plants. We are glad to see this evidence of an improving taste in Baltimore, as latterly there has seemed to be a falling off in the interest and zeal of the amateur cultivators.

Mr. Feast appeared mostly interested in roses; in addition to his stock on hand, he was in expectation of receiving another invoice of new kinds from France. He has also raised many seedlings, some of which are from the yellow tea and *microphylla*, and some singular varieties are anticipated as the result of crossing two kinds so dissimilar, and yet each so beautiful in themselves; they will probably flower the coming spring, when we hope to receive some account of them from Mr. Feast himself.

The camellias and other plants had just been removed to the houses, and no flowers were yet to be seen worthy of special note.

Claremont Nursery, Messrs. Sinclair & Corse.—Our want of time in Baltimore prevented us from calling on our old and respected correspondent, Mr. Sinclair of the Claremont Nursery, near the city, whose polite invitation at various times, we have during each of our visits to the city been unable to accept of; but as we have now before us a recent letter welcoming us to his place, we add the following in relation to the Nursery.

The grounds are situated one mile East of the city line, and comprise nearly two hundred acres of land, thirty of which are devoted to the purposes of a nursery, and the remainder to farming purposes, raising seeds, &c. The land is fertile and beautifully situated, and laid out in a picturesque manner, with borders of ornamental shrubs and trees, Chinese everblooming roses, &c., and evergreens. There are two greenhouses, but not much of a collection of plants, as the attention of the proprietors is bestowed principally on Fruit trees and hardy plants, of which the stock in all the various departments is large and well grown, Mr. Sinclair having been engaged as a nurseryman upwards of twenty years. The fruit trees have been received from England and France, and scions have been procured from the best collections in the vicinity of Boston. Mr. Sinclair has also planted out a fruit orchard containing eight or ten hundred trees, with a view to the production of fruit for testing the varieties. From these he cuts his scions; and as many of them have already come into bearing he can ensure correctness. We trust we shall have an opportunity when we again visit Baltimore to partake of the hospitalities of our correspondent.

(*To be continued.*)

ART. II. *The Curculio.*

By B. A. FAHNESTOCK, Esq., Pittsburg, Pa.

I HAVE read nearly all the articles upon this subject, which have appeared in your Magazine, and other horticultural periodicals, but have found no remedy, as yet, upon which I can place much reliance. The most satisfactory communication, is that of Dr. Burnett to the Massachusetts Horticultural Society, which agrees with my own observation and experience, and that of others in this vicinity. I believe the only way of preventing a destruction of the entire crop of fruit, is that of spreading a large sheet under the plum tree, early in the morning, or in the evening, when the insect is less active than through the day, and then giving it a sudden jar or shake, which will cause them to drop upon the sheet, and enable the operator to destroy them.

This, however, requires considerable perseverance, and must be continued daily, from the time the curculio first makes its appearance in June, until its disappearance in July; and it is questionable whether the plums preserved at the end of this season of watchfulness, will compensate for the time and labor bestowed upon them. I therefore believe we are still without a remedy, and anxiously look forward to the discovery of some easier, and more successful mode of preventing the destruction, from year to year, of this valuable fruit.

My anxiety on this subject has greatly increased since I have become acquainted with a fact observed by others, of which I had ocular demonstration during the last summer, that even the peach is not exempt from the ravages of the same insect,—the fruit of several trees upon my own ground having been rendered worthless by it, if not entirely destroyed.

My object more particularly in addressing you, is to mention one or two facts which came under my own observation, and may, perhaps, be of value to those who are in pursuit of the desired remedy. I think they will clearly prove that, if every curculio upon the tree be destroyed, and all the punctured fruit thrown into the fire, *it will not prevent the same number of the insect from appearing the succeeding year.*

The place which I now occupy contains twenty acres, situated within two miles of the city. Two thirds of it was covered with a dense forest, and the remainder in meadow, and was about the centre of a farm of one hundred and sixty acres, when I purchased it, six years ago. There was, at the time, no plum or peach tree within half a mile of it. Having planted a number of fruit trees near the house, some of the plum, which were of a large size, blossomed, and were covered with fruit in great abundance, for the first time, in the summer of 1842. As they increased in size, I soon discovered that the curculio were busy at work, and in a short time there was not a single one untouched. Consequently, they all dropped from the tree, but were immediately gathered up, and given to the pigs. Last year the trees having increased in size, and the season being more favorable, a larger crop appeared, which was again attacked by the insect in far greater numbers than the previous year. Although it appeared an almost hope-

less undertaking to prevent their ravages, I, however, commenced shaking the trees with a sheet spread under, as above mentioned, although too late to preserve any fruit.

The year after coming upon the place, I had three acres of the woodland thoroughly cleared, not leaving a single stump or bush remaining. This was some distance from the house, and about the middle of fifty acres of dense forest, extending beyond my boundary line. One half of it I laid out as a kitchen garden, and planted in it some peach, plum, nectarine, and other trees. A nectarine tree having attained considerable size, bore a full crop of fruit for the first time last summer; but when they had increased to the size of a large filbert, they were assailed by the curculio in such numbers, that there were three or four punctures in each fruit. They next appeared upon the peaches, the greater part of which shared a similar fate.

Now, the query is, where did they come from, in either of the two cases mentioned, and how, in the last, find access through the bordering wood, unless, as mentioned by Dr. Burnett, they fly a great distance? This I believe to be the fact, although at variance with the opinion of some writers on this subject; or if they originated in the garden, is not the fact fully established, that the insect finds other receptacles for its eggs than the fruit upon which they usually appear? Then an important question arises, what are these receptacles?

Since these facts conclusively show, that they are not confined within a certain compass immediately around the tree, but may range over any extent of country, and as we are not certain that they propagate exclusively upon the fruits in question, is it not fallacious to attempt their extirpation by destroying them in the grub or pupa state, by any of the means heretofore recommended,—such as saturating the ground some distance about the tree with salt ley, burning the punctured fruit to destroy the egg, and similar experiments?

Unless the plan of shaking the curculio from the tree, can be made to answer the purpose more fully, or some means devised to prevent it from coming upon the fruit. I confess that I am at a loss for a remedy, as I believe are also all your correspondents.

Yours truly, &c.

B. A. FAHNESTOCK.

Pittsburg, Pa. February, 1844.

ART. III: *Comparative earliness of six varieties of Early Peas, with a description of their qualities, and remarks on their cultivation, &c.* By the EDITOR.

DESIROUS of ascertaining the comparative earliness of several of the most generally cultivated kinds of early peas, whose real merits in this respect, there seems to exist so much uncertainty, we thought it advisable to try an experiment with a view to arrive at some accurate knowledge of their relative earliness; and the last spring, having received from London a small quantity of the new Prince Albert Pea, which was stated to attain to full size in the very short period of *forty-two days* after sowing, we were anxious to try its very early qualities in our climate, and at the same time to test its merits in this respect, when grown with what have been usually considered our earliest kinds.

On the 3d day of May, 1843, the following six varieties of peas were planted, viz :

Prince Albert,	Hill's Extra Early,	Early Washington,
Cedo Nulli,	Early Warwick,	Early Dwarf.

The soil in which they were planted was a light sandy loam, moderately enriched, and the situation open, though somewhat sheltered by surrounding buildings. The rows were about fifteen feet long, and about three feet apart, and two rows of each of the six sorts were planted side by side. The result was as follows :—

Prince Albert.—Sown May 3d—in flower June 11th—pods filled for eating June 25. Time from the date of sowing to time of gathering for the table, 53 days.

Cedo Nulli.—Sown May 3d—in flower June 14th—pods filled for eating July 1. Time from the date of sowing to time of gathering for the table, 59 days.

Hill's Extra Early.—Sown May 3d—in flower June 16th—pods filled for eating July 3. Time from the date of sowing to time of gathering for the table, 61 days.

Early Warwick.—Sown May 3d—in flower June 17th—pods filled for eating July 4. Time from the date of sowing to time of gathering for the table, 62 days.

Early Washington.—Sown May 3d—in flower June 18th—pods filled for eating July 5. Time from the date of sowing to time of gathering for the table, 63 days.

Early Dwarf.—Sown May 3d—in flower June 18th—pods filled for eating July 9. Time from the date of sowing to the time of gathering for the table, 67 days.

Difference in favor of the Prince Albert over the latest of the six varieties, *fourteen* days, over the next earliest to the Prince Albert *six* days.

It will be seen by the above list which is placed in the order in which the pods are fit to gather for the table, that the Cedo Nulli comes next to the Prince Albert, the difference being six days, showing that the Cedo Nulli maintains its reputation of being the earliest pea cultivated in our gardens, previous to the introduction of the Prince Albert. Hill's Extra Early, which has been considered by some market gardeners as the earliest pea, and always, in consequence, commanding a very high price, being *two days* later. The Early Warwick comes next; then the Washington; and last the Early Dwarf, which has always been considered an earlier and dwarfer variety than the Early Washington.

From this statement it will be seen that the Prince Albert did not arrive at a fit state for gathering for the table, in the period stated in the English publications, of *forty-two days*—exceeding that period by eleven days. It must be recollected, however, that our climate is materially different from that of England, especially our springs. With us cold easterly winds and sharp frosts often occur in April and May, which give a great check to vegetation; while in England the mildness and slight variation of temperature at that season, is favorable to a continued and rapid growth of such a vegetable as the pea.

Two other sowings were made of the Prince Albert Pea, alone, viz.—

Peas sown April 22d—in flower June 4th—pods filled for eating June 23. Time from date of sowing to time of gathering for the table, 62 days.

Peas sown May 18th—in flower June 23d—pods filled for eating June 30. Time from date of sowing to period of gathering for the table, 43 days.

The latter sowing, when the season was more advanced and the weather warmer, shows that the time for gathering for the table was only *forty-three* days, exceeding *one* day the time stated in which it had been grown by Messrs Cornack & Son, the originators of the variety.

These several experiments are satisfactory in establishing the fact, that the Prince Albert is the earliest pea yet known; varying in the time of arriving at proper size for gathering for the table, from 62 to 43 days, according to the earliness or lateness of the season when they are planted.

The following are the descriptions of the above six varieties, in the order of their ripening:—

1. **PRINCE ALBERT.** About $2\frac{1}{2}$ feet high, and moderately strong. Pods long, medium size, round and nearly straight, containing 6 or 7 peas. Very early, very prolific and of excellent quality. The first blossoms appear at the fourth joint, and we now have dry vines which have upon each, 7 or 8 pods of peas.

2. **CEDO NULLI.** *Synonyme:* Sinclair's Early. About 3 feet high, and strong growth. Pods long, good size, and nearly round, containing 6 to 8 peas. Very early, prolific, and of excellent quality. This is probably an improved variety of the Early Frame, raised by R. Sinclair Jr. & Co. of Baltimore.

3. **HILL'S EXTRA EARLY.** About 3 feet high, and of strong growth. Pods very large size, full, round and long, containing 7 or 8 peas. Early, very prolific, and of excellent quality. This variety obtained its name and reputation from long having been cultivated by Messrs. Hill, of West Cambridge, who have generally brought the first new peas to market, in the vicinity of Boston. The great value to the market gardener of this variety, is the evenness of the ripening of crop, the whole being gathered at about two pickings, when the vines may be cleared off the ground.

4. **EARLY WARWICK.** About 3 feet high, and of strong growth. Pods good size, full, round and long, containing 7 or 8 peas. Early, very prolific, hardy, and of excellent quality.

5. **EARLY WASHINGTON.** This variety we think is identical with the Early Frame, and its numerous synonymes; but as we have not compared them, when growing, with the true Early Frame of the English cultivators, we still continue its present name. About $3\frac{1}{2}$ feet high, and rather slender growth. Pods moderate size, round, containing 6 or 7 peas. Prolific and of excellent quality. See Vol. II. p. 427, for a list of the synonymes of the Early Frame, which it is unnecessary to repeat here.

6. EARLY DWARF. *Synonymes.* Earliest Dwarf. Russell's Early. Early June. About $4\frac{1}{2}$ feet high and of strong growth. Pods long, narrow, not very full, containing 6 or 7 peas. A moderately good bearer of good quality and very hardy. This variety seems nearly allied to the Hotspur or Early Charlton, from which it probably originated.

Although our experiments were principally confined to the above six varieties of early peas, yet, for our own information, we also made a sowing of the Blue Imperial and Dwarf Marrowfat, at the same period of the above sorts, with a view to obtain the exact period at which the pods were fit to gather for the table, in comparison with the early kinds; and as this may be of some interest to our readers, who may be desirous of planting their peas so as to obtain a crop in succession, we add the results of our experiment here, viz.—

Blue Imperial.—Sown May 3d—in flower June 26th—pods filled for eating July 18th. Time from date of sowing to period of gathering for the table, 76 days.

Dwarf Marrowfat.—Sown May 3d—in flower June 28th—pods filled for eating, July 20th. Time from date of sowing to period of gathering for the table, 78 days.

From this it appears that the Blue Imperial were of sufficient size to gather for the table, in 23 days after the Prince Albert, the earliest pea; and 9 days after the Early Dwarf, the latest of the early varieties. The Dwarf Marrowfat is only 2 days later than the Blue Imperial.

From this table any cultivator may make such sowings as will give a succession of peas throughout the season.

The cultivation of the pea is so very general and simple, that it may be thought superfluous to add anything on this head. Yet the familiarity of the subject is no reason why we should omit it. Peas, it is true will grow and bear under almost any management; but they will produce better crops with some cultivators than with others.

Sowings of peas may be made as soon as the frost is out of the ground, in warm and sheltered situations: as early as the latter part of February or March in some localities. In West Cambridge, on the sunny slopes and light soil at the base of the hills, sheltered from all cold winds, peas are often planted in February, and brought to market from the 4th to the 10th of June. Oftentimes they are checked with severe frost for several days, but being so very hardy and

at the same time protected by some light covering, they soon recover, and come on rapidly in May. In gardens, however, not much sheltered, and with heavy soils, not much is gained by sowing before the first of April.

The soil, if moderately rich, need not be manured; but if sandy, it should by all means have a quantity of old compost spread in the row, which should be made with a hoe, and after the manure is strewn in, covered over with two inches of soil. On this draw two drills about 6 inches apart and scatter in the peas at the distance of three or four inches apart, and cover them an inch deep, giving the soil a gentle tap with the back of the hoe as the peas are covered in. The rows may be three or more feet apart. Some cultivators recommend eight or ten feet and cropping between with other vegetables; this mode often prevents mildew. When the peas are up and advanced about two inches they should be slightly hoed; and when grown to the height of six inches they will need another stirring of the soil, at the same time slightly raising up the earth against the base of the vines. After this nothing more need to be done, unless it is thought desirable to stick them with brush, or put up lines of twine running lengthwise of the rows, and fastened each end to a strong stake. In gardens where neatness is an object the latter mode obviates the straggling appearance which the vines have when lying in all directions upon the ground.

The pea does not force well, but there are various ways of forwarding a crop; the modes which we have found best are sowing in small pots, or upon pieces of turf turned bottom upwards, placing the same in a frame or exhausted hot bed, and transplanting, as soon as the weather is mild, under a sheltered fence or building, protecting them with straw, leaves, or litter on cool nights. In this way peas may be accelerated a fortnight or more. Where there are grape houses, with or without flues, peas may be brought forward, and a small crop obtained, some time before they are to be had in the open air.

We cannot omit to urge the cultivation of Knight's tall marrow pea. It is of delicious quality, and produces throughout the whole season. A sowing made at the same time of the Dwarf Marrowfat, will produce pods for gathering for the table in about 2 weeks after that variety. Strong brush or lines, as before mentioned, should be put up to support the vines.

ART. IV. *Notices of Culinary Vegetables, new or recently introduced, worthy of general cultivation in private gardens, or for the market.* By the EDITOR.

LAST season (Vol. IX. p. 96,) we gave an article in continuation of our remarks on the qualities and merits of new or recently introduced products for the vegetable garden. Another year has given us an opportunity to try some of those heretofore only noticed, and to make some remarks on their qualities. A single season, however, does not always test the merits of a variety: from unfavorable weather, or other causes the crop may be affected, and produce below or above an average one. Yet in a considerable degree one year will enable us to form a fair estimate of the relative value of any particular kind, and determine whether it deserves further attention.

PEAS. *Prince Albert.*—In an article, in another page (91) on the comparative earliness of several sorts of peas, we have given an account of this new variety which we noticed last year. The experience of one season has shown it to be what was then stated “one of the earliest and best peas extant.”

The Milford Marrowfat which has been alluded to twice in our previous volumes, (VII. p. 136, and IX. p. 98,) but which has never been introduced, is now offered for sale, and an opportunity presented to test its merits. It grows four feet high, is very large and a great bearer, and boils of a beautiful green color. We shall endeavor to give some farther notice of it after the experience of the coming summer.

British Queen Pea.—*Syn.* Le Fauvres new Pea, St. Helier's Pea. This variety has been highly praised. It was grown by Ph. Le Fauvre, Esq. of the Island of Guernsey. It is an improved variety of the shriveled marrow, resembling that of Knight's tall marrow; but it is considered by every one who has tasted it to be much superior to that esteemed variety. It grows 5 to 6 feet high, and produces two, and often three crops in succession, from the same stalk. The first crop is from the top, and it immediately throws out laterals, and produces another crop from the centre; after which it frequently shoots out from the bottom and produces a third crop; thus continuing a supply

for nearly two months. The pods contain from 7 to 9 peas in each; and, what is rather peculiar, when the pods become old and ready to dry, the peas still continue to boil green, and are well flavored. This account we copy from Loudon's *Magazine*.

The *Early Race Horse*, and *Carter's Lilliputian* and *Flack's Victory*, are new and highly praised sorts, but we have no information of their merits.

The Cedo Nulli Pea.—This excellent pea, second to no other that we are acquainted with, except the Prince Albert, is an *American* variety. As a pea is received from London under this name and sometimes sold, we deem it important to state its origin, and the probability that the true variety is not known in England. The *Cedo Nulli*, as it is now generally called, was raised by Messrs. Sinclair of Baltimore, and is a great improvement both in earliness and product on the *Early Washington* or *Early Frame* pea. It is called, in Baltimore, *Sinclair's Early Pea*, or *Early June* pea, but as it is best known in New York and Boston as the *Cedo Nulli*, we retain the latter name. Its comparative earliness and qualities we have stated in a previous article.

CABBAGES.—Many new kinds of cabbages are advertised in the catalogues of the London Seedmen; but few of them, however have been imported, and no opportunity thus offered to try them. That there can be improvements on the old established kinds of cabbages, as well as in other vegetables, no one can doubt. Yet cultivators, and especially market gardeners, are extremely unwilling to try new sorts for fear of disappointment. We feel confident, however, that if they rely for their main crops on the old sorts, they will find it to their advantage to cultivate a few of the new kinds to make up an assortment, and give a greater choice to their purchasers. Some cabbages are large and coarse—others large, delicate and tender—some again are of good size but inferior flavored,—while others are small and of the first quality. The various qualities of earliness, lateness, heading freely, tenderness, flavor and hardness of growth, are all to be taken into consideration in estimating the merits of a variety.

The *Early Vanack* cabbage is the only variety of any merit which has been lately introduced into general cultivation. Since the publication of our second volume, (p. 290,) we have almost annually called attention to its merits,

until it has had so fair a trial that its reputation is now established as one of the earliest and best.

The Early Nonpareil, and *Early Hope* cabbages are recommended for their earliness and for their excellent flavor; but they are of small size and can be planted very close, and are therefore suitable for small gardens.

The Paignton cabbage is said to be a very large and valuable kind, cabbaging very early, and frequently weighing from 20 to 28 lbs. The flavor is very superior, not having the least degree of coarseness, although it is so very large. In the opinion of some English cultivators there is no other kind of cabbage to compare with it in that respect. It should be grown in a strong rich loam, and the plants three feet apart each way. It is often divided, in the market, into halves and quarters for the convenience of purchasers. We shall give it a trial this season.

The Cornish and Kentishbeare cabbages are two kinds smaller and earlier than the Paignton, and are grown much closer, and do not require so strong a soil as the Paignton. For small gardens they are excellent, as they produce sprouts for many months after the first heads are cut. In the county of Devonshire, these two and the Paignton, are the principal kinds of cabbages grown for garden purposes.

The Pomeranian cabbage is a new variety cultivated at Edinburgh, but not introduced, as late as 1842 into the vicinity of London. It is stated by Messrs. Lawson & Son to be the "richest and most delicate autumn cabbage hitherto known." But if grown on rich soil, and allowed plenty of room, it gets too large, producing even a greater weight of head and leaves than the late drumhead cabbage. It is allied to the Sugarloaf, but is so different from it that it may be reckoned to form a distinct class of cabbages. We hope it will soon be introduced and tried.

We shall continue our remarks in our next number.

ART. V. *The Tennessee, or Prairie Rose*, (*Ròsa rubifòlia*),
with some remarks upon its employment for *Hedges or Live Fences*. By JOSHUA PIERCE, Washington, D. C.

PERMIT me to call the attention of florists, through the columns of your useful journal, to the *Prairie*, or *Tennessee*

rose, (*Rosa rubifolia*.) This rose, a native of our Western and South-western states, was, as I have understood, first introduced into this district in the garden of Gen. Van Ness, from Tennessee, whence it has here taken the name of the Tennessee rose. In the West it is called the Prairie rose—the wild rose,—the wild running rose,—and in some places the Michigan or Detroit rose. It is a runner of the most rapid and luxuriant growth, and so perfectly hardy, that here, in the most exposed situation, the frost makes no impression on it. It is capable of being trained to a greater extent than any of our running cluster roses. The bloom is single, of a light rose color, two to two and an half inches across the disk, with a beautiful tuft of yellow stamens—and they are produced in large umbels in succession, so as to present a constant bloom from three to four weeks.

Having raised a small lot from the seed, four years ago, for the purpose of stocks, I was not a little surprised to find the third year that I had amongst them twelve fine varieties of double roses, all partaking, as to hardiness, luxuriance of growth, and abundance of bloom, of the character of the parent; they are all runners and bloom in clusters.

This rose, for ages in existence, and spread for thousands of miles in extent, which has not produced one double offspring (so far as we can learn,) is now destined to become, by being brought in contact with other varieties, the parent of a class of roses, equal to the choicest productions of our gardens. None of mine have yet shown a disposition to become monthly or perpetual, but I understand that Mr. Samuel Feast of Baltimore, has produced some that are perpetual. My object is now to call the attention of cultivators to hybridization on this stock the coming season. How desirable it would be to have a class of perpetual climbing cluster roses, sufficiently hardy to stand the frost of our winters, and take the place of the musk, the Noisette, the Champney and others, which form such beautiful ornaments of our grounds, but which are with such difficulty protected even so far south as here, at Washington.

It has long been my opinion, that, with a little attention it will prove superior to anything yet tried in this country for live fences. Three or four years attention, in good ground, will render it impervious to the strongest animals, such is the luxuriance of its growth, and so abundantly armed with strong prickles;—and when we have produced

varieties of perpetual bloom, and of all colors, which I feel confident we shall in a few years, can anything be imagined more beautiful than plantations and gardens thus enclosed and divided? in summer constant bloom and fragrance,—in winter scarcely less brilliant with its beautiful umbels of scarlet fruit.

I have not yet learned that this rose has been adopted for fencing in the Prairies of the west, where it is every where to be found, and where it is so much needed—although we hear so much of hedges of the Cherokee rose in the south, where from its tenderness, it can only be used.

From a hedge of about 40 feet I have something like 2½ bushels of hews or berries, which I shall sow for the purpose of raising a stock for hedging—and I hope to have them for sale by the thousand next fall. I also intend to forward to your care in a few days, a dozen papers of clean seed for the Massachusetts Horticultural Society, to be distributed to such persons as are disposed to make experiments on it for the purposes of live fences; and I should like to do the same to any of our Horticultural Societies who will provide the means of getting them forwarded without any expense to me. Yours, &c.

JOSHUA PEIRCE.

Nursery at Linnæan Hill, near Washington, D. C.

The above article by Mr. Peirce offers some valuable hints to lovers of flowers, as well as to proprietors of land and cultivators generally. The beauty of the Prairie rose is now so well known and appreciated, from the splendid varieties raised and distributed by Mr. Feast of Baltimore, that only the hint of our correspondent is needed, to induce them to make new attempts at the production of improved and superior seedlings. The production of seedling roses has, as yet, received but little attention at the hands of our amateur cultivators; yet with no class of plants could their time and attention be so well spent, or the results more important in an ornamental view. The Prairie rose is destined to open new treasures to the ambitious florist. Already the hybrid Chinas—hybrid Provence,—hybrid perpetual and other roses, are eagerly sought after, but neither of these classes possess the intrinsic value of the Queen of the Prairies. The Tennessee rose has the rare merit of being a native species—standing the cold of our severest

winters—growing twenty feet in one season—flowering in July, after all the other roses are gone—save the ever-blooming ones—and its blossoms withstand the heat of our scorching sun, when ordinary kinds would droop ere they had scarcely fully opened their petals. Add to this its ornamental appearance during winter, when its leafless branches are clothed with brilliant scarlet fruit, and we may with Mr. Peirce exclaim, “can anything be imagined more beautiful?”

That the skill of our amateur cultivators will eventually succeed in producing everblooming varieties of the Prairie rose, we are as confident as our correspondent. Indeed, it has already been done in one instance; Mr. Feast having one variety, the Perpetual pink, which is an autumnal bloomer. By hybridization with the perpetuals, or Bourbon roses, varieties will undoubtedly be produced which will flower throughout the season.

The idea of planting hedges of the Prairie rose is a novel one, but we see no reason why this cannot be safely effected with this family. The hedge Mr. Peirce alludes to, we noticed last autumn, and it was more impenetrable to man or beast, than the best Hawthorn, Buckthorn, or Three thorned acacia hedge we ever saw. Should farther trial of Mr. Peirce’s plan succeed, he will not only have conferred a benefit upon all landed proprietors, but have acquired quite an enviable name for his persevering attempts to bring into practice a mode of hedging so highly ornamental in a picturesque point of view, and so lasting and permanent in its character.

As Mr. Peirce has recommended the cultivation of the Prairie rose for hedges, and as he has intimated his purpose of offering seed for distribution to Horticultural Societies, perhaps many of our readers who may receive the seed, would be glad to hear from him in relation to the best manner of raising the plants.

A short article on this subject would undoubtedly be a great aid to those who are unacquainted with raising roses from seed—and may be the means of inducing amateurs to take more interest in the growth of new varieties. Nothing would please us more than to see attempts made to raise roses from seed, and a few simple directions from our correspondent would, undoubtedly, lead to many successful experiments.—*Ed.*

REVIEWS.

ART. I. *Manures, a Prize Essay.* By Dr. SAMUEL L. DANA. Published by the Massachusetts Society for the Promotion of Agriculture. Pamphlet, Svo. pp. 40. Boston, 1843.

THE author of this Essay, Dr. Dana, is well known to the agricultural community by his writings upon chemistry in its application to agriculture, his analysis of soils and manure, and more recently by the publication of his *Muck Manual*, which has passed to a second edition. No other man in this country, in the language of the committee, has "done so much to advance the science of chemistry as applied to agriculture, as Dr. Dana."

The present essay was written for, and obtained, the premium offered by the Massachusetts Society for the Promotion of Agriculture, and is every way worthy the reputation which the committee have awarded to it in their preliminary remarks. The views of Dr. Dana in relation to the employment of peat and its preparation for manure, are familiar to a great portion of our readers; a few more satisfactory experiments are only needed to fully sustain the theory established by the author.

In our brief space we shall not attempt any extracts from the work; indeed it can only be thoroughly understood by reading the whole carefully. We may therefore with the committee say to all cultivators, that they may "receive both profit and pleasure from its perusal."

ART. II. *Address delivered at the close of the sixteenth Annual Fair of the American Institute, New York October, 1843.* By the Hon. JAMES TALLMADGE, President of the Institute. Pamphlet Svo. pp. 20. New York 1843.

To the Hon. Mr. Tallmadge, President of the Institute, much of the success and prosperity of that association is indebted. No individual member has taken a deeper and more continued interest in the affairs of the Institute.

We have now before us the address delivered by Mr. Tallmadge at the close of the sixteenth annual exhibition of the Institute in October last. It contains a variety of statistical information upon the commerce and agriculture of the United States, with some judicious and excellent remarks relative to the protection of American industry. It is an interesting address to every friend of agricultural improvement.

ART. III. *Proceedings of the New Castle County Agricultural Society and Institute, at the eight Annual Meeting, held at Wilmington on the 13th and 14th of September, 1843, with the Address, delivered by WILLIAM DARLINGTON, M. D. Pamphlet 8vo. pp. 58. Wilmington, 1843.*

THE larger portion of this pamphlet is filled with the proceedings of the eighth annual exhibition of the New Castle Agricultural Society and Institute, embracing the reports of various committees &c., awarding premiums. It concludes with an excellent address by Dr. Darlington, in which he enforces the importance to the agriculturist and cultivator of the soil, of some knowledge of botany; so far as to make him acquainted with the true scientific name of all the plants or seeds which grow upon his premises, or are found in his immediate neighborhood. Such information will often be of great benefit, guarding him against deception in the purchase of seeds—enabling him to destroy such plants as are injurious—and cultivate such as are useful. We cannot better speak our own ideas of the importance of this subject than to quote from this address.

While I would thus urge upon Agriculturists—and especially upon the younger class, the importance of a correct knowledge of *all* that belongs to the Profession, I shall limit what I have now to say, to a few cursory remarks on the propriety of being accurately acquainted with the history and character of those *Plants*—whether valuable or pernicious—which come under the daily notice of the farmer. Without derogating in the slightest degree from the importance of the other departments of Natural History, it may be safely affirmed that the *vegetable creation* presents an eminent claim to the consideration of the cultivators of the soil. It is emphatically with the *products of vegetation*—the great source of animal subsistence—that the Agriculturist is concerned: and if, in other pursuits,

the operative finds it necessary to be well acquainted with his materials, it cannot be less desirable that the farmer should have an accurate knowledge of those objects which demand his care and attention. With such knowledge, he can not only understand precisely what plants are most worthy of culture, but, what is scarcely less important, he can comprehend the true character of those which require all his vigilance to exclude, or to extirpate from his grounds. He can not only identify, to his own satisfaction, the plants which it behoves him to know, but, by the use of an appropriate nomenclature, he can make himself perfectly intelligible, when communicating his information to others. The want of this knowledge, and, especially, the uncertainty of popular names, is a source of much confusion and perplexity, in the intercourse of farmers, and in the essays of Agricultural writers.* Every district of country, and almost every neighborhood, has its own names for well-known plants: but they are apt to be variously applied, the same plant being frequently known by different names, and the same name often bestowed on very distinct plants. A striking instance of this may be cited, by way of illustration, in the use of the term *Herd's grass*; which, in *New England*, is applied to the grass known to us by the name of *Timothy*, or the *Phleum pratense*, of the Botanists:—whereas, in *Pennsylvania*, and perhaps in all the States south of it, the term *Herd's grass*, is appropriated to a plant technically called *Agrostis vulgaris*,—entirely distinct from the preceding, and of inferior value. This discrepancy is liable to cause annoying mistakes, and has even been the occasion of litigation, between the seedsmen of Boston and Philadelphia. I can perceive no remedy for the errors and confusion resulting from a loose and variable popular nomenclature, but a resort to the precise scientific names, imposed by systematic writers. The use of popular names may answer every purpose, in colloquial intercourse with our neighbors: But when we wish to be explicitly understood by strangers, or by persons in trade, it would be better to employ the exact language of science,—and to use those *names*, for objects, which have a specific meaning, recognized by all the world.

In truth the well-bred Agriculturist, whose business it eminently is to study, and to turn to good account, the products of the soil, ought to know the name, the character, and the entire history, of *every plant* that he meets with on his premises,—or that approaches him from those of his neighbors: But all I ask, as a commencement is, that he should learn to know the limited number which it is his immediate interest to know, and of which it is disreputable, as well as disadvantageous, to be ignorant. Many worthy persons, I am aware, allege as an excuse for their deficiency in this kind of knowledge, that they *have not time* to acquire it: But I beg leave to intimate to such, that they *have* mistaken the nature of their com-

* We almost every day see high-wrought notices of Plants—supposed by the writers to be new, or unknown, and which set the curious all agog, to learn what the wonderful novelties may be:—when, nine times out of ten, if the proper scientific names were given, we should recognize them as old acquaintances, and should always be able to form a tolerable estimate of their value, by a knowledge of their Botanical character and affinities. In all such cases, there is no surer protection against imposition, or what is vulgarly called *humbug*—than a competent acquaintance with the first principles of Natural History—which should be taught, and considered as an indispensable branch of education, in every school throughout the land.

plaint. It is not so much the *want of time*, which afflicts them, as the *want of taste*, and the *neglect of opportunities*. We all idle away countless hours of our existence, and especially in the morning of life, which might be successfully devoted to the attainment of useful knowledge. *Taste* is a faculty which can be cultivated; and *opportunities* to be improved, happen to all men. It is impossible for an intelligent observer to ramble amid the works of creation without acquiring some knowledge of their character; and if he cultivate the habit, he will insensibly accumulate an amount of information, which, to the careless, seems to be the result of long and laborious research. Some of the most successful students of Nature I have ever known, prosecuted their inquiries under a constant pressure of the every day cares and duties of life; and yet were remarkable for the exemplary performance of those duties. It will not avail, therefore, in this age and nation, to plead a mere *want of time*, as an excuse for neglecting those attainments, which are due alike to the best interests, and to the high character, of our Profession. But, if the practical farmer shall still insist that it is incompatible with his turn of mind, and habitual employments, to indulge in this kind of research, there is a simple and ready method by which he may obtain a sufficient knowledge of all the Plants which present themselves to his notice, and seem to require his attention. Let him collect a fair specimen of every such plant—both in flower and in fruit: let the specimens be carefully pressed and dried, so as to exhibit the characters; and let each species be preserved in a distinct sheet of paper, accompanied with a label, designating the *place of growth*, the *date of collection*, and the *common name*, or *names*, by which it may be known—together with any remarks that may tend to illustrate its history, or properties. The specimens, thus prepared, will then require nothing more than the *scientific names*, to determine their identity when spoken of, and to render them intelligible to all the world. These names can be readily obtained from Botanical friends, who always take pleasure in affording such information: and thus, with a very trifling labor, (I should rather call it an instructive amusement,) and in the compass of a convenient volume, the Farmer may have constantly at hand, the means of knowing by name, by sight, and by character, all the plants of his vicinage, in which he has the slightest interest. When memory fails, or doubts arise concerning the identity of any particular species, he can turn to the standard specimens in his little *Herbarium*, as the scholar does to his Dictionary, in the full confidence of obtaining a solution of his difficulties. His knowledge will be of that authentic kind which results from ocular demonstration: and by employing terms which convey definite ideas, he can communicate what he knows with clearness and precision.

Upon this simple and feasible plan, may be obtained a fund of accurate information, which would serve as a basis, or starting point, for more extended and important attainments. The intercourse between Agriculturists would become more interesting and profitable, because they would better understand each other. In discussing the merits, or demerits, of any given plant, they would know exactly what they were talking about;

and not waste their arguments, as they sometimes do, under an utter misconception of the object in dispute.

Dr. Darlington is an excellent botanist and we commend his remarks to the attention of our readers.

ART. IV. *The Western Farmer and Gardener's Almanac, for 1844.* By A. RANDALL. 12mo. pp. 114. Cincinnati, 1844.

A useful little almanac to the farmer, containing in addition to the usual astronomical calculations, a variety of agricultural and gardening information, and several architectural designs and plans for cottages and villas. Among the more important articles is an essay on soils,—a chapter on grafting,—hints on breeding—on cattle,—sowing seed,—on architecture, and calendars of work for the farm and garden for every month, adapted to the Northern and Southern sections of the Union. The western farmer will find it an interesting volume.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

Tank System of Heating.—I have this day completed a house on the tank system of heating; you will hear of its results.—*Yours truly, R. Buist, Philadelphia, Dec. 29th 1843.* [We shall be much pleased to have our correspondent give us an account of the temperature of the house during the late cold weather, together with quantity of coal or other fuel consumed; also the first cost of the apparatus, and the size of the house which it is intended to heat. We have some experiments of our own to communicate as soon as we can find leisure to write them out.—*Ed.*

South Carolina Tea.—Some time since an account was given in a Virginia newspaper, of the culture of the tea, from China seed, in Greenville, S. C., and it was supposed by many at the time to be a hoax: but it seems that the statement is true—at least so far as it relates to *South Carolina tea!*—for certainly no individual who knows anything about plants, could ever have believed it to be *the* tea of commerce.

The statement is, that a Mr. Puckett in the employ of Mrs. E. Lewis, had some seed given him which was found in a paper of tea; and he sowed them in a box and the plants grew and matured seed *in the fall*, (!) these were sown in the following spring and cultivated with success. A trial of the tea was made, and its flavor very much resembled the foreign tea. By comparing the pods, leaves and stalks with cuts or plates of the China tea plants, found in Encyclopedias and Gazetteers, a striking similarity was perceived. Such is the account as is now given to show that the statement is a true one, and no hoax.

A few years ago (Vol. II. p. 390,) we had occasion to notice a similar absurdity in relation to the tea plant. A person in Marietta, Ohio, stated he had succeeded in introducing the *genuine* tea plant of China. By the favor of a friend we were presented with a few seeds, which explained the whole matter. The tea plant turned out to be some weed, and no more like the true tea plant, than the thistle is like the oak. Similar we doubt not will prove the South Carolina tea plant. Such statements show the importance of some botanical knowledge to all cultivators. The true tea plant is an *evergreen* shrub, growing to the height of 5 or 6 feet; and does not perfect its seed in the short space of 6 months. We trust no one will be hoaxed sufficiently, by the *true* statement, to spend their time in cultivating the South Carolina tea.—*Ed.*

ART. II. *Retrospective Criticism.*

Errata. Page 19, the heading to Art. III, should have the word "notice" inserted after the word some, in the 2d line. Page 22, in the note at bottom of page "near Newton, near Boston," should read "Newton near Boston." Page 27, 13 lines from the bottom, for "Phoiin," read "Thoiin."

Gardening in the vicinity of Flushing, L. I. (p. 19.) Dear Sir,—We have been not a little amused at an article in your last number signed "A Subscriber," and dated "New York," professing to comment upon the nurseries and greenhouses located in this town, which the writer kindly admits to be "still a place of some note for its several nurseries." Would it not be advisable Sir, that you should suggest the discontinuance of the practice of inserting anonymous communications, and insist that every writer should father his own productions, as thereby the public would be enabled to judge of the "*quo animo*" attendant on every communication.

It is somewhat singular that the writer of the article in question, which is dated "New York," should be, as we understand, a dealer in greenhouse plants in another city; but it may not be equally surprising that the writer should have commented in rather contemptuous terms on the greenhouses where plants are cultivated *for sale*, and should have alone indulged in applause on that one which happens to be a *purchaser*.

That greenhouse had not then existed above ninety days, and the lists of plants enumerated and extolled were those which had but just previously been registered in the bills of purchase alluded to, and no doubt

much to the satisfaction of your correspondent, they had undergone a flattering change as to location. The most amusing circumstance, however, is the attempt of the writer to comment on the extent of this nursery establishment, when he merely glanced one wintry day at the few acres attached to our dwelling house, which are cultivated mostly as pleasure grounds, without even visiting our great nurseries, which are located at the other extremity of the village, and without at all inspecting our greenhouse collection. His neglect, however, was an advantage in one respect, for it enabled him to state truly that the most extensive nursery he *saw* here, was one that had recently made some purchases from him, as that was the only one he visited during his flying visit here, and which every one knows is infinitely inferior to the highly respectable establishment of Messrs. Wilcomb & King, which he for some reason does not deign to mention. A person may be excusable at a hurried moment for not spending over an hour or two in our village, but it may be a question whether he becomes equally adequate to describe the extent of establishments, which no man could properly overlook in a week. The disappointment of the writer, however, seems to be greatest at the "almost total absence of glass," and well forsooth, because "glass" comprised his daily avocation, with its pecuniary results. This disappointment however was, it seems, somewhat relieved by his visiting the greenhouse at "Carolina Hall" for there dwelt the gentleman who had been a recent purchaser of Philadelphia plants, and who the writer intimates with much apparent satisfaction, proposes greater extensions of these interesting species, and to "introduce them *in all their varieties.*"

In regard to the vinery so much extolled as surpassing all others in the country (but which erroneous assertion you have corrected in a note showing that the one erected by H. Gray, Esq. of Newton, is much more extensive.) that has unfortunately for the laudatory visitor, met with an untimely fate, for such was the feebleness of the structure, that the ink of that communication was scarcely dry, when the wind of the 13th inst. prostrated the building; since which an architect has been dispatched to Boston, to inspect the vineries in that vicinity, for future guidance, to which you had most opportunely called attention. It is but justice however to J. R. Valk, Esq. the proprietor of Carolina Hall, to state that he has employed a different architect, and that he is determined to complete the building in the same splendid style in which it was originally projected, which his ample means fully enable him to do.

In conclusion we will simply remark, (as you are well aware,) that reasons sometimes exist for not exhibiting to *every visitor* all the novelties that may be in a course of propagation, and not yet announced to the public. But when you, Sir, shall favor us with a visit, we will take great pleasure in showing you, (as one fully competent to judge,) that at no period in the life time of our venerable parent, the late Wm. Prince, was this establishment superior or equal to what it is at present, either in the immense variety of its productions, or the extent of the grounds occupied thereby, and every order from our correspondents is executed under our personal supervision, in order to assure ample satisfaction.—*Wm. R. Prince & Co., Linnæan Botanic Garden and Nursery, Flushing, L. I., Jan. 31, 1844.*

[We willingly give place to the remarks of Mr. Prince, in reply to the article of "a subscriber" alluded to above. And we do this the more

readily, as it is a rule we have adopted, and generally adhered to, of never allowing a person, anonymously to make unjust or personal allusions to another through our pages. Had we read the communication of a subscriber as carefully before it went to press, as we did afterwards, we should have stricken out all that portion of it which reflects in any manner upon the respectable establishments of Messrs. Prince & Co., Winter & Co., or Parsons & Co., and inserted only the description of Carolina Hall. Should, however, either of the other parties feel aggrieved, our pages are open to them as freely as to Messrs. Prince. We think our correspondent is mistaken in the author of the article, and we have taken the liberty to alter the phraseology of one or two sentences.—*Ed.*]

Beurré Bronzée Pear. Mr. Éditor.—Knowing your anxious desire to bring the Magazine to the highest possible degree of perfection, I take the liberty to suggest that the valuable "Monthly Calendar" which it contains, would be much more useful to subscribers, if the Magazine was promptly issued on the first of the month; and that many are waiting with commendable patience for the diary or system for the cultivation of grapes in cold houses, which has been repeatedly promised.

The pomological articles with which the Magazine has been enriched, are highly appreciated in this meridian. And by the way—in your account of our annual exhibition of fruits, &c. you call one of the pears "Beurré Bronzée." Can you tell me with what noun understood the adjective "beurré" agrees? If with the word pear (*poire*) it should have the feminine termination, *beurrée*, as well as *bronzée*. If, on the other hand, it refers to pear tree (*poirier*) or, as I have always supposed, with the class (*ordre*) of pears, the usual (masculine) termination is correctly applied. The London Horticultural Society do not seem to have followed any regular rule in this respect, since in their last catalogue we find *Beurré royal, blanc, gris, vert*, as well as *grise, grosse, bronzée, Anglaise*, &c.—*Yours, E. C. N. H. S. Salem, Jan. 17, 1844.*

[We cannot enlighten our critical correspondent in this respect. Whether *beurré* refers merely to the word pear (*poire*,) or to the pear tree as a class (*ordre*,) we have no authority for stating. But on the supposition that it does refer to the latter, the feminine termination is we doubt not incorrect. In giving the names of pears in our Magazine, we have had a desire to have them all uniform, from year to year; yet we did not wish to take the responsibility to make them conform to our own ideas. The catalogues of nurserymen cannot be any guide; neither do we know of any author whom we could well follow. As the best authority, therefore, we have taken the *Catalogue* of the London Horticultural Society, and though we are aware they do not appear to have been guided by any rule, in the spelling of the names of French pears, we deemed it best to follow it; choosing rather to overlook the few grammatical errors which occur, to the danger of confusion by attempting a new nomenclature.—*Ed.*

Dioecious Character of Strawberries.—Recent articles in your Magazine have unsettled the question, whether the sterility and fertility of certain kinds of strawberry plants, are caused by the complete separation of what are called male and female flowers. In Vol. VIII, p. 259, you have admitted the truth of Mr. Longworth's theory on this point, and cite an instance, in which a bed of Hovey's seedling became sterile by being planted remote from any other kind. You have since said (Nov. 1843,) that the bed *accidentally* failed to produce a crop when at some distance from any

other kind. If by the term *accidentally*, we are to infer that the bed has since become sterile without the presence of other plants, the statement of that fact would have been very material and satisfactory.

The question is one of much moment to gardeners, and it will be advisable for them to adhere to Mr. Longworth's practice, until the abstract botanical question shall be settled by the experts in that science. Those who have not this skill may incline, from the evidence furnished, to believe in the separate existence of the male and female flowers, when their separate existence is not only affirmed by eminent gardeners besides Mr. Longworth, but the difference between them is minutely described by him, and accurate drawings of them given in this Magazine for July, 1842, from specimens culled by a botanist whose skill is eminent.

Mr. Longworth has somewhere said, that he first learned from a German who kept a market garden, the necessity of planting a portion of male plants with the bearing plants. The person he alludes to, is Mrs. Arbogast, who came from the vicinity of Philadelphia to Cincinnati about 25 years ago, and was the first person, and for many years the only person, who furnished that market with strawberries in good quantity. Mr. Longworth thus learning the necessity of paying due attention to the flowers in all those kinds which yield large fruit, has pursued the subject with zeal, and sought to spread this knowledge among cultivators.

The course of culture proposed by him, may very properly be called Mr. Longworth's theory, for he has more actively and clearly than others, taught the rules by which to make good crops. But it is a mistake to allege as he does, that English Gardeners seem to have known nothing of it. The fact of sterility from this cause and the cure for it, were certainly known to Mr. Keen, the producer of Keen's seedling, as early as 1809, as the following extract from his directions for cultivating the strawberry will show:—

“The *hautbois*, I have always found to thrive best in a light soil; and it must be well supplied with dung, for excess of manure does not drive it into leaf like the pine strawberry. In planting the beds, each row must be two feet apart, and from plant to plant in the rows, must be eighteen inches, leaving the alleys between the beds, three feet wide. There are many different seeds of *hautbois*: one has the male and the female organs in the same blossom, and bears very freely; but that, which I most approve, is the one which has the male organs in one blossom, and the female in another: this bears fruit of the finest color, and of far superior flavor. In selecting these plants, care must be taken that there are not too many of the male plants among them; for as these bear no fruit, they are apt to make more runners than the females. I consider one male to ten females the proper proportion for an abundant crop. I learned the necessity of mixing the male plants with the others in 1809. I had, before that period, selected female plants only for my beds, and was entirely disappointed in my *Lopes* of a crop. In that year, suspecting my error, I obtained some male blossoms, which I placed in a bottle on a bed of female *hautbois*. In a few days I perceived the fruit near the bottle to swell: on this observation, I procured more male blossoms, and in like manner, placed them in bottles, in different parts of the beds, removing the bottles to fresh places every morning, and by this means obtained a moderate crop, where I had gathered no fruit the preceding year.”

This observation precedes Mr. Longworth's by ten years, and without being known to him, is precisely coincident with his own remarks in every particular. The facts detailed by Mr. Keen, are not readily disposed of by a hypothesis, that too much manure produces an excess of runners, and over nourishment, a repletion of the blossom. The recommendation quoted from the *Gardeners' Chronicle* to give a top dressing of fresh soil instead of manure, is in opposition to all experience of what is needful in the cultivation of strawberry plants, which rank among gross feeders. If that suggestion were well founded, we might expect to see a bed which had been rendered sterile from over nourishment, gradually become fertile, as the ground should become exhausted by several years growth of the plants in the same spot; and that the fertility of the crop would improve with the increased sterility of the soil.

The London Horticultural Society's *Catalogue* has this remark: "In all the sorts of hautbois, there exist both the *Prolific*, and also those sterile plants commonly called males, which have *long stamens*." (In quoting this, (vol. 8, p. 262,) you have, by mistake written "*long runners*," and thus made it unintelligible.) Mr. Thompson adds; "I believe there is no such thing as distinct plants of male and female hautbois. *Stamens* and *pistillums* are to be found in either a *perfect* or an *imperfect state* in every individual flower. Imperfection generally takes place in the pistillum, together with the receptacle." I suggest the inquiry whether this does not solve the whole difficulty, between those who respectively deny and assert the existence of male and female blossoms:—that while in very strictness there may be no such flowers, as Mr. Thompson alledges, yet from the reciprocal defect of pistils in one, and of stamens in the other, they became so nearly such, as to require the practice of Mr. Keens and Mr. Longworth, to insure abundant crops of the large and fine kinds.

I also suggest whether you have not placed too much stress on Mr. Longworth's statement, that male and female plants will not produce a plant of different character from the parent plant, were they to run for fifty years. Mr. Longworth is perhaps, too positive. Why may not a plant, in diffusing its runners, produce both kinds? I have supposed that both kinds are so produced, at least my attempts to keep separate beds of each, from which to transplant, has raised the presumption that such is the case. I noticed that in the red mulberries in my garden, transplanted from the forest, some are destitute of fruitful blossoms—another which bears fruit has the two kinds on separate branches,—and these fruitful and barren branches fresh from the same limb. May not the same thing take place in the strawberry on the different runners from the same plant, or what is much the same thing in effect—plants of which the flowers will be reciprocally defective in stamens or pistils! Why shall it be doubted that Keen's seedling has produced both kinds, from one original, when it is well ascertained, that Hovey's seedling from one original, had clearly furnished perfect staminate plants, and others in which the stamens were quite deficient.

I can add a note on the transportation of strawberry plants which may prove of value to you. When I purchased some plants of Hovey's seedling in 1841, you informed me that it was difficult to keep plants alive for ten days, and that it was very difficult to make them cross the Atlantic in living order. The plants I purchased at Boston all perished, as did also a parcel purchased by one of my friends who brought them by rail-road

and stage. These were packed in moss, enveloping each root separately. I wrote to a friend, then on a visit in Baltimore, to bring me some from Mr. Sinclair, which he did, both for me and for himself. He wrapped the whole together in a bundle, the roots being well surrounded with earth, and arrived in fine condition, having been seventeen days out of the ground. It being late in November, I planted a part in the open ground, but the greater portion I planted in a box, which I placed in a cellar. Those in the box all perished—those in the open ground, not having time to establish themselves, were all heaved out but one which flourished, and in the same season produced nearly 150 plants, with which, in the spring of 1843, I planted three long rows, with one of Hudson's intervening, and had a good crop in June. My friend treated his parcel in the same manner, with precisely the same result, as to the preservation of his plants. *Yours respectfully, John H. James, Urbana, O., February 10, 1844.*

[The remarks of our correspondent are interesting to every cultivator of the strawberry; yet we do not think they afford any evidence of the separate existence of staminate and pistillate plants when the strawberry has been properly cultivated.

The experiment of Mr. Keen was with the Hautbois strawberry, and not with either the *Pine* or the *Scarlet*, which are the two classes in which are found all our large and best strawberries. So also the quotation from the *Catalogue* of the London Horticultural Society, again refers to the Hautbois. Neither of the two great classes of *Pines* or *Scarlets* have one word said about fertile and sterile plants, notwithstanding all the varieties enumerated had been tried and proved in the society's garden; and among the *Scarlets* is the *Hudson*, the very strawberry which is now brought forward as the type of a family producing separate sexes, or fertile and sterile plants. The late Mr. Knight, president of the London Horticultural Society, paid much attention to the cultivation of the strawberry, and wrote several articles, which appeared in the *Transactions* of the Society over which he presided: he also raised from seed the *Downton* and *Elton*, two superior varieties; but we cannot find that he ever mentioned any defect in the produce of plants, though it is well known that the *Downton*, under too high cultivation, is decidedly barren of fruit. He alludes to the Hautbois in one article, and states that he was led to believe that it was a different "species" from the scarlet or alpine, as he "failed to obtain mule plants between the alpine and the scarlet and Hautbois." This corroborates the statement of Mr. Huntsman at p. 52 that the Hautbois could not be fertilized by any but Hautbois. All the experiments with the Hautbois we consider irrelevant to the present question.

Our correspondent is entirely mistaken in affirming that there have been staminate and pistillate plants of our seedling. No such statement (unless supposed) has been made by us, and no such fact has ever been noticed among the plants. The flowers are all of one kind, with both pistils and stamens, but the latter quite short, and hidden under the receptacle. We do not believe that any variety of the strawberry, by running, will produce both staminate and pistillate plants. If Mr. Longworth's theory should prove true, we apprehend that it is only through the seed that the different plants can be produced, and that the runners will be precisely like the parent. The mulberry belongs to a strictly monœcious order, and cannot be brought forward as a case analogous to the strawberry.

The recommendation in the *Gardeners' Chronicle*, to apply fresh loam,

we believe founded on truth, and just what the plants require when they have been long stimulated by powerful manures; certain constituents are found in a fresh loam which manure does not afford, and we have no doubt of the fact, though we have not yet tried it satisfactorily, that plants producing little or no fruit in a highly manured soil, if transplanted to a free, rich loam, will bear abundantly.

The remarks of Mr. James in relation to packing, need correction. We stated that the plants *would keep well for ten days*; but *after that period* they soon began to fail. Messrs. Hovey & Co. have sent plants to nearly every State in the Union; to Canada and to England, and with such success, that *forty* out of *fifty* plants were growing near London, in sixteen days after they were taken up from their garden.—*Ed.*]

ART. III. Worcester County Horticultural Society.

[After the publication of our December number, of the last volume, in which we gave all the horticultural reports which came to hand in season, we received the account of the exhibition of the above society, together with the following prefatory remarks by our correspondent. The number of fruits presented for exhibition was exceedingly large, and the report of the same, with the names in detail, would occupy at least four or five pages; and as we have not the room to spare, we are compelled to omit it, giving only the remarks below. Over *one thousand* parcels of fruit were entered for exhibition, by one hundred and sixty-three individuals, all residing in the county, with the exception of six or seven; and, we hesitate not to say, it was the largest exhibition in point of number, ever made in the country. The apples, undoubtedly, far surpassed anything ever before seen at a single exhibition. The largest collection of pears was from Mr. Cabot, of Salem, one of our most enthusiastic amateur cultivators of fruit. Mr. Lee and Mr. Manning also sent good collections. This society, from its successful course, is now doing much to correct the confusion among fruits, and bring before the public new seedlings of merit. We shall look forward for a still more interesting exhibition next autumn.—*Ed.*]

The Fourth Annual Exhibition of this Society was holden in the large room in the New Central Exchange in Worcester, on Tuesday the 10th and Wednesday the 11th days of October, 1843. Though the season had been considered an unfavorable one, yet the exhibition as a whole was better than any that had preceded it, and afforded to the members of the Society the most gratifying evidence that their efforts are suitably appreciated, and are working a steadily favorable effect on the interests of horticulture in the central portion of the State. There is satisfactory reason for the belief, that the exhibition was visited by more than three thousand persons, exclusive of members.

The lateness of the season, and the peculiarly unfavorable state of the weather the week previous to the exhibition, in which time there had been a severe cold storm of rain, accompanied by a gale of wind, forbade the expectation of any considerable display of flowers, and therefore no disappointment was felt in finding this department of the show very limited. There were a few stands of pretty good dahlias, containing a considerable

number of the choice new kinds, as well as of the old standards, whose reputation has become well established. A few asters, verbenas, pansies, &c. &c., completed this portion of the exhibition. As yet, the cultivation of greenhouse flowers in this vicinity is too limited to encourage the expectation of any display in that line. And although every year now will probably add, more or less, to this kind of culture, yet some time must probably elapse before we can look for much increase, from this source, to our exhibition of either flowers or fruits.

The show of vegetables, though not large, was very respectable in the quality of the articles exhibited. It seems not to have been generally understood that exhibitions of this kind came within the object of the Society, and, as cultivators in the vicinity have for a long period of years been in the practice of exhibiting their remarkable vegetable products at the hall of the Agricultural Society, they still continue to exhibit them at that place. Hereafter, should the exhibitions of the two societies be, as they have been, at the same time, it is reasonable to suppose that cultivators generally will exhibit at the Horticultural room as the more appropriate place.

In the exhibition of fruits, the society had every reason to be well satisfied. Indeed, it much exceeded their expectations; and the entries were so numerous, that more extensive accommodations than had been provided were necessary; and, even after doing all that conveniently could be done, the extensive tables were loaded and overloaded, so that there was not room for such a display of the various specimens as was desirable. The report on fruits will show the great number of entries, and the extensive variety of the kinds. In apples, we have no doubt the exhibition would compare favorably with any one that has been held in this or any other part of the country. Not only were the varieties exceedingly numerous, but the specimens generally were remarkably large, fair and handsome. Many new varieties were displayed upon the tables, some of which are particularly named in the reports—others, which are probably of equal value, wait only for further evidence of their good qualities, to be brought into notice. Of pears, the number of varieties exhibited by cultivators in the vicinity has largely increased since the last year, and we are assured that so much attention is now paid to the culture of that valuable fruit, that they will continue to increase, probably, for many years to come. The soil of Worcester county is, to a considerable extent, peculiarly favorable to the culture of the pear, and the magnificent specimens, of several kinds, which have been shown at this exhibition and the one which preceded it, the result of ordinary culture, indicates pretty clearly what may be looked for when the approved modes of cultivation shall be more generally understood and adopted.

One of the most gratifying indications of the utility of these exhibitions was, the interest which was manifested on the occasion, on the part of great numbers of the exhibitors and visitors, by a free interchange of opinions, and by other means of information, to acquire as much knowledge as possible respecting the various kinds of fruits—of their several adaptations, and of the soil and culture most congenial to them. Such an interest, widely and generally disseminated, and kept alive by successive exhibitions, cannot fail, in the course of a few years, to be productive of the most decisive results.—*Yours, J. M. E.*

ART. IV. *Massachusetts Horticultural Society.*

Saturday, Dec. 30th, 1843.—Exhibited. Fruit: From L. P. Grosvenor, from his farm in Connecticut, fine specimens of Baldwin, Roxbury Russett, Spitzemberg, Fall Pippin, Rhode Island Greening, Black Gilliflower, Russett Pearmain, Queening (?), Chandler and Beauty apples; also two apples, in appearance and taste like the Rhode Island Greening, taken from a branch and spur, bearing Roxbury russetts: also, Uvedale's St. Germain pears. From E. M. Richards, Minister and White Calville apples, and specimens of a baking pear called the Bicknell. From Jacob Deane, Mansfield, apples called the Sugar Cluster Russetts; only noticeable from their small size and curious appearance. From J. Breck, a fine specimen of Tolman's Sweeting apple.

*Jan. 6th, 1844.—*The stated meeting of the Society was held to-day—the president in the chair.

A letter was read by the president, from Col. Van Mons, of Brussels, accompanying which were copies of a historical notice of the late Dr. Van Mons, presented by Col. Van Mons to the Society. A vote of thanks was passed, and the corresponding secretary was authorized to transmit the same to Col. Van Mons, with a letter of condolence on the death of his father.

The president, from the Committee appointed by a vote of the Society on the 19th of August, 1843, to contract for a building, or building lot, if either should present itself, reported that the Society had purchased the estate belonging to the city of Boston, known as the Latin school-house, in School Street, containing 2952 feet of land, with the building thereon, for the sum of *Eighteen Thousand Dollars*. The Report concludes as follows:—

The Committee would state, in their opinion the time has arrived, when the wants of the Society demand better and more extensive accommodations than can be furnished in the present location: that the funds now in the treasury, with its prospective resources, are such as to warrant an investment for this purpose, and that after the Society shall have appropriated such part of the building as may be deemed necessary for its own convenience, there will then be a portion left which may be fitted up for stores or shops, and which will probably rent for a sum equal to the interest of any loan which may be needed, in addition to its present funds, for the purchase and alteration, or the remodelling of the same. Your committee are also under the impression, that the cost of the property corresponds better with the means of the Society than any other that they have met with, or that might offer itself at present, and is capable of being made commensurate with its growth and necessities for some years to come.— And further, that the estate, situated as it is in a central part of the city, where real estate must always be valuable, cannot be a very bad investment, should the Society hereafter, for any cause, wish to dispose of the same.

The report was accepted, and a vote of thanks passed to the Committee for their attention to the subject, and the acceptable manner in which they had performed their duties.

A committee of nine was then chosen, to superintend the remodelling or rebuilding the Latin school-house.

Messrs. M. P. Wilder, S. Walker, Jos. Stickney, J. E. Teschemacher, J. J. Low, B. V. French, E. M. Richards, S. R. Johnson, and C. M. Hovey, were appointed the Committee.

Mr. C. M. Hovey, chairman of the Library Committee, made a report of the condition of the library, and recommended an annual appropriation of one hundred and fifty dollars for the purchase of books.

Mr. C. M. Hovey, chairman of a committee chosen to take into consideration the subject of an amendment of the constitution by which the official year shall commence on the first Saturday of January, instead of April, made a report in favor of the amendment, which report was accepted. [The subject will come up for a final vote, at the stated meeting in April.]

Adjourned one week, to Jan. 13th.

Exhibited.—Fruit: From the President of the Society, fine specimens of the following pears:—Columbia Vigoulouse, Beurré d'Aremberg and Easter Bergamot. From Joseph Breck, a fine specimen of the Hubbardston Nonsuch apple.

Jan. 13.—An adjourned meeting of the Society was held to-day, the President in the chair.

Mr. Vose, chairman of the committee on Finance, reported that they had examined the books and accounts of the Mt. Auburn Cemetery, and that they had received for the Society, as their portion of the proceeds, the sum of sixteen hundred and fifty dollars. The report was accepted.

On motion of Mr. Dutton, it was voted to increase the number of the Building Committee to thirteen, with power to fill vacancies, should any occur.

Messrs. C. Newhall, Joseph Breck, E. Vose, and H. W. Lutton, were chosen.

A letter was read from Prof. Fischer, of St. Petersburg, which accompanied a donation of seeds for the Society. The thanks of the Society were voted to Prof. Fischer.

The seeds were placed in the hands of Prof. Russell, to be assorted, and reported upon at a future meeting.

A series of Resolutions in relation to the erection of a building, the payment for the purchase of the Latin School-house, &c., were presented by the Building Committee, and accepted. They authorize the Finance Committee to make sale of the stocks of the Society and borrow money on mortgage, not exceeding the sum of twelve thousand dollars,—and also to procure plans and estimates of a building, and to proceed with the completion of the same as soon as possible.

Adjourned one week to Jan. 20th.

Exhibited.—From E. Allen, Roxbury, excellent cultivated specimens of mushrooms (*Agaricus campestris*.)

Jan. 20th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

A letter was read from Mr. Vose, declining to serve on the Building Committee,—the letter was laid on the table.

J. W. Clark, of Boston, was elected a subscription member.

Adjourned two weeks, to Saturday, Feb. 3d.

Exhibited.—Fruit: From the President of the Society, very handsome specimens of Beurré d'Aremberg and Prince's St. Germain pears. From R. Marsh, Quincy, Bleeker's Meadow pears.

ever, but a very slight advance; the continued cold has prevented all arrivals, either by water or by land, and none have been brought in for some time: Sweet remain the same. Turnips are plenty, abundant and of finer quality than we have ever seen in market. Onions are scarce, particularly the yellow or silver skin; great quantities of seed were planted last spring, and an uncommon crop would have been raised, but for the unfavorableness of the season which cut it off greatly—large quantities never came to their growth or ripened off well; prices are now much advanced, and those of good quality in good request. Beets, &c., remain the same with fair supply. No radishes have yet come to hand. Horseradish is large and excellent. Cabbages continue scarce; of Drumheads, the stock is greatly reduced, and those on hand quite small. Lettuce comes in very large and fine. Celery of common quality is well supplied, but the Giant sorts are scarce and in demand at increased prices. Spinach continues scarce, owing to the cold weather. A few Water Cresses, quite a new article in our market, have been brought in, and sold readily at our quotations. Parsley remains the same. Autumnal marrow Squashes are very scarce, and but few now remain; prices are materially higher. Of the crockneck sorts there is a slight tendency to some improvement on the present prices.

☞ *Fruits.*—Apples remain about the same: no shipments have been made, and the demand is principally confined to the retail trade: good Baldwins have advanced. In other sorts there is scarcely any variation; wine apples are all gone and Lady apples are nearly so. In dried apples there is considerable doing. Pears are about done for the season: Some Vicar of Winkfield and common sorts are nearly the only kinds remaining: Baking remain the same. Cranberries are scarce and prices about the same. Grapes are nearly out of the market; prices have improved for the small stock remaining. A few pine apples have been received. Lemons and oranges remain about the same; good Havanas commanding the highest prices. Walnuts are without change. In chestnuts but little is doing, and the season is now drawing to a close. Other nuts remain about the same.—*Yours, M, T., Boston. Feb. 26, 1844.*

HORTICULTURAL MEMORANDA

FOR MARCH.

FRUIT DEPARTMENT.

Grape Vines in greenhouses will now be swelling their buds rapidly, and will break into full leaf by the middle of the month. If cold nights should occur, it will be necessary to keep up more heat, in order that the temperature may not fall too low, and thus give a check to the vines. Pinch off all small and weak buds, that the full strength of the vines may be concentrated in the larger and more prominent ones, which are sure to give the largest clusters. Vines in cold houses will begin to swell their buds the latter part of the month, and will then need attention. If the

buds swell rapidly, and the border is deeply frozen, a good covering of fresh stable manure, to the depth of six or eight inches, will soon remove it: this mode of warming the roots of a border is highly recommended by one of the most eminent English cultivators. Cuttings for young vines may now be put in, if there is a hot-bed at work. Vines in the open air may be uncovered towards the latter end of the month, if the weather is mild.

Peach Trees, in pots, may still be brought into the greenhouse for a succession.

Scions for grafting may be cut any time this month, after which period, if the spring should be forward, it will be too late.

Root Grafting may still be successfully pursued, planting out the roots, after the operation is performed, in boxes, and placing them in a cool cellar, till good weather for setting out in April.

Pruning Orchards, Grape Vines, and all kinds of fruit trees, may be commenced this month, and continued till every thing is done.

Gooseberry and Currant bushes, in some early seasons, may be planted out the latter part of March.

Raspberry Plantations should be uncovered the latter part of the month.

Strawberry Beds may be partially or wholly uncovered the latter part of this month, if the season is mild and forward.

FLOWER DEPARTMENT.

Dahlias will now engage more attention, especially where there are choice collections: the desire to increase the more rare kinds will induce amateurs to bring their roots forward as fast as possible: to do this, they should be potted immediately in a light rich soil, and placed in a warm greenhouse, or in a hot-bed which has become somewhat exhausted of its heat. As soon as the cuttings are of sufficient length, they should be taken off for propagation. Seeds for producing new kinds may be planted this month.

Camellias still continue in great beauty, and now need good supplies of water—occasionally giving a little liquid manure or guano. Such plants as are of straggling growth should be pruned in, for no plant stands the knife better than the camellia, and if more freely used, we should oftener see better-shaped plants: a fear of losing some little branch often sacrifices the beautiful form of a plant. Inarching should be performed this month, and cuttings may be put in if the buds have not begun to swell. Plants done flowering, and now beginning to grow, may be safely repotted.

Pelargoniums not repotted last month, should be shifted immediately.

Roses will now be in full bloom, if they have been well managed. Young plants should be repotted. Water freely, giving liquid manure once a week, or guano in the proportion of 1 oz. to a gallon of water, and syringe occasionally. Fumigate, if there is any danger from the aphis, and saturate the atmosphere with fumes of sulphur, if that troublesome insect, the red spider, attacks them. Continue to propagate from cuttings, if young plants are wanted.

Ten Week, Brompton, and other stocks now coming into bloom, should be repotted.

Cactuses will now be showing their flower buds, and will need greater supplies of water.

Cyclamens now in bloom should be liberally watered. Be careful to save the seeds, if more plants are wanted.

Lilium lancifolium, and other species, should now be repotted, if not done before.

Calceolaria seed should now be sown for producing plants to bloom in the autumn.

Pansies, *Phlox Drummondii*, *Alonsoa*, *Brachycome*, *Verbena*, &c. may be sown this month, in order to procure strong plants for blooming early in the open garden.

German Asters, *Balsams*, *Ten Week Stocks*, and other annuals, may be sown in boxes, or in a frame, for transplanting out in May.

Tuberoses may be potted this month, and placed in a hot-bed, or other warm situation, and carefully watered till they begin to grow.

Erythrina crista galli. The roots will now be swelling their buds, and will need occasional watering.

Oxalis Bowiei, and other fall flowering species, may be placed on an airy shelf, and will only need watering once a week.

Ixias and *Sparaxis* now coming into flower, will need good supplies of water.

Hyacinths in pots may be brought into the greenhouse for successive blooming. Beds in the open ground should be looked at the latter part of the month, and if the weather is mild, they should be partially uncovered.

Chrysanthemums, *Carnations*, and other plants in frames, should have air every mild day.

Hydrangeas may be propagated from cuttings at this season, taking off the terminal bud, with a portion of the branch. If properly managed, each plant will flower this season.

Ericas may now be propagated from cuttings.

Azaleas will now begin to bloom: water more abundantly. Seed may now be sown, if not previously done.

Dwarf Rocket Larkspur seed should be sown as soon as the frost is out of the ground, and the flowers will be much stronger and finer.

Salvia splendens should be now propagated from cuttings, if plants are wanted for the open garden.

Orange and Lemon Trees may be grafted at this season.

Amaryllis formosissima may be potted now for early blooming.

VEGETABLE DEPARTMENT.

Hot Beds. In our January memoranda, we recommended the formation of hot-beds; but as the weather was so severely cold, probably little was done until February, when the weather was more moderate. If the beds were then made, they will soon be in readiness for planting any kinds of seeds.

Cucumber seeds, if sown last month in pots, may now be hilled out, making one hill under each light. Bring up the earth to within six inches of the glass, and earth over the hill as fast as the roots require it.

Tomato seeds should be planted in pots, for making early plantations in the open ground.

Eggplant seeds should be planted this month, as it requires a good season to bring the fruit to full size.

Lettuce, *Radishes*, *Cress*, &c. may be sown this month in any spare part of the bed, and the crop will all be pulled before the vines will be of sufficient size to crowd them out.

Cabbage, *Cauliflower*, *Brocoli*, and other seeds, may now be sown, in order to forward the crop.

THE MAGAZINE

OF

HORTICULTURE.

APRIL, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes and Recollections of a tour through Hartford, New Haven, New York, Philadelphia, Baltimore, Washington, and some other places, in October, 1843.* By the EDITOR.

(Concluded from p. 88.)

Philadelphia, October 21st.—On the evening of the 19th we left Baltimore, and before daylight on Saturday, the 20th, we arrived in Philadelphia, where we spent the day in visiting several of our friends, whose gardens we have already fully noticed in our previous volumes; but we now add a few brief notes relative to their improved condition.

Exotic Nursery of R. Buist.—Since 1841, Mr. Buist has considerably enlarged his city grounds, by purchasing the premises adjoining, which were formerly occupied by Mrs. Hibbert, the widow of the late Mr. Hibbert, who, since the death of her husband, has kept a very good collection of plants: the range of houses is now consequently lengthened to nearly three hundred feet. Since our visit, Mr. Buist has erected another new house, which is heated on the tank system, and he has kindly promised to give us the results of this mode of applying heat, as compared with copper or iron pipe and brick flues.

Mr. Buist has a large and choice collection of plants, and has lately made many additions. Passing through the houses, we noticed several new species of *Oxalis*, viz. *O. purpureus*, *lanatus* and *elongatus*, the two latter, we believe, received from the exploring expedition. Among the Cacti, we noticed some new *Echinocactus*es, and a fine stock of *E. Eyrièsi*, *Rodánthe*, &c. In the greenhouse we saw fine specimens of *Achimenes longiflora*, *Chorizema ovata*, and

vàrium, and *Genista ramòsus*, the three latter most desirable greenhouse plants, not often seen in collections. Mr. Buist also has a good collection of cinerarias, a tribe of plants now attracting great attention among the English florists, and deservedly too, for there are but few plants which add more to the gayety of the greenhouse than the varied shades of their star shaped blossoms, abundantly produced throughout March, April and May; we must recommend to amateur cultivators the production of seedlings in order to obtain new varieties. The general collection of plants had not yet been arranged for the winter, and we found it a work of more time than we had to spare, to note down many of the more interesting objects.

In the greenhouse at the nursery at Moyamensing, we noticed immense quantities of seedling camellias, which, if one plant in one hundred produces a flower worthy of preservation, will furnish our collections with a great number of new varieties. Mr. Buist has already raised two very superior kinds, *Martha* and *Pràttii*; the former a remarkable white, and the latter a beautiful rose colored, one. We believe we noticed Mr. Buist's method of growing his camellias in our last account of his garden; which was to keep them in shallow pits, just deep enough to admit the plants; in this way they keep better than in the open air, do not require near so much care, are easily shaded from the hot sun, and their foliage acquires a deep green and healthy hue. In gardens of limited extent and where there is little or no shade, we would recommend the same mode of summer protection from our scorching sun and drying winds.

Mr. Buist showed us in the open garden, a patch of the *Prairie* strawberry mentioned by Mr. Longworth in our volume for 1842, (VIII. p. 40.) It has a large and vigorous looking leaf but it has not yet fruited, and its merits are yet unknown. Our seedling strawberry Mr. Buist considers the finest variety he has ever cultivated; he showed us a seedling raised from it which, though a very good sort, was wholly unlike the parent in size and beauty; this is at least the third instance where we have known seedlings raised from it, which have turned out to be small and almost worthless varieties; this fact shows conclusively its hybrid origin. The demand for plants of our seedling has been so great that but few, if any, really fine fruit have been obtained here; the present season we hope our Phila-

delphia friends will see it in all the perfection it has been exhibited at the meetings of the Massachusetts Horticultural Society, when it again obtained both the 1st and 2d premiums of the last season.

We intended to have made some remarks upon Mr. Buist's collection of roses, to which many new kinds have been lately added, and among others Noisette Solitaire, one of the new yellow roses of so much merit; but our time would not permit us to take down scarcely any memoranda, even what we have already written having been from a recollection of what we saw in our hasty walk through the grounds.

Garden of P. Mackenzie.—A new greenhouse erected on Spruce street, and parallel to it, completes a *square* of greenhouses and hothouses for the growth of plants. Adjoining the greenhouse in the rear, Mr. Mackenzie has built a neat brick dwelling, three stories high, in which he resides; his whole premises, comprising dwelling house and upwards of three hundred feet of glass, occupying less than half an acre of ground; this is certainly economising space.

The objects of most attention here were the seedling azaleas of which we have often spoken, and of which descriptions have appeared in our pages, the last at page 55. Mr. Mackenzie pointed out to us great numbers of seedlings, many of which were from the *A. variegata*, and, he has expectations of some new and quite distinct kinds. The readiness with which seeds are obtained, and the facility with which they are raised, invites the amateur to give this tribe more attention; if a large and fine flower, like *speciosa* could be obtained, spotted or striped with white it would be a great desideratum; and we see no reason why this may not be done: *variegata* is an approach to it, but the flower is wanting in the brilliancy of its colors. Crossing the large white Nepal rhododendron, with some of the azaleas would also give a new feature to the family, by increasing the size, texture and brilliancy of the foliage, and at the same time, adding to the size, as well as clustered habit, of the flowers. We look forward to beautiful results from judicious intermixture of the various kinds of rhododendrons and azaleas.

Mr. Mackenzie's collection of camellias is large and very fine, as is also his collection of roses—and we found every

department in as good condition as could be expected at the season of the year when the plants are just being removed to the houses for the winter.

Nursery of Ritchie and Dick, Kensington.—We unfortunately did not find either of the proprietors at home. Mr. Ritchie was absent on a tour to the south, and Mr. Dick had just left for the city. We walked through the grounds and greenhouses, but from the confusion attending the removal at this season of the year we did not find much to note down. Great quantities of roses yet remained in the open ground, but the cool nights had checked the growth of the plants so that we saw no very good specimens. Messrs. Ritchie and Dick have considerably extended their collection since 1841. Two or three houses, some with and some without heat, have been erected, principally for the wintering of roses and camellias the two classes of plants to which they give the most attention. Thousands of young stocks of camellias were coming on, and large quantities had just been worked by the new mode of grafting now so generally adopted.

Not having the means of ascertaining the new roses lately added to their collection, we were in hopes to have had leisure to call again, but our limited time would not allow us to do so on our present visit.

Mr. Pepper's City Garden we found as usual, under the care of Mr. Chalmers, Jr. in the highest state of keeping. The camellia house, where the plants are kept all summer, was as fresh as if the plants had had all the shade and air of a country garden. Mr. Chalmers is a most excellent cultivator of the camellia, and we must give him the credit of having the healthiest and most vigorous looking camellias of any we saw during our visit; taking the quantity of buds into consideration even excelling Mr. Becar's of Brooklyn, N. Y. His compost is a rich loam with little peat and sand, and he pots a plant whenever it needs it, no matter at what season; all the main shoots are tied up to neat stakes, and the knife is used freely to bring into shape every plant.

The Palms in the hothouses were in admirable condition considering the limited room their rapidly increasing size allows them; in a year or two more it will be impossible to crowd them into their present location. The Cacti, of which Mr. Pepper has some of the largest specimens in the

city, were remarkably strong and healthy : two specimens of *Ephiphyllum truncatum* being nearly six feet high, grafted on tall stems of the *Cereus triangularis*. Mr. Chalmers has raised a very fine seedling called *C. Pépperi*, which has been noticed by our Philadelphia correspondent (Vol. VIII. p. 293.) Some beautiful new *Echinocactuses*, from Texas, have been added to the collection, which promise to be very desirable sorts.

Mr. Chalmers deserves great credit for the skill which he evinces in the cultivation of the collection of plants under his care. Having no place for their protection during summer, and confined in a small spot surrounded with high brick walls, it would seem almost impossible to prevent the plants from being greatly injured by heat and insects, especially the latter ; yet we found the collection as free from the red spider, scale, and other such pests of the cultivator of plants, as any we had ever seen. Continued attention and diligence, together with neatness in every department, have been the means by which he has brought the plants, under his care, to a high state of cultivation.

Newburgh, N. Y., Oct. 24.—Returning by the way of Albany and the Western Rail-road, we tarried on our tour up the Hudson River, at Newburgh, in order to pay a passing visit to our correspondent Mr. Downing, whose nurseries and grounds we have given a full account of in our Vol. for 1842, (VII. p. 401.)

Highland Horticultural Nurseries. A. J. Downing & Co.—The lateness of the season, and the return of cool frosty nights, had now destroyed the greatest beauty of the garden. On the lawn in front of the house the beds of petunias, roses, and other showy flowers, had been touched with the frost, and a fading bloom was all that now greeted the eye. The dahlias were blackened by the same rude touch, and where all was brilliancy but a few days previous, a flowerless scene was now presented.

In walking through the grounds we noted down the following as most desirable shrubs, trees and plants :—*Virbúrum* sp., *Fothergilla alnifolia*, *Hydránga quercifolia*, *Periplóca græca*, a very excellent climbing plant, with rather singular flowers ; two fine species of the *Aristolóchia*, both desirable plants for training over an arbor or trellis ; their broad and ample foliage and curious flowers having an interesting appearance all the season.

The microphylla rose is quite hardy here, as are also many or all of the Bourbon roses. The fine specimen of *Magnolia conspicua*, which is mentioned at the page above referred to, had made a fine growth during the summer, and was full of flower buds. [We shall be surprised if this plant has not been injured by the cold weather since we saw it. If it has not been much hurt, there is no doubt it would stand perfectly well in the vicinity of Boston.] A fine specimen of *Pinus Cémbra* had attained the height of six feet, and looked well.

In the fruit department Mr. Downing has made many additions; and having his grounds around the house fully stocked, a new spot of ground of about ten acres, at a short distance, has been taken up for growing trees. Of pears, Messrs. Downing have a good stock, as also of cherries and plums, including among the latter Lawrence's Favorite, the Columbia—and a seedling called the Emerald Drop, which is said to be very fine.

The grounds of Mr. C. Downing have been much improved since 1842. They were now well filled with a good selection of trees of all kinds. The Doyenné blanc, or St. Michael pear, is cultivated here in large quantities, and the fruit is produced in the greatest perfection: one purchaser has planted out no less than *six acres* of this variety, the trees having been taken from this nursery.

Mr. Downing has given considerable attention to the cultivation of the pink, &c., and has originated several fine seedlings, which are to be found in their catalogue.

We mentioned in our account of this place, that Mr. Downing had raised a seedling variety of rhubarb, which proved to be large and fine. Since then we have grown this variety, having at that time been furnished with a very small plant, and so far as the experience of a single season allows us to form any opinion, we consider it as one of the best varieties which has been raised; being of a large size, with a handsome red stalk, and of most excellent flavor. If it should continue to improve as the root becomes stronger, it will claim a rank equal to Myatt's Victoria.

Every part of Mr. Downing's grounds we found in fine condition; all the trees are planted four feet apart, and the whole tillage is done with the cultivator. Our visit to each of the Messrs. Downing's nurseries afforded us much gratification.

ART. II. *Pomological Notices ; or notices respecting new and superior fruits worthy of general cultivation. Descriptions and Engravings of six varieties of Pears.* By the EDITOR.

OUR present article is a continuation of the series which we commenced in our last volume, (IX. p. 132,) figuring eighteen varieties of pears. Our last article appeared at p. 361 of that volume. We now add six additional varieties, whose qualities are considered sufficiently excellent to entitle them to a place in every good collection of fruits. Among the number is the Vicar of Winkfield or Le Curé, which has lately attracted so much attention among cultivators. To the description and figure, which is from a very superior specimen, we have added all the particulars we could gather from the best authorities in reference to that variety. The numbers are continued from our last article.

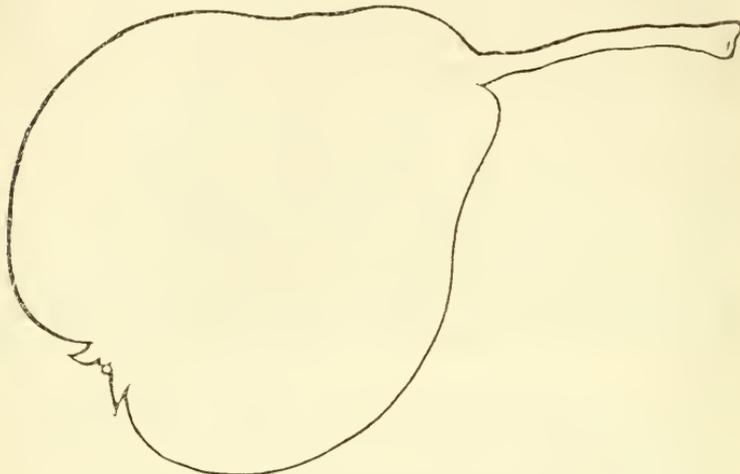
19. WINTER NELIS. Hort. Soc. *Catalogue*. 3d Edition.

Nelis d' Hiver, Bonne des Malines, Beurré des Malines, La Bonne Malinoise, Milanese Cuvelier, Etourneau.	}	According to Hort. Soc. <i>Cat.</i> 3d Ed.
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Among the earlier winter pears which have been introduced into our gardens, few possess more merit than the Winter Nelis (*fig.* 1, p. 128.) Though not of large size, its excellent qualities claim for it a place in every good collection of fruit. The first notice we find of this variety is that of the late Mr. Braddick, of London, an enthusiastic cultivator of fruits, who for several years annually visited the continent for the express purpose of procuring buds and scions of new varieties, and to whom English cultivators are greatly indebted for the early introduction of many of Dr. Van Mons's seedling pears. Among the varieties in his collection, he enumerates the Nelis d' Hiver or Bonne Malinoise (*Gard. Mag.* Vol. III. p. 353,) and he then considered it the "best new winter pear." In the 1st edition of the *Cat.* of the Hort. Soc. (1826,) it is inserted under the name of Bonne Malinoise; and in the 2d edition (1831,) and 3d (1842,) as the Winter Nelis; a correct figure of it

is given in the *Pom. Mag.* Vol. III. pl. 126. This variety was first fruited, we believe, in this country by the late Mr. Manning, who has described it in our Vol. III. p. 47, where he states he obtained his scions from Mr. Lowell,

1



Winter Nelis Pear.

who received them from the late Mr. Knight. It was raised by M. Nelis of Mecklin, in honor of whom it has been named. The third, and last two synonyms above given, have been detected since the publication of the 2d edition of the *Catalogue*.

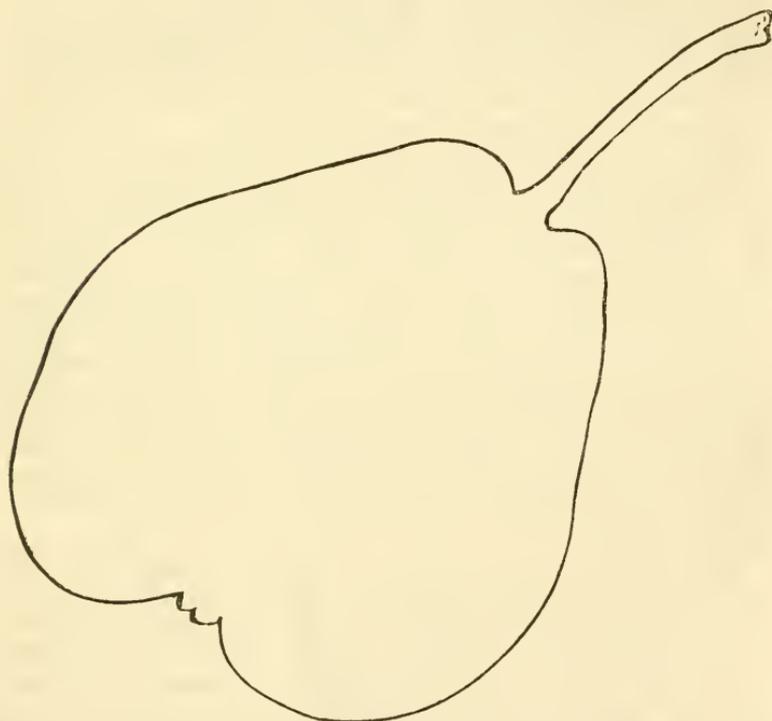
Size, medium, about two and a half inches long and two and a quarter inches in diameter: *Form*, obovate, largest in the middle, rounding off towards the eye, and contracted near the stem where it ends obtusely: *Skin*, rough, dull yellowish green, becoming paler when mature, nearly or quite covered with brownish russet, darkest on the sunny side, with a few blackish dots interspersed upon the surface: *Stem*, long, about one and a quarter of an inch, rather slender, smooth, dark brown, and slightly sunk in a shallow cavity: *Eye*, medium size, open, and moderately sunk in a round depression; segments of the calyx broad and pointed: *Flesh*, yellowish white, fine, melting and juicy: *Flavor*, rich, sugary, perfumed and excellent: *Core*, medium size: *Seeds*, large, dark brown, nearly black. Ripe from December to February.

20. NAPOLEON. Hort. Soc. *Catalogue*, 3d Ed.

Medaille, Sucree doré (of some, Charles d' Autriche (of some, Wurtemberg, Roi de Rome,	}	According to the Hort. Soc. <i>Cat.</i> 3d Ed.
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The Napoleon pear (*fig. 2.*) was first introduced to this country in 1823, through the exertions of Mr. Lowell, then

2



Napoleon Pear.

corresponding secretary of the Massachusetts Agricultural Society. Mr. Lowell had occasion to write to Mr. Knight, for some copies of the *Transactions* of the London Horticultural Society, and in the reply to his letter Mr. Knight expressed himself "in the most friendly manner, appeared to be highly gratified with opening an intercourse with our country, expressed his strong attachment to it, his disgust

of the libels on our country in some presses of Great Britain, and his intention to send us the best new fruits which the late improvements had introduced." At the same time Mr. Knight forwarded trees and scions of ten varieties of pears, among which was the Napoleon. These nearly all grew, and scions were liberally distributed, from whence this variety has been extensively disseminated in the vicinity of Boston.

The Napoleon was raised by Dr. Van Mons of Louvain, and was first sent to England in 1816. It proved to be so good a variety that it was rapidly disseminated, and some time ago had become a very commonly cultivated and universally admired pear. A very correct drawing of it is given in the *Pom. Mag.*, Vol. II. pl. 75.

Size, large, about three inches long, and two and a half in diameter: *Form*, obtuse pyramidal, largest about one third from the eye, considerably contracted above the middle, ending obtusely at the stem: *Skin*, fair, smooth, pale green, becoming yellowish when mature, sometimes with a faint tinge of red on the sunny side, and covered with minute russet specks: *Stem*, long, about one inch, straight, smooth, dark brown, inserted in a shallow cavity, with a slight projection, or lip, on one side: *Eye*, medium size, deeply sunk in a large, round, cavity; segments of the calyx rather short: *Flesh*, yellowish white, coarse, melting and exceedingly juicy: *Flavor*, rich and refreshing: *Core*, medium size: *Seeds*, large, light brown. Ripe in October and November.

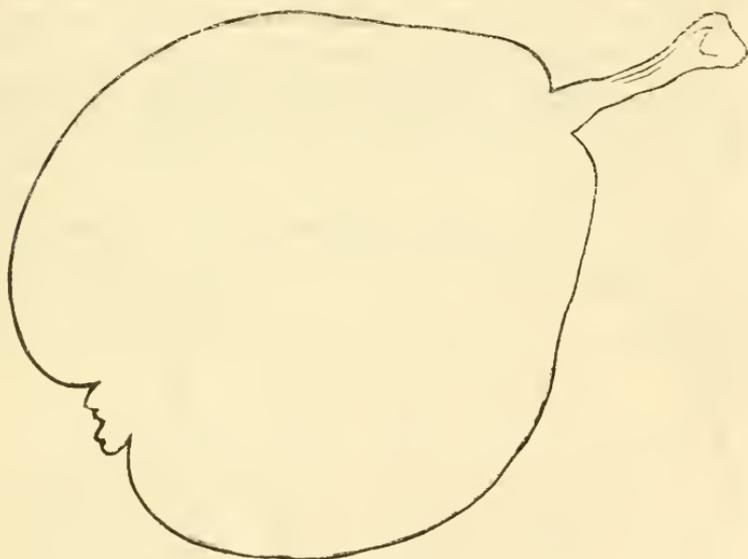
This pear is very variable in its quality, according to the soil in which the tree is placed. In cool heavy soils it is often astringent; but in light rich loams it is excellent, having a most copious supply of rich, sprightly, refreshing juice. It is not in eating until the skin assumes a yellowish hue. It succeeds well either on the quince or pear stock. In the vicinity of Boston this variety is often found under one of the synonyms above quoted, the Charles d'Autriche, and in the autumn of 1843, at the Annual Exhibition of the Mass. Hort. Soc. several parcels were received from various cultivators, under that name, which proved to be the Napoleon. We ourselves received it from France under the former name. The Napoleon is, however, so distinct a fruit, that the error is readily detected.

21. URBANISTE. Hort. Soc. *Cat.*, 1st 2d and 3d Ed.

Beurré de Roi (*of some.*)

The first introduction of this pear (*fig. 3*) into our gardens was through the same source as that of the Napoleon. The Urbaniste was one of the varieties sent by Mr. Knight, in 1823, to Mr. Lowell and the Mass. Ag. Soc., and from Mr. Lowell's garden scions were very freely distributed, so that the Urbaniste is now a very generally cultivated pear. It was raised by the Count de Coloma, of Malines, who first sent specimens of the fruit to the London Horticultural Society in 1823. It is somewhat remarkable that so excel-

3



Urbaniste Pear.

lent a pear has continued so long in cultivation without having obtained, in England, a synonymous name. Trees have, however, been received here from France as the Beurré de Roi, which have proved to be the *true* Urbaniste. It is one of the very finest autumn pears.

Size, large, about three inches long and two and three-quarters in diameter: *Form*, roundish obovate, regular, largest in the middle, rounded off at the eye, and tapering gradually to the stem, where it ends obtusely: *Skin*, fair, smooth, pale yellowish green, with occasional patches of

russet, particularly around the stem, and light dashes of red on the sunny side: *Stem*, medium length, about three-quarters of an inch, stout, thick, with an uneven surface, and inserted in a slight cavity: *Eye*, rather large, and slightly depressed: *Flesh*, white, fine, juicy and melting: *Flavor*, rich, sugary, perfumed and delicious: *Core*, large, slightly gritty. Ripe in October and November.

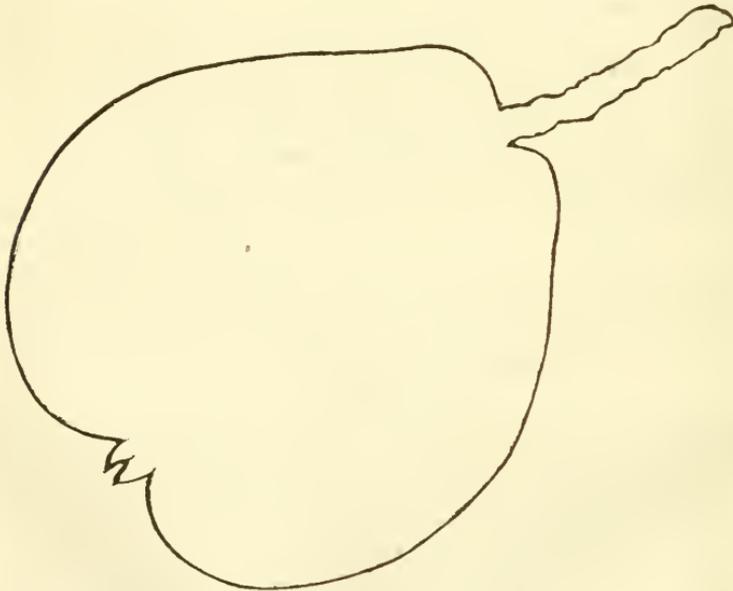
Mr. Manning states that the tree is of handsome form, and grows vigorously, but does not come into bearing early; when, however, it has attained a bearing age, it is very productive. Of all the European pears he thinks the Urbaniste the best substitute for the St. Michael.

22. BELLE LUCRATIVE. Lindley's *Guide to the Orchard*.

Fondante d'Automne. Hort. Soc. *Cat.*, 3d Edition.

The Catalogue of the Hort. Soc. describes two different pears under the above names, viz:—The Belle Lucrative

4



Belle Lucrative Pear.

as "pale yellow and red, roundish, 2d size, crispy, 2d quality," and the Fondante d'Automne as "pale green, obovate,

buttery, 1st quality." It would certainly seem that two pears so described could not be synonymous, yet Mr. Lindley, in his *Guide to the Orchard*, has described the Belle Lucrative from the fruit grown in the garden of the Hort. Soc., and he designates the Fondante d'Automne as a synonym. Supposing that there must be some error in the *Catalogue*, we have quoted Mr. Lindley as our authority. The Belle Lucrative (*fig. 4*, p. 132) is one of the very best autumn pears, though less beautiful than many others, and also one of the most productive.

Size, large, about three inches long and three inches in diameter: *Form*, roundish, inclining to obovate, largest in the middle, and regularly tapering to the stem where it ends obtusely: *Skin*, pale yellowish green, more or less interlaced with russet, which appears in streaks or lines at the base of the stem: *Stem*, medium length, about one inch, stout, curved, dark brown, rough, with several protuberances, slightly fleshy at the base, and inserted on one side of a fleshy projection in a shallow cavity: *Eye*, small, open, sunk in a much furrowed cavity; segments of the calyx medium length, projecting, firm; *Flesh*, white, fine, melting and very juicy: *Flavor*, rich, sugary and perfumed: *Core*, medium size: *Seeds*, medium size, brown. Ripe in September.

Our drawing is from a fine specimen given to us by Mr. Wilder, President of the Mass. Hort. Soc.

23. LOUISE BONNE OF JERSEY. Hort. Soc. *Cat.* 3d Ed.

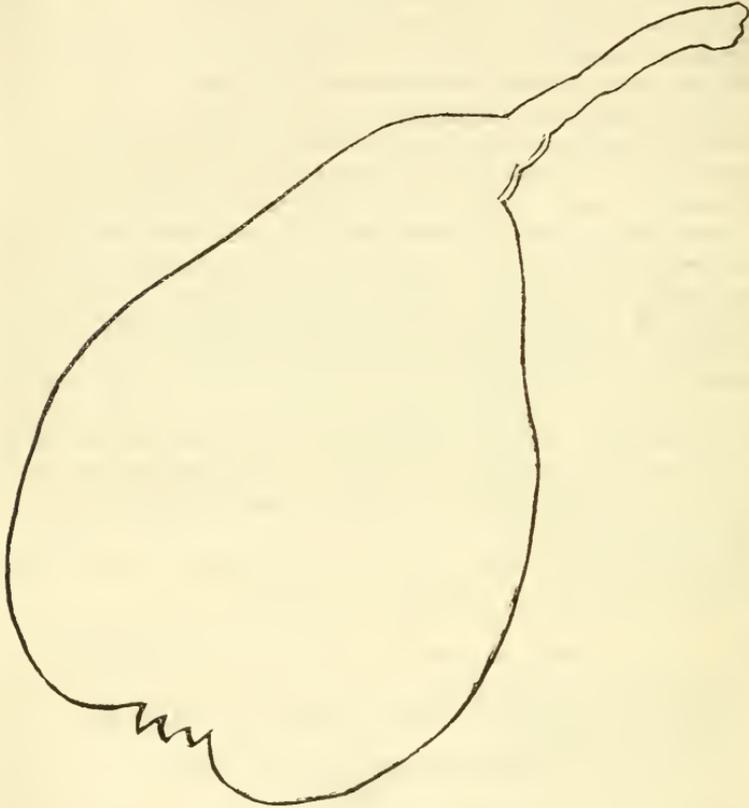
Louise bonne d' Avranches,	}	Hort. Soc. <i>Cat.</i> 3d Ed.
Beurré ou Bonne Louise Auradore,		
William the Fourth,	}	<i>Pom. Rep.</i> of the Hort. Soc. of Rouen, Fig. 23.
Bergamotte d' Avranches,		
Poire de Jersey,		

Of the many varieties of pears which are of more recent introduction, probably none take a higher rank than the Louise Bonne of Jersey, (*fig. 5*, p. 134.) Mr. Thompson has stated that in the climate of England, it more than "rivals the Marie Louise," and is worthy a place in every collection. Its beauty is fully equal to its excellence.

It appears that the Louise Bonne of Jersey is quite an old variety, though but so recently introduced to England and this country. According to an account of it in the

Pomological Report of the Hort. Soc. of Rouen, it was obtained at Avranches in 1788, by M. de Longueval, and its original name was the *Buerré de Longueval*. It was, however, generally distributed under the name of Louise Bonne

5



Louise Bonne of Jersey Pear.

d' Avranches, which is undoubtedly its legitimate title ; but the London Horticultural Society have called it the Louise Bonne of Jersey, from its having first been received in their garden from the Island of Jersey—and to distinguish it from the old Louise Bonne, an old and inferior fruit. In 1820, specimens of fruit were first exhibited before the society, which were received from Jersey, and subsequently grafts were received from Major General Le

Contour, for the society's collection. It is a vigorous and hardy tree, and well adapted for a standard. For dwarf trees, considerable care is requisite in the pruning, in order to clothe the stem with branches near the ground, as the tendency of growth is upright.

Size, large, about three and a half inches long, and two and a half in diameter: *Form*, pyramidal, regular, large around the eye, gradually tapering to the stem near which there is a slight contraction: *Skin*, fair, smooth, yellowish green, paler when mature, very broadly suffused with bright red on the sunny side, which shades off abruptly, and the surface covered with grayish russet points, each point having the peculiarity of being surrounded with an "auréole" or ray of red: *Stem*, medium length, about one inch, stout, smooth, pale brown, with a few grayish specks, fleshy, swollen and wrinkled at its junction with the fruit, and forced into an oblique direction by a large projection or lip on one side: *Eye*, medium size, open, moderately sunk in an open furrowed cavity; segments of the calyx medium length, stiff, projecting, rounded: *Flesh*, yellowish white, fine, melting, buttery and exceeding juicy: *Flavor*, rich, brisk, agreeably perfumed and delicious: *Core*, medium size: *Seeds*, medium size, light brown. Ripe in October.

24. VICAR OF WINKFIELD. Hort. Soc. *Cat.* 3d Ed.

Monsieur Le Curé. Hort. Soc. *Cat.*, 2d and 3d Edition.

Dumas. Hort. Soc. *Cat.* 3d Edition.

Clion. *Am. Orchardist.* 3d Edition.

De Curé, }
Monsieur, } Of some French Cultivators in the Department of Indre.
De Clion, }

Belle de Berry }
Bon Papa, } Dalbret *Traité de la Taille des Arb. Fr.*
Pater Notte, }

Belle Heloise, of some French *Catalogues.*

Saint Lézin. *Bon Jardinier.* 1837, p. 327.

Burgomaster, of many gardens around Boston, and Manning's *Book of Fruits*, p. 90.

It is somewhat singular that a variety whose qualities have been so long known, in the vicinity of Boston, under the name of Burgomaster, should now, almost for the first time, attract so much attention, and, by many, supposed to be a very *new* pear. For a number of years, at least ten, and we believe longer, this variety has been sold in the

Boston market, and has been almost the only pear, in some seasons, to be found as late as January, or even February. Yet, notwithstanding this, since the merits of the variety have become better known, there has been a constant inquiry after this pear.

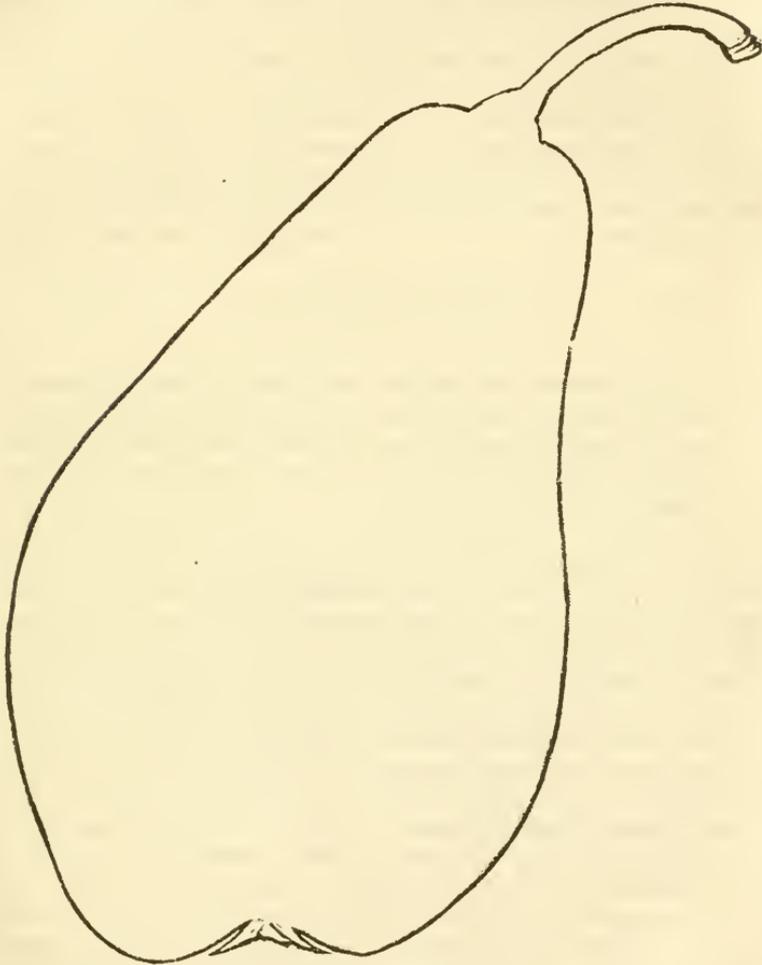
Mr. Manning at one period thought of regrafting all his trees of this kind ; but after further trial, its great productiveness, and other good qualities, induced him to continue its cultivation. The specimens of fruit are remarkably variable, and we have eaten them when they would have been pronounced nearly first rate, and we have also tasted them when they were only fit for culinary purposes. This great difference is to be attributed wholly to soil, situation, &c., and also to the proper mode of ripening this, as well as other winter varieties of pears.

Notwithstanding it is a matter of some doubt as to the propriety of substituting the name Vicar of Winkfield for Le Curé, still we have done so for reasons heretofore given ; the most important of which are, that the *Catalogue* of the Lon. Hort. Soc. is acknowledged as the best authority, and it is certainly advisable to have some standard. The Poire de Curé is the oldest name among fruit cultivators, but it has obtained all the synonyms above enumerated. The original tree was found in the woods at Brenne, in France, by a curate, (curé, from whence its original name,) and from its large size and good qualities was extensively multiplied and disseminated. A full account of its history will be found in our Vol. for 1843, (IX. p. 271.)

The Vicar of Winkfield is one of the most productive pears in cultivation ; the trees bear every year and are often so overloaded as to break down the limbs. As a dwarf, or *en quenonille*, tree, on the quince, it is a most desirable kind ; the fruit on that stock is often six or eight inches long and is higher colored than when growing on the pear. It will also flourish in a soil unfavorable to many other pears. In regard to quality there is much difference of opinion ; but, as we have just stated, this is greatly owing to locality, season, &c. In a description of it in the *Gard. Chronicle* for 1843, p. 20, Mr. Thompson states that it is "buttery and melting in all seasons, and rich in such as are favorable." The best we have ever tasted, were some specimens we received from Mr. S. Walker, of Roxbury, last autumn, whose excellent article on the ripening of

this and other varieties, will be found in a previous No. (page 22,) and our engraving (*fig. 6,*) gives a very correct representation of one of the pears.

6



Vicar of Winkfield Pear.

Size, large, about five inches long and three inches in diameter: *Form*, oblong pyramidal, irregular, flattened, oblique at the crown, largest below the middle, contracting

slightly above, and tapering to the stem where it ends rather obtusely : *Skin*, fair, smooth, pale yellow when mature, broadly tinged with dull red on the sunny side, and regularly covered with brownish russet points, interspersed with rather large, irregular, blotches or patches of dark russet : *Stem*, medium length, about one inch, rather slender, curved, wrinkled, greenish brown, thick and fleshy at its junction with the fruit, which is oblique : *Eye*, large, open, slightly depressed in a roundish shallow cavity ; segments of the calyx large, broad, long, pointed and much reflexed : *Flesh*, yellowish white, coarse, tender and juicy : *Flavor*, pleasant, sweet, and agreeable : *Core*, large : *Seeds*, medium size, pale brown. Ripe from November to February.

ART. III. *An account of two new Seedling Apples, with a description of their qualities.* In a letter to J. S. Skinner, Esq., Corresponding Member of the Col. Hort. Soc., Washington, D. C. By J. W. SCOTT, Esq., Toledo, Ohio. Communicated by Mr. Skinner.

IN conformity with the request of Hon. E. Whittlesey, I send you an account of some seedling apples of uncommon merit. They grow on the alluvial bottom or intervale of the Maumee River, immediately under the high bank on which Fort Meigs was built. The orchard was planted some 20 or 30 years ago, I think by Major Spafford, father of the present owner, Aurora Spafford. The trees are thrifty and handsome shaped. The Spafford Russet is believed to be a very good bearer. The other, which has been named Darling Russet, from Henry Darling, Esq., late of Perrysburg, who first brought them into notice, is not believed to be a first-rate bearer, but as I have not made enquiries of Judge Spafford himself, I am not sure of that. It bore this year over 12 bushels. It has rather limber twigs on which the apples grow. The apples are of very unequal size, from that of a medium Spitzenburg to a medium Seek-no-further. From the stem end there sometimes runs one or more well defined seams towards the blossom end. Some of them are shaped like Spitzenburg, and some like Lady-finger apples. I have been particular

in describing this Darling Russet, because I think it equal, taking all its qualities together, to the best winter apple that has fallen under my notice. I prefer it to the Greening, the Boston or Roxbury Russet, or the Newtown pippin. For keeping late, and preserving its freshness and flavor, it will take rank with any rival that I know. I know no apple having so racy a flavor.

Spafford Russet.—A medium sized apple. The eye in a small and rather deep cavity; the stem about three-fourths of an inch long. Of a smooth, russety, golden yellow color. Flesh tender, firm, juicy, sub-acid, and possessing a flavor of a summer pear. It ripens from October to December. This apple is a seedling on the farm of Judge Spafford, of Perrysburg.

Darling Russet.—A medium sized apple, of somewhat conical form; the eye and stem in moderate sized cavities; the stem from three-fourths of an inch to an inch in length. Of a dark russet color, with greenish yellow blotches on one side, and yellowish red on the other, and of a smooth, russety yellow around the stem. The flesh white, tender, firm, and high flavored. It excels the Roxbury Russet in high flavor, but is of a coarser texture. This apple is also a seedling on the farm of Judge Spafford. In a dark, cool cellar, they would hardly ripen before the middle of April, and would keep good till July.

As a fall and early winter apple, we like the Spafford Russet as well as any; I might say better than any, except the Fall Pippin and the Belleflower. It is said to be a stronger and better tree than the Darling Russet.

Scions of these apples may be had of Hon. Aurora Spafford, Perrysburg, who owns the orchard, and who, I doubt not, will take pleasure in aiding your design to collect the best native apples of the west. My acquaintance with Ohio seedling apples leads me to entertain very favorable anticipations of your success in obtaining all the new varieties that may be desired, and of a quality not inferior to the best that fill the books of our pomological writers.

I had a kind last winter, obtained from an orchard five miles above Maumee, on the river bottom, bearing a few feet below the surface,—a shelly lime rock,—that kept well and were excellent, but I have lost the description, and could not now find the tree. They were selected by myself from a large orchard, where I was obtaining my graft-

ed fruit for winter use. I picked from all the trees, the apples on which looked as if they might keep well and be good, but I found but this one kind worth propagating. Next fall I will endeavor to find it out again. If I can be of service in the good cause of securing the propagation of the best native fruits, please command me.

Very truly yours,

J. W. SCOTT.

Toledo, 25th Feb., 1844.

ART. IV. *Guano ; its action upon the growth of various Plants, Fruits, &c.* By J. E. TESCHEMACHER, Corresponding Secretary of the Mass. Hort. Soc.

I HAVE already stated that I had numerous experiments in progress which were destroyed by fire; as there is no prospect of my resuming them at present, I will offer a few ideas upon which several of them were based, in order that those who have leisure may pursue them. The ultimate object of vegetable life appears to me to be the production of seed;—to this purpose, and to accumulate the properties and ingredients for the formation and perfection of this seed, the root, stem, leaf and flower are devoted, each performing its destined gradual part, until by their united efforts, brought into action by soil, light, heat and moisture, this object is attained; exterior vegetable action then declines until another season. Experiment has shown that plants grown on mere sand, with the assistance of water, will throw out stem, leaf and flower, nay even the forms of seed, but these will be mere integuments, empty vesicles or little bladders—also that by constantly stimulating, with peculiar manure, we can throw plants into such uninterrupted luxuriance of shoots and foliage, that often the flowers, and more often the seeds, do not appear within the limits of the season. Combining these views with others on the production of double flowers, and with some suggested by various experiments on Guano, it seems to me highly probable that certain manures are particularly conducive to a luxuriant growth of stem and foliage, while others are peculiarly so to the production of numerous and

well filled seeds. As it would be impossible for me, at the present moment, to develop all my ideas and experience on this subject, I will endeavor briefly to elucidate it by a supposition, which, like those in algebra, may or may not be near the truth.

Suppose the nitrogenous (*ammoniacal*) and alkaline (*potash and soda*) manures to be those chiefly instrumental in producing stem and foliage, then nitrate of soda will be valuable for this purpose, and if the soil itself contain the ingredients of the seed in a fit state for absorption, the plant thus thrown into a state of luxuriance will be enabled to draw from it sufficient to make plenty of good seed. But if the soil in itself contains them very sparingly, then this excess of stem and foliage, although containing a quantity of nitrogenous and palatable food for cattle, will be deficient in rich seed. Now we know that phosphate of lime and of magnesia, with sulphurous compounds, exist in all seeds useful to man and animals—these, however, do not form part of nitrate of soda and potash, hence the latter can only assist the plant in extracting them from the soil.

Suppose, secondly, we use a manure combining the nitrogenous principles in the shape of urates, &c. with the alkaline phosphates, sulphates, muriates, &c., then even on the poorest soil, while the ammoniacal portion is performing its office of causing luxuriance in foliage and stem, the ingredients of the seed are offered in abundance to the root. This is exactly the predicament of Guano—most of the salts in which are soluble in water—and those which are not, such as the phosphate and oxalate of lime, become so when combined near the roots with the carbonic acid furnished by the humus as well as by other portions of the manure.

The use of a solution of Guano in water is therefore good, when the seed is not required; but where it is, the deprivation of the insoluble phosphate of lime is very injurious.

Hence, from the proper use of Guano, a luxuriant vegetation is followed by the production of a large crop of fine seed. As a farther elucidation of my views, I will state that the manure made use of for the purpose of producing double flowers, is the highly nitrogenous stable manure, which is used in such quantity as to prevent the roots from

coming into contact with that part of the soil containing the ingredients of the seed—this manure being then chiefly favorable to the production of foliage alone, if continued through many generations will by degrees convert the stamens, pistils, and the parts destined by nature to prepare the seed, into leaves or petals, and finally obliterate the seed. These flowers, if grown in a poor soil, scarce in nitrogenous substances, will again, as is well known, revert to their normal single seed bearing state.

Several of my experiments with Guano proved to me that it shortened the internodes, or portions of the stem between each leaf; this was particularly evident in seedling orange and lemon trees, and is a sure indication of fruit or seed bearing; indeed the spurs, which are well known as the fruit producing parts of many trees, are but shortened branches where the internodes are reduced to a mere nothing, and where, consequently, the axillary action is concentrated into a small space. I have, therefore, no doubt of the beneficial action of Guano on fruit trees. Many experiments are, however, yet desirable. Such as whether Guano acts beneficially on the receptacle of the seed, which is the fruit of the strawberry and raspberry; whether on the exterior covering of the seed, which is the apple, peach, plum, &c.; or on the kernel or nut, or on the pulpy envelop of the seed, as the gooseberry, grape, melon, gourd, &c. I hope that these ideas will give rise to numerous experiments this year, and that those who make them will not hesitate freely to communicate them for the general benefit.

I will merely add farther, that I should consider it advisable, in all experiments on fruits, to try both the Guano itself as well as a weak solution of it in water—it is highly probable that the solution will be efficacious where the receptacle or the exterior of the seed is most valuable, whereas in corn, peas, beans, &c., those phosphates which are insoluble in water, and are very necessary, would be thus lost to the plant.

At another period I may possibly resume this subject, as it seems to me that these ideas open new views on the physiology of plants, and certainly show of how much importance it is for those who study this subject to become better acquainted, from personal observation, with the action of the soils on vegetable life. It is from the want of this

knowledge that the greatest errors have been proposed and propagated as truths, by scientific men.

Yours, J. E. TESCHEMACHER.

Boston, March, 1844.

ART. V. *Observations on the Curculio, and the modes recently recommended for its destruction ; with some remarks upon the application of Salt Lye, and its efficacy in extirpating the Insect.* By JOHN A. KENRICK, Newton, Mass.

HAVING, till quite recently, had all my plums destroyed by the Curculio, my attention has been directed to all communications upon the subject in your Magazine, and other publications, which came in my way, with a hope of finding some preventive or remedy proposed, which would enable me to secure a crop; but such various and opposite opinions exist among writers, that I have, on the whole, been rather *blinded* than enlightened by many of the articles which I have read, and have been almost discouraged from trying many things which seemed to be well recommended for this purpose. Some writers contend that the evil, to a great extent, arises in consequence of the punctured fruit being left upon the ground, thereby allowing the worms to escape and bury themselves under the trees during the winter, which, in effect, is sowing the seed for the crop of the succeeding year. Writers, who are of this opinion, recommend the destruction of all punctured fruit, either by gathering it up daily or allowing swine to run at large among the trees; and I have read of great benefits being realized from this course. Fowls also have been recommended; and *salt* has been relied on by many, spreading it on the surface of the ground under the trees, as far as the branches extend;—the last has been said to be completely effectual.

Various other things have been proposed. There are some writers, however, who contend that the insect is able to fly a great distance; and consequently all, or either of the above modes, are no prevention at all; and destroying all the defective fruit will not diminish their number the

succeeding year ; that nothing but their destruction at the season when they are actually committing their depredations upon the fruit, can avail anything. I read the letter of Dr. Burnett, who seems to be of this opinion ; but notwithstanding it contained much scientific information, it was evident to all others, whose opinion I heard expressed, that it was doubtful whether the expense of preserving the fruit in the way recommend by him would not be greater than all the income which could be expected from the sale of it, as it would be necessary to continue the operation twice a day for several weeks ; very near to which conclusion your correspondent, Mr. Fahnestock, seems to have arrived ; and the communication from him in your March No. seems to require a notice from some proselyte to *salt*, as an efficacious preventive of the Curculio, as he looks upon it as so great a “fallacy” to attempt their destruction by either of the above proposed methods.

Admitting all his statement of facts to be strictly correct, (and I do not doubt it,) the only hope can be to be able to secure a crop the *present season* ; and I think a more effectual and cheaper course can be found, which will effect the object, than that recommended by Dr. Burnett. Had your friend Mr. Ernst diverged a few rods from his course, after leaving the trees he gave an account of, which had been dressed with salt lye, I should have been happy to have shown him a striking example of its effects on a small orchard of plums ; they are growing in a yard used for poultry, which was enclosed under an idea that the injury would be prevented by the fowls ; but, although I had some fruit, so large a proportion was destroyed that the experiment proved a failure.

Having heard salt recommended I concluded to make a trial of salt lye, having a quantity at command. The yard contains about one eighth of an acre, in which I have about a hundred trees. In the spring I had about two cords of meadow mud, well saturated with lye, evenly spread and spaded in. (The year previous about the same quantity of dock mud was applied in the same way.) About the first of June I put on a load of about five hogsheads in addition, pouring it from a large watering pot, about two common sized pailsfull to each tree, saturating the whole ground in the yard ; and so powerful was the application that there was not a weed to be found the height of two inches during

the season—every tree bore well, and many of them were so completely loaded with fruit that I was obliged to stake them to prevent their breaking down. There were a very few Curculios which found their way up the trees, but not a *twentieth* part enough to thin the fruit as they ought to have been, which prevented their attaining the size they otherwise would have done.

If your correspondent will lay aside a part of his present theory, and make a *fair trial* of *strong brine*—plant his trees seven or eight feet apart each way—(and he may try the experiment fully this season, planting his trees carefully, as I had a number of small trees *carelessly* planted last May, several of which bore 25 to 30 each)—and saturate the whole surface of the ground with brine, allowing about two pailsfull to each tree—I think he may be seen next July hunting for a few of those same little insects to aid him in thinning his fruit.

Yours, JOHN A. KENRICK.

Newton, March, 1844.

ART. VI. *Observations on the Camellia, with a descriptive account of all the finest varieties which have been introduced, or raised from seed, in this country.* By M. P. WILDER, Esq. President of the Mass. Hort. Soc.

(Continued from Vol. VII, p. 223.)

[After a lapse of two years we have the pleasure of presenting a continuation of Mr. Wilder's article, giving accurate descriptions of such new camellias as have flowered in his collection. Owing to the loss of many plants at the time his collection was partially destroyed by fire, he was unable to continue his remarks in our last volume.—*Ed.*]

135. *Caméllia japonica* var. *Coquétti*. Abbe Berlèse
Monographie.

This variety is of recent introduction to our collections. Flower, large, regular and symmetrical—the exterior petals deep crimson, those approaching the centre, rose color shaded with violet, handsomely imbricated and diminish-

ing very gradually in size from the circumference inward. Sometimes striped and splashed with white. Desirable.

136. *Camellia* j. var. *Duchesse d' Orleans*. Abbe Berlèse *Monog.*

Flower $3\frac{1}{2}$ to 4 inches in diameter, of the most perfect formation; petals beautifully cupped and imbricated, and standing erect in concentric circles to the very centre; color, pale blush, nearly white, and exquisitely spotted and striped with rose. First class.

137. *Camellia* j. var. *Bruceana*. European *Catalogues*.

The color of the flower is deep orange red, a shade lighter than *C. var. Leeana superba* which it much resembles; the form nearly regular; petals imbricated and well arranged. Size, large.

138. *Camellia* j. var. *eclipsis rubra*. European *Cat.*
Preston Eclipse. Abbe Berlèse *Iconographie*.

Color, light rose, veined distinctly with darker shade. Form and size of *C. var. Press's Eclipse*, from a sporting branch of which it no doubt originated, and has by grafting been perpetuated as a distinct sort.

139. *Camellia* j. var. *Oxriglomana superba*. Abbe Berlèse *Icon*.

Flower $3\frac{1}{2}$ to 4 inches in diameter. The large outer petals are broad and round; those of the interior narrow, elongate, and erect. Form of *C. punctata*, ground color rosy blush, distinctly marked with spots and lines of carmine red.

140. *Camellia* j. var. *serratifolia*. European *Cat*.

This is a variegated variety; the beauty of which is wholly dependent on the quantity of white with which it is marked. It is usually much spotted, on a deep rose ground, and in this condition a pretty, desirable, sort. Size, rather less than medium, having 3 or 4 rows of petals, regularly arranged, with some stamens intermixed. Flower resembles *C. j. var. Donckelaërii*.

141. *Camellia* j. var. *Victoria alba*. Abbe Berlèse.

Flower $3\frac{1}{2}$ to 4 inches in diameter; white, slightly spotted with rose and occasionally a petal suffused with deep blush or pink. Form of *C. var. imbricata alba*, full, round and double. Received from the Abbe Berlèse and undescribed.

142. *Caméllia* j. var. *Sáccoi* (color di lacca.) Abbe Berlèse *Monog.*

The color of this flower is a pale rose nearly pink. Petals regularly imbricated, faintly striped through the centre, and touched at the apex with white. Form, good; size, medium—does not open its flowers freely.

143. *Caméllia* j. var. *Sáccoi* nõva. German and French *Catalogues.*

A new desirable *Camellia*, perfectly regular and symmetrical in its form. Petals beautifully cupped and imbricated; color, very light delicate rose; size $3\frac{1}{2}$ to 4 inches. First class.

144. *Caméllia* j. var. *Sáccoi* des Peintrés. Abbe Berlèse.

Flower medium size; petals regularly laid over each other in shell form, entire, round; color deep rose, distinctly spotted with pure white. Handsome. Received from the Abbe Berlèse. This and the two preceding varieties were raised from seed by the late Dr. Sacco, of Milan.

145. *Caméllia* j. var. *Carswelliàna*. Abbe Berlèse *Monog.*

The form of this *camellia* is like the old double White, regularly imbricated to the centre. Color a deep cherry red, the petals being frequently striped through the centre and marked at the apex with dingy white. Very shy in producing its flower buds.

146. *Caméllia* j. var. *Mile E'ndi*. English and German *Catalogues.*

Flower of the loose waratah formation, with two rows of outer guard petals, those of the centre being long, narrow and erect; size 4 inches; clear rose color. Raised by Mr. Thompson of Mile End, near London.

147. *Caméllia* j. var. *picòrum coccínea*. Abbe Berlèse *Monog.*

Form and color of *C. var. flórida*; petals broad, large, handsomely cupped, with sometimes a few of those at the centre not fully developed.

148. *Caméllia* j. var. *Collétti*. German and French *Cat.*

Flower of the irregular formation, 4 to $4\frac{1}{2}$ inches in diameter, full and double; exterior petals broad, those of the interior narrow, numerous, forming a thick well filled centre. The color is a deep crimson, approaching to scarlet,

and the merit of this variety consists mostly in the manner with which it is spotted with white, being sometimes in this condition very beautiful.

149. *Caméllia j.* var. *álba venústa*. French and German *Catalogues*.

Flower of the irregular formation, round, double and full; white, sometimes slightly spotted and tinged with rose; medium size.

150. *Caméllia j.* var. *foliolòsa*. Herbert's *Amaryllidàceæ*. *C. j.* var. *Amalthea*. Ger. *Cat.*

An English variety, produced from seed by Rev. Mr. Herbert, Spofforth, England. Color of *C. j. v. concinna*; 4 to 5 inches in diameter; petals very numerous and well arranged, those at the centre narrow, long and irregular; devoid of stamens.

151. *Caméllia j.* var. *Emelie grandiflòra*. Abbe Berlèse *Monog.*

Flower 4 to 4½ inches in diameter, full and spherical, with high centre; color a shade lighter than *C. j.* var. *conspícua*, sometimes freely marked with white; a bold showy sort.

152. *Caméllia j.* var. *innocénza*. French *Cat.*

A pure white camellia of large size and nearly regular formation. This variety has not always opened its flowers freely.

153. *Caméllia j.* var. *madiolanénsis*. Abbe Berlèse.

A flower of very perfect form, and beautifully cupped, which shape it retains until near falling; color, very delicate rose, or pink, almost blush; size, medium. This variety I received from the Abbe Berlèse, and is yet undescribed by him.

154. *Caméllia j.* var. *Bonárdii striàta Ridólphii*. Abbe Berlèse *Icon.*

A new *Camellia* of medium size, white, distinctly striped and spotted with rose; resembling *C. j.* var. *Press's Eclipse* in form and appearance, but is more strongly variegated, and of quite different foliage.

155. *Caméllia j.* var. *Marchioness of Exeter*. English and German *Cat.*

Clear brilliant rose; very large, 5 to 5½ inches in diame-

ter; petals large and broad, not numerous, but imbricated and well arranged, exhibiting some stamens; a free, easy and bold flower.

156. *Camellia* j. var. *pictorum roseum*. European *Cat*.

Rosa pictorum. Abbe Berlesé *Icon*.

Flower large, 4 inches or more in diameter, and of a clear brilliant rose color; form, regular; petals, not very numerous, well arranged and gracefully imbricated, generally full, but sometimes a few imperfect stamens at the centre. Desirable variety.

157. *Camellia* j. var. Henri Favre. Abbe Berlesé *Icon*.

A variety of superior excellence; flower $3\frac{1}{2}$ to 4 inches in diameter; the outer rows of petals deep crimson, those of the interior gradually shaded to a delicate rose color; exquisitely cupped and imbricated, and of the most elegant formation.

It is stated in the *Iconography* that Mons. Favre of Nantes produced this *Camellia* from seed, and sold it to M. Cachet of Angers for the enormous sum of 6000 francs, or more than eleven hundred dollars.

In continuation of my "Observations on the *Camellia*," I propose to give your readers in my next, descriptions of some American varieties, which have of late come to notice. Of these, several will take rank, if not precedence, with those of the highest order of other countries.

To have gained from seed a *camellia* of the regular formation, and as perfectly imbricated as the old double White, would, a few years since, have been considered a matter of surprise. It is now, however, quite a frequent occurrence, and proves the success that has attended its hybridization in this country. I venture to predict that we shall hereafter be exporters, as well as importers, of new varieties, and thus, in some measure relieve ourselves of the disappointments we have experienced by receiving those, some of which have had, at least, little else than a high sounding name, and glowing description, to recommend them.

Of less than twenty seedlings which have bloomed in my collection the present year, five have been of the regular perfect formation, and which it is believed will prove worthy of dedication, and a place in this magnificent tribe of plants.

In the collection of Mr. Boll of New York, (formerly Mr.

Smith's of Philadelphia,) a still larger number have flowered this season, and which he considers first rate.

Among the successful cultivators who have produced fine varieties may be mentioned Mr. Floy of New York, Mr. Feast of Baltimore, Messrs. Buist, Ritchie & Dick, Sherwood and others of Philadelphia. And of those already before the public, or soon to appear, may be named—C. j. var. Landréthii, americana, amabile, Práttii, Martha, Hempsteadii, Sherwoodii, Feástii, Binneyii, Gen. Washington, Gen. Lafayette, Caroline Smith, Brooklynia, Wilderi, and others, all of the full, regular, imbricated form.

M. P. WILDER.

Hawthorn Grove, Dorchester, March, 1844.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

Raising Seedlings of Roses.—I noticed the article by Mr. Pierce upon raising seedling roses from the rubifolia, and hope I may be able to get a portion of the seed he promises to send the Horticultural Society. I should, however, need some instruction to enable me to make them vegetate the first season, and hope he will send you an article, giving you his manner of growing them. How would they do for stocks to inoculate? The Boursault is excellent in some respects, but is condemned by some of the best rose growers in this vicinity, on account of its disposition to throw up suckers, particularly when planted in the open ground, and it is said to be liable to die down after being cut down the side opposite the bud.—K. *Newton, March, 1844.*

[We should be glad to learn what stock can be used for budding that will not throw up suckers when planted in the open ground. The Boursault is a most excellent stock. Do those who condemn the Boursault know any thing about it? and are their opinions based upon experiment? We consider it as good a stock as we have ever tried, especially for Tea, Noisete, Bengal and Bourbon, roses. The Prairie rose may excel it, but this remains to be seen. It will be recollected that there are several varieties of the Boursault, and that the old blush is the best.—*Ed.*]

Artificial Guano.—Dr. Jackson states that artificial guano may easily be manufactured at a less price than the imported article can be had: though there are some doubts respecting this, we annex below the list of ingredients which compose his artificial guano. We are assured by one who is well acquainted with the price of the articles, that they are quite too low, on the average, of at least 30 per cent. We, however, give the statement entire.

According to the analysis of Voelckl, published in the *Bulletin Universelle de Geneve*, Nov. 17th, 1841, natural guano consists of—

Urate of ammonia,	9.
Oxalate of ammonia,	10.6
Oxalate of lime,	7.0
Phosphate of ammonia,	6.0
Phosphate of ammonia and magnesia,	2.6
Sulphate of potash,	5.5
Sulphate of soda,	3.8
Muriate of ammonia,	4.2
Phosphate of lime,	14.3
Clay and sand,	4.7
Undetermined organic matter, ($\frac{1}{2}$ of which is soluble in water,) and water with traces of soluble salts of iron,	32.3

100.

The following is the composition of my artificial guano, with an estimate of the cost of each ingredient, as stated by my friend,† Mr. A. A. Hayes, a scientific and manufacturing chemist. The prices are estimated for crude products, as they can be made in large quantities:—

		Cost per lb.	Total.
Bone-ash, or ground bones,	15 lbs.	$\frac{1}{2}$ cent.	7 cents.
Carbonate of ammonia,	10 "	6 "	60 "
Phosphate of soda,	10 "	4 "	40 "
Sulphate of magnesia,	6 "	3 "	18 "
Muriate of ammonia,	5 "	9 "	45 "
Sulphate of soda,	3 "	1 "	3 "
Sulphate of potash,	5 "	3 "	15 "
Nitrate of soda,	5 "	4 "	20 "
Nitrate of potash,	2 "	6 "	12 "
*Humate of potash,	20 "	3 "	60 "
†Apocrenate of ammonia, &c.,	10 "	4 "	40 "
Oxide of manganese,	5 "	2 "	10 "
Bog-iron ore in powder,	2 "	1 "	3 "
Fine silex from peat bog, q. s.			
	100		\$3 32

In the cultivation of potatoes, a much larger proportion of sulphate of magnesia may be introduced with advantage. For clover, a very large addition of gypsum may be made, either by mixing it directly with the guano, or by spreading it on the soil, the latter being preferable, since it will absorb the escaping ammonia.

The apocrenate, crenate, and humate of ammonia made by the addition of carbonate of ammonia to swamp muck or peat, does not (in the large way) require to be dissolved and filtered. It will be sufficient to mix them in the state of moist paste. No ammonia can escape from its combination with the peat or muck.

The refuse bone-black of sugar refineries may be made into a paste with sulphuric acid in excess, and then treated with a sufficiency of crude potash or soda to take up the phosphoric acid set free by the sulphuric acid. This mixture may be at once added to the other ingredients of the guano, leaving out the phosphate of soda and sulphate of potash and gypsum, for these are now formed.

* Sawdust and potash melted together in an iron pot.

† Peat steeped in carbonate of ammonia, strained and evaporated to paste.

The animal carbon will also be a substitute for the ammoniacal extract of peat, which may be omitted. Urine made into a paste with calcined gypsum, may be substituted for the carbonate and muriate of ammonia. It is indifferent whether we use nitrates of soda or potash. The common crude saltpetre will answer perfectly well, where it can be obtained cheaper than nitrate of soda. Common bog manganese answers for the oxide of manganese and bog iron.

It will be easy for any one familiar with chemistry, to make many varieties of the above combinations within the rules, but those who do not understand the science, will do well to follow the formula strictly, if they wish to test the value of the manure.—(N. E. Farmer.)

ART. II. *Massachusetts Horticultural Society.*

Saturday, Feb. 3d, 1844. An adjourned meeting of the Society was held to-day,—the President in the Chair.

Mr. Vose's letter declining to serve on the building committee was accepted, and Capt. F. W. Macondray chosen in Mr. Vose's place.

Dr. A. B. Wheeler was admitted a subscription member. Adjourned three weeks to March 2d.

March 2d. An adjourned meeting of the Society was held to-day,—the President in the Chair.

A report was read from Professor Russell, upon the seeds received from Prof. Fischer, of the Botanic Garden of St. Petersburg, which was accepted, and voted to be published in the transactions of the Society.

A letter was received from A. H. Ernst, corresponding member, Cincinnati, Ohio, describing two varieties of apples.

It was voted, that the sum of thirty-eight dollars be appropriated to the Fruit Committee, for the purpose of awarding gratuities for 1843, agreeably to the report of the Fruit Committee.

On motion of C. M. Hovey, the following Resolution was adopted:

Resolved, That the Society have learned, with feelings of painful regret, the death of their late honorary member, JOHN CLAUDIUS LOUDON, Esq., of London, and that, sensible of the important services he has rendered to the science of Horticulture and Rural Improvement generally, in the publication and dissemination of the many valuable and instructive works, of which he was the author, as well as the conductor of the late *Gardener's Magazine*,—they would respectfully tender the sympathies and condolence of its members to the family of Mr. Loudon, in their deep affliction and bereavement.

It was also voted, that the Corresponding Secretary be requested to transmit a copy of the above to the family of Mr. Loudon. Adjourned one week to March 9th.

Exhibited—Fruit: From A. H. Ernst, fine specimens of an apple, called the Detroit, and also a seedling called the Cannahan; both handsome and good, the former much resembling the Bellflower, with which it may prove synonymous. We have drawings of both these varieties, and in our next number shall publish Mr. Ernst's communication to the Society, and give an engraving of the Cannahan. From the President of the Society, Princes' St. Germain and Catillac pears, both handsome, and the former in excellent preservation. From Capt. Macondray, pears without name.

March 9. An adjourned meeting of the Society was held to-day,—the President in the Chair.

The seeds received from Prof. Fischer were placed in the hands of the Flower Committee.

The Special Committee appointed at the last meeting, to whom was referred the subject of appropriating money for Premiums for 1844, reported that it was expedient to appropriate the sum of *four hundred and sixty dollars*, to be divided as follows: To the Flower Committee, two hundred dollars; to the Fruit Committee, two hundred dollars; and to the Vegetable Committee, sixty dollars; with a special provision that not more than thirty dollars should be awarded for any one class of flowers, fruits, or vegetables; and also, that of the above sums, the Flower and Fruit Committees should reserve the amount of twenty-five dollars, to be awarded as gratuities, should objects be presented worthy of the same.

It was voted, that a committee of five be appointed to take into consideration the subject of awarding medals or plate instead of money, and also, to report whether it is not expedient to award the medals at the time of declaring the premiums, so far as practicable. Messrs. Newhall, Walker, Stickney, C. M. Hovey, and Teschemacher, were appointed the committee.

The reports of the Flower, Fruit and Vegetable Committees having been approved by the Executive Committee, it was voted, that they be published as usual. Adjourned one week to March 16th.

The following are the reports of the several committees:—

REPORT OF THE COMMITTEE ON FLOWERS,

AWARDING PREMIUMS FOR 1843.

The Committee on Flowers beg leave to submit the following report of their doings. They have awarded the premiums offered by the Society, viz:—

TULIPS.—For the best specimens of not less than 30 blooms, a premium to S. Walker, of \$4 00

For second best specimen of not less than 30 blooms, a premium to S. R. Johnson, of 2 00

GERANIUMS.—For the best display of cut flowers, a premium to Wm. Meller, of 5 00

PÆONIES.—For the best display of flowers, a premium to Wm. E. Carter, of 5 00

For the second best display, a premium to S. Walker, of 3 00

PANSIES.—For the best display, a premium to Joseph S. Cabot, of 2 00

ROSES.—In classes, as follows:—

Class 1.—Hardy kinds.

For the best 20 dissimilar blooms, a premium to Hovey & Co., of 7 00

For the second best 20 dissimilar blooms, a premium to S. R. Johnson, of 5 00

For the third best 20 dissimilar blooms, a premium to J. Breck & Co., of 3 00

Class 2.—Bourbon, Chinese, &c.

For the best display, a premium to S. R. Johnson, of 5 00

Class 3.—*Perpetual and other Roses.*

For the best display, a premium to Hovey & Co., of	3 00
For the second best display, a premium to S. R. Johnson, of	2 00
PINKS.—For the best display of flowers, a premium to S. Walker, of	4 00
For the second best display of flowers, a premium to Wm. Meller, of	2 00
CARNATIONS, &c.—For the best display, a premium to J. Breck & Co., of	5 00
For the second best display, a premium to S. Walker, of	3 00
For the best seedling, a premium to J. Breck & Co., of	2 00
BALSAMS.—For the best display of cut flowers, a premium to S. R. Johnson, of	2 00
GERMAN ASTERS.—For the best display, a premium to Hovey & Co., of	3 00
For the second best display, a premium to S. Sweetser, of	2 00
PHLOXES.—For the best display, a premium to Wm. E. Carter, of	3 00
For the second best display, a premium to S. Walker, of	2 00
DAHLIAS.—In the following divisions and classes:—	

Division A.

The Premier Prize. To J. Stickney,	10 00
Specimen Bloom. To S. A. Walker,	3 00

Division B.

Class I.—For the best 24 dissimilar blooms, a premium to John Robinson, of	7 00
Class II.—For the best 12 dissimilar blooms, a premium to J. L. L. F. Warren, of	5 00
Class III.—For the best 6 dissimilar blooms, a premium to S. A. Walker, of	3 00

Division C.

Class I.—For the best 24 dissimilar blooms, a premium to J. Stickney, of	7 00
Class II.—For the best 12 dissimilar blooms, a premium to H. W. Dutton, of	5 00

GRATUITIES.

To S. Walker, for fine and continued displays of flowers during the season,	7 00
To Miss Russell, for fine and continued displays of flowers during the season,	5 00
To John Robinson, for seedling dahlias and rare specimens during the season,	5 00
To H. K. Oliver, of Salem, for a fine specimen of dahlia, var. Oakley's Surprise,	2 00
To John A. Kenrick, for fine specimens of flowering shrubs, &c.,	5 00
To Wm. E. Carter, for a fine specimen of <i>Achimenes longiflora</i> ,	5 00
To J. L. L. F. Warren, for fine bouquets during the season	5 00
To Wm. Wales, for fine specimens of tender roses,	2 00

 \$150 00

Per order,

S. Walker, Chairman.

REPORT OF THE COMMITTEE ON FRUITS,

AWARDING PREMIUMS FOR 1843.

The Committee on Fruits, after mature deliberation, award the following premiums, agreeable to the appropriation made for that purpose for the present year:—

APPLES.—To Josiah Lovett, 2d, for best summer apples, . . .	\$5 00
J. L. L. F. Warren, best fall apples, . . .	5 00
L. P. Grosvenor, best winter apples, . . .	5 00
PEARS.—To Samuel Walker, for best summer pears, . . .	5 00
Elijah Vose, best fall pears, . . .	5 00
Marshall P. Wilder, best winter pears, . . .	5 00
CHERRIES.—To Otis Johnson, for best specimen of cherries, . . .	4 00
George Walsh, for second best specimen, . . .	2 00
PEACHES, under glass.—To J. F. Allen, for the best specimen of peaches, grown under glass, . . .	5 00
Otis Johnson, for the next best specimen, . . .	3 00
PEACHES, out-door culture.—To John Hill, for the best specimen of peaches, in open culture, . . .	5 00
S. & G. Hyde, for next best, . . .	3 00
APRICOTS.—To E. E. Bradshaw, for best specimen of Apricots, John Wells, for next best specimen, . . .	5 00
John Wells, for next best specimen, . . .	3 00
NECTARINES.—To David Haggerston, for the best specimen of nectarines, . . .	3 00
QUINCES.—To John A. Kenrick, for the best specimen of quinces, . . .	2 00
PLUMS.—To Josiah Lovett, 2d, for the best specimen of plums, E. E. Bradshaw, next best specimen, . . .	5 00
E. E. Bradshaw, next best specimen, . . .	3 00
GOOSEBERRIES.—To O. Johnson, for the best specimen of gooseberries, . . .	5 00
J. F. Allen, for second best specimen, . . .	3 00
CURRENTS.—To A. D. Williams, for best specimen of currants, Josiah Lovett, 2d, for next best, . . .	3 00
Josiah Lovett, 2d, for next best, . . .	2 00
RASPBERRIES.—To Josiah Lovett, 2d, for the best specimen of raspberries, . . .	4 00
To Messrs. Hovey, next best, . . .	2 00
STRAWBERRIES.—To Messrs. Hovey & Co, for the best specimen of strawberries, . . .	5 00
J. F. Allen, next best, . . .	3 00
MULBERRIES.—To John Hovey, for the best specimen of mulberries, . . .	3 00
WATER-MELONS.—To John Gordon, for the best specimen of water-melons, . . .	3 00
GREEN-FLESHED MELONS.—To John C. Howard, for the best specimen of green-fleshed melons, . . .	3 00
GRAPES.—To John C. Howard, for the best specimen, grown under glass previous to July 1st, . . .	8 00
J. F. Allen, for the next best specimen, . . .	5 00
To David Haggerston, for the best specimen grown under glass since July 1st, . . .	6 00

Otis Johnson, for the next best specimen,	4 00
To Kendall Bailey, for the best specimen of foreign grapes, open culture,	5 00
To George Walsh, for the best specimen of native grapes,	3 00
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	\$140 00

Your committee recommend the following gratuities be paid, partly from an unexpended balance of ten dollars, and the balance of twenty-three dollars from a new appropriation. The excellent exhibition of peaches and figs, the new seedling grapes, pears and apples, deserve something more substantial than a passing notice of merited praise.

To Wm. Quant, for a fine exhibition of white peaches	\$3 00
To J. F. Allen, for his monthly Fayal figs, which prove abundant bearers, and of fine flavor,	5 00
To Mrs. Diana Crehore, for her Seedling Diana grape, grown from the seeds of the Catawba grape, and is the earliest and best native grape your committee know of,	5 00
To Messrs. Wilcomb & King, for the Lawrence pear,	5 00
To Daniel Wilbur, Jr., for the Hull pear,	5 00
To S. L. Goodale, for the McLaughlin pear,	5 00
To George Howland, for the 20 oz. apple,	5 00
To A. D. Capen, for very large and beautiful apples,	5 00
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	\$38 00

Your committee consider the introduction of new and valuable varieties of fruits to the Society, with a view to have them diffused among its members, and finally to the public, as one of the great ends of our association, and every inducement within our limited means should be made use of to that end. The Hull pear is from the same individual who introduced the Early Wilbur, and who has more than once contributed largely for the use of the members of our Society. The McLaughlin pears, from Mr. Goodale, and the Lawrence pears, from Messrs. Wilcomb & King, with the fine specimen and fine flavored 20 oz. Pippins, from Mr. George Howland, are fruits that should be in every good collection; they are natives, and rank with our very best fruits.

In regard to the Wells premium, your committee are of opinion there have been no apples presented that can have a preference to our known choice varieties, and consequently no premium can be awarded.

Communications in regard to the Curculio have been received, particularizing the habits of the insect, made with much labor and nice observation. As there appears nothing new in any of the communications that has not been communicated by the late Professor Peck, or by others since, and in all the remedies that have been suggested for this pest of our choice fruits, no one has been made that your committee could deem thorough and effectual, or if so, that the remedy would not be too burdensome to be compensated for by the crop of fruits. On this subject, they would suggest, for the consideration of the Society, whether a gratuity might not be granted, in lieu of the full premium, as the subject appears to be exhausted, and there is no probability, in the opinion of your committee, that for many years to come, there will much more be known of the Curculio than its habits.—*Benj. V. French, Chairman.*

REPORT OF THE COMMITTEE ON VEGETABLES,

AWARDING PREMIUMS FOR 1843.

The Committee on Vegetables for the year 1843, report the premiums awarded by them as follows:—

ASPARAGUS.—For earliest and largest four bunches, to John Hill, a premium of	\$3 00
RHUBARB.—Largest twelve stalks previous to 1st Saturday in July, to Hovey & Co., a premium of	3 00
PEAS.—No premium awarded.	
LETTUCE.—No premium awarded.	
POTATOES.—No premium awarded.	
CUCUMBERS.—Under glass—best pair exhibited in May, to J. L. L. F. Warren, a premium of	4 00
Open culture—No premium awarded.	
BEANS.—Large Lima, best two quarts, to Josiah Lovett, 2d, a premium of	3 00
Earliest Dwarf—No premium awarded.	
CAULIFLOWERS.—No premium awarded.	
BROCOLI.—No premium awarded.	
CELERY.—No premium awarded.	
EGG PLANTS.—No premium awarded.	
TOMATOES.—No premium awarded.	
SQUASHES.—Best display of largest number of varieties at the annual exhibition, to Josiah Lovett, 2d, a premium of	5 00
For best display of various vegetables at annual exhibition, (not including squashes,) to F. W. Macondray, a premium of	5 00
To Josiah Lovett, 2d, for a remarkably large cauliflower, a gratuity of	3 00
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	\$26 00

The committee regret that so little interest is taken in this department. Of many articles for which premiums were offered, no specimens have been exhibited; and as it was presumed that the intention of the Society, in making the appropriation, was to give rewards only where they were merited, they have withheld premiums where, in their opinion, there was no excellence in the specimens exhibited—and more than half the amount at their disposal will not be called for.—*John A. Kenrick, Chairman.*

March 16. An adjourned meeting of the Society was held to-day,—the President in the Chair.

A letter was received from S. L. Goodale of Saco, Maine, accompanied with scions, for distribution to the members, of the McLaughlan pear. Cuttings of the Diana grape were also received from Mrs. Crehore, for the same purpose. The thanks of the Society were voted to Mr. Goodale and Mrs. Crehore.

A committee was chosen to revise and amend the Constitution and By-laws of the Society, and also to consider the expediency of printing the schedules of premiums to be awarded the present year. The committee consists of the President, Messrs. Walker, Newhall, Breck and Dr. Wight. Adjourned one week to March 23d.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new :				Autumnal Marrow, per cwt.	6 00	—	—
Chenangoes, { per barrel,	1 25	1 50	Winter Crookneck, per cwt.	3 00	3 50		
{ per bushel,	50	60	Canada Crookneck, per cwt.	4 00	5 00		
Common,.... { per barrel,	1 00	1 25	West India, per cwt.	2 50	3 00		
{ per bushel,	50	—	Pumpkins, each,	10	12½		
Eastports,.... { per barrel,	2 25	2 50					
{ per bushel,	1 00	—	<i>Fruits.</i>				
Nova Scotia, { per barrel,	1 25	1 50	Apples, dessert and cooking:				
{ per bushel,	50	60	Baldwins, per barrel, . . .	3 50	—		
Sweet, per bushel,	2 00	—	Greenings, per barrel, . . .	3 00	—		
Turnips, per bushel :			Russets, per barrel,	2 50	3 00		
Common,	50	—	Blue Pearmain, per barrel,	3 00	—		
Ruta Baga,	50	—	Danvers Winter Sweet, "	2 50	3 00		
Onions :			Common Sweet, per bar.	2 00	—		
Red, per bunch,	3	4	Spitzembergs, per barrel,	3 00	—		
Yellow, per bunch,	4	5	Common, per barrel,	2 00	2 50		
Yellow, per bushel,	1 25	—	N. Y. Pippin, per barrel,	3 00	3 50		
Beets, per bushel,	62½	75	Wine apple,	—	—		
Carrots, per bushel,	62½	75	Egg-Top, per barrel,	—	—		
Parsnips, per bushel,	62½	75	Gilliflower, per barrel,	—	—		
Salsafy, per doz. roots,	12½	—	Lady Apple, per. half pk.	87½	50		
Radishes, per bunch,	17	20	Dried apples, per lb.	4½	5		
Horseradish, per lb.	10	12	Pears :				
Garlic, per lb.	8	10	Beurré Diel, per doz.	—	—		
			Vicar of Winkfield, pr. "	25	37½		
<i>Cabbages, Salads, &c.</i>			St. Germain, per doz.	—	—		
Cabbages, per doz. :			Beurré d'Aremberg, "	50	—		
Drumhead,	75	1 00	Easter Beurre, per doz.	1 00	—		
Savoy,	75	1 00	Chaumontelle, per doz.	25	37½		
Red Dutch,	75	1 00	Common, per half peck,	—	—		
Brocolis, each,	12½	20	Baking, per bushel,	1 50	—		
Cauliflowers, each,	25	37½	Cranberries, per bushel,	3 50	4 00		
Lettuce, per head,	6	8	Tomatoes, per doz.	—	—		
Celery, per root,	8	10	Grapes, per pound :				
Spinach, per peck,	25	—	White Malaga,	20	25		
Dandelion, per peck,	25	37½	Purple Malaga,	20	25		
Water Cresses, per quart,	6	—	Pine-apples, each,	12	25		
Cucumbers, (pickled) pr gal.	25	—	Lemons, per doz.	17	20		
Peppers, (pickled) pr gal.	37½	—	Oranges, per doz :				
			Sicily,	20	25		
<i>Pot and Sweet Herbs.</i>			Havana,	37½	50		
Parsley, per half peck,	37½	50	Walnuts, per bushel,	1 50	2 00		
Sage, per pound,	17	20½	Chesnuts, per bushel,	2 50	—		
Marjorum, per bunch,	6	12½	Cocoanuts, per hund.	3 00	4 00		
Savory, per bunch,	6	12	Butternuts, per bush.	1 00	—		
Spearmint, per bunch,	3	—	Almonds, per lb.	14	—		

REMARKS.—March has been a variable and unpleasant month; cold weather prevailing a larger portion of the time. A few days ago there appeared some signs of approaching spring, but cold weather has again set in, and the thermometer has fallen below 20°.

Vegetables.—There has been scarcely any variation in the prices of the principal articles. Potatoes remain the same, with a moderate stock.

Arrivals from Nova Scotia have supplied the market the last month; Chénangoes will soon arrive from the East, and furnish a continued supply; Sweet, from the lateness of the season, have advanced considerably. Turnips remain about the same, with a good supply. Onions are quite scarce, and good yellow command our highest prices. Beets remain the same, with an abundant supply. Radishes have just come to hand, and are of fair size and quality: the cold weather has been unfavorable to an early and abundant supply. Horseradish is very fine this season, and well supplied. Cabbages continue rather scarce; within a week or two the stock has been rather larger, owing to the supply of small lots which have been covered during winter. Lettuce is now plentier, and of exceedingly fine quality; prices have also fallen off; the demand for lettuce, particularly at this season, has greatly increased within a year or two. Celery is rather small, and the supply of good quality limited. Spinach is now, since the approach of more open weather, more abundant. Dandelions have made their appearance within a week, both of the wild and cultivated, the latter commanding the best price. Squashes of all sorts are rather scarce; marrows are all gone, as are also the true Canada; the main stock is winter crookneck; within a week or two, however, there have been some arrivals of West Indias, of fair quality, which command our quotations.

Fruit.—Apples remain nearly the same; good Baldwins being readily obtained at our quotations; Blue Pearmain and Gilliflowers are nearly gone, and the Egg-top and Wine apples are quite out of the market; a few Lady apples yet remain. Pears are scarce; the Vicar of Winkfield is just gone, and though there are some very small lots offering of the d'Areberg, St. Germain, &c., there are scarcely enough to keep up our quotations. Cranberries remain the same, very few of this spring's picking having yet come to hand. Grapes are nearly gone.—*Yours, M. T. Boston, Mar. 28, 1844.*

HORTICULTURAL MEMORANDA

FOR APRIL.

—

FRUIT DEPARTMENT.

Grape Vines in greenhouses and graperies will soon be out into leaf, and by the latter part of the month will then show their flower-buds well advanced. Continue to increase the temperature a little, and if cold nights occur, make stronger fires; syringe occasionally, and cut out any eyes which are not wanted or do not start strong: also tie up the side shoots as they advance. In cold houses the vines will soon be breaking their eyes, and air should be properly admitted. Vines in the open ground, owing to the cold weather, have not yet been uncovered; the first pleasant weather this should be attended to.

Scions may yet be cut for grafting if not done before.

Gooseberry, Currant and Raspberry bushes may now be transplanted with entire success.

Pruning may now be performed; and as much should be completed this month as possible.

Strawberry beds may be planted this month with success. We consider it the most favorable season.

Grafting should soon be commenced and continued throughout the month.

Peach, Pear, Plum, and other kinds of trees, may be transplanted this month. Roots grafted in March should be set out in the open ground this month.

Pear and Apple seed should be sown as soon as the ground can be got ready.

FLOWER DEPARTMENT.

Dahlias potted last month will now be throwing up strong shoots, which, if many young plants are wanted, should be taken off and rooted in a hot bed; or the roots may be separated and potted. They should be sheltered in a frame during the entire month of April.

Rocket Larkspur seed should be sown as soon as the ground is sufficiently dry to be dug over.

Pelargoniums not yet shifted should not be omitted any longer.

Camellias will now be making vigorous shoots, and will require syringing at least twice a week. Give guano liquid to the roots once a week. Continue to inarch if duplicate plants are wanted. Such plants as need repotting, if not already begun to grow, should be shifted immediately.

Tuberoses, Gladioluses, and similar bulbs may be potted now for early blooming; turning the bulbs out of pots, into the border in May.

German Asters, Pansies, Balsams, Stocks, &c., should be sown this month in an exhausted hot bed or a cold frame.

Roses will perhaps need repotting; but this need not be done unless the roots are quite crowded, as the plants had better be turned out into the ground in May.

Verbenas should now be repotted, and all straggling shoots cut in.

Fuchsias will now need shifting; as this is now so admired a tribe, we hope to see more care taken in its cultivation.

Cactuses will now require more water.

Chrysanthemums may be propagated from cuttings the latter part of the month.

Achimines coccinea, longiflora, and the other species, should now be potted and placed in a slight bottom heat.

Hyacinths will be in bloom this month, and should be shaded.

Hardy herbaceous plants of all kinds may be transplanted this month.

Pæonies may be removed with safety this month. Tree pæonies may also be separated now to increase them.

Hardy roses, of all kinds, should be removed in April.

Oxalises, Ixias, &c., now done flowering, should be sparingly watered.

Carnations in frames should now be attended to, and carefully watered.

Annual Seeds of all *hardy* kinds may be sown this month, and the *tender* ones in a hot bed or frame.

THE MAGAZINE
OF
HORTICULTURE.

MAY, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *On Transplanting Fruit Trees in the autumn; and some account of a mode of autumn grafting of fruit bearing branches, with a view to obtain fruit the following year.* By Capt. JOSIAH LOVETT, 2d, Beverly, Mass.

DEAR SIR,—In a conversation a short time since, you requested me to put in writing my views on autumn transplanting of fruit trees, &c., together with my mode of performing the same. I will now endeavor to do so. Although familiar with farming, and the mode of gardening in the country towns, from my youth, to the age of about 16 years; yet from that period to within the last ten years, I have ploughed the ocean. It is consequently but a few years since I began to pay particular attention to horticulture. In this short experience (I plant and transplant with my own hands), I have found it best in my soil, which is mostly a clay loam, upon a subsoil of stiff clay, to transplant strawberries in August, pear, plum, and apple trees, together with currant and raspberry bushes, in the latter part of summer or early autumn. Thus far, I have been most successful in those earliest transplanted; say from the 20th of August to the last of September, according to the season. The best time is immediately after the usual summer or autumn drought, when the summer growth of wood has ripened. I prepare my ground by taking out two spadings of soil, keeping the top spading to mix with the roots; making the hole at least a foot more in diameter than the extent of the roots of the tree; I then drive a single stake in the position which I intend the tree to stand, not allowing

the top of the stake to appear more than four inches above the surface of the ground. If the bottom soil is not rich, on replacing it I mix a good quantity of well rotted compost manure (a few old bones or bone dust will do well here), with it; I fill with this to within four inches of the lower roots; and then use my top soil, laid aside for that purpose, to the roots.

Previous to taking up the tree or bush to be transplanted, I remove every leaf, by cutting them off with a sharp scissors; I take up every tree in the morning of a clear day, and place the roots in a tub of soap suds, saved for the purpose the last washing day; let them remain here till afternoon, (twenty-four hours will not injure them.) The sun having warmed the ground, I place the tree in its position, with a wisp of straw between it and the stake, and secure well to the stake with good bass or Russia matting both below and above the straw; you then have a good tap root in the stake to secure against all winds and frost, and nothing to chafe either the body or limbs. Now fill up with top soil or earth, in the usual manner, observing to have it well pulverized, to do which there is no difficulty at this season of the year; the soil must be pressed well up under the main roots and about the heel of the tree; all the roots should be spread carefully out, in their natural position, and the earth pressed down over each layer of roots; covering the top roots not more than four inches deep, treading gently round to press the top soil about them: every broken root should be cut off with a sharp knife. Late in the autumn, say November, a little more soil may be thrown over to protect the roots in winter, and removed in spring.

In several instances, after planting thus early, I have examined the roots in November, and invariably found that they had made new rootlets; in one instance, having to remove a pear tree on quince stock, in November, after having set it out the first of September, I found it had made new roots nearly a foot in length. Great care should be taken not to set the roots too deep, particularly on moist or adhesive soils. Should the drought effect them on light dry soils, a half peck to a peck, according to the size of the tree, of unleached wood ashes, placed round from the body of the tree, to the distance of four feet, and well watered, will effectually prevent any injury from drought.

Your remarks in the November number of the Magazine, for 1843, page 423, respecting my mode of procuring the specimens of fruit presented on several occasions at the Horticultural Society's rooms, last autumn, is partly incorrect; they were not procured by budding, but by grafting. I have practised budding with fruit buds for some eight years past, and occasionally succeeded in getting good fruit from them. It is now three years since I began grafting with fruit wood in autumn, (and I never heard of any person attempting it previous to that time); thus far I have been eminently successful with the pear and apple (occasionally with the plum); the grafts thus set have been more certain to mature their fruit, than the trees from which the grafts were cut; this can only be accounted for by supposing the sap to flow slower in the graft in the spring, in consequence of there not having been a perfect union formed with the stock in autumn; and the grafts not blooming or setting their fruit, quite as early as the tree from which they were cut, escape the injurious effects of our late spring frosts and cold northeast storms, to which, in our climate, we are so subject.

I select a healthy shoot for a scion, with fruit buds on it, (I have set them a foot long with one or two side shoots.) Immediately remove the leaves, and cut it on one side in a sloping direction, to a point, the cut from one to two inches long; then with a sharp knife I begin at the point and cut just within the bark, up about half an inch above the commencement of the incision on the opposite side; then select a thrifty upright shoot, on a healthy tree, cutting well back, making a short stump; cut this stump in the same manner as the scion, reversed; and carefully but firmly push one within the other; secure with bass or Russia matting, and cover with clay; or, I prefer to mix equal parts of beeswax and Burgundy pitch (a less quantity of rosin will answer in room of pitch); soften to a proper consistency with hogs lard, melt together, and spread on coarse cotton shirting; then cut in strips of one half to three quarters inch wide, and after uniting graft and stock, bind with this, the cotton side next the bark. The composition ought not to come in contact with the bark, as the bandages should be left on through the winter. If the grafts are carried any distance before uniting to the stock, it will be very important that the leaves

are all cut off under the tree, and the ends, as soon as possible, dipped in wax or something adhesive.

Very respectfully your obedient servant,

JOSIAH LOVETT, 2d.

Beverly, March 5, 1844.

N. B.—The mode of grafting above described is very similar to what is called whip-grafting by some, though I take much less wood with the bark than I have seen gentlemen do who graft by that mode.—*J. L.*

ART. II. *Hints on the system of Pruning Fruit Trees, as practiced in the London Horticultural Society's Garden, by R. Thompson.* By R. CARMICHAEL, NEWTON, MASS.

As the raising and cultivation of fruit trees forms one of the principle objects of pursuit, by a great mass of people in this enlightened country, I should be pleased to offer a few hints (if you should think them worth publishing,) on a proper system of pruning, and a few first principles in connection with it, which may prove useful to some of your readers who are not thoroughly acquainted with that important operation;—important, because on the performance of it, in a great measure, depends the health, vigor and production of fruit. To have a true knowledge of it, it is necessary that the operator should be in some measure acquainted with the laws that govern vegetation and know the functions the different parts have to perform; for, unless he does, how can he be sure of the consequences that are to follow; and it is no ways improbable that that which was intended for a service may turn out an evil; hence it is obviously necessary that the operator should be acquainted with vegetable physiology in order to ensure success; quite as necessary as it is for the surgeon to know the functions of the human system in order to perform a successful amputation.

I shall now endeavor, and at the same time hope to satisfy your readers, by pointing out the principle thing that is necessary to be known, namely, *the functions of the leaves*; it is essential also to know that every part of a

plant, from the minutest fibre to the ponderous stem, has its own useful office to perform; but as the development of all those parts entirely depends on the leaves, it is on that account I consider them the principle organs of the vegetable fabric. The roots absorb moisture (containing the food of plants,) by their extremities, and it is transmitted from them through the stem by means of channels formed by nature for that purpose, to the leaves, where it undergoes a chemical process. The fluid on entering contains many different substances, owing to the particles of matter it meets with in its progress through the vessels of the alburnum; this fluid does not become the proper food until it is duly exposed to the sun's rays, which acts on the cuticle of the leaves, when what fluid that is superfluous passes off by evaporation, and that which is left becomes elaborated and prepared as the proper food, passing into the system and depositing a new layer of wood to the outside of exogenous, and to the inside of endogenous, structures, passing on to the roots, always leaving something after it that adds to the diameter of each part it passes through, and finally elongates the tips of the roots or forms new ones. The matter that does all this is prepared by the leaves, by which alone the great importance of them is clearly shown. It is an admitted fact that the greater the quantity of leaves over a given part, the more that part increases in diameter. The secretions for fruit are likewise prepared by the leaves, and deposited in the tissue for the ensuing year's fruit; hence the more leaves the more secretions for fruit will be formed; but this does not hold good in all cases; for instance, strong rank leaves that hold or receive no proper juices and leaves not fully exposed to the sun's rays are of no use for the formation of secretions; therefore, if the leaves are not properly exposed to the sun's rays digestion is prevented and they become worse than useless. It is highly essential that the juices are prevented from being lost in the formation of useless wood.

The system I am going to describe, which is practised in the London Horticultural Society's garden, and first put into practice in England by Mr. R. Thompson, the acknowledged leading pomologist of Europe, principally depends on summer management; it is as follows:—

Allow the young shoots to grow until the leaves become too crowded; then cut off their growing points only; by

this means you will stop their elongation and confine the juices to the already formed leaves, where they will become fully elaborated for the ensuing year's fruit, which would not occur so readily, if left to the formation of useless wood; for be it remembered, it requires the secretions properly prepared, by the action of the sun's rays, in order to produce fruit; this check will cause the shoots to throw out lateral branches, which must be stopped in the same manner, for the confinement of the juices as already described. This system of summer pruning will be found to be of the first importance in the production of fruit, and it requires but little trouble when properly attended to. Winter pruning is only a secondary object compared to this system, and I hope it will be clearly seen, when the principles here laid down are properly investigated. All that is necessary in winter pruning is, to remove all useless and superfluous wood. For peaches, nectarines and apricots, plenty of young wood is required, and the operator should be guided by the health and vigor of his trees, the soil and situation in which they grow: all these circumstances must be taken into consideration, to perform the operation aright. The system I have described will be found to answer the summer pruning of vines and all fruit bearing trees.

R. CARMICHAEL.

Nonantum Hill, Newton, April, 1844.

For the above interesting communication, we are indebted to Mr. Carmichael, recently from the London Horticultural Society's garden, and now gardener with Mr. Kenrick, nurseryman, Newton. It is well worth attentive perusal; and we hope often to have the pleasure of inserting communications from Mr. Carmichael.

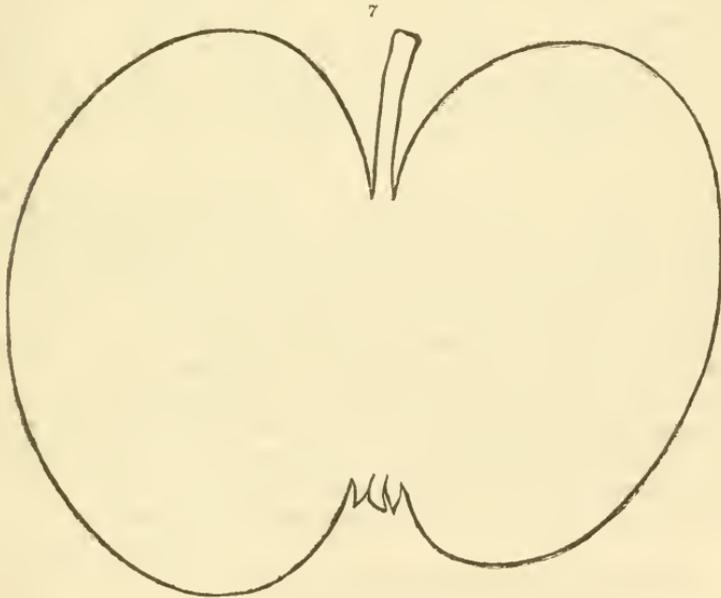
ART. III. *An account of a New Seedling Apple, with an engraving of the fruit, its origin, &c.; and a notice of the variety called the Detroit apple; in a letter to the President of the Massachusetts Horticultural Society.* By A. H. ERNSR, corresponding member, Cincinnati, Ohio.

I had hoped to have met with a gentleman going to your city, who would be willing to take charge of a very small

box of specimens of fruit for your inspection and that of our society; but in this I have been disappointed. I have prevailed on Mr. Mussey to take a few specimens, and a few scions; I may have other opportunities before too late: if so, I shall not fail to avail myself of the pleasure.

Detroit.—No. 1, is the apple which is known here as the Detroit apple, specimens of which, with its history, so far as I have been enabled to trace it, I sent you last winter. The present specimens are a fairer sample of what the fruit is. I will thank you for any information with regard to it, if it is known with you, and the estimation in which it is held.

Cannahan's Favorite.—No. 2, (*fig. 7*), is a specimen of a seedling apple under the name of "Cannahan's Favor-



Cannahan's Favorite.

ite." The original tree of this fruit stands on Mr. Cannahan's farm, thirteen miles north of this city, on the "Hamilton Road." The seed from which this tree originated was sown by Mr. Andrew Williams at North Bend, (late the residence of the lamented Harrison,) from whom Mr. Cannahan procured it with a parcel of other trees, and

planted them on his farm above referred to, in the spring of 1799. I measured the tree last fall, four feet above the ground, and found it girted seven feet six inches. It is still vigorous and healthy, and forms an immense spreading head. This is the only tree out of a lot of seventy, which produced fruit worth preserving. You will probably think me very minute in my history, but as I have seen the sad effects of a want of being particular, I do not feel at liberty to take too much on trust and promulgate it in the same way. The fruit as you will perceive is very handsome, of good size, fine flavor, and an excellent keeper; these are all desirable qualities which cannot fail to recommend it to favorable notice, and the only wonder is, that it should so long have existed in comparative obscurity. I will not attempt to describe it; I leave that for the more competent hand of yourself and the committee on fruits; I shall be glad if my opinion of its merits are sustained, and it is thought worthy of promulgation, that a figure of it, with a description, be published in Hovey's *Magazine of Horticulture*. I send a few grafts for yourself and the members of the society.

I also send a few scions of a seedling pear, under the name of Hill's Fall Butter; this pear I think highly worthy of propagation, so far as I am capable of judging, in the absence of some new and esteemed sorts ripening at the same time which have not yet fruited with us. You will oblige me if you will see that Capt. Lovett, Mr. Breck, and Mr. Hovey get a few of each of the above scions. This pear, with its origin, history, and description, with an engraving, I have published in the November No. of the *Farmer and Gardener* printed in this city, a copy of which I had the pleasure of sending you some time since.

Yours with much respect,

A. H. ERNST.

Spring Garden, Cincinnati, Jan. 27, 1844.

As the committee on fruits have not made any report on the specimens of the two apples presented by Mr. Ernst, in season to accompany the above communication, we annex our own descriptions of the same; and as soon as the committee make their report, it will be found under the proceedings of the Mass. Hort. Soc.

Cannahan's Favorite.—*Size*, large, two and a half inches long and three and a half inches in diameter; *Form*, roundish, slightly flattened, somewhat angular, large at the base and tapering towards the eye; *Skin*, bright yellow, thinly covered with irregular stripes of bright red, thickest and brightest on the sunny side, with a few greenish russet freckles; *Eye*, large, open, and deeply sunk in a ribbed and angular cavity; segments of the calyx long; *Stem*, medium length, about one inch and deeply inserted in a broad, open, regular cavity; *Flesh*, yellowish white, fine, tender, and juicy; *Flavor*, pleasant, agreeable and good; *Core*, medium size, close; *Seeds*, medium size, brown. Ripe, December to February.

In regard to the Detroit apple, there is some doubt as respects its being a new fruit; specimens received by the Cincinnati Horticultural Society, from our correspondent the Rev. Mr. Beecher, of Indianapolis, as the true Bellflower, have been pronounced by the committee on fruits as identical with the Detroit; leaving the question to be decided hereafter we add a description of the variety, which may be compared with the descriptions of the Bellflower by *Coxe* and others.

Detroit (?)—*Size*, large, three and a half inches long and three and a half inches in diameter; *Form*, conical, largest above the middle, and rounding off at the eye and stem; *Skin*, smooth, bright yellow, with a faint tinge of blush on the sunny side, freckled around the stem with greenish russet; *Eye*, medium size, closed, and moderately depressed in a contracted cavity; segments of the calyx short; *Stem*, short, about three quarters of an inch, slender, brown, and deeply sunk in a narrow cavity; *Flesh*, yellowish, fine, tender and very juicy; *Flavor*, rich, subacid, brisk and excellent; *Core*, very large and open; *Seeds*, small, roundish. Ripe, November to March.

The apples of the west are so large and fair, that the same variety assumes quite a different appearance in our climate. In deciding synonyms, this must be taken into consideration; allowance must be made for location, soil and climate, or gross errors will be likely to be committed.

We shall have occasion to refer to the Detroit and other western apples at another time.

ART. IV. *Origin and Cultivation of the Pearl Onion.*

Translated from the *Allgemeine Gartenzeitung* of October. By K., 1841.

MANY things in horticulture are in truth old and have been raised and cultivated for many, many years, which, nevertheless, are new to many, and their origin entirely unknown; such in my apprehension is that of the *Pearl onion*.

This article is an artificial variety of the leek, *Allium Pórrum* var. *séctivum Hort.* and is thus procured. The common leek, every one knows, is a biennial plant, which sown in the spring of one year, produces in the next its seed stalk and then perishes. By cutting off this seed stem before it has perfected itself, you compel the plant to throw out from the collet or neck of the bulb, new offsets resembling the parent, but more delicate and smaller. These taken off and replanted in the ensuing season, produce the so called Pearl onions, but do not run back into the original leek type. They are highly prized as seasoning for ragouts, pickles, &c.

Cultivation.—The Pearl onion requires a rich and mellow soil, with a rather low than elevated situation. The land having been prepared for their reception, is divided into beds which are laid off into rows four inches apart, in which the young bulbs are planted about the end of September, at a depth of three quarters of an inch. To protect them from the cold, I usually cover my beds at the beginning of winter with sawdust or short litter. Generally the bulbs continue growing to the end of the autumn, and are not injured even by the frosts destroying the points of the leaves. The covering is removed in the month of March, the beds kept clean, and when the leaves, having attained a length of from six to nine inches, assume a yellow tint, the bulbs are then fit to be taken up. This must be done with peculiar caution, if you do not wish to leave a great part of the produce in the earth, since very numerous bulbules are formed round every bulb of from one half to one inch in diameter; and these, unless great care is exercised, will become separated and remain in the ground, where they will continue to grow.

After being taken up, free them from the soil by washing,

dry them and sort them into different sizes by passing them through sieves of various dimensions. The middle size are the best for replanting. K.

ART. V. *Notice of a large fruited and large leafed variety of the Native Black Mulberry.* In a letter to J. S. Skinner, Esq. By Hon. E. WHITTLESEY, Ohio. Communicated by Mr. Skinner.

My Dear Sir,—I make you the medium of communicating to the public, in such manner as your judgment shall deem to be best, the impress of a leaf of the native black mulberry, presented by Mr. T. A. Denormandie, of New Lisbon, who received it from Mr. Jacob N. Brown of Brooks county, Virginia, proprietor of the Neesley farm, where the earliest attention was paid to the cultivation of fruit in the western country.

Mr. Denormandie has an extensive nursery of engrafted apples, consisting in part of a variety of choice native fruit.

The fruit of this mulberry is said to be from 2 to 2½ inches in length, and of delicious flavor. Mr. Brown informed Mr. Denormandie, that it was considered by some of the western silk growers, as superior in fineness to the Italian or multicaulus for silk, and that the worm was not liable to be diseased, as is often the case when feeding on the multicaulus. Although the leaf from which the impression is made was 13½ inches in length, and 9½ inches in width, Mr. Denormandie says, it was by no means the largest class on the tree.

Silk will ere long, be one of the great staples of the United States, and if the representations are correct, and I do not doubt them from the source they are derived, the existence of this tree may be important to those engaged in its growth and manufacture.

Most sincerely yours,
E. WHITTLESEY.

Canfield, Trumbull Co., Ohio, April, 1844.

An impress of the leaf of this mulberry accompanied the above communication; but from its great size we are

unable to give an engraving of it. It must be a remarkable variety not only for the leaf, as food for the silk worm, but for its fruit which is of unusual size, being 2 to 2½ inches in length. This alone should recommend it to general cultivation; and we trust Mr. Denormandie will cultivate it with a view to its dissemination as a fruit bearing tree. It certainly would be far more desirable than the common English mulberry, which is esteemed an excellent variety.—*Ed.*

ART. VI. *Sowing Seeds in Snow.* Translated from the *Allgemeine Gartenzeitung* of April, 1841. By K.

FOR five years I have practised with considerable success, sowing the seeds of such Alpine plants as the Gentians, Ranunculus, Anemone, &c., usually of difficult vegetation, in *snow*. At Erfurt I have raised many hundred gentians. The sowing of auricula seeds in snow is a well known practice among our north German gardeners.

This spring the idea occurred to me that this method of sowing might be applied to the sprouting of *exotic* seeds, a much more valuable purpose; I therefore sowed a parcel of New Holland seeds, such as *Papilionacæ* and *Mimoseæ*, also *Ericacæ* and *Rhodoracæ*, *Cactæ*, *Cucurbitacæ*, and other families of the most different sorts, by first covering the earth in the flower pots with a layer of snow, then sprinkling the seeds and adding another layer of snow, and placing them finally in the hot-house in a close glass case, in a temperature of from 12 to 15 degrees of Reaumur.

I was not deceived, for after two days several sorts of acacia, such as *subcærulea* and *Cunninghãmi*, and many of the *Mamillãria*, such as *uncinãta* had sprung up. All these came up very evenly, and beyond my expectation, speedily; and for the first time I succeeded in forcing the seeds of *Crotalãria purpùrea* into vegetation.

In sowing these last I did not cover the seeds immediately after the melting of the snow with fine, sandy earth, as was done in former cases, but postponed doing so until after the seeds had sprouted. Snow for this purpose may be laid up in ice-houses until June, and answers perfectly, &c., &c.,

&c. * * * Further results of my experiments will be hereafter communicated. K.

P. S. For the perusal of the above interesting Journal, published in Berlin, I am indebted to the politeness of your correspondent A. J. Downing, Esq., of Newburgh.—K.

ART. VII. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates; with additional miscellaneous information, relative to new plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural and Botanical Intelligence. New Seedling Camellias.—Our correspondent Dr. Gunnell of Washington, writes us that he has had several very new seedling camellias bloom for the first time the past winter, descriptions of which he will forward to us at a future opportunity. His two seedlings, George Washington and Thomas Jefferson, he has placed in the hands of R. Buist of Philadelphia, for propagation and sale.

Mr. Wilder informs us that he has had several seedlings which have bloomed for the first time, and which afford evidence of great promise; no less than five of them having regular formed flowers, similar to the double white. The catalogue of superior American seedlings bids fair to ex-

ceed in number even that of European ones, possessing the same relative beauty.

The Tennessee or Prairie Rose. In our March number, (p. 98,) we gave an article by Mr. Pierce, on the Prairie rose. It has since been copied into the western papers, and in the *Ohio Statesman* with some preparatory remarks, which may be interesting to lovers of this beautiful class.

The writer states that our correspondent Mr. Pierce, was mistaken in saying that this rose has produced no double variety. "Twenty-two years since, Mrs. Montjoy found a double multiflora rose growing wild, on an island in the Licking River, Ky., a few miles south of Cincinnati. It had all the peculiarities of the single variety, except that the petals were as numerous, and were formed similar to the Chinese multiflora, the rose being about three times as large. This rose was brought by Mr. Buchanan to this city fifteen years ago. He obtained the cuttings from the garden of Gen. Taylor, of Newport, Ky. Mr. B. gave some to Mr. Schnetz, who raised many of them, since which it has been widely disseminated. It is known here by the name of the 'Montjoy Rose,' or 'double native multiflora,' and it deserves to be a great favorite.

Another variety of our wild multiflora rose was found in the Scioto Valley, near Chillicothe, by Mrs. Gov. Worthington; this was semi-double.

Another beautiful variety was found near Urbana, O., by Mr. John H. James. This was single, but with spotted petals.

The same writer states they have the promise of an article shortly, accurately describing all the varieties and the peculiarities of the western Prairie rose, which will be interesting and valuable to horticulturists."—(*Ohio Statesman*, April 10, 1844.)

New varieties of the Gladiolus.—Great attention has been given in Belgium to the cultivation and production of new hybrid varieties of the *Gladiolus*. From a communication in a Belgian Journal, translated in the *Gard. Chronicle*, we copy the following account of some of these new varieties.

Many of the new seedlings surpass the finest we have hitherto possessed of this genus, namely, the *G. cardinalis* and *floribundus*, introduced from the Cape in 1788 and 1789, and the *G. ramosus*. The *G. natalensis*, perroquet

or Daeleni, was introduced after this period. It was brought from Java in 1828 or 1829, in a Dutch vessel to Rotterdam, and having been obtained by Dr. Dael of Brussels, it flowered with him for the first time, and was accordingly named after him by horticulturists. In addition the *Gladiolus Colvillii*, pulcherrimus, ramosissimus, and a great number of other very fine varieties, with which the horticulturists of Haarlem have enriched their trade, the formosissimus deserves particular notice as being the finest flower we have seen in 1842. This variety unites the habit and abundant flowering of the ramosus, with the color of the cardinalis, though scarcely so brilliant. All these varieties have a family resemblance to the ramosus, floribundus and cardinalis. They are not, however, to be compared with the brilliant novelties obtained at the Duc d'Areberg's seat at Enghein. Beddinghaus, a young man of good intelligence and education, and in every respect capable of directing such an establishment as that at Enghein, fertilized the *G. natalensis* with the floribundus, the ramosus and the cardinalis. This crossing was made in the summer of 1837, a season favorable for such operations. Seeds were ripened, and from a sowing of these the *G. gaudavensis* was raised. M. Louis Van Houtte having obtained this variety, thus announced it in his catalogue for 1841. "I have the stock of this gladiolus with the exception of two bulbs possessed by one of my brothers. At the moment I write all Ghent comes to admire it. In stateliness and color it exceeds all we have seen among the Gladioli. Its dimensions surpass those of *G. ramosus*; its majestic flowers, to the number of 18 or 20 are of the most charming vermilion; their inferior petals adorned with chrome, amaranth and brown, are again relieved by anthers of an azure hue which descend to the centre of the flower." This description, doubtless, made in a moment of admiration and enthusiasm, is however, a little exaggerated. If properly cultivated the plant will produce flowers corresponding with the above description. Many other varieties from the same sowing, much surpass even the *G. gaudavensis*. Several of these have already appeared in the catalogue of M. Jacob Makoy, of Liege, for 1842, others are not yet in the trade. The names of the former are Baron de Pronay, De Candolleii, Grétry, Herbértii, Lówii, Pfeiferii, Reine des Belges, Salmiànus, Schwarzenbergiànus, splén-

didus and Stérni. With regard to their culture it may be said that they succeed very well in the open air, planted in leaf mould. They are taken up towards the end of September, after the stems are completely withered. The offsets and bulbs are preserved during winter in a dry place protected from frost. They are replanted in the open ground in April or May. (*Revue Horticole.* for Sept. 1843.)

New Fuchsias and Verbenas.—The most popular flowers among English cultivators, as would appear from the Gardening periodicals, are the fuchsias and verbenas. The number of new varieties which have been produced within a year or two, is truly astonishing, particularly of fuchsias; were it possible to count them all, we doubt not they would amount to at least two hundred. Messrs. Youell & Co., extensive cultivators at Yarmouth, raised in the summer of 1842, upwards of *three thousand* plants, to the flowering of which one house was entirely devoted in 1843; and although many of the kinds were truly beautiful, yet in the present improved state of the flower, a selection of only *six* was preserved as worthy of name. These were Queen Victoria, Prince of Wales, Princess Royal, Marchioness of Normanby, Lady Alice Peel and Lady Walsingham. They are offered for sale at 7s. 6d. per plant.—*Ed.*

Mr. Fortune's progress in China.—Advices have been received from Mr. Fortune, who, it will be recollected, went out from the London Horticultural Society last year, to collect seeds and plants, dated Chusan, Nov. 12, 1843. He describes the whole coast of China to the northward as consisting of bare, rugged rock, barren sand, and burnt, gravelly clay, but with beautiful plants here and there. He had met with very bad weather in his passage to Amoy, but had had an opportunity of exploring the islands of Kong-loo-soo and Amoy. On the voyage thence to Chusan, the vessel encountered heavy gales in the Formosa Channel, and was twice driven back, once to Chunchen and once to Chamoo; this, however, gave him the opportunity of landing at these places, and exploring the country for several miles inland. On no occasion had he met with serious obstacles to penetrating the country, but, on the contrary, found the natives particularly civil, much more so than on the coast further south and at Canton. Mr. Fortune had fallen in with hills covered with azaleas, and with several other good things, seeds of which, in very small quantities,

were enclosed in his letters. In particular, he had met with a very beautiful *Buddlea*, with rich purple flowers, arranged in clusters like a lilac; and a very fine Campanulaceous plant, with flowers as large as those of *Lisiánthus Russellianus*. What he had seen of China gave him great hope of fully realizing the anticipations of the Society. He was about to proceed to Shang-Hai and Ning-poo. (*Gard. Chron.*, 1844, p. 103.)

Nelumbiàcæ.

NELUMBIUM Rox.

cáspicum Fisch. Caspian Nelumbium. A stove aquatic; growing 2 feet high; with white flowers; appearing in August; a native of Asia; increased by seeds; grown in sandy loam. Bot. Reg. 1844, t. 14.

This is one of the celebrated nelumbiums of the East, which have so rarely been seen in flower in England. The specimen from which the drawing was taken flowered in the nursery of Messrs. Rollisons, of Tooting, last season. The flowers bear considerable resemblance to our white lily. According to De Candolle, all the *Nelumbia* found in various parts of Asia are varieties of one species, and this opinion is generally adopted. The present plant is however considered, by Dr. Lindley, as a distinct species, under the name of *N. cáspicum*. The principal specific difference consists "in the very small number of carpels, which do not appear to exceed nine, while in the great Indian species they are as numerous as thirty or thirty-three."

It is a stove aquatic, requiring to be kept dry during the winter. Before putting it into water, which ought to be done in February, it should be potted in sandy loam, mixed with pieces of sand stone, to act on the same principle as drainage, for the water in which it is grown requires to be renewed once or twice a week, and should never be allowed to fall below 80°. It is increased both by seeds and division of the root. (*Bot. Reg.* Mar.)

Berberidàcæ.

BERBERIS

pállida Benth. Pale ash-leaved Berberry. A half-hardy shrub; growing six feet high; with yellow flowers; appearing in May and June; a native of Mexico; increased by layers; grown in common soil. Bot. Reg. 1844, t. 16.

Another of the pretty berberries, of which several have been previously introduced. The present species, in its native country, forms an evergreen shrub, attaining to the height of 6 feet. It was discovered by Mr. Hartweg, in his

Mexican tour, and plants of it flowered in the garden of the London Hort. Soc. in May, 1843. Being rare, it is, at present, cultivated in a cold pit; but it will undoubtedly prove as hardy as *B. fasciculàris*. It may be increased by layers, or by grafting on the *Mahònia aquifòlium*. (*Bot. Reg. Mar.*)

Combretàcæ.

QUISQUALIS

sinénsis *Lindl.* Chinese Quisqualis. A stove climber; growing 10 feet high; with scarlet flowers; appearing in summer; a native of China; increased by cuttings; grown in sandy loam and peat. *Bot. Reg.* 1844, t. 15.

A superior species to the old *Q. índica*, which has long been an admired plant. *Q. sinénsis* is a more compact grower than *índica*, has smoother leaves and branches, and flowers of a larger size and of a deeper rose color. Its general management is the same as the *índica*. The plants should be potted in sandy loam and peat, mixed with a few potsherds; in summer, water should be freely given at the roots, and the foliage frequently syringed. It is propagated by cuttings, under the ordinary management. (*Bot. Reg. Mar.*)

Rosàcæ.

SPIRÆA

Reevesia'na *Lindl.* Mr. Reeves's Spiræa. A hardy sub-evergreen shrub; growing four feet high; with white flowers; appearing in May and June; a native of China; increased by cuttings; grown in common soil. *Bot. Reg.* 1844, t. 10.

Syn.: *S. Reevesia'na*, Hort. *S. corymbòsa*, *Rozb.*

A very handsome species of the Spiræa, forming a neat spreading shrub, three or four feet high, and abundantly furnished with racemes of white flowers, which appear in May and June. Like the others it is readily cultivated, not being partial to any particular soil. It is increased by cuttings of the small half-ripened twigs during the summer or autumn: they should be put in sand, covered with a bell glass and placed in an exhausted dung frame. It will probably prove as hardy as the *S. bélla* in our climate. (*Bot. Reg. Feb.*)

Leguminòsæ.

LUPINUS

arvénis *Benth.* Field Peruvian Lupin. A half-hardy biennial; growing one to two feet high; with lilac blue and yellowish flowers; appearing in the autumn; a native of Mexico; increased by seeds; grown in any good rich soil. *Bot. Reg.* t. 1, 1844.

"One more addition to the large genus *Lupinus*. The flowers are rich bright lilac, enlivened by a yellow spot on

the white centre of the vexillum." It is a half-hardy biennial, flowering the first season, and is probably best treated as an annual. The seeds should be sown in March, in a loamy soil, and when of proper size, transplanted into small pots, three in a large pot. These should be turned out into the border when danger of frost is over, and they will flower freely all the summer and autumn. It is a pretty companion to the *L. Hartwégii*, *Cruikshánkii*, &c., the treatment of which is the same as here noticed. The only objection to the more general introduction of these fine species is their proneness to run up without flowering until just as frosty nights set in; but if the seeds are planted early, in a frame or hot bed, the plants will throw up fine spikes of flowers in August and September. (*Bot. Reg.* Jan.)

GENIŪTA

virgata *De Cand.* Twiggv Broom. A half-hardy shrub; growing four feet high; with yellow flowers; appearing in May and June; a native of Madeira; increased by cuttings; grown in light rich soil. *Bot. Reg.* 1844, t. 11.

"A very handsome, compact shrub," sufficiently hardy to stand the ordinary winters around London, if planted in a dry situation. It attains to the height of four feet, and produces an abundance of spikes of yellow flowers, very showy and ornamental. It is increased by seeds or cuttings, and grown in any good light soil. Should it prove hardy in our climate it will be a fine acquisition to our limited stock of ornamental shrubs. (*Bot. Reg.* Feb.)

Celastráceæ.

EUONYMUS

japónicus *Thomb.* Japan Euonymus. A hardy evergreen shrub; growing six feet high; with greenish white flowers; appearing in July and August; a native of Japan; increased by cuttings; grown in good soil. *Bot. Reg.* 1844, t. 6.

An evergreen species of the *Euonymus*, which has proved nearly or quite hardy in the Horticultural Society's Garden. It is liable to have its branches killed by severe winters, but it springs up again and rapidly forms a bush. The flowers possess no beauty, and the value of this species consists in its evergreen character, having much "the appearance of a small-leaved orange." It is easily increased by cuttings of the half-ripened wood, under a hand glass or a close frame.

Malpighiáceæ.

STIGMAPHYLLON *Aug. de St. Hil.*

jatrophæfolium *Adr. de Juss.* Jatropha-leaved Stigmaphyllon. A greenhouse plant; growing four or five feet high; with yellow flowers; appearing in July; a native of Brazil; increased by cuttings; grown in sandy loam and peat. *Bot. Reg.* 1844, t. 7.

A "very pretty twiner, well suited for cultivation in pots, attached to a trellis." The foliage is palmate, 5-7 parted, serrate and fringed, and of a clear light green. The flowers appear in clusters, and are of a bright yellow, with the edge of the petals delicately cut or fringed. Many of the species are worthy of cultivation, and some are extremely handsome. They are mostly natives of Brazil. The present subject inhabits rocky places on the banks of the Uruguay, where it creeps over the surface of the soil. It may be treated as a greenhouse plant, and potted in sandy loam and peat, in a rough state. In summer, the plants should be partially shaded, as the leaves are liable to be scorched by the sun. It is propagated by cuttings in the usual manner. (*Bot. Reg.* Feb.)

Meliaceæ.

TURRÆA *Bennett*

lobata *Lindl.* Lobed Turraea. A stove plant; growing 2 feet high; with white flowers; appearing in July; a native of Sierra Leone; increased by cuttings. *Bot. Reg.* 1844, t. 4.

A "rare stove plant" collected in Sierra Leone and sent home to the Duke of Devonshire, where it flowered last July. It is a small erect shrub with trilobed, dentate, leaves, and axillary flowers of a pure white, having much "the appearance of those of an orange," but without odor. It is probably increased by cuttings in the usual manner. (*Bot. Reg.*, Jan.)

Ericaceæ.

ARCTOSTAPHYLOS

pungens *De Cand.* Pungent Bearberry. An evergreen, half hardy shrub; growing six to eight feet high; with pink flowers; appearing in June and July; a native of Mexico; increased by seeds; cultivated in peat and loam. *Bot. Reg.* 1844, t. 17.

A Mexican plant, found by Mr. Hartweg, at an elevation of 7000 to 8000 feet above the sea, where it forms an evergreen bush, with reddish brown branches, and terminal racemes of pretty pink flowers, resembling an arbutus. In the garden of the London Horticultural Society, it has proved a neat, half hardy shrub; it is however, one of those uncertain plants which sometimes die suddenly during hot weather, especially after a few hours of rain, if planted in the open border, though it may have been previously in the highest state of health and vigor. It is raised from seed, which should be sown in peat and loam, and placed in a close frame. Pot them off when the rough leaves appear, and keep them in a close frame partially shaded, until they are well established. (*Bot. Reg.*, Mar.)

REVIEWS.

ART. I. *The Rose Manual; containing accurate descriptions of all the present varieties of Roses, properly classed in their respective families, their character and mode of culture, with directions for their propagation, and the destruction of insects, with engravings.* By ROBERT BUIST, Nurseryman and Florist. 1 Vol. 12mo. pp. 182. Philadelphia. 1844.

SOMEWHAT after the style of the *Rose Amateurs Guide* of Mr. Rivers, which has been a favorite book with the rose fanciers of England, we have one here, adapted to the rose cultivators of our own country, by Mr. Buist. The increasing taste for this beautiful flower, has demanded a small volume suitable to the wants of amateur fanciers, who need some guide to the more successful growth of many of the numerous varieties which now fill up the catalogues of nurserymen: varying oftentimes as much in their habit as they do in color; and necessarily requiring different treatment to bloom them in equal perfection. To supply this information is the purpose of this work, and the object has been very well accomplished by the author.

The rose has always been a universal favorite; but at the present time it is particularly an object of attention: within a few years French cultivators have given great attention to the tribe, and great numbers of brilliant varieties have been raised, so far surpassing those of former years, that it has almost changed the character of the family. Who would recognize in some of the Bengal roses, the old *indica* and *sanguinea*, the parents of this class; and where shall we look for anything like the prototype of the hybrid *chinas*, so brilliant with their immensely large and double flowers, and glossy foliage, and withal quite hardy: or again, where have we seen in former years roses which would vie with the bold flowers of the Bourbons; or uniting the delightful perfume of the old *damask*, with the elegance of the *Provence*, find anything so beautiful as the hybrid *perpetuals*, blooming often from June to November: and last, though not least, where is the hardy climbing rose, that great desideratum, which would begin to compare with the incomparable *Queen of the Prairies*. A few years have

produced astonishing changes; but they are few only, compared to many which four or five years more will bring about. We are but in the infancy of the cultivation of roses, and, as with the camellia, a short period only will elapse before the American varieties will be as numerous as those of the latter flower.

Nineteen classes of roses are enumerated, and the principal varieties belonging to each described. There are also ten or twelve sections devoted to the planting, propagation, budding and general management of roses, including their propagation from seed. It would be almost impossible for us to offer anything but a synopsis of the volume; amateurs of roses should possess it. To give some idea of the manner in which Mr. Buist treats the subject, we extract two chapters, one on growing roses from *seed*, and the other on their cultivation in pots for the greenhouse or parlor.

Growing Roses from Seed. To the amateur this opens a field of very interesting amusement; it gives an object with which to fill up profitably every leisure moment, in impregnating, saving the seed, sowing and watching every movement of the plant till it develops its beauties of inflorescence, which, if it prove of new character, is an ample compensation for the time spent upon the process; if not worthy, it is at least a good stock to be used in budding or grafting upon, and even then causes no loss. In the centre of many roses there is a number of thready filaments surmounted by what botanists term anthers; these are small oval forms which, when ripe, contain a quantity of pollen or yellow dust, which can easily be perceived between the finger and the thumb after giving them a gentle pressure. This pollen, though to the naked eye a fine powder, and light enough to be wafted along by the air, is very curiously formed, and varies very much in different plants. Under the microscope each grain of it in the rose is a membranous round bag, which remains entire, and can be kept dry and perfect for days and weeks. On its application to the moist tip of the pistil (which in the rose is a stiff protuberance in the very centre of the flower) it bursts with great force. When flowers are designed to be operated upon, the one intended to produce the seed should be deprived of its anthers early in the morning, which can readily be done with a pair of fine scissors; then during the day, or within two days, take a fine camel hair pencil, and obtain, about noon, the pollen or dust from the plant or plants with which you intend to make the cross, and apply this dust to the pistil of the roses from which you have previously extracted the anthers. It will require some practice before proficiency can be attained in the operation, but a little attention will insure some success. The organs are fit for the operation when the pistil has a glutinous appearance on its summit, and the pollen is dry and powdery. The flowers may be one or two days old; rain is fatal to the operation—dry weather, therefore, must be chosen. Patience and assi-

duity can accomplish wonders in this department of rose culture; the persevering efforts of the French cultivators have been so very successful within the last ten years that we do not at all despair of seeing a yellow Moss, a yellow Provins Rose, or even striped roses, combining every shade from white to black, and there is no reason why there should not be produced a perpetual blooming climbing Moss Rose of any color at present known in the family of the rose. Ten years ago we had no idea of a Noisette Rose of as fine a yellow as Harrisonii, and as large as Noisette Lamarque; such Chromatella, or the Cloth of Gold, is *said* to be; perhaps ere this work is through the press the plants in my possession will be in bloom, to prove or disprove the assertion.

The seeds will be ripe about the first of November, and can be retained in the capsule or fruit till the time of sowing, taking the precaution to bury them in sand, where they will be safe from the depredations of mice, who are very fond of them. Early in the spring choose a sheltered spot in the garden, free from the shade or drip of trees; enrich and break up the soil very fine, make the surface quite smooth, take the hips from their winter quarters, break up the fruit, and sow the seeds thinly and evenly on the soil; take the back of the spade, or a board, and press the seed level with the ground, then cover them with about one-fourth to one-half of an inch of sand; if sand cannot be obtained take leaf mould, or soil from the woods, finely sifted, for the purpose; in dry weather give occasional waterings. Many of the seeds will come up the first year, and the balance will make their appearance in the second; the third year they can be transplanted to beds or rows to remain till they bloom, which will generally be the fourth or fifth year. It is truly astonishing to see the variety produced—red and white, rose and pink, may all be seen springing from seeds of the same plant, and from single to the most double; none but such as are of the finest form, very prolific, and possessing a good habit, should be reserved for culture. Our climate is so favorable to the maturing of seed that there is no reason why we should not only equal, but surpass, any European country in the cultivation of this “Queen of Flowers.”

The blooming of seedlings can be readily hastened where time and convenience will admit. As soon as the young plants have made three or four leaves, lift them very carefully from the seed-bed with a transplanting trowel, and put them in pots of rich light earth; then place them in the shade and give a gentle watering and sprinkling over the leaves for a few weeks, when they may be planted into the ground to remain. I have in this way grown plants eighteen inches high the first season. They will, by this method, generally bloom the third year. The seeds are covered with a thick tough shell, which, if allowed to get perfectly dry, and kept in that state for a considerable period, will take two years to germinate, and perhaps not grow at all; regular moisture appears to be indispensable for keeping the shell soft and exciting the embryo plant into growth. The seeds are on this account providentially furnished with a fleshy pericarp (hip) to prevent their becoming too dry for germination, while nearly all other seeds do not germinate well unless dried before sowing.

Cultivation of Roses in pots, for the greenhouse or rooms. A selection, for this purpose, should be made from the Tea, Bengal, and Bourbon families, all on their own roots, or budded very low. Presuming that

these roses are already in pots, or to be procured from the nurserymen in the small* pot they are generally grown in for sale, they should at once be placed into those of six inches in diameter, carefully and freely watered, during July and August, cutting off all the flower buds they show in the latter month. About the middle of September, shorten the overgrown shoots, and thin out the slender ones, turn the plants out of the pots, depriving them of some of the soil, and repot in those of seven inches diameter, using a compost of sand, turfy loam, and manure in equal proportions; they will also grow admirably in the black soil, from the woods, composed principally of decayed leaves; put several pieces of broken crockery in the bottom of the pot, then a portion of soil; place the plant so that its surface roots should be under the rim of the pot, and then fill all round with the soil; put them in a situation partially shaded,—water sparingly, till they begin to grow—then expose them fully to the sun and water freely every day. There they may remain till the middle or end of October, and in the south till November, when they should be removed to the greenhouse or rooms, for flowering. Previous to their removal, the pots should be washed, and the plants neatly tied up. Thus treated they will mature all the buds they will then show, and produce a profusion of flowers again in January and February. Where there is the convenience of charcoal, it will be found of prime utility in rose pot-culture, broken to the size of nuts and about one fifth mixed with the soil; the roots will delight to ramble through it, and the foliage will be of a richer and darker green; the surface of the soil must have frequent stirrings. The plants must be carefully examined, and whenever infested by the aphid, or green fly, they should be destroyed, if in the greenhouse, by tobacco smoke. But, if in rooms, that method cannot be well adopted, for the odor would penetrate into every part of the dwelling. They should in that case be brushed off into a pail of water; or the safest plan will be to make a strong tea of tobacco, fill a pail with it, and while in a tepid state invert the plant therein, holding the hand or a cloth over the surface of the pot to prevent the earth from tumbling out. Roses in pots are wonderfully benefited by a watering of manure water about once in two weeks. This water is very easily prepared either in town or country. The droppings from the horse or cow stable put into a large tub or barrel, with water kept over it for a week or two, occasionally stirred up; the water then poured or drawn off for use about the color of good tea; or one quart of poudrette, put into three gallons of water—stir it a few times,—in two days it will be fit for use. A new species of manure from the islands of the Pacific, called Guano, the deposit of sea fowls that has accumulated for centuries, is very valuable for making liquid manure. A quarter of a pound, in three gallons of water, frequently stirred before using, will be found very nourishing; indeed one pound to sixteen gallons, will be strong enough to use by the inexperienced, for if used much stronger than I have stated, it would injure plants in pot culture. When required for the open ground, watering with any of these liquids may be made stronger, or used more frequently.

We shall have occasion to refer to this volume again in reference to the synonyms of many kinds of roses.

* The plants for winter blooming should be ordered from the venders of an extra size; the very small plants sold at low prices would defeat the object.

ART. II. *The New American Orchardist; or, an account of the most valuable varieties of Fruit of all Climates, adapted to cultivation in the United States, with their history, modes of cultivation, management, uses, &c., with an Appendix on Vegetables, Ornamental Trees, Shrubs and Flowers; the agricultural resources of America, and on Silk, &c.* By WILLIAM KENRICK. Seventh edition, enlarged and improved with a Supplement. 12mo. pp. 450. Boston, 1844.

SINCE our review of this work in a previous volume, several editions have been issued, and we have now before us the seventh. In the advertisement to this edition, the author states that it "has been revised with very particular attention and care; all the latest and most eminent writers in Europe, which have come to hand, having been diligently consulted, and the experience of the most intelligent of our own country. In this edition many important alterations will be found, and many additions, particularly in regard to fruits. The list of these, although so complete in former editions, is yet, in this, greatly improved; and especially in those fine kinds, which have been so lately proved by Mr. Thompson and others, at the garden of the London Horticultural Society; or more latterly approved with us."

Mr. Kenrick has labored to produce a volume containing all the information up to 1844; and in a hasty perusal of this edition, we notice that many entire pages have been cancelled, and others altered and rewritten; many fruits are more fully described, and others introduced of whose qualities ample and satisfactory information could be obtained. Many synonyms, also, have been detected, and the names struck out.

ART. III. *Transactions of the Essex County Agricultural Society for 1843.* Vol. III. No. IV., published by order of the Society, January, 1844. Svo. pp. 111. Salem, 1844.

THE Essex County Agricultural Society is one of the most flourishing in the State, and its doings are regularly pub-

lished in appropriate form. Included in this pamphlet is the Annual Address before the Society by the Hon. Mr. Saltonstall, and the annual reports of the various committees, together with the list of premiums awarded in 1843.

The address of Mr. Saltonstall is replete with interest, and had we room we should be pleased to offer some extracts.

The following statement of B. Poore, Esq., in relation to forest trees, we copy entire, as we are sure it will interest our readers.

From 1819 to 1831, I made a number of unsuccessful attempts to raise forest trees. But in 1832 after witnessing the success that attended planting of forest trees in England, I commenced planting acorns on a steep hill side, on pasture land, from which some old hickory trees had lately been removed.

In the same year, I planted acorns in the nursery for the purpose of transplanting to the forest.

I have continued the planting in the forest and nursery and when the trees were two years old, transplanted them to the forest from the nursery.

The spot selected was not favorable, as the snow drifted in large quantities on the trees and has from time to time broken hundreds. Also, at the commencement there was no shelter for them, which is indispensable in raising oaks.

I did not make much show till 1836, and my success that year and since, I attributed mainly to the *shelter* afforded the oaks by bushes that had sprung from the roots of the old walnut trees.

The trees offered for premium partially cover between two and three acres of land too steep for cultivation, and beside hundreds of walnut and other trees, exceed twenty-seven hundred, some of which are more than twenty feet high. We have also, several thousand locust and other forest trees, under a series of experiments to ascertain, if possible, the advantage of trenching and deep ploughing, and also, whether a forest tree is injured by transplanting as for many years it was supposed by writers to be, but so far as my experiments have already gone, it is not injured but rather benefited. Some years, however, will be required to ascertain these results satisfactorily. I however, annex such directions as I would practice in planting forest trees.

1st. Select such soil as the tree which I intended to propagate grew in, when in forests, to greatest perfection.

2d. Trench or plow the land according to the depth of soil—if two feet deep, trench the land two feet, but if only eight inches of soil, trench not exceeding twelve inches deep, and in same proportion.

3d. Keep the acorns, nuts or seeds in dry sand through the winter, and plant early in spring.

4th. If you transplant from nurseries do it in autumn, soon as the leaf falls. The oak should be transplanted the second autumn after sowing the seed.

5th. For shelter, I would prefer the Scotch larch which I would plant

freely. When the oaks are five years old the larch can be removed, and for fuel will amply pay the expense.

6th. Avoid, (a common error) the putting of seed or trees too deep in the earth.

ART. IV. *The Young Gardener's Assistant; in three Parts: containing Catalogues of Garden and Flower Seeds, with practical directions under each head for the cultivation of Culinary Vegetables and Flowers: also directions for cultivating Fruit Trees, the Grape Vine, &c. To which is added a Calendar to each Part: showing the work to be done in the various departments each month in the year. The whole adapted to the Climate of the United States.* Tenth edition, improved. By THOMAS BRIDGMAN, Gardener, Seedsman and Florist. Svo. pp. 164, 164 and 174. New York, 1844.

THE title of this volume fully explains its object. It has now passed to its tenth edition, the best test of the merits of the work. Each part has been greatly improved, and in the fruit department, descriptions of all the new varieties have been included. A fine engraving of the author is added to this edition.

Having in one of our early volumes expressed our approbation of this work, it only remains for us to add that the present edition has been thoroughly revised and improved, and rendered more valuable to every reader.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Retrospective Criticism.*

Diaceous character of Strawberries.—Dear Sir: Indisposition for the last eighteen months destroyed all my interest in horticulture. But my health is again restored, and with health, my former feelings and attachments. I trust this will be a sufficient apology for not sooner noticing your change of opinion as regards pistillate and staminate strawberry plants, as expressed in the February number of your Magazine. You say, “we believe it is now the generally received opinion of all intelligent cul-

tivators, that there is no necessity of making any distinction in regard to the sexual character of the plants, when forming beds. The idea of male and female flowers, (first originated we believe with Mr. Longworth, of Ohio), is now considered exploded." I am at a loss to imagine what the new light is, that has so suddenly changed your views on this subject. Mr. Downing, of Newburgh, fully sustains me, as does a late English writer. The same is true in the communications of Huntsman, Coit, and Bayne. How do you dispose of the conclusive evidence furnished by Mr. Coit. He says, "Mr. Huntington for two years had standing in contiguous and parallel rows, the Methven Castle, Warren's Seedling Methven, [?] Hautboy and Hovey's Seedling, all female plants, and that neither kind had produced fruit, unless indeed a very little and that defective." He further states, "the female Methven standing near the Wood strawberry, which had the male organs perfect, still bore no fruit. I have never seen a white or monthly strawberry but what had both the male and female organs perfect in the same blossom, (when this is the case the fruit is always small,) and the reason why the Wood would not impregnate the Methven female is, that they are a distinct species.

In these back woods, we naturally look to the East, and to Boston in particular, for correct views of botany and religion. As an evidence of the latter, witness our ready credence to the truth of Millerism. So great is the faith of some of our citizens, that they sell their best notes, when not due till April, at fifty cents on the dollar. Judge my surprise, then, to find myself represented as "first originating the idea." It is doing me too great an honor. The doctrine is as old as the days of Linnæus, and is advanced by every botanist who has written on the strawberry since his day. Tell it not in Gath, that this fact is unknown to the horticulturists and botanists of the East, or the hoosiers of the West will deem lightly of their botanical knowledge. If they will turn to Ree's *Cyclopædia*, article *Fragaria*, they will find the principle established by the cotemporary of Linnæus, Duchesne, and by Duhamel, Martyn and Haller.

I state explicitly, that pistillate plants never become staminate by running. Your correspondent, Mr. Huntsman, says, "I think it is well established, that the pistillate Hudson, and your seedling, will bear well without staminate plants near them. The gentleman, in selecting the Hudson, is particularly unfortunate. Your seedling will produce some defective fruit; but an acre of pistillate Hudson's, will not produce even an imperfect one. For twenty-five years I have kept a small patch of female Hudson's, at a distance from all others, to make new beds from, and they have never borne even an imperfect berry. Some male plants bear no fruit: others produce more or less fruit, and in favorable seasons, the female organs develop strongly and produce a middling crop; but a portion of the blossoms produce defective fruit, and a part none. It has been much disputed, whether there are distinct species of the strawberry. I consider this question settled by the fact, that there are cases where one kind will not impregnate the other. The Lafayette strawberry, which has been much lauded of late, is a staminate plant, but more or less of the blossoms perfect fruit. My gardener, Mr. Sleath, suggested to me yesterday, that this would be a good kind to cultivate to impregnate the female Keen, Hudson, and other varieties of that class. This I disputed, contending that the Lafayette was a distinct species from the others. I know not how many quires of paper we might have wasted, nor how many of

your readers we might have put to sleep, had we not agreed to settle the dispute in a more peaceable and expeditious manner. We set a plant of each "cheek by jowl," in a remote corner of the garden, and three weeks will put one of us to silence :

" For facts are chiefs that winna ding,
And downa be disputed."

You are correct in saying that "stamens are sometimes converted into petals." But this does not prove that pistillate plants of the strawberry become staminate by running, by high cultivation. Two facts prove the contrary. In raising from seed, both male and female plants are produced, and our market gardeners, who cultivate the strawberry with great care for market, can distinguish the male from the female plant at all seasons. To put this question at rest in your mind, do me the favor to plant three or four female Hudson's, separate, (say fifty feet from any other), and by them plant one staminate early male Virginia, and at the same time plant an equal number of female Hudson's, at a like distance from other plants, without any male, and a few days will test the principle. I request a like experiment from all others, who have a doubt on the subject. Where the sex of the plant is unknown, the person can wait till the first blossom appears, to enable him to judge of the sex, and then move them carefully with a trowel, with a ball of earth. *Yours, &c., N. Longworth, Cincinnati, Ohio, March, 1844.*

[We shall not again undertake to enter into an argument to substantiate our views, as the experiments we now have in course will satisfy us of the truth or incorrectness of our views; noticing therefore one or two remarks of our correspondent, we pass over the subject until after the fruiting season, when we shall have some experiments to give in detail.

I. Mr. Longworth states, that when the blossoms are perfect (that is, stamens and pistils in the same flower,) the fruit is always small. This is certainly an error: we have raised Keen's Seedling of immense size, and the blossoms abound in large stamens.

II. In speaking of the male Hudson plants, our correspondent remarks, "In favorable seasons the female organs develop strongly and produce a middling crop." If this holds true of the male or *staminate* plants, why may it not of the female or *pistillate* plants? and in favorable seasons why may not the *male* organs "develop strongly." It is admitting just what we have before stated was the fact, in reference to our seedling.

III. "I state explicitly that pistillate plants *never become* staminate by running." How can we reconcile this with such remarks, as "male and female Keen's Seedling," "Methven Scarlet," "Hudson, &c." when it is well known that the whole race of these plants originated from *one parent* stock of each kind?

IV. Mr. Downing, as late as October, 1843, when we visited him, stated to us that he considered the idea of male and female plants as *entirely exploded*. We were particular to learn his opinion in this respect, as he first mentioned the subject in our pages some years ago. And we were pleased to learn that his views had changed, and were the same in every respect as our own.

These are the more important points for consideration in the communication of our correspondent, and we shall be glad to have them more fully explained.—*Ed.*]

The Ohio, and Norton's Seedling Grape.—I am somewhat nettled to find that you have knocked my Ohio grape into Norton's seedling. Would it not have been more prudent, to have waited till you could compare the fruit. It is an old axiom, that "chalk is not cheese." And it is one of the few, on the truth of which I believe we may safely rely. Yet blindfold a man, and placing the two before him, and deny him all chance of tasting, feeling, or smelling, and there is an equal chance that his decision will be wrong. Having now vented my spleen, at having my infallibility doubted, I can readily grant you absolution.

People have become so fond of writing for magazines, (or from a great desire to benefit the human family,) that you are daily annoyed by discoveries about equal to two, that I have seen going the rounds of the press, to secure the plum from the ravages of the curculio. It seems an honest, pains-taking farmer, by accident, hung his grubbing hoe on his plum tree. That season, for the first time, the tree produced one plum. It was published through the union, as a great discovery, with an assurance that if a person would hang as many pieces of old iron on his plum tree as it had blossoms, not a single fruit would be injured by the curculio. The other, was the case of a horticulturist, who accidentally threw his waste brine on the ground under his plum tree, and that year he escaped the fly; and I perceive my neighbors are busy sowing salt under their plum trees, with great confidence in its powers; for say they, "if it will *save pork*, why not *save fruit*?" Having been engaged in the cultivation of the grape for 30 years, and having tested the qualities of, and their adaptation to our climate, of more than 150 varieties of the grape, both foreign and native, and having now 60 acres in vineyards, it would have been wholly inexcusable in me to have committed such a mistake. I obtained the genuine Norton, and the grape brought into notice by Mr. Pleasants, from Virginia, many years since. The latter was utterly worthless, and the former bears fruit with me yearly, but I have never increased it. With me it has the hard pulp, common to most American grapes, from which the Ohio grape is entirely free, and the bunches of the Ohio grape are more than double the size of the Norton. The Ohio is a hardy vine, but may not succeed as well with you, for I am told the Catawba is, by your horticulturists, scarcely preferred to the Isabella, which we consider a far inferior fruit. I have had the Catawba in my vineyards, where no special care was used, to weigh 24 oz.—*Yours, N. Longworth, Cincinnati, Ohio, March, 1844.*

[The Ohio grape we purchased last year, was entirely killed by the severity of the past winter, while the Norton seedling, which stood side of it, was uninjured. In stating this we do not intend to say the Ohio will not bear our climate, as our vine was newly planted and small; though it was equally as vigorous as the Norton seedling; when stronger it may prove as hardy as the Isabella; of this we shall speak when we have had more experience. *Ed.*]

Dr. Gunnell's collection of Camellias.—In your Magazine for March, 1844, I find on pages 84 and 85, where you give your recollections of a tour, that you have committed a considerable error, unintentional no doubt, as relates to my management, &c. of my camellias (which you will please to correct): beginning at the 24th line from the top of page 84, there is an error as relates to myself, as I never have in any summer kept my general stock of camellias (or those that might be termed blooming

plants), in my greenhouse, as I have always disapproved of the practice, though I have kept my small seedlings and small plants raised from cuttings, and a few larger camellias that I was inarching from, in the greenhouse during the summer, which I believe is the practice of many persons. And on the 85th page, beginning at 34th line, where you speak of my using two thirds peat for my camellias, two years past, is also an error. I think about six or seven years past, I got some indifferent peat, which I used in about one quarter or less proportion with other compost, but I discontinued it in the course of about two years. I have no doubt but that the notes you took when you visited here have been misplaced, as some of my neighbors have been in the habit of keeping their general stock of camellias (or blooming plants) in their greenhouse during the summer, and also of using peat as a part of their compost to pot them in, but these practices, &c. are not properly applicable to myself; I presume from the above hint, that upon a second reflection you will be perfectly satisfied that your notes must have been misplaced, and that they were intended to be applicable to another establishment in this place.—*Respectfully yours,*
J. S. Gunnell, Washington, D. C., April, 1844.

ART. II. *Massachusetts Horticultural Society.*

Saturday, March 22, 1844.—An adjourned meeting of the society was held to-day, the President in the chair.

The committee appointed to revise the constitution and to whom was referred the subject of publishing a sheet list of premiums for 1844, reported that it was advisable to do so for distribution among the members. It was then voted that 250 copies be printed for this object.

Scions of the 20 oz. pippin, Swaar and streaked Dutchman apples from Mr. Howland of New Bedford, were received for distribution. Scions of the Lawrence pear were also received from Messrs. Wilcomb and King, of Flushing, L. I. The thanks of the society were voted to Mr. Howland, and Messrs. Wilcomb and King. Meeting dissolved.

April 6.—A stated meeting of the society was held to-day,—the President in the chair.

Mr. Vose, from the finance committee reported that they had examined the treasurer's account and found the same correct.

The following amendment to the constitution, proposed at a previous meeting, was adopted.

That the officers of this society shall be elected on the first Saturday of October, and enter upon their respective duties on the first Saturday of January, in the year 1846, and succeeding years, instead of the first Saturday of April, as now provided; and that the term of office, of the respective officers, who may be elected on the first Saturday of October, 1844, and whose term of office will commence on the first Saturday of April, 1845, shall terminate on the first Saturday of January, in the year 1846, instead of the first Saturday of April, of said year.

A letter was read from A. J. Downing, Newburgh, N. Y., accompanied with scions of the Lady Sweet apple for distribution. The thanks of the society were voted to Mr. Downing. Adjourned one week to April 13th.

Exhibited—Fruits: From A. J. Downing & Co., Newburgh, New York, fine specimens of the Lady Sweet apple. These were pronounced by the committee, of good size, high flavor and finely colored. From the President, fine specimens of an apple, the name unknown; supposed to be from New York State.

The following are reports of the committees, offering premiums for 1844 :—

SCHEDULE OF PREMIUMS FOR 1844.

COMMITTEE ON FLOWERS.

GERANIUMS—For the best twelve varieties, a premium of . . . \$3 00
For the second best twelve varieties, a premium of 2 00

Exhibition to take place April 27.

HYACINTHS—For the best ten named varieties, a premium of . . . 3 00
For the second best ten named varieties, a premium of 2 00

Exhibition to take place May 4.

TULIPS—For the best thirty varieties, a premium of 4 00
For the second best thirty varieties, a premium of 2 00

Premiums to be awarded May 18.

PANSIES—For the best six flowers, a premium of 2 00
For the second best six flowers, a premium of 1 00

Premiums to be awarded May 18.

HAWTHORNS—For the best display of cut flowers, a premium of . . . 2 00

HARDY AZALEAS—For the best display of cut flowers, a premium of . . . 3 00

HARDY RHODODENDRONS—For the best display of cut flowers, a
premium of 2 00

MAGNOLIAS—For the best display of cut flowers, a premium of . . . 2 00

SHRUBBY PÆONIES—For the best six flowers, a premium of . . . 3 00

Premiums to be awarded June 15.

RANUNCULUS—For the best display in June, a premium of 3 00

PINKS—For the best six distinct varieties, a premium of 3 00

For the second best six distinct varieties, a premium of 2 00

Premiums to be awarded June 22.

HERBACEOUS PÆONIES—For the best twelve flowers, a premi-
um of 3 00

For the second best twelve flowers, a premium of 2 00

Premiums to be awarded in June 22.

ROSES—in classes :—

Class 1.—Hardy kinds.

For the best thirty distinct varieties, a premium of 5 00

For the second best thirty distinct varieties, a premium of 4 00

For the third best thirty distinct varieties, a premium of 3 00

Premiums to be awarded June 22.

Class 2.—Bourbon, Chinese, Tea and Noisette.

For the best twelve varieties, a premium of 4 00
 For the second best twelve varieties, a premium of 3 00

Premiums to be awarded June 22.

CARNATIONS AND PICOTÉES—For the best six flowers, distinct, a premium of 3 00
 For the second best six flowers, distinct, a premium of 2 00

Premiums to be awarded July 20.

PHLOXES—For the best six varieties, a premium of 3 00
 For the second best six varieties, a premium of 2 00

Premiums to be awarded August 17.

HERBACEOUS PLANTS—For the best general display of flowers for the season, a premium of 5 00
 For the second best general display of flowers for the season, a premium of 3 00

INDIGENOUS PLANTS—For the most interesting display for the season, a premium of 3 00

CHRYSANTHEMUMS—For the best twelve varieties, a premium of 4 00
 For the second best twelve varieties, a premium of 3 00
 For the third best twelve varieties, a premium of 2 00

Premiums to be awarded November 16.

CAMELLIAS—For the best six flowers, a premium of 5 00
 For the second best six flowers, a premium of 4 00
 For the third best six flowers, a premium of 3 00

Premiums to be awarded in February, 1845.

AZALEAS (*Greenhouse*)—For the best six named varieties, a premium of 3 00
 For the second best six named varieties, a premium of 2 00

Premiums to be awarded March, 1845.

Gratuities, , 25 00
\$200 00

The following premiums are to be awarded at the Annual Exhibition in September.

DAHLIAS—in the following divisions and classes :—

Division A.—Open to all Cultivators.

PREMIER PRIZE—For the best twelve dissimilar blooms, 4 00
 SPECIMEN BLOOM—For the best bloom, a premium of 2 00

Division B.—Open to all Cultivators of more than Two Hundred Plants.

CLASS I—For the best eighteen dissimilar blooms, a premium of 4 00
 For the second best eighteen dissimilar blooms, a premium of 2 00
 CLASS II—For the best twelve dissimilar blooms, a premium of 2 50
 For the second best twelve dissimilar blooms, a premium of 1 50
 CLASS III—For the best six dissimilar blooms, a premium of 1 50
 For the second best six dissimilar blooms, a premium of 1 00

Division C.—Open to all Cultivators of less than Two Hundred Plants.

CLASS I—For the best eighteen dissimilar blooms, a premium of	4 00
For the second best eighteen dissimilar blooms, a premium of	2 00
CLASS II—For the best twelve dissimilar blooms, a premium of	2 50
For the second best twelve dissimilar blooms, a premium of	1 50
CLASS III—For the best six dissimilar blooms, a premium of	1 50
For the second best six dissimilar blooms, a premium of	1 00
DOUBLE BALSAMS—For the best display, a premium of	2 00
For the second best display, a premium of	1 00
ASTERS (<i>German</i>)—For the best display, a premium of	2 00
For the second best display, a premium of	1 00
ROSES (<i>Hardy Perpetual</i>)—For the best six varieties, a premium of	3 00
For the best other roses, a premium of	3 00
CUT FLOWERS—Designs for ornamenting the Hall at the Annual Exhibition, viz:—	
For the most appropriate design, a premium of	7 00
For the second best appropriate design, a premium of	5 00
For the third best appropriate design, a premium of	3 00
BOUQUETS—To be presented at the Annual Exhibition:—	
For the best, a premium of	4 00
For the second best, a premium of	2 00
For the third best, a premium of	1 00

Gratuities will be awarded at the discretion of the Committee for Seedling Camellias, Azaleas, Roses, Pinks, Carnations or Picotees, Phloxes, Geraniums, Dahlias or Chrysanthemums of American Growth, or for any rare or curious flower that may be exhibited during the season.

Jos. Breck, Chairman.

COMMITTEE ON FRUITS.

APPLES—For the best Summer Apples, a premium of	\$5 00
For the best Fall Apples, a premium of	5 00
For the best Winter Apples, a premium of	5 00
PEARS—For the best Summer Pears, a premium of	5 00
For the best Fall Pears, a premium of	5 00
For the best Winter Pears, a premium of	5 00
CHERRIES—For the best specimen of Cherries, a premium of	4 00
For the second best specimen of Cherries, a premium of	2 00
PEACHES—For the best specimen of Peaches, grown under glass, a premium of	5 00
For the next best specimen of Peaches, grown under glass, a premium of	3 00
For the best specimen of Peaches, in open culture, a premium of	5 00
For the next best specimen of Peaches, in open culture, a premium of	3 00
APRICOTS—For the best specimen of Apricots, a premium of	4 00
NECTARINES—For the best specimen of Nectarines, a premium of	5 00
QUINCES—For the best specimen of Quinces, a premium of	4 00
PLUMS—For the best specimen of Plums, a premium of	5 00
For the next best specimen of Plums, a premium of	3 00

GOOSEBERRIES—For the best specimen of Gooseberries, a premium of	3 00
For the next best specimen of Gooseberries, a premium of	2 00
CURRANTS—For the best specimen of Currants, a premium of	3 00
For the next best specimen of Currants, a premium of	2 00
RASPBERRIES—For the best specimen of Raspberries, a premium of	4 00
For the next best specimen of Raspberries, a premium of	2 00
STRAWBERRIES—For the best specimen of Strawberries, a premium of	5 00
For the next best specimen of Strawberries, a premium of	3 00
WATER-MELON—For the best specimen of Water-melon, a premium of	3 00
MUSKMELON—For the best specimen of Muskmelon, a premium of	3 00
GRAPES—For the best specimen grown under glass, previous to July 1st, a premium of	5 00
For the next best specimen grown under glass, previous to July 1st, a premium of	3 00
For the best specimen grown under glass, subsequent to July 1st, a premium of	4 00
NATIVE GRAPES—For the best specimen of Native Grapes, a premium of	3 00

The following premiums are to be awarded at the Annual Exhibition in September.

APPLES—For the greatest number of kinds and the best grown, a premium of	6 00
For the next best, a premium of	4 00
PEARS—For the greatest number of kinds and the best grown, a premium of	6 00
For the next best, a premium of	4 00
GRAPES—For the greatest number of kinds and the best grown, a premium of	7 00
For the second best, a premium of	5 00
For the third best, a premium of	3 00
ASSORTED FRUITS—For the best basket of fruit of various kinds, a premium of	7 00
For the next best, a premium of	3 00
For the best dish of Apples, not less than twelve specimens, a premium of	3 00
For the best dish of Pears, not less than twelve specimens, a premium of	3 00

Assorted Fruits, exhibited in baskets, shall not be entitled to any other than the premiums for such.

The above premiums to be awarded on the first day of the exhibition.

S. Walker, Chairman.

COMMITTEE ON VEGETABLES.

The Committee on Vegetables recommend the following premiums to be offered the ensuing year:—

ASPARAGUS—For Asparagus, the earliest and largest four bunches, a premium of	3 00
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RHUBARB—The largest and best, previous to the first Saturday in July, twelve stalks, a premium of	3 00
PEAS—The earliest and best peck in June, a premium of	4 00
LETTUCE—The finest six heads, of open culture, previous to the first Saturday in July, a premium of	2 00
POTATOES—The best peck previous to the first Saturday in August, a premium of	3 00
CUCUMBERS—The best pair grown under glass, previous to the first Saturday in June, a premium of	4 00
The best and earliest, of open culture, a premium of	2 00
BEANS—The earliest Large Lima, two quarts, a premium of	3 00
CABBAGES—The earliest and best three heads Drumhead Cabbage, a premium of	3 00
CAULIFLOWERS—The best and largest four heads, a premium of	3 00
BROCOLI—The best and largest four heads, a premium of	3 00
CELERY—The largest and best twelve roots, a premium of	3 00
EGG PLANTS—The finest six, a premium of	3 00
TOMATOES—The best not less than one dozen, a premium of	2 00
SQUASHES—The best display of the largest number of varieties at the annual exhibition, a premium of	5 00
For the best display of various vegetables at the annual exhibition, (not including squashes,) a premium of	5 00
Second premium on do.	3 00
	\$54 00

John A. Kenrick, Chairman.

Regulations to be observed in the exhibition of Flowers, Fruits, and Vegetables.

If, at any meeting, the committees for awarding premiums shall be of opinion, that the time appointed by the premium list for the exhibition of any fruit, flowers, or Vegetables, will be too late or too early, they shall have power to alter the time of exhibition, giving notice thereof to the society at the time of such change.

Committees shall have the discretionary power of withholding premiums, if the articles exhibited do not merit them.

All articles exhibited shall remain in the Hall until one o'clock, P. M., when they will be delivered to the contributors, unless otherwise directed.

Every article, if possible, is to be accompanied by its proper name.

When specimens of any fruits, flowers or vegetables are presented for a name, the owner is requested to give all the information in his possession as to their origin, and the name which they have usually been known by.

When the committee have good reason to believe that any information has been withheld, as to the name of specimens, they will decline to give their opinion,—they are ready at all times to aid and assist, to the utmost of their ability, in ascertaining the true name of any new production, presented under these regulations, but not otherwise.

The committee are authorized to remove all ordinary specimens from the table.

The regulations of the society forbidding the handling of fruits, flowers, &c., will be strictly adhered to.

No premiums on fruits are to be awarded, unless specimens (if desired) of the same, shall have been presented to the committee, to enable them to judge of the quality.

No seedling flower will be considered as deserving a premium, unless it possesses points of superior excellence.

No premium will be awarded to a seedling, which has already received one.

It is also desirable that the fruits, vegetables and flowers, exhibited, should be accompanied by brief observations on the mode of cultivation, if peculiar, together with any other remarks of utility.

All fruits, flowers and vegetables for competition, are to be the growth of the competitors.

Articles intended for premiums must be on the tables by 11 o'clock, A. M.

No person allowed to be in the room while the committees are awarding the premiums.

April 13. An adjourned meeting of the society was held to-day—the President in the chair.

Scions of the Hull and Wilbur pear, were received from D. Wilbur, Jr. for distribution among the members. Scions of a large apple were also received from A. D. Capen, for distribution. The thanks of the society were voted.

Dr. Howard Sargent, J. W. Sever, and Rev. Ebenezer Thresher, were admitted subscription members.

Adjourned 3 weeks to May 4th.

Exhibited—Flowers: From W. E. Carter, *Azalea indica phœnicea*, *Smithii*, *hybrida*, and *coccinea*, well grown specimens, and beautifully in bloom.

Fruits: From J. F. Allen, specimens of Black Hamburg grapes, the bunches of good size, finely colored, and good flavor, the first of the season; also, a cluster of the Black Prince grape, of the crop of 1843, in sound condition though slightly shrivelled, and of good quality; and perfectly ripened specimens of St. Michael figs.

Vegetables: From Edward Savage, Springfield, six stalks of blanched rhubarb, measuring three feet seven inches in length; it was produced from roots uncovered March 9th.

April 20th. Exhibited—Fruits: From S. Downer, apples received from C. Tinkham, of Quakerville; they were of fine appearance but only second rate quality. From Henry Vandine, pears called the *Beurré Spence*, the tree which produced them having been received from Flushing, L. I., its quality was very inferior. [The true *Beurré Spence* has never, we believe, been fruited in England until within a year or two, since Mr. Bradick procured it from Dr. Van Mons. Mr. Rivers in his *Catalogue* describes it as a good pear, though not meriting the high encomiums which have been bestowed upon it.]

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To			From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new :				Marjorun, per bunch, . . .		6	12½
Chenangoes, { per barrel,	1 25	1 50		Savory, per bunch, . . .		6	12
{ per bushel,	50	60		Spearmint, per bunch, . . .		3	—
Common,.... { per barrel,	1 00	1 25		<i>Squashes and Pumpkins.</i>			
{ per bushel,	50	—		Autumnal Marrow, per cwt.	6 00	—	
Eastports,.... { per barrel,	2 00	2 25		Winter Crookneck, per cwt.	3 00	3 50	
{ per bushel,	1 00	—		Canada Crookneck, per cwt.	4 00	5 00	
Nova Scotia, { per barrel,	1 25	1 50		West India, per cwt.	3 00	—	
{ per bushel,	50	60		Pumpkins, each,	10	12½	
Sweet, per bushel,	2 00	—		<i>Fruits.</i>			
Turnips, per bushel :				Apples, dessert and cooking :			
Common,	50	—		Baldwins, per barrel, . . .	4 00	4 50	
Ruta Baga,	50	—		Russetts, per barrel, . . .	—	—	
Onions :				Blue Pearmain, per barrel,	3 00	3 50	
Red, per bunch,	3	4		Danvers Winter Sweet, "	2 50	3 00	
Yellow, per bunch,	4	5		Common Sweet, per bar.	2 00	—	
New White, per bush.	4	6		Spitzembergs, per barrel,	3 00	—	
Yellow, per bushel,	1 25	—		Common, per barrel, . . .	2 00	2 50	
Beets, per bushel,	62½	75		Lady Apple, per. half pk.	87½	50	
Carrots, per bushel,	62½	75		Dried apples, per lb. . . .	4½	5	
Parsnips, per bushel,	62½	75		Pears :			
Salsafy, per doz. roots,	12½	—		Vicar of Winkfield, pr. dz.	—	—	
Radishes, per bunch,	6	8		St. Germain, per doz. . . .	—	—	
Horseradish, per lb.	10	12		Easter Beurré, per doz. . .	1 00	—	
Garlic, per lb.	8	10		Chaumontelle, per doz. . .	—	—	
<i>Cabbages, Salads, &c.</i>				Common, per half peck, . . .	—	—	
Cabbages, per doz. :				Baking, per bushel,	1 50	—	
Drumhead,	75	1 00		Cucumbers, each,	25	37½	
Savoy,	75	1 00		Cranberries, per bushel, . .	4 00	—	
Red Dutch,	75	1 00		Tomatoes, per doz.	—	—	
Brocolis, each,	12½	20		Grapes, per pound :			
Cauliflowers, each,	25	37½		White Malaga,	25	37½	
Lettuce, per head,	6	8		Purple Malaga,	25	37½	
Celery, per root,	8	10		Pine-apples, each,	12	25	
Spinach, per peck,	12½	17		Lemons, per doz.	17	20	
Dandelion, per peck,	10	12½		Oranges, per doz. :			
Cabbage Sprouts, pr. hf. pk.	17	20		Sicily,	20	25	
Asparagus, per bunch,	8	10		Havana,	37½	50	
Rhubarb, per lb.	4	5		Walnuts, per bushel,	1 50	2 00	
Water Cresses, per quart,	6	—		Chesnuts, per bushel,	2 50	—	
Cucumbers, (pickled) pr gal.	25	—		Cocoanuts, per hund.	3 00	4 00	
Peppers, (pickled) per gal.	37½	—		Butternuts, per bush.	1 00	—	
<i>Pot and Sweet Herbs.</i>				Almonds, per lb.	14	—	
Parsley, per half peck,	25	37½					
Sage, per pound,	17	20½					

REMARKS.—Since our last report there has been a constant succession of favorable weather, and the indications now are of an early season. Peach, cherry and plum trees have already opened their blossoms, and the apples are coming on with rapidity and will be in bloom early in May. The season is at least twenty days earlier than last year. Scarcely a drop of rain has fallen during the entire month to this date, and the ground

is now becoming quite dry for this early time of year. This favorable weather has brought on vegetation so rapidly, that the month has been a hurried one to every farmer.

Vegetables.—Potatoes a week or two ago fell off considerably, owing to the great quantity brought in, under the expectation of obtaining the high prices of last month; this stock accumulating, the market was quite inactive; there is now, however, a more ready sale, and a slight improvement in rates; the supply is now ample. Onions are very scarce; within a day or two new onions of good size, raised from autumn sown seed, have made their appearance. Radishes are now abundant, and prices moderate: with the present fine weather, the open air crop may be expected in a week or so. Cabbages are about gone; some few heads are brought in, but only in exceeding small lots, which are taken at our rates. Lettuce continues in good demand, and prices have been fully sustained. Spinach and other greens have been unusually abundant and good. The stock of squashes is so light as scarcely to bear reporting; West Indies are the principal kind, and supply the place of other sorts.

Fruits.—The season is now drawing to a close for Apples. Baldwins and Russets, picked and repacked, now command our present quotations; other sorts are nearly or quite gone; of pears none remain but baking, and those rather inferior. Cucumbers have made their appearance, but they are rather scarce; the low prices obtained for two or three years past have discouraged cultivators in their attempts to grow them. Cranberries have slightly improved since our last; the stock is now wholly of spring picking. Grapes are nearly or quite out of the market. Some few lots of Pine apples have arrived, and kept up a supply at this season. Oranges and Lemons are plentiful, and prices low. *Yours, M. T., Boston, April 25th, 1844.*

HORTICULTURAL MEMORANDA

FOR MAY.

FRUIT DEPARTMENT.

Grape Vines in greenhouses and graperies, will now be opening their flowers, and will need increased attention. Keep the house rather close, giving air early in the morning, and closing up early in the afternoon. Discontinue syringing until the fruit is set. Sprinkling the walks however, may be practised, in order to create a humid atmosphere so favorable to the vine when in bloom. Continue to tie up the growing wood for next year's crop, and take off all unnecessary wood. Vines in the open air should now be tied up carefully to the trellis, and if any unnecessary wood remains it may be cut off; a little bleeding will do no harm. Grafting vines may be successfully performed this month.

Grafting trees of all kinds may be continued throughout the month, if the scions have been well preserved.

Strawberry beds may yet be planted with entire success.

Raspberry bushes should be neatly tied up to stakes and the ground manured and spaded; prune off the tips of shoots down to a good prominent bud, leaving them from 4 to 5 feet.

Seedling Pears and Apples should have the ground well stirred about the roots.

Attend to the destruction of insects early, and a great amount of labor will be saved.

Pruning trees may be continued throughout the month, and also dis-budding of the young growing shoots where not wanted.

FLOWER DEPARTMENT.

Dahlias for early flowering may be planted out the latter part of the month. New kinds may yet be propagated by division of the roots or by cuttings, and the plants sheltered in a frame until June.

Camellias will now be finishing their new growth of wood. Keep them well syringed, and water occasionally with liquid manure. Inarching of some sorts may yet be performed.

Roses may be planted out into the open ground any time this month.

Cactuses as soon as done blooming may be repotted.

Chrysanthemums may now be propagated from cuttings or suckers.

Achimenes of the different species should now be shifted into the next size pots.

Tulip beds now coming into bloom should be shaded. The ground should also be lightly pricked over with a small trowel, being careful not to injure the roots or foliage.

Pansies raised in pots should now be planted out in beds, choosing a cool moist situation.

Verbenas may now be turned out into the ground.

Hardy annuals of all sorts should now be sown in the open ground, and *tender ones* raised in hot beds or frames, turned out into the border.

Herbaceous plants of many kinds may yet be safely removed.

Brompton and Queen stocks for forming strong plants next winter, should now be sown.

Ericas may now be propagated from cuttings.

Roots of Erythrina crista galli may now be planted out in the open border.

Salvia splendens may now be turned out into the border.

Oralises and other bulbs done blooming, should be removed to a dry, airy place, and watering discontinued.

Gladioluses, Tiger Flowers, &c., may be planted this month.

Hydrangeas should now be repotted.

Orange Trees may be grafted this month.

THE MAGAZINE

OF

HORTICULTURE.

JUNE, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Some account of an Insect that attacks the Grape-vine.* By Dr. T. W. HARRIS, Cambridge, Mass.

OUR cultivated and our native grape-vines are attacked by various kinds of insects, most of which are peculiar to this country. Of these insects, some differ entirely from all those that inhabit the vine in Europe; but there are others which closely resemble some European vine-insects, and, without due examination, might be mistaken for them.

The *Procris ampelophaga*, which has been found to be very injurious to the vineyards of Piedmont and Tuscany, is replaced here by another species of the genus, having the same destructive habits as its European counterpart. The young of the American *Procris** are little yellow caterpillars, with transverse rows of black velvety spots on their backs. The leaves of the common creeper, *Ampelopsis quinquefolia*, a plant belonging to the same natural family as the grape-vine, appear to be their natural food. Fourteen or fifteen years ago, swarms of these caterpillars were observed, by Professor Hentz, upon the vine at Chapel-Hill, in North Carolina, and constant care was required to check their ravages there, during several years in succession. How much the vine may have suffered from them, in other parts of the United States, has not yet been made known. Within a few years, these same insects have appeared upon the creeper covering the porch of the mansion-house of the late Madam Dix, in Boston, and also

* *Procris Americana*, Harris. Catalogue of North American Sphinges, in Silliman's "American Journal of Science," Vol. XXVI, p. 316; and "Treatise on Insects injurious to Vegetation," p. 236.

upon grape-vines growing behind the house, where the writer of this article has seen them in great numbers, and has had an opportunity of observing some of their habits and transformations.

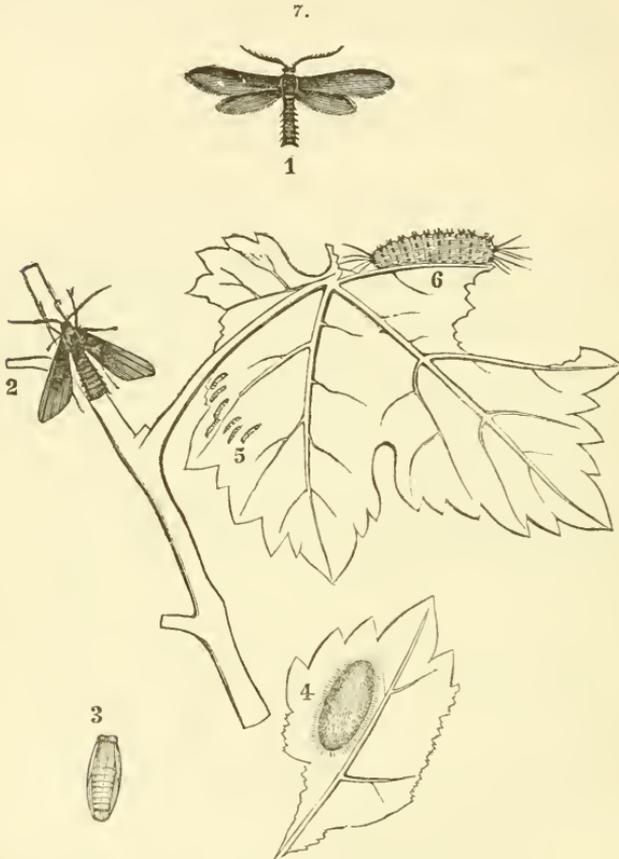


Fig. 7. The Procris Americana in its various Forms.

- | | | |
|----------------|-------------------|----------------------------|
| 1. The Male. | 3. The Chrysalis. | 5. Young Caterpillars. |
| 2. The Female. | 4. The Cocoon. | 6. Full-grown Caterpillar. |

In the southern states several broods are produced in the course of one year, for Professor Hentz informs me that the caterpillars were found on the vines throughout the summer, and this accords with the history of the European vine *Procris*. In New England there are, at least, two annual broods. The transformations of the second are

finished in the spring; and the first brood of the summer, the history of which has not yet been fully investigated, may be expected in June. This, therefore, appears to be a proper time to direct attention to this little destroyer, whose ravages are comparatively recent, or have been overlooked, hitherto, in this vicinity.

In the middle of a warm sunny day, about the first of July, many small black moths were seen flying around and alighting upon the creeper, and they continued to appear, every fair day, for a week or more. There was some difference in their size and color, the females being the largest, and glossed with blue; but, in both sexes, there was an orange-colored collar around the neck. The wings expanded, in flying, about an inch. The body was slender, but thickened and tufted towards the end. These moths laid their eggs, in clusters, on the lower sides of the leaves, from twenty to fifty in each cluster.

On the twelfth of August, caterpillars, of various sizes, which had been hatched from these eggs, were seen upon the leaves of the creeper. Some of them could not have been more than two or three days old, while others had probably been hatched ten days or more. The younger caterpillars were of a greenish yellow color, and the black spots on their backs were very small. They kept together, in swarms, beneath the leaves, the caterpillars in each swarm arranging themselves in rows, side by side, with their heads all in the same direction. At first they eat small irregular portions of the lower surface of the leaf, leaving the cuticle above and the veins untouched; but as they grew larger, they eat up the whole leaf, excepting the stalk and the principal veins, and passing from leaf to leaf, they devoured each one, in turn, in the same way. The grape-vines suffered more from them than the creeper, long shoots of the former being entirely stript of their leaves by the insects, before the source of the mischief was suspected and discovered. These caterpillars appeared to come to their full size within fourteen or fifteen days, then measuring, when at rest, about six lines, or six tenths of an inch, in length. Their color, at this age, was a deep yellow. The segments or rings of the body were very distinct; each ring having a transverse row of eight, oval, black, velvet-like spots or tufts upon it. The feet were short, and sixteen in number. The head was very small, with three

black spots upon it, and could be drawn almost entirely within the first segment, which formed a kind of hood over it. A few slender hairs were scattered over the body, and were most conspicuous on the second and on the last ring. These insects were sluggish and slow in their motions, and, when touched, curled their bodies sideways, lost their footing, and fell to the ground; or, more rarely, they let themselves down a short distance, and hung suspended, by a silken thread.

On the fourteenth of August, some of the largest, which were confined in a box, refused their food; and, on the next day, they made their cocoons, in the angles of the box, and on the leaves and stalks wherewith they were supplied. The youngest, however, did not spin their cocoons till the end of the month. This kind of cocoon is formed of very fine silk. It is of a yellowish white color, oblong oval shape, slightly convex above, and nearly flat below, and is firmly fastened to the spot on which it rests. Though almost as thin as writing paper, it is opaque, and very close and tough in texture. Soon after the cocoon was finished, the caterpillar, within it, changed to a shining brown chrysalis, very small, however, compared with the size of the caterpillar and of the moth. The insects remained within their cocoons, without further change, throughout the winter.

On the first of May, moths, similar to those already described, began to come out of the cocoons that were kept in the house, and others continued to make their escape till the twentieth of the month. In doing this, the chrysalis first opened one end of the cocoon, and worked its way partly out of it; after which a rent appeared on the forepart of the chrysalis, through which the moth drew its body and wings. These insects were forced to come out before their time, by being kept in the house; for they have not yet left their places of concealment abroad, and probably will not finish their transformations, and appear in the winged form upon the vines, till the month of June.

Although the history of the American *Procris* is not yet finished, enough of it has been ascertained to guide us in our proceedings, should this new-comer increase and multiply on our cultivated vines. Many of the moths, in their slow and short flights, may be caught upon the wing, by sweeping a bag-net of gauze over the vines. But, to the

destruction of the insects in their caterpillar state, our efforts must chiefly be directed. A few minutes, daily given to an examination of the vines in June and in August, will enable us to detect them; and, by a single grasp of the hand, an entire brood may be crushed upon one leaf. Any fluid, offensive to insects, such as soap-suds or a solution of oil-soap, thrown forcibly beneath the leaves with a syringe, will dislodge the caterpillars; and, even if they be not killed by this means, they will find it difficult to mount again upon the vines.

T. W. H.

Cambridge, May, 1844.

ART. II. *Pomological Notices; or notices respecting new and superior varieties of fruits worthy of general cultivation. Notices of several new Apples and Pears.* By the EDITOR.

OUR last miscellaneous notice of new fruit appeared in 1842, (Vol. VIII. p. 249,) in which article, and a previous one, in the same volume, (p. 161,) we gave some account of a variety of new pears, grapes, strawberries, &c. In continuation of this subject, we now offer some account of several new varieties of apples and pears which have been recently brought into notice among our own cultivators.

APPLES.—The excellence of several native varieties of Western apples, which have been exhibited before the Mass. Horticultural Society, by Mr. Ernst, a corresponding member, of Cincinnati, and notices of which have appeared in our last volume from him,—has created quite a desire, among amateur cultivators, to become more acquainted with Western fruits. The apple, in the valley of the Ohio, seems to attain to a great state of perfection; and Eastern fruits, when cultivated there, are so much larger and fairer, that they would scarcely be recognized as the same varieties. With so fine a climate and the production of great numbers of seedlings, it is quite possible that many of them will prove new and very superior kinds. The early settlers of Ohio—then without any of the facilities of communication

of the present day, and unable to take trees hundreds of miles, over rough roads and through an uninhabited country—possessed themselves of quantities of seeds, which were promiscuously sown, and from which have sprung a greater portion of the apples cultivated in that section of the country. Within a few years several varieties have been introduced from Western New York, and the Eastern States; but the thousands of barrels of apples which are annually carried down the Mississippi, are nearly the entire produce of seedling trees.

To select from the great number of varieties which abound in the Western States, only those which are of first rate quality, is no small task; but with establishment of the Horticultural Societies of Ohio and Indiana, we look for valuable aid. The labor has been commenced, and we do not doubt that enthusiastic cultivators will feel sufficiently impressed with the importance of the duty, to persevere in selecting every native variety which possesses merit sufficient to entitle it to cultivation.

With a view to afford our cultivators an opportunity to judge of the relative merit of many of the Western apples, we have condensed the following, principally from the reports of the Committee on the Synonyms of Fruits, of the Cincinnati Horticultural Society, during the season of 1843 and spring of 1844. A great number of seedlings are noticed, of which no descriptions are given; these will probably be reported on by the committee another year. Several are also described merely as seedlings presented by various cultivators. We have only added notices of such as have been named, and under which they are, or probably will be, sold by nurserymen; this will enable those who wish to possess them, the means of ordering any or all of the varieties.

As other new varieties are named and introduced to notice, we shall continue to give all the information we can obtain in regard to them.

Dukeberry Winter blush.—A large fair apple, greenish yellow, with a bright red blush next the sun, and dark specks over the surface; flesh white, breaking, sub-acid, pleasant, but rather flat; form round, largest at the base, slightly pointed at the blossom end, which is somewhat sunk; stem small, planted in a deep cavity. This apple was brought from Peter Grist, near Springborough.

Lancaster.—A good fruit; size above medium; color greenish yellow, with a blush next the sun; brown dots over the surface; flesh white, crisp, juicy and rather aromatic; stem short and planted in a deep cavity; eye small and moderately sunk; a good keeper till April. Presented by Mr. Jackson, under the name of Lancaster.

Gennetin or Neverfail.—"A fruit of superior merit, highly deserving of cultivation." Color striped; flesh white, fine, tender, juicy, rich and excellent. Keeps till June. A letter to us from C. W. Elliott, states that the Gennetin shows its leaves and flowers two weeks later than the common varieties. So far as its origin has been traced, it is supposed to be a native of Virginia.

Raritan Sweet.—Supposed to have originated in New Jersey. The size is small; color yellow, approaching to orange, slightly tinged with red next the sun, clouded with dark spots over the surface; flesh yellow, melting, sweet, and pleasant; form oblong, smallest at the blossom end, which is slightly planted in a moderate indentation. A good keeper until April.

Whitewater Sweet.—A seedling raised by Mr. Ira Sherman, Jr., of Whitewater village, Ohio, from seed brought from Wabash. Size medium; form round; eye slightly sunk; stem small and short, planted in a moderately deep cavity; color bright yellow, with dark spots over the surface; flesh yellowish, firm, juicy, sweet, particularly pleasant and high flavored. Keeps well till May.

Osceola.—A seedling of superior merit, which originated in Indiana. Size above the medium; shape somewhat flat; remarkable for having the stem—which is long—sunk in a deep cavity, running almost to the core; eye also in a deep indentation; it is four inches in diameter, three in depth, and only one between the insertion of the stem and eye; color yellow, beautifully striped with red, and dotted numerously with dark spots over the surface; flesh yellowish juicy, sub-acid, rich and fine flavored. Keeps till May.

Pryor's Red.—An apple famous with good judges in Indiana. It is late coming into bearing, a good bearer, fruit decidedly a first rate winter apple, medium size, the tree a clean grower and very upright. This is the description given of it by our correspondent, the Rev. Mr. Beecher, in a letter to the Cincinnati Horticultural Society.

Cannon.—Size three and a half inches in diameter and

two and three quarter inches long; color dark red, rich; flesh white and crisp; ripe in September. The grafts were brought from Kentucky some years since. Specimens received from Mr. J. Knoop, of Troy, Ohio.

Them's Red Streak.—Size three inches in diameter and three inches long; nearly round; pale green, with dark red stripes; flesh yellow, very rich, and a little inclined to sour; very much esteemed as a winter apple. A seedling, raised near Cincinnati from seed brought from North Carolina some fifty years ago, by Mr. Thems.

Fairmount Pine.—Above the medium size, flat at the base, gradually tapering to the blossom; stem small, planted in a deep cavity; skin pale yellow, with a blush next the sun; flesh white, slightly astringent and rather coarse. A seedling variety which originated on the farm of Mr. G. Luckey, in Mill Creek township, Hamilton county. It keeps well, but is deficient in flavor.

Lansinburgh or Rock.—Invaluable as a good keeper; in eating till July; of a handsome appearance and good flavor.

Limber Twig.—Of medium size; flat at the base, gradually rounding off to the blossom end; blossom in a shallow indentation; stem small, planted in a large opening; skin greenish yellow, with a bright red next the sun; flesh white, juicy, sub-acid, and inferior in flavor.

Spiced Ox-Eye.—Represented to be a seedling. This is a tolerable good fruit. Shape, longish, flattened at the ends; stem short, planted in a deep cavity; blossom large and in a wide opening moderately deep; color dull and of a yellow ground, somewhat streaked with numerous specks over the surface; flesh yellow, juicy, sub-acid, and quite pleasant.

Hunt's Winter Pearmain.—Said to be a seedling; this is a bright red apple, of medium size; a tolerable good fruit.

Cannahan's Favorite and the *Broadwell* have already been described by Mr. Ernst. The latter is a superior sweet variety.

The following new, or supposed new, kinds, are also enumerated from information received from our correspondents, and other sources:—

Progress.—A native fruit, which originated on the farm of Isaac Miller, Esq., Middlefield, Middlesex Co., Conn., about forty years ago. David Freeman, a revolutionary soldier, was for forty years a hermit in that neighborhood,

and used to go into pastures and fields and engraft trees; this variety was a favorite of his, and he called it Squire Miller's sort; he said the name was too long, for the kind was very vigorous and healthy as well as very productive, and the name should be "Progress." It is a large yellow fruit, slightly freckled with greenish russet, and tinted with blush on the sunny side; shape conical; tender, of excellent flavor, and keeps till spring.

Giles.—A variety which originated in a pasture, in a very obscure place, on the land of Giles Hall, of Wallingford, Conn., and is no doubt a native. It is not a winter fruit, but is in perfection in October and November. It is a good sized fruit, of a dark red color, slightly conical, tender, juicy and well flavored.

Jabez Sweet.—A medium sized fruit, nearly round; color pale green, with dull red on the sunny side; sweet and excellent. Our correspondent relates the following, from the pen of an old cultivator of fruits, in regard to this variety. "An old lady in Middleton, Conn., known as 'Granny Barnes,' told me when she was eighty-five years old, that when she had three sons, her husband was setting out an orchard of native fruit, and the boys wanted this to be John's and that to be Jabez's, &c. and this was the origin of the apple; as to their being in eating, I tell you expressly, that for forty years I have eaten them from October till April; they are remarkable bearers."

Abbott Seedling.—Of medium size, roundish, slightly conical; color dull green, tinged with red on the sunny side; flesh tender, very juicy, and only wants flavor to rank among the very best varieties. Ripe in December and keeps till April. For specimens of the fruit of this and the last three varieties, and scions of the trees, as well as for the above information in regard to their origin, &c., we are indebted to our friend and correspondent, Dr. E. W. Bull, of Hartford, Conn., through whose exertions several native varieties of apples have been brought into notice.

The following varieties, exhibited before the Mass. Hort. Soc. last autumn, are stated to be fine kinds:—

Welcome.—Medium size round; color very deep red, nearly black next the sun, streaked with yellow and white in the shade; flesh white, fine, and deeply suffused with

red; tender, juicy, sub-acid, with slight astringency. Promises to be valuable. The Committee on Fruits, who gave this description, named the variety the Welcome apple, in honor of Mr. Welcome Alverson, of Johnson, R. I., on whose farm the tree was found growing, which is supposed to be a seedling.

Mother's.—In size and shape similar to the Baldwin, but of a deeper red color; flesh yellowish; flavor very rich. A most excellent variety, in eating from November to February. This variety originated in Bolton, on the farm of the late General Gardener.

Crown.—A fine large apple; in shape oblong; color red; of excellent flavor and worthy of general cultivation. It is hardy and a great bearer. Supposed to be a seedling variety which originated in Leominster, Mass.

Twenty-Ounce.—A very large and beautiful fruit; form nearly round; ground color yellowish green, striped with bright red, quite covering the surface on the sunny side; flesh yellowish, fine, tender, juicy and excellent, with a pleasant flavor. Taking all its properties, an exceedingly fine fruit. Its origin is not stated. The specimens of fruit were received from Mr. Geo. Howland, of New Bedford, who gathered them on his farm in Cayuga Co., N. Y. It is supposed to be a native.

Golden Ball.—An apple introduced to notice a year or two ago, by Mr. Cole, who again exhibited specimens of the variety last fall. It is a native of Maine, and has a high reputation in the Portland market, commanding a good price. Size large, nearly round; color fine golden yellow; flesh yellowish, tender, juicy and good. Ripe in November.

Egg-Top.—Size medium; form oval; color yellowish, striped and shaded with bright red, darkest on the sunny side; flesh fine, white, tender, juicy and sweet. An apple received from western New York, and sold in the Boston market under this name.

Spaulding's Early Seedling.—A variety recently brought into notice. It was raised by Mr. P. P. Spaulding, of Lowell, and first fruited four or five years ago. It is of large size; color dull red, more or less striped; flesh tender, juicy and excellent. A good bearer. It ripens just about the same time of Williams's Favorite.

The following are the names of several seedling apples which were exhibited at the last annual exhibition of the Worcester County Horticultural Society. The report of the exhibition having been mislaid, we are unable now only to give the names; at another time we shall offer the remarks of the committee in regard to their qualities:—Capron's Pleasant, Coe's Housewife, Coe's Spice, Earle's Greening, Hogpen and Red Cheek.

PEARS.—Several new native varieties of pears have been brought into notice the past year, and out of the number four or five of them promise to be valuable, or at least desirable kinds. These have all been mentioned in the reports of the Massachusetts Horticultural Society, in our last volume, (IX.) but those which possess the greatest merit we now enumerate again, adding some information not before given. We have drawings and descriptions of all the varieties, which we shall present to our readers after the trial of another season.

It is gratifying to see more zeal manifested in the subject of seedling fruits; with such fine specimens of American pears as have already been discovered in our gardens and fields, cultivators should be encouraged in continuing their investigations, with the hope of detecting others equally valuable. The success of the late Mr. Knight, and of Dr. Van Mons, as well as other Belgian and French cultivators, should also be a sufficient inducement to amateurs to make them attempt the production of new seedling varieties.

Hull.—Of medium size and obovate form; skin yellowish green, russeted; flesh yellowish white, coarse, melting, juicy, and pleasantly perfumed. A great bearer. Ripe in October. The original tree of this variety was found in the town of Swanzey, Mass., and is now about forty years old. It formerly stood in an old orchard, and is undoubtedly the accidental product of some of the seeds which fell from other trees.

Wilbur.—Though this variety has been known five or six years, and is now introduced into our gardens, it is comparatively new. It is rather below medium size, and of a dull green color; flesh melting, juicy and good. Ripe in September. The original tree is now sixty years old, and stands on the farm of Mr. D. Wilbur, Jr., in Somerset,

Mass., to whom we are indebted for the history of this and the Hull pear. It was found growing wild in a piece of mowing land.

Watson.—A variety of rather large size, obtusely obovate in form, and of a light russet color, resembling in general appearance the old Orange pear. It is said to be a fine variety. It originated in Plymouth, Mass., on the farm of Wm. Watson, Esq. The old tree was destroyed two years ago by accident. It is an abundant bearer, ripening in August and September.

Oliver's Russet.—In size and shape resembling the Jalousie; color dark cinnamon russet, with a tinge of red on the sunny side. Pronounced by the Committee on Fruits of the Massachusetts Horticultural Society "equal to the Seckel." It is an abundant bearer. The tree is a seedling, and originated in the garden of G. W. Oliver, of Lynn, Mass., about twelve years ago. It sprang up, Mr. Oliver informs us, in the vicinity of the old Orange and a Doyenné blanc or St. Michael, and is undoubtedly a cross between the two.

Winship's Seedling.—A medium sized pear, of pyramidal form; color pale yellowish green; flesh melting, juicy and of agreeable flavor. Ripe in October. A very desirable fruit, which originated in the nursery of Messrs. Winship, of Brighton, about twelve years ago.

Lawrence.—Size large; form obovate; color pale yellowish, freckled with green; flesh yellowish white, coarse, melting and juicy; flavor rich and sugary, but without much perfume. Ripe from December to February. This pear, according to a letter from Messrs. Wilcomb & King, who forwarded the specimens, is a native of Flushing, L. I., and first produced fruit three or four years ago. It produces abundant crops every year, and is not inclined to rot or shrivel. The tree is of fair growth, very full of thorns, and appears to be a cross of the St. Germain and the Doyenné blanc, resembling them in wood, foliage, &c., and having sprang from seed in the vicinity of those kinds, with no others near.

Hill's Fall Butter.—Fruit above the medium size; form obovate, flat at the blossom end; eye sunk in a moderately deep cavity; blossom small; stem long and slender, with a peculiar fleshy protuberance on one side; skin thin, greenish yellow, of a smutty appearance; flesh white,

highly perfumed, buttery, with a very slight disposition to astringency. Seed vessel full and large, tree strong and vigorous in its growth; wood dark brown, buds large and prominent. The original tree was found growing on the farm of Mr. Jedediah Hill, on the Hamilton road, twelve miles north of Cincinnati. Mr. Hill states that he brought the seed from New Jersey ten or twelve years since, from which this tree originated. The tree bore fruit for the first time in 1841; in 1842 it produced no fruit, but last season it again fruited, though not so perfectly as in the first year. The Committee of the Cincinnati Horticultural Society named it Hill's Fall Butter, in compliment to the owner of the tree. The above description by our correspondent, Mr. Ernst, we copy from the *Western Farmer and Gardener*, published at Cincinnati.

McLaughlan.—The late Mr. Manning first introduced this variety to notice, and gave a short description of it in our Vol. VIII. p. 62; but it has never, we believe, been fruited anywhere except in the vicinity of its native locality, but in the Pomological Garden, and is comparatively a new fruit. Last December specimens were presented before the Mass. Hort. Society, which the committee pronounced to be excellent. It is a large sized fruit, greenish yellow skin, melting and juicy. Ripe, December and January.

Pennsylvania.—This is another native variety, first introduced into the vicinity of Boston by Mr. Manning, and now found in several collections around Salem, where fine specimens were grown in 1843, which were exhibited by Mr. R. Manning before the Mass. Hort. Society, and by J. S. Cabot, Esq. and other gentlemen at the annual exhibition of the Essex County Natural History Society, in Salem. It is a large fruit, of obovate form; skin pale yellowish green, much russeted, and deeply suffused with red on the sunny side; flesh yellowish white, coarse, tender, slightly melting and juicy. Ripe in October. This variety was raised some years since by J. B. Smith, Esq., Philadelphia.

Many other seedlings have come under our notice, but as they have been without names, and their merits yet uncertain, we defer giving an account of them until another year.

ART. III. *Some remarks on the evil effects of removing small Plants, from frames, into large and spacious green-houses.* By C. J. RYAN, Gardener to J. M. Thorburn & Co, Astoria, near New York.

HAVING experienced the bad effects of removing small, and recently potted plants, into large and spacious green-houses or conservatories, I am induced to offer you the following remarks, should you deem them worthy of a place in your Magazine. Should the subject be thought of sufficient importance, I hope it may be the means of calling forth the remarks of some of your able correspondents.

There is much risk in taking young and tender plants, brought forward in frames, and yet only a few inches high, into a large, airy and spacious greenhouse; until they arrive at a more mature age, and the wood becomes hardened, they are not able to bear the many changes of temperature to which they are necessarily subjected in such a situation. Many amateur cultivators practice this mode, having no suitable place to bring forward their plants, and others from a want of the knowledge of the bad effects of such treatment. Judicious cultivators are aware how beneficial uniformity of temperature is to young plants, and always avoid sudden changes in the early stage of their growth. How injurious then must be their exposure to the glaring sun and cold drafts of air, when placed on the high shelves of lofty houses, almost out of reach, and almost out of sight; where the sun's rays, striking upon the pot, heats it to such a degree that the roots are often completely burnt up, or at least the entire ball of earth so dried, that the plant cannot grow; and, while in this state, subjected to a deluge of water, given perhaps only once or twice a week. If crowded in among tall plants on the stage, the effect on those of small size is equally injurious.

If it is an object to have plants in a healthy condition and vigorous state, a structure intermediate between the frame and the conservatory is requisite. This may be of simple construction, placed in the rear of the main house, or in any sheltered situation, where it will not interfere with the arrangements of the garden. Being only intended

for bringing forward plants, regard need not be paid to external or internal appearance—as the plants, when of proper size or ready for blooming, will be transferred to the conservatory.

Gardeners, not provided with suitable means, cannot be expected to give the same satisfaction to their employers as those who have every thing to accomplish their object. The question would not so frequently be asked, “Why does this species show such a vigorous growth, while that one seems to be drawing out a lingering death?” and both under the same roof and apparently equal treatment. If it is answered that “the treatment applicable to one is not beneficial to the other,” this is often deemed a mere excuse of the gardener. Gentlemen who are acquainted with plants are aware, on a moment’s reflection, of the true cause; for while some species thrive in a dense wood, where the rays of the sun never shine, others are found on arid sands and sun-burnt rocks in the highest state of luxuriance and vigor. Is not this a sufficient proof that the cultivation of plants cannot be carried to a high degree unless appropriate houses are devoted to that object?

Large houses have a fine appearance when filled with good sized plants in a healthy condition, but those who wish to keep them in such a state, and, at the same time, bring forward new plants of small size, should bear in mind that this cannot be well done without the aid of an intermediate house, where the plants may have that proper treatment which will afterwards keep them in a growing condition.

Should these hints be the means of calling attention to this subject, the object of the writer will be accomplished.

Yours,

C. J. RYAN.

Astoria, New York, Jan. 1844.

ART. IV. *On Summer Pruning of Fruit Trees: with a few observations on training trees in the pyramidal or en quenouille form.* By R. CARMICHAEL.

It has been suggested to me that I have not sufficiently described, at length, the system of pruning which I laid

before your readers in the last number of your valuable Magazine. I shall again, with your permission, endeavor to give a more lengthened description of the time and manner the operation should, and ought to be, performed, concluding with a few observations on training young fruit trees in the pyramidal form.

In order to render a knowledge of summer pruning available to others, it will be indispensably necessary to describe the system in such a manner that the ideas derived from it may be easily comprehended and put into practice. In the first place, the proper time to commence the first pruning will be in some measure guided by the forwardness or lateness of the season, the health and vigor of the tree, and the soil and situation in which it is placed.

In ordinary seasons, in this climate, the middle of June may be taken as a general rule for commencing, say when the shoots have grown about a foot long; then with a sharp knife cut off about an inch from their growing points; the shoots, in consequence of this check, cease to elongate, and the sap, instead of being expended in the formation of useless wood, is directed to increase the production of fruit. The practice generally heretofore followed, in summer pruning apple, pear, plum and cherry trees, has been to cut the young shoots back within two or three eyes of the base; by this means, all the leaves which were fully organized, and prepared to perform digestion, are destroyed, with the exception of the spur-leaves, which are not sufficient to elaborate the amount of sap necessary to support the necessary functions of the tree; the number of leaves are diminished to such an extent as to produce a partial derangement of those laws which regulate the action in the organs of vegetation. After being cut in this manner, the few remaining eyes receive a stimulus which causes them to grow with great vigor, in order to produce those organs which are so essential to their development, and which they had already formed, if allowed to remain.

In about two or three weeks after the first pruning, it will be necessary to go over the trees again, and where they are becoming too crowded thin a few shoots out, by cutting them back within two inches of the base, letting the remainder stand sometime longer, say till the latter end of August, when the fruit will require being exposed to the sun and free influence of light and air; then cut all back

to the same length as the others, and as there will be no danger after this period of the remaining buds being stimulated into growth, and likewise no injury in removing the leaves, which have by this time nearly completed their functions, it will be as essential to remove them now, as it was essential before to let them remain. By this method of pruning, no three or four crops of young wood will appear, by which the tree exhausts itself to no purpose, and loses its energy in the production of useless wood. I hope from what has been stated, that the importance of summer pruning has been clearly shown.

I shall now endeavor to show the advantage of cutting out all superfluous wood in the autumn, instead of the winter and spring, as usually practised.

If what is called winter pruning be performed in the autumn, all the sap which is accumulated by the tree during the winter will be retained to supply the succeeding year's wood, which would not be the case if winter or spring pruning were adopted; the sap accumulated from the autumn till winter or spring, in the wood, to be cut away as useless, is considerable, and would all be saved by autumnal pruning. Vegetation is more or less active in winter, as well as in summer, and absorbs from the earth a certain quantity of matter at this seemingly dead season. "The fact, (says Dr. Lindley,) of many plants retaining their leaves, of others swelling their buds, and of all forming an addition, more or less considerable, to the points of their roots, sufficiently attest the movement of the fluids. Whatever power of attracting sap by its roots a plant may possess, during the winter, it is obvious that it has little means of parting with any of it again, by evaporation, at that period of the year; so that, during the winter, the whole of the tissue must gradually acquire a state of turgidity, which will go on increasing till the leaves and new branches of another year are developed and carry off the sap, or decompose and assimilate it. This turgid state is eminently favorable to rapid growth when vegetation once resumes its activity. It is well known that after very long winters, or when a plant has been prevented, by artificial means, from shooting at its usual season, its branches and leaves are developed with extraordinary vigor, a circumstance which is owing to the turgid state of the tissue, for

it acts as a force from behind, which continually presses upon the new-born tissue and causes it to expand."

I have thus far endeavored to show the advantage of performing what is termed winter pruning, in autumn, from a confidence of its superiority, having seen it successfully applied by some of the best gardeners in England; and I hope the few imperfect remarks I have made will receive that just consideration which the importance of the subject demands.

In concluding this paper, I have thought it might prove beneficial, to some of your readers, to describe the practice followed in the London Horticultural Society's garden, and other extensive establishments in England, of training pear and apple trees in the form of pyramids. The system has for its recommendation the production of larger, finer, and as well flavored fruit as is produced on standards; the trees are more productive and occupy less room; adding to all these good qualities—when properly managed—beautiful objects of ornament. If planted along each side of the principal walks in the fruit or kitchen garden, (as in the Horticultural Society's garden at London,) they produce a most splendid appearance. I am induced to think that the system might be followed with great advantage in this country; the method of training is easily put into practice, and when once commenced and properly attended to, requires little trouble.

The pear trees intended for this system should be on quince stocks, and the apples on paradise stocks; this checks their luxuriance and causes a dwarfness which is desirable in this method of training. The system adopted in England to produce the pyramidal form is to plant young trees of the former year's grafting in rows, from ten to twelve feet asunder, along the sides of a walk, or any other conspicuous place, when the stem or last year's growth is cut back a sufficient length, say within five or six eyes, of the base; this heading back causes the remaining buds to push equally, and produce the first tier of branches, which are allowed to continue growing until the month of July, when the uppermost shoot only is permitted to grow erect; the others are forced into a downward direction by tying them to stakes, placed at equal distances round the tree. The leading shoot, from its perpendicular direction, grows with great vigor, and soon requires to be

stopped again for throwing out another tier of branches; the top bud is allowed to continue its vertical position, training the others down, between those of the former growth, to stakes as before. This process of stopping the leading shoot, and causing it to throw out new tiers of branches, which are tied down as already described, is allowed to continue till the tree has gained the desirable height, which is generally ten feet, when it is headed back and kept so. The distance between each tier of branches, proceeding from the stem, is about one foot, and the number in each tier five to six. All the branches are trained down till their tops touch the earth, where they are stopped, and this causes them to throw out lateral branches, which are continually cut back, with the exception of those required to fill up the space, in order to keep the equal proportion of the tree. The effect of this cutting back is the production of plenty of short bearing branches or spurs.

The system of pruning employed is the same as described in the preceding part of this article, by which greater quantities of bearing wood are obtained, than nature, unassisted, would produce; the branches being turned downwards, causes a slower circulation of the sap, which is favorable to the production of flower buds.

There is a great deal of attention required the first two years, till once the proper set of the branches is obtained and the perfect equilibrium of the tree produced. Should any of your readers wish a fuller detail of this process of training, I beg to refer them to the seventh edition of the *New American Orchardist*, lately published, where, under the section "Pruning and Training," the author minutely describes this system.

Respectfully yours,

R. CARMICHAEL.

Newton, May, 1844.

Our readers must feel greatly indebted, as we do ourselves, to Mr. Carmichael, for his detailed account of summer pruning and of training trees in the pyramidal or *enquenouille* form. It is a better elucidation of this system of training than that of any writer we have lately read, and those who wish to adopt this method may follow with safety Mr. Carmichael's directions. Three years' experience in the London Horticultural Society's Garden has enabled him to become familiar with the system there practised by Mr. Thompson.—*Ed.*

ART. V. *Descriptions of several new Verbenas.*

By the EDITOR.

IN our volume for 1840, (VI. p. 253,) we described several varieties of verbenas, including such as we had given some account of in volumes previous to that, all those worth cultivating, which had been originated up to that period—in all, *thirty-one* species and varieties. Subsequently to the appearance of our article, a correspondent described in our volume for 1841, (VII. p. 217,) four other varieties, which were originated by him in Norwich, Conn. But since then, during the entire space of four years, we have not described any additional seedlings.

During the last two years great attention has been given to the cultivation of verbenas in England, and great numbers of seedlings have been raised, which are described as superior sorts; but of several which have been imported into our collections, none that we have seen have surpassed those which have been originated by our own cultivators. In our sunny climate, where the seed is always ripened in abundance in the open air, there is no doubt but that new and yet greatly distinct varieties may be raised, if cultivators would sow larger quantities of the seed; there would then be a greater chance in the selection. It must not be expected to get any thing very new, out of forty or fifty plants: if *one* in a *hundred*, or even thousand, should prove really *distinct*, the cultivator should feel encouraged to continue his experiments.

We have stated that thirty-five varieties have been correctly described in our previous volumes; we now add thirteen more,—making in all *forty-eight* kinds, thirty-three of which are American seedlings. Many varieties have been raised, but not sufficiently distinct to deserve names.

The color which is now most wanting is a pure white, of fine habit,—all of the present varieties partaking too much of the strong and upright growth and coarse foliage of the *teucroides*. A distinct striped one is also a desideratum. The fine blue now described is the nearest approach to this desirable tint; and Gazelle is the darkest one we have yet seen. Repeated experiments will no doubt give

us spotted and edged flowers, and of such habit of growth as is best suited for grouping out in beds.

Purple Perfection.—Bright violet purple, shaded with violet around the eye, which is white; umbel large, compact, and of good form; flowers large and well shaped. The richest and most distinct purple variety that we have seen. The habit, both in flowers and foliage, is very similar to *Tweediana*, and the variety forms an admirable plant either for grouping in beds or for pot cultivation.

Gazelle.—Rich dark velvety maroon, much deeper than *Pépperi*, with a bright yellow eye; umbel medium size, round, and very compact; flowers medium size, fine form. The darkest and richest color yet out, possessing a brilliancy quite unsurpassed by any of the dark kinds, the yellow eye forming a striking contrast. In habit it is somewhat similar to *Tweediana*, but rather dwarfer, having a thick and dense foliage of a very deep green tint. The flowers are so dark that the sun sometimes injures them before the whole umbel is expanded. In pot cultivation it succeeds admirably; a half shady situation suits it best.

Bedfordii.—Crimson purple, somewhat like *Binneyana*, but with a better habit and a much finer shaped umbel of flowers, being round, compact and full. In habit it is similar to *Tweediana*, and is excellent for grouping out.

Superb Pink.—Pale purplish pink, similar to *Winchesterii*; umbel very compact, semicircular and full; flowers of medium size. Of a free, vigorous, pendant habit, and peculiarity of tint, which renders it extremely pretty.

Stellata.—Rich light pink; umbel of good size but rather flat; flowers slightly curled, which gives them a starry appearance; habit erect and moderately strong, resembling *Powellii*. A pretty variety in a large collection.

Lilacina.—Dark lilac; umbel loose and rather long; flowers large, occasionally with one or two extra petals springing from the eye; habit tolerably strong, foliage broad and of a rather pale green. Not so distinct as some others, but a desirable variety. These six kinds were raised from seed by Mr. W. Young, gardener to Jas. Arnold, Esq., of New Bedford, who kindly forwarded us cuttings of each, with some others less distinct, in the summer of 1843.

Bridesmaid.—Flowers white, tinged with pale blush,

often approaching a salmon color; corymbs good size, compact, and well shaped; foliage deeply serrate and pubescent; habit moderately strong, but not too much so to group well with *Tweediana* in beds. This variety is also very fragrant. Raised in Baltimore by E. Kurtz, Esq., an amateur cultivator, who has originated several seedling camellias, and kindly sent to us by our correspondent, W. C. Wilson, Esq., together with twenty other varieties, comprising all the fine seedlings raised about Baltimore in 1840 and 1841; but owing to various causes, we only saved four or five of the kinds, and thought only *three* of these distinct enough to name. As they came to us under private marks, and wishing to give them a name under which they might be sold out, this one was called Bridesmaid, from the great beauty and delicacy of its flowers. It is decidedly one of the handsomest light verbenas which has ever been produced.

Splendissima.—Light brilliant rose, changing to pink; flowers slightly cupped; umbel large, compact and good form; habit vigorous and erect. This variety, from its upright growth and long stems, is admirably adapted for cutting for bouquets. It is slightly fragrant. This was also received from Mr. Wilson, and, we believe, from the descriptions which accompanied the plants,—for some of the labels were lost,—is one of his own seedlings. In color it is quite distinct and beautiful.

Bostonia.—Flowers lavender color; heads very large, rather loose, and good form; habit vigorous, with large and handsome foliage. A very distinct color, showy and beautiful. Of its origin we are uncertain; it came into our collection without name, and to distinguish so desirable a variety we have called it under this name.

Fine Blue.—Flowers dark purplish blue; umbels large, round, compact, and well formed; habit moderately strong, with deeply dentate and pubescent foliage. Groups admirably with Bridesmaid, Eclipse and delicatissima. It is the nearest approach to a blue variety we have yet seen. The origin of this variety is unknown. We have called it the Fine Blue, from its deep color, although it came into our collection merely as a *blue* verbenas.

Eclipse.—Rich brilliant scarlet, with bright yellow eye; petals very broad, smooth and flat; heads of flowers large and compact, but not so globular as *Tweediana*; foliage

large, deeply serrated, bright green; habit vigorous, but rather dwarf, grouping well in beds. This is, we think, the best scarlet yet out. The great breadth of the petals and size of the flowers, the brilliancy of color and the large yellow eye, give it a character quite unsurpassed. This variety originated in our collection in 1842.

Bicolor.—Flowers dark red or ruby, with a dark eye of the same shade; umbels medium size, compact and good form; habit good, similar to *Tweediedna*. The contrast between the dark eye and the outer edge of the petals is very striking, and renders it a distinct and desirable kind. This was one of the few varieties we saved from the plants received from Baltimore, and is a seedling raised by Mr. John Feast.

Delicatissima.—Flowers white, tinted with blush, opening first of a bright pink, and slightly cupped; unbel large, rather loose, but of good form; foliage the neatest of the group, being narrow, long, deeply dentate, thick, and very pubescent on the surface; habit beautiful, neither slender nor strong, grouping well in beds; it is also one of the most fragrant varieties. This was raised by us in 1842, and is the most delicate of all the verbenas we have seen, excelling even Bridesmaid by the satiny and varied tints of the flowers, some being pink, some blush, and others white, all expanded at the same time. For bouquets it is invaluable.

As other new and distinct sorts are raised and brought into notice, we shall endeavor to give descriptions of them.

ART. VI. *Notes on Gardens and Nurseries.*

Belmont Place—*J. P. Cushing, Esq.*—A short visit to this fine place, a few weeks since, has enabled us to give some account of the plants, &c. The greenhouse, as usual, had been a blaze of beauty, but its greatest show was over; the pelargoniums were now nearly out of bloom, with here and there a straggling truss of flowers, but they had been exceedingly showy, the two large circular stages being filled on one side. The magnificent *Westaria* on the roof, as well as the Banksian roses, were past blooming, although at one period their flowers spangled the whole space.

What at this time was most attractive, and, perhaps, worthy of notice, for the information of our amateur friends, was the plants on the front shelf, consisting of *Nemóphila insignis*, *Iberis coronària*, *Clintonia pulchella*, &c., &c.; the nemophilas were drooping their pendant shoots over the edge of the pots at least two feet, and were covered with their brilliant blue and white flowers; in the same condition was the delicate clintonia, with its silver and blue corols; contrasting with which was the snowy plumes of the iberis, which, though they had been gay all the spring, were yet blooming abundantly. That splendid stock, the Victoria, was also displaying its rich crimson spikes of blossoms; it is decidedly the handsomest variety ever brought to notice. Few individuals who have not seen these annuals, as indeed many others, under cultivation in the greenhouse, can form any idea of their great beauty when properly treated; they do not seem the same plants we see in the open air. Every possessor of a greenhouse should not neglect to sow, in the month of August, a pot of seeds of *Nemóphila insignis*, *Clintonia pulchella*, *Alyssum maritimum*, mignonette, schizanthuses of all sorts, *Iberis coronària*, *Eùtoca viscida*, Victoria, and other stocks, &c., &c.

In the stove the vines were ripening a fine crop of grapes, some of the clusters of which were immense; and a crop of Keen's Seedling strawberries had just been taken from the pots placed on the back shelf. Mr. Haggerston informed us that some of the berries were four inches in circumference. The plants were obtained by pegging the young runners into small pots in July, and then shifting them into a larger size in August, one or two plants in each. Keen's Seedling is undoubtedly the best *forcing* strawberry that has yet been raised.

On the back wall, that loveliest of all climbing plants, *Técoma jasminoides*, was radiant with its blushing corols; it had extended its branches twenty or thirty feet. The roots are planted in the pit at one end, and the shoots are trained over the walk. The greenhouse is scarcely warm enough for this plant to do well, but in the stove or hot house its shoots extend, and it luxuriates in a higher temperature. On the opposite end of the pit, *Combrétum purpùreum*, also trained over the walk, rambled along the wall, and was just showing its budding racemes. *Euphórb-*

ia splendens and *jacquinæflora*, several plants of which, with their scarlet flowers, were very showy. A plant of *Cereus grandiflorus*, in a pot, was showing at least twenty buds, some of which had already opened, and others were now expanding; this plant may be grown well in pots, with a trellis, and in this way is a most desirable acquisition to any collection.

The plants were all in good condition, and we only regretted that we could not have found time to visit the conservatory earlier in the season, when it was in its fullest splendor.

In the vieries the grapes were coming forward with immense crops, and everything denoted, as usual, the good attention and management of Mr. Haggerston.

In leaving the grounds we passed the hedge of the Osage Orange, (*Maclura aurantiaca*), and we were pleased to find it had stood the severe winter well, and now promises, after it has attained a little size, to become a most ornamental hedge plant. It has been planted about six years.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Cultivation of Salvia splendens for Winter Flowering.—About the middle of August, or as soon as there is the slightest appearance of bloom, I take off cuttings from the strongest shoots, immediately below the third joint, and insert them singly in small 60-sized pots, and plunge them in a brisk bottom-heat, under a hand-glass, in a compost of leaf mould, dung and sand, in equal proportions, taking especial care that the cuttings do not droop, but continue to grow on, the same in appearance as when taken from the parent plant. When the cuttings are well rooted, shift them into the next sized pot, and continue to shift them until firmly established in 48-sized pots. This fine plant is a great acquisition to the conservatory, especially in the dull months of November, December and January.—(*Gard. Chron.* 1844, p. 5.)

Standard Currant Trees.—As a matter of fancy, I have for some years grown currants as standards; and observing the constant crop that clusters round the head, and the little room they require, I potted about this time last year, (Jan. 1843,) [Nov. in our climate,] several three year old trees, and placed them on the back stage of a greenhouse; they bloomed and set their fruit well, and ripened about five or six weeks earlier than the out-door fruit. They were trained with small heads, and with the ripe fruit were remarkably showy. They are very easy to manage. The cuttings should not be shortened back, but disbudded to the top bud, re-

peating the disbudding till it reaches the required height. A plant three years from the cutting yielded in my greenhouse about 3 pints of fruit.—(*Id.* 1844, p. 21.)

Improvements with regard to inducing Trees to form Roots, so as to render them independent of the Stock.—M. Dalbret remarks that pear trees, more particularly those grafted on quince and apple trees, on doucin and paradise stocks, derive great benefit when roots are emitted above the graft, particularly in soils that are unfavorable for the longevity of these trees. It therefore becomes desirable to assist or induce the formation of such roots artificially, as follows:—When a plantation of these trees is made, the grafts should be from $2\frac{1}{2}$ to $4\frac{1}{2}$ inches below the surface of the soil. Two or three years after, in summer, when the sap descends in greatest abundance, which is generally the case in July, the soil is removed, so as to expose the point of junction of the graft and stock; and immediately above this, several portions of bark are removed with a sharp gouge, about $\frac{1}{10}$ ths of an inch wide. The wounds are made in a perpendicular direction, and about an inch in length; their form, from that of the instrument, being concave, and so deep that a portion of the inner bark may be removed; and their number should of course be increased according to the size of the tree, but so that not more than one fourth of the bark shall be removed. (Hence four portions, nearly half an inch in width, and an inch in length, would be removed at equal distances from a tree eight inches in circumference.) The wounds must be immediately covered with rich soil. Two quarts of decomposed cow dung, and six quarts of maiden loam, well mixed, form a good compost for the roots to strike into in the first instance. It is to be regretted that this mode of invigorating the trees in our gardens and orchards has not been hitherto employed. Some that have struck root naturally from above the graft may be seen growing with remarkable vigor, whilst others adjoining, living only on the stock, above which they form excrescences, languish during a short existence. This mode ought to be adopted for all grafted trees, destined to live in a light hot soil.—(*Id.* 1844, p. 39.)

Nitre a Remedy for Mildew.—I wish to add a few facts to those already stated with regard to mildew, and I hope to suggest a remedy. Having in my conservatory, which may vary in temperature from 38° to 70° , an Aimée Vibert rose, a Tea Hymenée rose, and a Microphylla rose, extremely subject to mildew, I began about a year ago to try a remedy, which I think I must have met with in the *Gardener's Chronicle*, viz.: to water them with nitre dissolved in water. The effect is, Aimée Vibert is quite cured, and Hymenée, whose wood was almost destroyed by the disease, is totally free, and making beautiful young wood; the Microphylla, though much improved in health, has still a little of it left. I used one ounce of nitre to one gallon of water, (the best I could get at the chemist's,) and about once in ten days during the summer, and am just beginning again to do so. I should think if the peach trees were well syringed with the solution, taking care there should be enough to water the roots, it would be effectual there also. I tried sulphur without the least effect.—(*Id.* 1844, p. 53.)

Budding and Inarching the Grape Vine.—Wishing to increase the number of Muscats of Alexandria and Cannon Hall Muscat grapes, I cut down a few vines; one half of them was budded and the other was inarched. To test the merits of each method fairly, both budding and inarching were done at one period. The result is, that by the former

method bearing wood has been produced nearly double the strength of that of the latter. In budding, the following is the method I pursued: The old vines were cut down in the autumn of 1842. They were laid in March, 1843; as soon as they had made shoots a few inches long, two were selected on each vine, and all the others were taken off. These were tied in, and laterals were regularly pinched off them until May. The young shoots were then about two thirds up the rafters, and nearly full grown in thickness at the base, but not ripened or turned brown. At that period, the buds taken from young shoots, with leaves not larger than two inches in diameter, were put on; the wood was left in the buds; they were inserted in the usual way, and tied firmly with a piece of matting. In the course of ten days or a fortnight they were united, the matting was undone, and the shoots were cut down to the buds; all shoots below the buds were taken off as they made their appearance. After this was done they grew away very strong and rapidly. Some of the buds showed fruit, but this was pinched off. The leaves attached to the buds never flagged.—(*Id.* 1844, p. 54.)

Mode of ascertaining the Quality of Seeds.—Such seeds as do not naturally require a very long time to germinate, are sometimes readily examined, as regards their goodness, by being placed in hot dung. The following particulars of the mode indicated by General Ygonet, is recorded in the *Revue Horticole*. A pinch of seed is sown in a pan, which is plunged in fermenting horse-dung, the seed being covered with nearly half an inch of soil, and over this rather more than half an inch of dung. (*Id.* 1844, p. 55.)

Charcoal.—Last year I potted two standard hydrangeas in 16-sized pots, (7 inches broad,) with two thirds turfy loam and one third sifted charcoal; the drainage, which was three inches deep, I formed of coarse pieces of charcoal. When the plants bloomed, I found the color of the flowers to be a beautiful bright blue, and so they continued to flower the whole of the season. Every plant seems to delight in charcoal; since I have laid charcoal merely on the surface of the mould, round the stems of many of my large orange and lemon trees, the alteration has been very striking; the foliage assuming a dark rich hue, and the plants being altogether most luxuriant. It is my opinion that large beds of blue hydrangeas might easily be obtained by the above treatment.—(*Id.* 1844, p. 69.)

Climate and Vegetation of Upper California.—It was late in the autumn of 1837, when an expedition of the Rio Sacramento penetrated from San Francisco some distance into the interior. The country exhibited a vast plain, rich, in a deep soil, and subject to periodical submersion. Occasional clumps of fine oaks and planes imparted an appearance of park land. They were already shedding their leaves; a small grape was very abundant on the banks, and sometimes we obtained a dessert from the fruit of a Juglans. We had scarcely returned, when a storm covered the maritime range of hills with snow: and this set the final seal on the year's vegetation. On quitting the coast for the interior, we exchanged the evergreen oaks for deciduous species. The latter grow to fine trees, with wood of great specific gravity. But the natives have a very pernicious practice of lighting their fires at the bases, and as they naturally select the largest, it was really a sorrowful sight to behold numbers of the finest trees thus prematurely and wantonly destroyed. And it is not a country where wood is superabundant; for no sooner is the Oregon crossed, than

the spruce forests disappear, and the prevailing trees are oaks, which towards the south become gradually less abundant.—(*Botany of the Voyage of H. M. Ship Sulphur, in Gard. Chron. 1844, p. 70, 71.*)

Condensation of Carbonic Acid by Charcoal.—The cells of wood-charcoal have a diameter of about 1-2400 of an inch, and if a cubic inch consisted entirely of cells, their united surface would have amounted to 100 square feet. By experiment, it can be shown that the cells constitute 5-8ths of the whole cubic contents of the charcoal; and allowing for the space occupied by the charcoal, the actual surface of the cells will be about 73 square feet. When charcoal is plunged into carbonic acid gas, it absorbs into its cells not less than 56 times their cubic contents at the ordinary temperature and pressure, and consequently the gas is condensed to 56 atmospheres. But according to the experiments of Addami, carbonic acid liquifies under a pressure of 36.7 atmospheres, and we are hence compelled to conclude that above one third of the carbonic acid which is condensed on the walls of the cells is in the liquid state.—(*Polytechnic Mag., in Gard. Chron. 1844, p. 71.*)

How to preserve the vitality of Seeds in long Voyages.—Bottles carefully sealed, and thick brown paper packages are generally employed for their preservation of seeds, and are kept in a cool and well aired room. But although this preserves them very well from insects, yet the advantage does not appear to extend farther. In the beginning of May, 1843, Mr. McGall was induced, from the evenness of the temperature there, to put a bottle of onion seed, carefully sealed, which had arrived at Bermuda from Madeira, in the beginning of February, into the bottom of a cistern of rain water five feet below the surface of the earth. The cistern was cased with roman cement, and had a free circulation of air above the cement, about seven feet from the bottom. On the first November, about the usual time of sowing, this bottle was taken out, and its contents sown, together with those of four other bottles of the same package, which had been kept in a cool warehouse during the summer, and of three others. In all cases the seed came up more or less; that in some of the bottles to the extent of about a fifth part, others of about a tenth, but in some scarcely at all. The seed, however, which had been kept under water, came up regularly, and four or five days sooner than the others; the plants were strong, and not more than a fifth part of the seed failed. The seed in three of the bottles looked pale when opened, and several seeds were chipped or broken; the fourth bottle, in comparison with that taken out of the water, seemed equally fresh, though very few seeds sprung. It is no doubt possible that some of the seed was not good when first imported; but be that as it may, the seed kept under water came up as quickly as new seed.

This is a new, and we think an important fact; because, if further experiments confirm Mr. McGall's experience, it may possibly be found that the best plan for seeds on board ships bound to distant countries is, as Col. Reid has suggested to us, in bottles plunged in ships' tanks, where they may be exposed to a more uniform temperature than can be otherwise secured. This information is worthy of consideration by importers of seeds.—(*Gard. Chron. 1844, p. 83.*)

To grow Campanula pyramidalis.—I either sow the seeds, or pot cuttings from the old roots, in leaf mould and sandy peat; as soon as they are strong enough I pot them off into 60-sized pots, (our No. 1,) regularly shifting them into larger sizes, as the plants require them. When they have

gained a little strength, I give them a rich loamy soil, well incorporated with a small proportion of bone dust; and at intervals supply them liberally with manure water. I do not find them flower vigorously under two or three years, but at that age I have had plants of both varieties nine feet high and covered with blooms.—(*Id.* 1844, p. 102.)

Season for repotting plants.—Examining some greenhouse plants lately, I found that they had all made quantities of roots round the ball of the plant, and from the circumstance of these having evidently been formed after the plant had ceased growing, it occurred to me that autumn would be a better time for shifting plants than spring. It is clear that these fibres had been made when the plant was in a dormant state, and it is certain that, unless they are supplied with fresh soil, the plant will not be able, in the following season, fully to develop its parts. The practice of spring shifting is attended with danger of breaking these newly-formed roots, and this gives a check to the plants. Plants in general should be shifted during their season of rest, for it is then they make the feeders that supply them with nourishment in the spring, when they begin to grow. Peach trees and vines clearly prove the assertion to be correct, for when they have been forced without having a due season of rest, the result is always unfavorable; this arises from their not having had time to form new fibres. When leaves begin to fall off, plants commence to form young rootlets, which absorb nourishment, and from these, on the first excitement of the plants, the sap ascends; fresh roots are afterwards made to keep up a supply through the season. It is necessary to keep these roots as dry as possible in winter, in order to preserve them from rotting, for, if they perish, the effects will soon be seen on the plants. This is an objection which many have to shifting greenhouse plants in the autumn, but if water is given with caution, and the pots well drained, there is no danger to be apprehended.—(*Id.* 1844, p. 102.)

Wash for Fruit Trees.—You constantly recommend that fruit trees should be done over with lime as a wash. Nothing can look more frightful than their glaring conspicuous trunks on a hot summer's day; and to obviate this disgusting sight I use cow dung, soap or wood ashes, mixed up with urine, the drainage of a dung mix, or ammoniacal water from the gas works, to the consistency of thick paint. This composition appears to me to possess all the advantages of the lime, and the trunks of the trees appear lessened, and altogether more pleasing to the eye.—(*Gard. Chron.* 1844, p. 181.)

Cultivation of Solandra grandiflora.—Among the many plants that adorn the conservatory with blossoms at this season, few are more showy than is *Solandra grandiflora*; and as this plant in many places does not bloom freely, I shall give my method of flowering it: After it attains to the height of from 3 to 5 feet, I do not shift it, but it is allowed to remain in as small a pot as it will grow in until the roots become matted round the outside of the ball; this, in some measure checking over-luxuriance, without injuring much the constitutional vigor of the plant, gives it a disposition to bloom. Early in autumn it is kept in a cool situation, and allowed to become perfectly dry, when the leaves will drop off. About the beginning of November it is introduced into heat and forced gently, supplying it plentifully with water when it begins to grow. Being thus excited for a short time, the plant grows freely and produces blossom-buds on the young wood and at the end of each shoot; these, in January and

February, expanding into large magnolia-like flowers, have a gay and imposing effect. As soon as it has done flowering, which is generally in March, the shoots are cut back, and the plant being shifted is put into heat and encouraged to grow, stopping the young shoots frequently, to induce it to throw out laterals and to keep it dwarf. By this treatment it very often forms spurs similar to a pear or apple tree, at the ends of which, after allowing the roots to become matted in the pots, giving it rest, and keeping it dry and cool from August till November, blossoms are produced in abundance upon its being put again into heat and excited into growth.—(*Id.* 1844, p. 181.)

Destruction of the Gooseberry Caterpillar by Salt.—To destroy the green worm, as also the small orange colored aphides, which often injure the bushes and destroy the fruit, we sprinkle the plants with salt and water early in the spring, *before the leaves are developed*; the mixture may then be made so strong as to whiten the branches without affecting the future crop. Should the leaves or buds be in part expanded, the brine should be greatly reduced, say one quart of salt to about eight gallons of soft water, applied over the bushes from the rose of a watering pot.—(*N. E. Book of Fruits*, p. 127.)

Oxalis Déppeii.—Roots of this species of *Oxalis* were lately distributed to the members of the London Horticultural Society, accompanied with the following statement in relation to their cultivation:—"I have grown it for several years, and I am convinced that if a little attention is paid to its cultivation, it will be found very useful in the months of October, November and December; but it would require a longer season of dry weather than our climate affords to bring its tubers to perfect maturity. The bulbs should be potted as early in spring as circumstances will permit, and as they vegetate in a low temperature the pots may be placed in a peach house, greenhouse, or even a cold frame; but they must not be turned out of doors until all danger of frost is over. They thrive best in light sandy soils, in a southern exposure; the bulbs may be planted from nine to twelve inches apart each way, and should be so arranged that they may be protected from the early frosts of October and November, by a slight covering of straw mats, or spur lights. As eight or ten good tubers are sufficient for a dish, there may be two or three dishes a week for three or four months, which is no small acquisition to a gardener who has a family at that season to supply with vegetables." Dr. Lindley remarks, that a smaller, and in many respects an inferior kind, is generally cultivated for it, which is no doubt one reason why this root is not more in use for culinary purposes. In Belgium it is extensively grown, where not only the tubers but the leaves are also made use of.—(*Gard. Chron.* 1844, p. 182.)

*Propagation of Plants by Circumposition.**—The following mode is practiced by Mr. Foulap, at Mont-Brisson. He procures a quantity of small tin cases, of a conical form, like the upper part of a funnel, 2 3-4 inches in length, and 2 1-6 inches wide at top, narrowing towards the lower part till only sufficient room is left for the introduction of the shoot or branch intended to be propagated. These cones are supported on rods,

* A term applied by early writers on gardening, but has latterly fallen into disuse. Circumposition is a kind of layering; the difference being, that in the latter the shoots are brought down to the ground, while in the former "the earth is lifted up to them," in consequence of their being too tall to bend down with safety.

to which they are secured by wire. Commencing with the central branches, the leaves are taken from the parts which the tin is intended to enclose. The branch is cut two thirds through, as in layering; and being enclosed by the funnel, the latter is well packed with moss. Moisture necessary for favoring the emission of roots is supplied by means of a bottle, from which the bottom is struck off, and the neck furnished with a cork, perforated so as to admit a small pigeon's feather, a bit of wool to form a syphon, by means of which the moss is kept in a proper state of moisture. The plants on which the operation is made are placed so as to be partially shaded by trees during the first month. Hard-wooded plants are propagated in this way from the middle of May till the end of June; and the branches are sufficiently rooted to be taken off by the first week in September. Soft-wooded plants may be operated upon in March, and the plants taken off in June, or in the end of June and beginning of July, in which case the plants may be taken off, if sufficiently rooted, in the end of September. It is, however, necessary, in all cases, to ascertain whether the branches are sufficiently rooted previously to their being separated. This is easily done by opening up the edges of the tin. When the branches are found to be sufficiently rooted, they are potted off, without removing the moss by which the roots are surrounded. Being moderately watered, they are immediately placed under glass, on a slight hot-bed, and kept shut up for a fortnight. They are then gradually exposed, and afterwards placed in the shade of large trees, so that only half of the rays of the sun shall reach them. In this manner, M. Fonlup obtained from one shoot of *Pittosporum sinense*, fifty-two well-rooted plants, in the short space of two months, by means of thirty tin cones. He also employs the latter for invigorating weak branches, and for increasing the size of fruits.—(*Revue Horticole, in Gard. Chron. p. 183.*)

ART. II. *Domestic Notices.*

New method of destroying the Curculio.—The following remedy for the curculio has been communicated to the President of the Cincinnati Horticultural Society: An old man who lived on the premises of a neighbor of the writer, in Canton, Ohio, in a shop which had a yard with a single plum tree in it, observing that that insect infested the trees very generally, and were in a fair way of destroying the whole crop, and knowing of no preventive, was induced to try the experiment of saturating the bark of the tree for a short distance with spirits of turpentine. He afterwards tied a rag, dipped therein, around it. The experiment succeeded to a charm, for not a plum was afterwards injured, whilst other trees in the vicinity cast from one half to two thirds of their fruit from the sting of that pernicious insect.—(*Western Farm. and Gard., Vol. IV. p. 225.*) [As it is now just the season to institute experiments for the destruction of this insect, we hope cultivators will be induced to try this plan.—*Ed.*]

Saltpetre a Remedy for the Peach Worm.—Lyttleton Physic, M. D., in a letter to our correspondent, J. S. Skinner, Esq., states that he has made use of saltpetre with good effect in destroying the borer. He uses one

part of saltpetre to from four to eight parts of common salt, and applies, in a solid state, about half a pound of this mixture to a bearing tree. He never disturbs the earth about the tree. For a long time he applied it three times in the course of a year, though he now thinks twice will answer. He has heretofore applied it in April, June, and first of September. Of 500 trees, 300 were treated with salt and nitre, and 200 left without its use. Those around which the salt and nitre were put, were, and still continue, entirely exempt from worms; of those left without the salt and saltpetre, not one escaped the ravages of the peach worm.—(*Am. Farm.* 1843.)

Experiment with Guano on Corn.—The great value of guano is just beginning to be fully appreciated in Great Britain. According to the latest accounts, the price per ton had risen from £1 to £2 sterling, and farmers were eager to lay in a supply. The discovery of the article on the Coast of Africa, on the Itehiboe Island, where it can be obtained without cost, and of nearly or quite equal value to the Peruvian, will tend to increase the consumption of it, from the lessened price at which it can be bought. Thousands of tons are daily arriving, and every cargo finds ready purchasers.

It will be, as it has been in England, some time before our farmers become wise enough to make trial of this valuable manure. It is four or five years since it was introduced to Great Britain in any quantity, and until last season the sale of it has dragged heavily; and it was only by the means of accurate experiments, tried under the care of scientific and influential agriculturalists, and given to the public through the medium of *Agricultural Journals*, that even the British farmers have at last become convinced of its immense value. Small parcels have recently arrived in Boston, and we are glad to learn that many individuals are now trying its effects on various crops. That they will be satisfactory we are almost certain. So far as we have tried it in garden culture we are satisfied there is nothing like it: our only object is to convince others of its utility, that they may obtain results equally astonishing. By another year we hope hundreds of tons of guano will be received from Africa, and sold at a price which will induce every farmer to test its value.

The following experiment with guano, in the cultivation of corn, was made by our correspondent, Mr. Teschemacher, last season: it forms a portion of his excellent address delivered before the American Institute, in October last, which has not yet been published; we copy it now, that those who wish may have an opportunity to give their crop a top dressing, and note the results, as compared to that without it:—

On the 12th of May, this year, I sowed several hills of sweet corn on a poor, exhausted, sandy soil, putting a tablespoonful of guano to each hill of five seeds, without any other manure. I feel sure that this quantity in sowing is two-thirds too much: one teaspoonful would suffice; besides which, it was not sufficiently stirred up with the soil, so that when the young tender sprouts first germinated, they came at once into contact with this most powerful manure, and were considerably injured, turning yellow, and several dying away. Three or four, however, in each hill survived, and soon began to grow, of a dark green color. For the first three weeks, I did not observe much difference between these and some adjacent hills in the same soil, which I had sown also without manure, for the purpose of comparison. When about one foot high, I stirred into each

hill about three teaspoonsful more of guano, and watered all freely, as the weather was very dry. On the 11th of July, the tassels appeared, which is about a fortnight earlier than usual. When fit for gathering for the table, I exhibited, at the rooms of the Massachusetts Horticultural Society, the largest produce of one seed. It had three principal stems, two of which had three heads each, and one two heads, in all eight heads, besides five suckers, each of which showed the silk. The weight of this plant, the roots being cut off, was 8½ lbs. At the same time, I exhibited the best produce of one seed out of the hills without guano or manure. One stalk showed one head, no sucker, and weighed 1½ lb.

It is well known by cultivators of this corn, that, under the usual cultivation, it seldom averages two heads to a seed. In my address before mentioned, the view I took of the action of this manure, and which I beg leave to state I deduced theoretically, from a consideration of the analysis of its contents, was, that it would be more valuable in agriculture than in horticulture, for that it was probable that it would diminish the size of the flower, but that it would certainly increase the produce of seed. I consider the above experiment with sweet corn alone as considerably fortifying these views, and I will mention but one other of my numerous experiments: it is purely a horticultural one, but it further supports the same theory, which is very important to agriculture.

In February, 1842, I repotted two plants, an old woody one, and a young cutting of heliotrope, which were in soil entirely exhausted, and in which they had been about twelve months. The exhaustion of the soil was proved by the leaves turning yellow and dropping off as fast as they appeared, as well as by the attenuated appearance of the shoots. On repotting, I merely added a teaspoonful of guano to the same soil, and replaced the plants in the same pots. In three months they had both shot out most luxuriant branches, with many clusters of flowers; and on the older and more woody plant, each cluster produced a good crop of seed, which this plant seldom produces, even under good common cultivation. This seed and luxuriance may therefore be fairly attributed to the guano. In order to pursue this subject to its farthest limits, I considered it valuable to discover whether any of the ingredients, discovered by chemical analysis of this manure, had found their way permanently into the seed of the sweet corn, with a view of ascertaining its importance in cultivation as an improver of the food either for cattle or man. I therefore forwarded a portion of the seed grown with guano and that grown without on the same spot, to Mr. A. A. Hayes, of Roxbury, to whose valuable discoveries and researches on this subject, I have before alluded, and likewise to Dr. C. T. Jackson, who has also interested himself much in these matters.*

I myself have repeated Mr. Hayes's experiments with this corn, although I have not been able to separate the ingredients in the seed, so as to make a delicate and certain comparison with those of seeds grown without gua-

* Dr. Jackson I have not yet heard from, but the result of Mr. Hayes's experiments on the corn I transmitted to him, is, that the phosphates in the guanoed corn are to those in the corn without guano, as 6 to 4; in other words, the guanoed corn contains 50 per cent. more phosphates than the other. Now, according to the most recent physiological discoveries, it is agreed that without the phosphates, neither flesh nor blood can be formed, and therefore, that the value of food for cattle and man, is dependant on the quantity of phosphates it contains.

no. Yet, according to the judgment of my eye, there is certainly an increase in the phosphates of the seed with guano. If this fact can be fairly once ascertained with one ingredient, it may be fairly supposed to be the case with others; and when the researches affecting agriculture, now being pursued by numerous able men of science, shall have attained a greater degree of precision and perfection, the importance of a knowledge of the ingredients contained in the various foods of cattle and man, will become quite manifest.

One other consideration has suggested itself to me as worthy of notice. In cultivation, the choice of fine seeds has always been deemed of first rate consequence. If the seed of this first year's sowing with guano has really acquired any more valuable properties than that cultivated without, it is at least probable, from what we already know practically of the laws of vegetation, that these properties may be increased with another year's similar treatment; I have, therefore, preserved some of this guanoed corn as seed for the succeeding year, when it will be again tried with the same manure.

I will merely add to these statements, that the quantity of guano I consider desirable for each hill of corn of five seeds, is less than one ounce, to be given in two applications. One quarter on sowing must be well mixed with the soil, and three quarters stirred well into the hill when the plant is about a foot high, always endeavoring to effect this latter operation just previous to rain. This would give about 70 lbs. to the acre, supposing it to contain 1100 hills at six feet apart. The price in England is £10 to £12, or \$50 to \$60 per ton, of 2240 lbs.; hence the quantity to the acre would cost somewhat less than two dollars, and no other manure is necessary. In England it has been applied at the rate of 250 to 500 lbs. to the acre, or more than six times the quantity by the above calculation; but there it is scattered broadcast as the seed is sown, and of course the quantity used must be much greater, as all the ground is covered. In the method I propose, it is applied as it were simply to each plant. In England, nothing is cultivated in hills; it is either broadcast or in drills.—(*N. E. Farm.*)

ART. III. *Retrospective Criticism.*

Errata.—Our correspondent, Mr. Teschemacher, requests us to correct an error, which was overlooked in his communication in our April No. p. 140. The fruit of the raspberry is represented as the receptacle; he intended to invite attention to this fruit as being a specimen of the berry, (*acinus.*)—*J. E. T., Boston, May, 1844.*

The efficacy of Salt for destroying the Curculio. (In answer to Mr. Longworth, p. 190.) I noticed a very modest communication in your last number, in which the writer represents himself as being under great excitement in consequence of your once having expressed an opinion that his famous "Ohio Grape" was identical with the "Norton's seedling," (although, if am not mistaken, there was a retraction made by you in a succeeding number, some months since.) Of this, however, I should not have spoken, had it not appeared to me to be his design to seek out some one on whom he could vent his "splcen;" and has seen fit, in no very

ceremonious manner, to single out a class of people (and a very numerous class, too) who place reliance on one of the two wonderful "discoveries," with which he asserts you are "daily annoyed by people who have become fond of writing for magazines, from a desire to benefit the human family;" (to which class he, of course, does not consider himself as belonging;) and has seen fit to class this "discovery" with another, which he conceives of a similar character—"hanging a grubbing hoe on a plum tree to secure the plum from the ravages of the curculio." Any one who has read the communications of your very learned and scientific correspondent would suppose that a person of his superior intellect, whom he intimates has been suspected of originating "an idea," would have perceived the dissimilarity of the two "discoveries." How simply hanging a "grubbing hoe" on a tree could be supposed to destroy the eggs or insects which might be buried beneath the soil, seems rather mysterious; this discovery no person in this vicinity has the honor of making; but it needs not such acuteness to suppose it possible that *brine*, when applied in any considerable quantity, might produce a *trifling* difference in effect, if applied to the soil where the eggs or insects existed. Now it appears as if your learned correspondent had taken no pains to either "taste, feel, or smell" of the subject, as he does not condescend to give any facts which would go to disprove statements which have been correctly made, and which could be corroborated and multiplied by the testimony of many scientific, practical men—but as it does not agree with his notions, he pronounces it a nonsensical humbug! One would infer, from his peculiar style of writing, that he belonged to that class of people not unfrequently met with, who consider all humbugs who differ from themselves; and as it appears to him to be a prevailing propensity in such ignoramuses (as these great discoverers) to inflict their stupid productions on you—(whom he appears to consider too amiable in your disposition to reject their communications)—he conceives it his duty to come out and give them a check.

Now if he possesses any information upon the subject, instead of advertising people as dupes, it is certainly his duty, as he has introduced the subject, to bring his light out from under the bushel and give your readers some facts which will set them right; as he says some of the people in his vicinity suppose that "*because salt will keep pork, it follows that it will also keep plums.*" Now, sir, the writer has not the most distant idea that your learned correspondent has any other object in view, in writing his communications for your Magazine, than to enlighten the "human family"—no desire for fame, or to bring his grape or his raspberry into notice. A gentleman, however, of the writer's acquaintance, who purchased some small vines of his grape at \$2, and raspberries at 50 cents each, informs me that he has some little inkling that in this case his "cheese" may prove "chalk."—*Yours, J. A. Kenrick, Newton, May, 1844.*

ART. IV. Massachusetts Horticultural Society.

Saturday, April 27, 1844.—Exhibited. Flowers: from W. Meller, a great variety of pelargoniums, embracing many seedlings, viz.: Oliver Twist, Lifeguardsman, Erectum, Decorum, King John, Jewess and Gaines's King; also Meller's Henry Clay, Beauty of Roxbury, Franklin, George

Washington, Martha Washington, British Queen, Prince Albert, &c., &c. together with bouquets, pansies, &c.

This day having been the time appointed for Premiums for pelargoniums, the Committee awarded the prize of \$3, for the best ten varieties, to Mr. Meller, there being no competitor.

May 4th.—An adjourned meeting of the Society was held to-day—the President in the chair.

J. S. Eldredge, of Dorchester, was admitted a subscription member.

Adjourned two weeks, to May 18th.

Exhibited. Flowers: from W. E. Carter, *Saxifraga cordata*, *Ribes aureum* and *Cytisus alpinus*; also hyacinths of different varieties. From J. Breck & Co., pansies, polyantheses, and hyacinths of several varieties. Col. Bigelow exhibited a branch of a new white double flowering peach, which originated in his garden at Medford about ten years ago; it resembles the common double flowering peach, except in the color of the flowers, which are pure snow white.

Fruits: J. F. Allen exhibited handsome specimens of Black Hamburg and Chasselas Bar Sur Aube grapes, the latter on a vine in a pot containing eight clusters, averaging half a pound each; also Royal George Clingstone peaches, handsome, large, and well colored; and Early Virginia and monthly strawberries.

Vegetables: fine Asparagus, from David Hill, West Cambridge; also good specimens, from G. Walsh, Charlestown.

May 11th.—*Exhibited.* Flowers: from Col. Bigelow, specimens of the white double flowering peach, the same as those exhibited the 4th. Bouquets from S. Walker, Misses Sumner and W. Kenrick.

Fruits: from Mrs. Howard, by her gardener, Mr. Nugent, handsome Black Hamburg and Sweetwater grapes.

May 18th.—An adjourned meeting of the Society was held to-day—the President in the chair.

The President reported that he had received a deed of the land, recently purchased of the city, agreeably to a vote of the Society, and had paid \$18,000. A loan of \$12,000 had been effected for the purpose of completing the building, but as the Building Committee would need a larger sum to complete the Hall, it was voted to raise the amount to \$15,000.

John Marland, of Andover, was admitted a subscription member.

Adjourned one week, to May 25th.

Exhibited.—Flowers: from S. Walker, a variety of fine tulips, also pretty specimens of *Polemonium mexicanum* and *Pulmonaria virginica* and bouquets. From S. R. Johnson, a variety of tulips. From Jos. Breck & Co., fine tulips, together with cut flowers of *Wistaria Consequana*, *Dodecatheon Meadia*, pansies, &c. From W. E. Carter, fine specimens of phloxes, viz.: *P. divaricata* and *divaricata* var. dark blue, *P. subulata* and s. variety deep pink, and *P. nivalis*; also *Dodecatheon* purple and white, honeysuckles, *Magnolia auriculata*, cordata and acuminata, double flowering cherry, bouquets, and a pretty specimen of the *Abutilon striatum*. From J. L. L. F. Warren, pansies. J. A. Kenrick exhibited a variety of fine flowering shrubs and plants, viz.: double white and pink, new scarlet and new pink thorns, snow-drop tree, (*Halèsia*) *Calycanthus*, *Kérria japonica*, *Wistaria Consequana*, *Magnolia tripetala*, *Spiræa hypericifolia*, and a great variety of hardy azaleas. From W. Kenrick, bouquets, thorns, pæonies, &c. From W. Meller, fine pansies, pe-

largoniums and bouquets. From D. Mack, Northampton, specimens of native flowers.

The exhibition of tulips and pansies for premium took place to-day, and the following is the award of the judges:—

TULIPS.—To S. Walker, for the best display of thirty dissimilar flowers, a premium of \$4 00.

To Jos. Breck & Co., for the second best display of thirty dissimilar flowers, a premium of \$2 00.

PANSIES.—To W. Meller, for the best exhibition of pansies, \$6 00.

Judges: Messrs. W. E. Carter, P. Barnes and C. M. Hovey.

Fruits: from J. F. Allen, beautiful Early Royal George Clingstone peaches, and fine specimens of Hovey's Seedling and Early Virginia strawberries; also Black Hamburg and Chasselas Bar Sur Aube grapes. From Woodlands, the garden of Mrs. Howard, fine Black Hamburg and Miller Burgundy grapes.

May 25th.—An adjourned meeting was held to-day—the President in the chair; but there being no business, it was adjourned two weeks, to June 8th.

Exhibited.—Flowers: from the President, fine specimens of tree pæonies, among which there were several new ones, viz.: *papaveræca*, *Banksiæ*, *Duc de Bade*, *Héldii plenissima*, *stellata atropurpurea*, *globosa Cas-sorétti*, *purpurea plena*, and *papaveræca plena*; also fine plants of fuchsias, varieties *Moneypennii* and *hybrida coccinea*. From W. Meller, pelargoniums, pansies, bouquets, &c. From W. Kenrick, *papaveræca* and *Banksiæ* pæonies; some herbaceous kinds, and handsome specimens of double white and scarlet thorns, honeysuckles, purple beech, irises, &c. &c. From Jos. Breck & Co., *papaveræca* and *Banksiæ* pæonies, six varieties of herbaceous sorts, *Phlôx divaricata* and other flowers; also a fine specimen of American mountain ash, with variegated foliage, a seedling tree, very beautiful.

Hovey & Co. exhibited a great variety of fine roses, among which were *Tea*: *Triumph of Luxembourg*, *Hymenée*, *Lyonnais*, *Caroline*, *Leonie Charmante*; *Bengal*: *Roi des Cramoises*, *Triumphant*, *Theresa Stravius*, *Clara Sylvain*, *Augustin Hersant*, &c.; *Bourbon*: *Hermosa*, *Mrs. Bosanquet*, *Marshal Villers*, &c.; also bouquets. From Messrs. Winship, a fine variety of azaleas, spiræas, and other plants, together with the double white and pink thorn, &c. From J. A. Kenrick, tree and herbaceous pæonies, *Wistaria Consequana*, laburnum, thorns of several kinds, magnolias, a very beautiful hardy azalea. Bouquets from S. Walker and Misses Sumner.

The premium on hawthorns, azaleas, tree pæonies and magnolias took place to-day, and the following is the award:—

To J. A. Kenrick, of Newton, for the best display of hawthorns, a premium of \$2 00.

To J. A. Kenrick, of Newton, for the best display of hardy azaleas, a premium of \$3 00.

The pæonies were not of sufficient merit to receive a premium.

S. Walker, J. Breck and P. Barnes, judges.

Fruits: from J. F. Allen, fine Early Royal George and Grosse Mignonne peaches, St. Michael's figs and Franconia raspberries. From Mrs. Howard, Woodlands, fine Black Hamburg, Miller's Burgundy and Sweet-water grapes.

Vegetables: large and fine asparagus from J. Cummings, Jr., Woburn.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>	From	To	<i>Pot and Sweet Herbs.</i>	From	To
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
Potatoes, new :					
Chenangoes, { per barrel,	1 25	1 50	Parsley, per half peck, . .	20	25
{ per bushel,	50	60	Sage, per pound,	17	20½
Common,.... { per barrel,	1 00	1 25	Marjorum, per bunch, . .	6	12½
{ per bushel,	50	—	Savory, per bunch, . . .	6	12
Eastports,.... { per barrel,	2 25	2 50	Spearmint, per bunch, . .	3	—
{ per bushel,	1 00	—			
Nova Scotia, { per barrel,	1 25	1 50	<i>Squashes and Pumpkins.</i>		
{ per bushel,	50	60	Canada Crookneck, per cwt.	—	—
Sweet, per bushel,	2 00	—	West India, per cwt. . .	2 50	3 00
Turnips, per bushel :			Pumpkins, each,	10	12½
Common,	75	1 00			
Ruta Baga,	75	1 00	<i>Fruits.</i>		
New, per bunch,	12½	—			
Onions :			Apples, dessert and cooking:		
Red, per bunch,	3	4	Baldwins, per barrel, . .	—	—
Yellow, per bunch, . . .	4	5	Russets, per barrel, . . .	3 00	3 50
New White, per bunch, .	3	4	Dried apples, per lb. . .	4½	5
Yellow, per bushel, . . .	—	—	Pears :		
Beets, per bushel,	62½	75	Vicar of Winkfield, pr. dz.	—	—
Carrots, per bushel, . . .	62½	75	St. Germain, per doz. . .	—	—
Parsnips, per bushel, . . .	62½	75	Easter Beurre, per doz. .	—	—
Salsafy, per doz. roots,	12½	—	Chaumontelle, per doz. .	—	—
Radishes, per bunch, . . .	3	—	Common, per half peck, .	—	—
Horseradish, per lb. . . .	10	12	Baking, per bushel, . . .	1 50	—
Garlic, per lb.	8	10	Cucumbers, each,	17	25
			Cranberries, per bushel, .	4 00	—
<i>Cabbages, Salads, &c.</i>			Green Gooseberries, pr qt.	8	10
Cabbages, per doz. :			Strawberries :		
Drumhead,	75	1 00	Per basket,	10	12
Red Dutch,	75	1 00	Per box, (or quart,) . . .	50	—
Brocolis, each,	12½	20	Cherries, per quart, . . .	17	20
Cauliflowers, each,	25	37½	Tomatoes, per doz. . . .	—	—
Lettuce, per head,	3	—	Grapes, per pound :		
Celery, per root,	8	10	White Malaga,	25	37½
Spinach, per peck,	12½	—	Purple Malaga,	25	37½
Dandelions, per peck, . . .	10	12½	Pine-apples, each,	12	25
Cabbage Sprouts, per peck, .	17	20	Lemons, per doz.	17	20
Beet Tops, per peck,	12½	—	Oranges, per doz. :		
Asparagus, per bunch, . . .	8	10	Sicily,	20	25
Rhubarb, per lb.	2	3	Havana,	37½	50
Water Cresses, per quart, .	6	—	Walnuts, per bushel, . . .	1 50	2 00
Peas :			Chesnuts, per bushel, . . .	—	—
Common Early { pr bush, .	2 00	2 50	Cocoanuts, per hund. . . .	3 00	4 00
{ pr peck, .	50	62	Butternuts, per bush. . .	1 00	—
Cucumbers, (pickled) pr gal.	25	—	Almonds, per lb.	14	—
Peppers, (pickled) per gal. .	37½	—			

REMARKS.—Rarely does a season pass over but what the farmer or gardener finds some cause of complaint; the spring is too late—severe frosts cut off the crop—cold rains injure vegetation—drought parches up the ground—or some other cause is assigned for the failure of a good harvest. For once, however, for many years, we believe, no possible cause

of complaint can be imagined. Never was there a more favorable season. An early spring—mild weather—and timely rains, have brought forward vegetation with great rapidity. Peach trees were some injured by the severe winter, but apple, pear and cherry trees never promised a more abundant crop. Only one very light frost has occurred throughout the entire month of May.

Potatoes.—The stock is still abundant, and prices remain nearly the same; constant arrivals from the Eastward and the Provinces have kept up a fair supply; Chenangoes are consequently little duller; good East-ports command an advance of 25 cents. New turnips, of good size, have come to hand since our last. New white onions are supplied, of good size. The stock of beets, &c. is low, and before our next probably a good supply will be brought in. Cabbages are gone, but from the favorable weather new ones may be expected in a week. Lettuce is plenty and good. Greens, of all kinds, are well supplied. Asparagus has been scarce throughout the whole month, and prices are as high now as at the date of our last. Rhubarb is abundant and good; the consumption of this article is greatly on the increase, and immense quantities are now purchased every week. Peas from N. Jersey have been abundant at our quotations for the last ten days; new ones from the vicinity will probably be brought in in a few days. Parsley is now plentiful. No squashes remain in market except the West Indies.

Fruit.—Apples are nearly done for the season; few remain except russets. Of pears, none are to be had. Strawberries from New Jersey and Long Island, have been plentiful for some time, and hundreds of baskets and small boxes, (holding about half a pint,) have been received daily; a box or two have also made their appearance from the vicinity; the prospect is now of a great supply, notwithstanding the winter injured many large beds in the neighborhood of Boston. Green gooseberries have also been plentiful. Cranberries remain the same. Cucumbers have been tolerably abundant and good. A few arrivals of pine apples have afforded a better supply and of a better quality.—*Yours, M. T., Boston, May 30th, 1844.*

ART. VI. *Obituary Notice.*

DEATH OF WILLIS GAYLORD, Esq.—Died at his residence, Limerock Farm, Onondaga Co. N. Y., on the 27th March, 1844, Willis Gaylord, in the 51st year of his age. Mr. Gaylord was an invalid from his youth. He first began his agricultural contributions to the *Genesee Farmer* in 1833, and afterwards became associate editor of that paper. On the death of Judge Buel, when the *Cultivator* and *Genesee Farmer* were united, he continued with his associate, Mr. Tucker, to edit that paper until his death. Mr. Gaylord was well read in agriculture and its various departments, as his writings will show; and he ably filled the place of the lamented Buel. His death may be truly considered a public loss.

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape Vines will now have set their fruit, and more air may be given, and syringing again resorted to, not, however, too frequently. Continue to lay in the new bearing wood carefully, and cut out all laterals beyond the first joint. Water at the roots with guano liquid, once a week.

Vines in the open air will soon open their flowers. Now is a good time to prune off any large branches, as all danger of bleeding is over. Thin out and tie up all wood wanted for next year. Grafting may yet be performed.

Strawberry Beds should be looked after. Keep them free from weeds, and as soon as the fruit is picked, cut off all superfluous runners, if not wanted to make new beds.

Grafted Trees should have all suckers rubbed off of the stock, as fast as they appear.

Summer Pruning should be commenced this month, as recommended in Mr. Carmichael's article.

FLOWER DEPARTMENT.

Dahlias should be all set out this month, commencing now, and continuing to plant till July, so as to have a succession of flowers. Those planted about the 20th will give the best *show* flowers, as the plants will not be exhausted in September. Stake and tie up as soon as planted.

Roses should now be turned out into the border. Cuttings may be put in now.

Tulips and Hyacinths should be taken up the latter part of the month, or as soon as the leaves die off.

Perennial Flower Seeds may be sown any time this month.

Chinese Primrose Seeds may be planted this month.

Ericas may yet be propagated from cuttings.

Camellias should be removed from the house to the open air, and placed in a half shady situation. Syringe often.

Asters, Balsams, &c. raised in pots or frames should now be planted out.

Fuchsias now beginning to bloom should be shifted into large pots.

Geraniums should be cut down the latter part of the month, and cuttings may be put in.

Carnations, in pots, or in the ground, should have their flower stems neatly tied up.

Hardy Roses should be layered, if duplicate plants are wanted.

Azaleas may now be propagated from cuttings; top such plants as have a tendency to grow tall without branching.

Cyclamens should either be turned out of the pots into a shady border, or kept in a cool place and sparingly watered.

Heliotropes may now be propagated from cuttings.

Callas should now be turned down on the sides of the pots, in a shady situation, where they may remain till September.

Amaryllis Belladonna, now having completed their growth, watering should be omitted till September.

Cinerarias may be separated the latter part of the month.

THE MAGAZINE
OF
HORTICULTURE.

JULY, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Pomological Notices; or notices respecting new and superior varieties of fruits worthy of general cultivation.* By the EDITOR.

IN our last we had no space to continue our report of several other new fruits, besides those of the apple and pear; and we now add some information respecting new varieties which have been more recently introduced.

GRAPES.—It is gratifying to find so much attention being given to the grape; the importance of procuring seedling varieties of our native kinds, which will come to maturity in our climate, and at the same time embrace all the qualities of a good grape, seems to be fully appreciated; we consequently find that several zealous amateurs have directed their attention to this object, and have already many seedlings under cultivation. It will be recollected that our correspondent, Mr. Camak, of Georgia, in our last volume (IX. p. 372) suggested to amateurs and nurserymen the propriety of raising seedlings according to the theory of the late Dr. Van Mons, which he adopted in producing his seedling pears,—that is, to commence with the native wild grape of the woods, and by successive generations, produce ameliorated varieties. The rapidity with which the grape vine may be fruited, compared with the pear or apple, is favorable to an early attainment of the objects desired. By grafting, seedling vines will fruit the fourth year, when the second generation may be planted, and in twenty years, the *fifth* generation will be secured, which should, according to Dr. Van Mons' theory, give excellent fruit.

But without stopping to institute an inquiry into the merits of his theory, compared with that of artificial impregnation, as practised by Mr. Knight and others, we shall recommend to those who would raise seedlings, the importance of commencing with the Isabella or Catawba, for one of the parents, and impregnating them with the Sweet Water, Chasselas, or some other early foreign variety. The results will be obtained in a shorter period, and, we believe, equally as favorable as by the method of successive generations alone.

The cultivation of our native grape has but just commenced: three or four kinds embrace all that are now found in our gardens. In Prince's *Treatise on the Vine*, nearly one hundred and fifty different species or varieties are described or noticed, several of which are supposed to be hybrids between the native and foreign grape: few however, of these varieties, have ever been much cultivated, and their merits, however good, are comparatively quite unknown. The labor of collecting together every variety of native grape was zealously commenced by Mr. Prince, and the information communicated in the *Treatise* is valuable, and will form the basis of future inquiries into the character of the different varieties. Mr. Prince commenced the production of seedlings himself, and in 1830 had a number of thousand vines, but of the success which attended his efforts we are uninformed. A whole chapter is devoted to the raising of vines from seed, and Mr. Prince takes the same view of the subject as ourselves, and recommends at least one of the parents to be some foreign grape.

These rather extended remarks, now hastily thrown out, will be enlarged upon at a future opportunity, when we hope to take up the entire subject of the growth and cultivation of the vine at length. These hints we have offered with the hope that they will be impressed upon cultivators that they may not allow another season to pass without making at least one attempt to raise some seedling plants.

Diana.—This new variety of the grape, which was brought into notice last year, when it was first exhibited before the fruit committee of the Massachusetts Hort. Soc. is thought by some who tasted it, to be the finest which has been produced, surpassing even the Catawba; we were

present at the meeting when Mrs. Crehore, herself, exhibited a couple of clusters, and although we only had the opportunity to taste three or four of the berries, and scarcely time to examine them carefully, yet it was our impression that it was a first rate fruit; but we preferred to have another trial of it, the coming fall, before we could give a decided opinion.

But allowing it to be of excellent quality, its greatest merit is the earliness of its ripening. Mrs. Crehore exhibited the grapes on the 23d of September, at least a fortnight *before* any Isabellas were shown. If locality or soil did not hasten their maturity, it will undoubtedly prove a more valuable variety than any we possess: as a crop may be relied upon for a certainty. The committee in compliment to Mrs. Diana Crehore, called it the *Diana* grape, as it is a seedling, raised by herself from, we believe, the Catawba, planted about ten years ago. In general appearance the grape resembles the Catawba; the clusters are of similar form, but the color is paler, being of a dull greyish red. The berry is perfectly juicy, vinous, and rich.

We are indebted to the kindness of Mrs. Crehore for a few cuttings of this variety, which are now growing well; and we hope to test its merits, when we shall endeavor to procure a full account of the origin of the grape, and other particulars interesting to cultivators.

Norton's Seedling.—This certainly cannot be called a new grape, in the true sense of the word, as it originated about twenty-five years ago; but to cultivators in the Eastern States it is as rare as if it was a seedling just brought into notice; we do not think it has ever fruited in New England, and it is, comparatively, quite unknown, except to amateur cultivators.

Mr Kenrick, in his *American Orchardist*, has fully described it, as has also Mr. Prince in his *Treatise*, but the Isabella and Catawba have so generally been distributed that they have taken the place of all others. In our last volume (VII. p. 69) we gave a brief account of this variety when comparing its qualities with the Ohio, which we then supposed synonymous. It was raised by Dr. Norton, of Richmond, Virginia, about twenty-five years ago, and is supposed to be a hybrid between the Bland and Miller Burgundy. The bunches are quite long, and shouldered; the berries of rather small size, and of a red purple color:

flavor, vinous and rich. Ripens in September and October. It is vigorous and perfectly hardy, standing the last winter uninjured.

Lenoir.—This is the name of a variety considerably cultivated in and around Cincinnati. In the *Western Farmer and Gardner* for January last, we find the following account of it:—The wood, greyish brown, strong, long jointed and round.—The leaf, tri-lobed, rather larger and coarser than that of the Ohio. Bunches, large and compact, not much shouldered, narrow, very handsome; the berries, small, very dark, nearly black, little bloomed, very sweet and palatable, with no pulp. This grape and the Ohio are the most desirable among the hardy table grapes, that have come to notice, and resemble each other in the berry very closely. They both succeed best with the long pruning, and should be left in the spring, with but few bearing branches, or, as it is termed, laid thin. This grape came here [Cincinnati] from Carolina; whether or not it is of French origin, as its name indicates, has not been ascertained.

Possibly this may prove synonymous with some of the native kinds already known. From the above description, it appears to be a valuable grape, if quite hardy: the Ohio, the last winter, was killed with all those cultivators in the vicinity of Boston, who purchased it last year; we fear it will not stand our climate.

We have several native varieties under cultivation which have been procured from various sources, some of which are seedlings from the Isabella. In most instances they are without names, but as soon as they afford good specimens of fruit we shall give descriptions of each.

The following are varieties we would recommend to the notice of cultivators who are raising new varieties or who feel desirous of making a collection of native kinds:—Beaverdam, Cunningham Prince Edward, Woodson Prince Edward, New England, Winne, Herbemont's Maderia, Elsinburgh and Missouri.

RASPBERRIES. *The Fastolff raspberry*.—This new variety is attracting much notice in England, and seems to be taking the lead of all others. It was first introduced to notice a few years ago by Messrs. Youell & Co., nurserymen of Yarmouth, England, who procured the original vines from an old garden in the vicinity of that town, where they

had been long famous for their fine large raspberries, which always obtained the prize at the several Horticultural societies where they were exhibited. On the 1st of August, of last year, the fruit was exhibited by Messrs. Youell before the London Horticultural Society, and obtained a prize. Mr. Thompson, to whom the fruit was sent, states that "he finds it merits all that has been stated in favor of its excellence. The fruit which we have received is very large, obtusely conical, and of rich flavor, far exceeding in this respect some other new and large varieties. The plants bear abundantly and in long succession."

Messrs. Youell & Co. state that "it continues in high perfection throughout the autumnal months, and has maintained its superiority in the most unfavorable soils and situations, and requires no other than the ordinary treatment of the old varieties." Another season, we trust its merits will be tested in our climate in comparison with the Franconia.

Our correspondent, Capt. Lovett, of Beverly, has raised several seedling raspberries, some of which appear to possess superior qualities: they have not, however, been fully tested; the present season will enable him to do thus; when if any of them prove superior, we shall give some account of their qualities.

STRAWBERRIES.—The following new kinds have been raised in England, and some of them have already been imported, viz:—Princess Alice Maud, Deptford Pine, Haig's Scarlet Pine, Emperor, Victoria and Prince Albert.

The British Queen has fruited in the collection of G. C. Thorburn, Astoria, New York; but the berries were only four and a half inches in circumference; possibly the plants from which they were picked were young and not strong enough to produce large fruit. Five inches, in the present improved size of the strawberry, is not very large, many of our seedling measuring five and a half, and some six inches, in circumference, and of regular form.

Bayne's Extra Early and *Bayne's Incomparable* are names of two kinds produced from seed by our correspondent, Dr. Bayne, of Georgetown, D. C. They are described in the *American Orchardist*, and the latter is stated to be large and unsurpassed in productiveness. The former we lately saw in bearing at Mr. Wilder's garden, and it was not so early as the Virginia by at least ten days.

We shall endeavor, as soon as any of the new varieties produce fruit, to give a full account of such as are valuable and worthy of cultivation.

ART. II. *Descriptions of Mr. Feast's Seedling Rubifolia or Prairie Roses.* By the EDITOR.

OUR correspondent, Mr S. Feast of Baltimore, has sent us specimens of his seedling rubifolia roses, as follows:—Queen of the Prairies, Baltimore Belle, Perpetual Pink, Superba and Madame Caradori Allen. These were forwarded to us in a tin case, but as they were four or five days on the way, and were packed with damp moss, the buds had mostly damped, and fell off before expanding. Mr. Feast accompanied the box with the following note.—Perceiving that some difficulty exists in the nomenclature of some of my Prairie roses, amongst the floral community, I now send you a few specimens, with the anticipation that you may set the matter right through the columns of your valuable magazine.—*Yours, S. Feast, Baltimore, June 7, 1844.*

Although the specimens of flowers were so much injured that we were unable to describe them, the foliage was in such good order that, by comparing them with young plants already in our possession, we are enabled to add the following account of each variety.

Queen of the Prairies.—*Synonyms:* Beauty of the Prairies, Feast's No. 1. Madame Caradori Allen of Buist's *Manual*. This variety has been well described in our volume VII. p. 134. It is the most splendid of the group. The flowers are very large and cupped, of a fine rose color, and appear in clusters of from ten to twenty each, often not more than three to five, unless the plants are strong. The foliage is very large, deeply serrated, and of a dark green, nearly smooth on the surface; spines, strong and rather distant.

Baltimore Belle.—Flowers, white with blush centre, cupped, and very double; clusters, very large, often numbering *thirty to forty* flowers: foliage, large, pale green, having a rugose appearance on the surface; spines, strong and rather distant.

Perpetual Pink.—*Synonyme.* Perpetual Michigan. Flowers, medium size, rosy purple changing to rose, cupped and very double, resembling in shape the multiflora. Clusters, large, containing from ten to twenty blooms; foliage, nearly smooth, very dark green; spines, rather strong and thick, forming quite a pubescence on the peduncles of the flowers; growth, vigorous. How far this will prove a perpetual bloomer remains to be tried; we saw it flowering a second time in Mr. Feast's garden, in Oct. 1843, though its habit of continual blooming may be quite uncertain.

Superba.—Flowers, pale rose or pink, large, cup-shaped and very double, much resembling in general appearance the multiflora; foliage, large narrow, pale yellowish green, having a rugose appearance. Spines, rather strong, not crowded, habit vigorous: clusters of flowers from ten to twenty.

Madame Caradori Allen.—Flowers, bright pink and semi-double, in every other respect similar to the Queen, having the same large and vigorous foliage, and habit of growth. Mr. Feast states that he did not think this variety worth preserving, after he had raised the Queen, until the last season, when its free flowering and other qualities made it a desirable variety.

From these descriptions amateurs will probably be able to distinguish the varieties, and should they have purchased them under other names, they can rectify the mistakes. It is desirable that the few varieties which have already been raised should be cultivated under their true names, as there is little doubt but that many additional kinds will be raised in the course of a few years. Mr. Feast's seedlings are all truly splendid varieties, and without making any exceptions, the greatest additions which have ever been made to this tribe of plants for our climate. To their hardy, vigorous and running habit there is united all the good qualities of our finest roses.—Some possessing the grace of the multiflora, while others have the brilliancy of the Provins.

Mr. Buist, in his *Rose Manual*, states that he has several hundred seedling roses, raised from the rubifolia elegans, or Chillicothe multiflora, as it is called in Ohio, a semi-double variety, hybridized with the perpetual and Chinese; and though none of them have bloomed, unless during the last month, they exhibit in their growth "great diversity of character." Repeated experiments will undoubtedly give re-

sults of which we have now scarcely any imagination, even a yellow rubifolia rose would not be too much to expect. It is only nineteen years since the first Noisette rose was raised; it originated in Charleston, S. C., in the garden of Mr. Noisette, brother of the great nurseryman of that name in Paris, and when first introduced to that city created a great excitement among the Parisian rose fanciers: the original was a pink rose, of nearly the color of Baltimore Belle. Now we have the Lamarque, Solitaire, and other yellowish varieties; and at last, the said to be, real golden yellow, the *Cloth of gold*. What may we not hope then, from so remarkable a parent as the Queen of the Prairies.

We cannot too strongly recommend all the above varieties to the attention of every rose amateur or lover of roses.

ART. III. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates; with additional miscellaneous information, relative to new plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural and Botanical Intelligencer. New Seedling Camellias.—At page 173, we stated that several new seedling camellias had bloomed the past year in the collection of our correspondent, Dr. Gunnell, of Washington, D. C., and also in that of Mr. Wilder, of Dorchester. The fol-

lowing note from our Philadelphia correspondent will show what additions have been made to this splendid tribe of plants in that city:—

In perusing some of the late numbers of your magazine, I see that there has been raised some fine seedling camellias, in several parts of the country, and I am happy to state that we have not been idle in our good city and around it, having produced several, although only two have come before the Pennsylvania Horticultural Society, for competition. One from Robert Buist, and one from Messrs. Ritchie & Dick; the former a light cherry color, perfect flower, of the same character as *myrtifolia*, the foliage good, and if the plant had been stronger, might have produced a better flower: the latter, a dark cherry, perfect full flower, four inches in diameter, and a fine dark green foliage, received the Society's premium for the best seedling this year, and is named *Frósti*. A. Dryburgh had one flowered, a beautiful rose colored regular flower, much in character of *Fórdii*; it was not shown to the committee, hence could not compete. I saw two more at Ritchie & Dick's, one very good, regular flower, and fine foliage; the other a semi-double, the color as dark as George the IV. rose, and when in bud looked beautiful. All the above are first rate kinds, and add some more to our superior native productions. However good a flower may be at first, so many of the hybrids are so liable to sport, and not sustain their original character, that they disappoint our expectations. *Lándrethi* is an exception; it always is good: and so is *C. var. Chalmèrii*; it even improves in appearance as the plant gets older; it is one of the very best seedlings that has been produced, from what I have seen, not excepting even Henry Favre, and this is saying perhaps too much. I have seen no new imported camellias this season, that are worth mentioning. I noticed one at Mr. Styles's said to be *Queen Victoria*, which was neither more nor less than *imbricata*, which certainly was a great disappointment; and if done intentionally ought to be highly rebrobated; and if merely a mistake, was a most unpardonable one, as the foliage of the two are so unlike, as not to be easily mistaken. *An Amateur, Philadelphia, May, 1844.*

New Roses.—Roses here, this spring, are in great demand; the love of cultivating this Queen of flowers is increasing amazingly, and we have a very large and supe-

rior collection amongst our gardeners, equal to any in the country. The fleece of gold, or as the French call it, *Chromatelle*, which is talked so much of in Europe, is now in our nurseries for sale. Peter M'Kenzie has a large stock of very fine plants. I have never seen its flower; of course can say nothing about it. Robert Kilvington has raised a seedling tea, and it is certainly one of the largest roses that has been produced here or any where else; the bud before expanded I saw measured in the society's room, and it was 3 inches in length; it opens freely and is very double, partaking of the character of the Princess Maria, but very different in the foliage: he has named it after our great Statesman and candidate for President, Henry Clay. It received the Society's premium for the best ever blooming seedling.

At our last meeting on the 21st, John Sherwood took the first and second premium for ever blooming roses, there being no competition; they were very fine, and of choice kinds; the whole of his show of roses was very good.

Yours, an Amateur, Philadelphia, May, 1844.

New Tree Pæonies.—At a late exhibition of the Massachusetts Horticultural Society, the President exhibited several new varieties of shrubby pæonies, two or three of which are desirable acquisitions to this splendid hardy tribe. *P* var. Duc de Bade and *Héldii* plenissima were the two finest; the former similar to the *Banksiæ*, but more double, larger and of rather a paler tint; the latter is a fine full flower, quite dark at the base of the petals.

New Double White Flowering Peach.—We had the pleasure of seeing, a few weeks ago, a new double variety of the peach, with pure snow white flowers: the tree was a seedling in the garden of Madam Bigelow, of Medford, and the branch was given to us by Col. Bigelow, who exhibited a specimen at the room of the Mass. Hort. Soc. It is one of the most ornamental objects we have seen; surpassing in the snowy whiteness of its flowers, their uncommon profusion, and large size, even the double flowering cherry; it is a most desirable counterpart to the old double flowering variety, with its pink blossoms, and the two planted in near proximity would form magnificent objects in May, when few other trees or shrubs are in bloom. The tree sprung from seed about 10 years ago, and first flower-

ed in 1841 or 1842. We consider it a valuable acquisition.

Magnolia conspicua and *Soulangeana*.—These two magnolias have flowered in fine perfection the past spring in the nursery of Mr. John A. Kenrick at Newton. They are considered quite tender in our climate, but by a suitable protection Mr. Kenrick has been enabled to bloom them in great beauty. One tree, of each kind, at least twelve feet high, was loaded with hundreds of flowers which remained in beauty several days. Mr. Kenrick's mode of protection has been to drive down several stakes in a circle around the tree: the branches are then all tied in close, and the space between the tree and the stakes, of about one foot, is filled in with leaves, which are slightly trod to prevent the frost from penetrating through. This labor, which is easily done and at no expense, may be recommended to all lovers of splendid trees, and induce them to plant out the above kinds of magnolias as well as others, whose half-hardy character has prevented their being often seen in collections. The experiment is well worth a trial.

Gladiolus gandavensis.—This beautiful variety, as well as several others, of which we gave some account at page 174, has been received by Mr. Wilder, and is now growing in his collection, and will probably bloom the coming autumn, when an opportunity will be offered to compare its merits with the *ramosus* and *pudibundus*.

Berberidæcæ.

BERBERIS

tenuifolia Lindl. Thin Ash-leaved Berberry. A greenhouse shrub; growing 10 feet high; with yellow flowers; appearing from October to December; a native of Mexico; increased by cuttings; cultivated in sandy loam and peat. Bot. Reg., 1844, t. 26.

A very rare plant, found by Mr. Hartweg on his first arrival in Mexico, at an elevation of 3000 feet above the sea, seeds of which were forwarded to the London Hort. Society, from whence plants were raised. It requires the protection of the greenhouse where it flowers from October to December, throwing up loose racemes of bright yellow blossoms, which are agreeably sweet scented. It has a graceful habit, but is apt to run up without producing lateral branches, in which state it remained a long time, until at last, by binding down the branches, so as to check the rise of the sap, they were enabled to expand, and now the specimen is well furnished with branches, and is six feet high. It is propa-

gated by cuttings, of the half ripe wood or it may be grafted on the *Mahonia Aquifolium*. (*Bot. Reg.*, May.)

Malvaceæ.

HIBISCUS

Cameroni-fulgens (Garden hybrid.) *Bot. Reg.*, 1844, t. 28.

A beautiful garden variety raised between *H. Cameroni* and *H. fulgens*. The color is a deep brilliant scarlet crimson, with dark spots in the eye. Like the parents, it is a hot-house plant, flowering freely in winter, or if kept in the greenhouse, blooming during the summer. It is a most desirable hybrid. (*Bot. Reg.*, May.)

Rosaceæ.

LINDLEYI (named by Humboldt and Kunth, in 1823, in honor of Dr. Lindley, Editor of the *Register*.)

mespiloides Humb. Medlar-like *Lindleya*. An evergreen shrub; growing 10 feet high; with white flowers; appearing from July to September; a native of Mexico; increased by grafting; cultivated in any good soil. *Bot. Reg.*, 1844, t. 27.

An evergreen shrub, not quite hardy in the climate of England, with white flowers, as sweet scented as the hawthorn. It belongs to a peculiar group of rosaceous plants, remarkable for their capsular fruit and winged seeds,—the latter, a circumstance not hitherto observed in other plants of this order. In our climate it would probably require the protection of the greenhouse, and would do for placing out in summer on the lawn, where its hawthorn scented flowers would make it a desirable acquisition. It is increased by grafting on the common thorn. (*Bot. Reg.*, May.)

Portulacææ.

CALANDRINIA (well known garden ornament of several species.)
procumbens Trailing *Calandrinia Fischer*.

A lax growing and spreading annual, with very small crimson blossoms, and no addition in point of beauty to the species already in culture. Raised from a collection of seeds sent to the Massachusetts Hort. Soc. by Prof. Fischer, of the Imperial Botanic Garden, St. Petersburg; and flowered June, 1844.—*J. L. R.*

Vacciniæææ.

MACLEANIA

longiflora Lindl. Long-flowered *Macleania*. A greenhouse shrub; growing four or five feet high; with crimson flowers; appearing in Spring; a native of the Andes; increased by cuttings; grown in sandy loam or peat. *Bot. Reg.*, 1844, t. 25.

This very showy plant belonging to the genus *Macleania* somewhat recently established by Sir Wm. Hooker, was found by Mr. Hartweg in dry and exposed situations on the

Andes, at an elevation of 8000 feet above the sea; where it forms a "neat compact evergreen shrub, about five feet high." The leaves are sessile oval-oblong, obtuse, and reticulate; the flowers generally appear in threes, at the axils of the leaves, and are long cylindrical, and of a rich crimson, very showy. It should be grown in the greenhouse, and potted in sandy loam and peat in equal proportions. It produces very fleshy roots, and consequently requires a good sized pot or tub: it should be liberally watered in summer and sparingly in winter. Increased by cuttings under a bell glass in bottom peat.—(*Bot. Reg.* May.)

Compositææ.

BIDENS (from having its seeds surmounted with two teeth.) Willd.

Wallichii Wallich's *Bidens*. An annual: from seeds received from the Botanic Garden, Calcutta, E. Indies, 1842.

Quite a showy, tall plant, with dark green and rich foliage, and rather large white flowers, of some merit. Flowered in the summer of 1843, and grown out of a collection of East Indian seeds.—*J. L. R.*

Hydrophyllædæææ.

EUTOCA

Wrangellii Fischer. Wrangel's *Eutoca*.

A beautiful variegated flowered little plant, from seeds of the same collection as the last. An abundant flowerer, with conspicuous blue and white blossoms in thick clusters, and promises to be a valuable addition to the annual gems of the flower border. Flowered in May, from seeds sown in March.—*J. L. R.*

Gramineææ.

ELYMUS (*Lyme grass*.)

dasystachys. Thick or short spiked *Lyme grass*.

A strong, vigorous grass, with long culculi or underground stems; and growing about four feet high: probably well calculated for light loose soil. Raised from seed received from Dr. Fischer of Imperial Garden, St. Petersburg, 1843-4.—*J. L. R.*

ART. IV. *Notes on Gardens and Nurseries.*

Mr. Walker's Ranunculus show.—A few days since we were highly gratified with an exhibition of that exquisite flower, the ranunculus in the garden of our correspondent, Mr. Walker. Few flowers, in England, are more highly prized among the florists than this; and large and extensive collections are cultivated by some of the amateur fanciers. Next to the tulip, it holds the highest rank, and during the last ten years, many new and truly splendid varieties have been produced, by English cultivators. As long since as 1830, we were ardent admirers of the ranunculus, and so great was our desire for a fine collection, after growing only ordinary kinds, that, in the autumn of 1833, we imported, from Messrs. Tyso & Son, who had one of the best collections in England, one hundred roots, at the extravagant price of *twenty five* dollars. These we flowered in very fine condition, and continued their cultivation for two or three years, until other objects demanded so much of our time, that we found it necessary to dispose of our roots; resolving, at the same time, that when our leisure would again permit, we would renew our cultivation of a flower, which, we are free to confess, far above all others, was our favorite among the florist's productions.

From these remarks it may be at once inferred, that Mr. Walker's bed afforded us a rich treat; and not only in its mere beauty, but because we consider it tending to awaken anew, the taste for this flower. In our volume for 1840, (VI. p. 416,) we gave a long article on the cultivation of the ranunculus, with a view to render its cultivation within the reach of admirers of flowers; and as a still further aid in the object, we trust the present collection of Mr. Walker will do much to induce its more general cultivation. Mr. Walker, having had an exceedingly fine growth from spring planting, he has offered to give us an article on the subject, which will appear in the course of the summer, before planting time comes on.

The bed numbers nearly or quite one thousand roots, and many of them beautiful kinds, but we believe, generally without name. They were planted out in March, and have had the protection of the tulip house, since the warm weather came on, and have made a vigorous growth,

and thrown out an abundant bloom. Some of the spotted and tinted varieties were truly superb. Those who have seen the bed, will need no urging from us to cultivate a small collection; but to those who have not, and are fond of perfect flowers, we would say, try a small bed and see if they will not repay all the care, expense and trouble.

Hawthorn Grove, Col. Wilder, June 8th—The greenhouse had been shorn of its beauty, and nearly all the plants removed to their summer quarters. The camellias looked unusually strong and vigorous, with a deep green and healthy foliage; this, we presume, has been occasioned by frequent waterings with guano, which is a valuable manure for this tribe. We have already given Mr. Teschemacher's experiments on camellias, with charcoal and guano, and we are satisfied from our own practice, that it gives great vigor to the plants. Many new kinds have flowered the past winter, some of which have been described in Mr. Wilder's communication at p. 145; many others which have also blossomed, will be described hereafter.

In the greenhouse, we found several new fuchsias in flower, viz:—*elegans* superb, *Moneypannii*, *formosa elegans*, *hybrida coccinea*, *conspicua arborea*, and several others under numbers: *formosa elegans* has crimson sepals, and almost blue petals; *elegans* superb, has pale red or rosy sepals, and rich purplish violet petals, very beautiful; *Moneypannii* is a strong and vigorous variety, with large and handsome flowers: Mr. Wilder has nearly twenty kinds in his collection. We saw here, a very large and fine petunia, the flower of which, we should judge, would measure three or four inches in diameter; this class of plants is now attracting great attention among English cultivators, and some very unique and handsome varieties have been produced. They are all so desirable for turning out in the summer, that they will always be sought after by amateur cultivators. Of verbenas, Mr. Wilder has a number of English varieties, but they were not yet in bloom; such as we have seen, however, do not excel our American varieties.

Mr. Wilder has several new things under way; among others, a number of seedlings of the Japan lilies, which we have before noticed, and which are now five or six inches high; he has also the new gladioluses, of which

we lately gave some account; probably some of them will bloom the present season.

In the open garden, the roses were just coming into bloom. A row of standard plants, set out a year ago, were in as fine condition as could be desired, and were throwing up strong shoots, terminated with great clusters of flowers; they stood entirely unprotected, last winter, and scarcely one of them was injured. Some of the most beautiful of those in bloom were Hybrid China President Mole, Brilliant, Coronation, and Charles Louis; a week later, and the display would be truly magnificent.

Col. Wilder has raised several hundred seedling strawberries, the result of various impregnations, with our Seedling for one of the parents; the vines were now coming into bearing, and some of the plants promised well; but as this is the first year after planting out, another season will afford a better opportunity to test them. It will be difficult to find a variety possessing all the merits of our seedling; we have known hundreds of plants raised from it by various cultivators, both with and without hybridization, and all of them have been destroyed as not worth keeping. Ross's Phœnix, and the Swainstone Seedling were showing some fruit, but not in sufficient quantities to form a just estimate of their merits. Ross's Phœnix appears to be very much like the parent, Keen's Seedling. The British Queen, of which Mr. Wilder had several plants, last fall, were nearly or quite all killed by the winter.

The fruit trees, especially the pears, were showing an abundance of fruit, and several new kinds are bearing, for the first time here; Knight's Monarch, and Van Mons Leon le Clerc, are among the number; we may therefore anticipate the pleasure of seeing these highly esteemed varieties in the approaching autumn. Several new French Pears are also fruiting, but we did not take down the names.

The May Bigarreau cherry fruited again this season in great perfection, although, from its exceeding earliness, before any other fruit was ripe, the birds destroyed the best part of the crop; the tree had been literally loaded with fruit; but it was, even now, [June 8th,] nearly or quite all gone. This variety is, without doubt, the very earliest cherry in cultivation, coming in *ten* days before any other kind; ripe fruit was picked June 1st.

REVIEWS.

ART. I. *The Rose Manual; containing accurate descriptions of all the finest varieties of Roses, &c.*, By R. BUIST, Nurseryman and Florist. 1 Vol. 12mo. pp. 182. Philadelphia. 1844.

2. *The Rose Amateur's Guide; containing ample descriptions of all the fine leading varieties of roses, regularly classed in their respective families, their history and mode of culture.* By T. RIVERS, Jr. Third edition, corrected and improved. 1 Vol. 12mo. pp. 209. London. 1843.

THE rose is now attracting great attention. Within a few years great numbers of new varieties have been produced, and though always an admired flower, the splendor of these new ones has greatly enhanced the value of a collection. The great depredations of the rose-slug, a few years since, induced many amateurs to give up their cultivation altogether, and that, too, just at a time when the new classes of hybrid perpetuals and Bourbons were being brought into notice; prolonging, as they do, the rose season into the verge of winter, and giving a new feature to the tribe. But with the easy and simple means of destroying that destructive insect, the growth of the rose has again been renewed, and with their growth, a desire to possess all the new and beautiful kinds which have taken the place of the older varieties.

To supply the necessary information for the cultivation of the rose, has been the object of the works, at the head of this article. Mr. Rivers is one of the oldest and most celebrated rose cultivators in England, and his volume has been, as it is well named, the "Amateur's Guide" to the growth of this beautiful family. Three editions have been issued, the last of which we have before us. The *Manual* of Mr. Buist, already reviewed at p. 181, is intended to give the same information to the American cultivator, that Mr. Rivers's *Guide* affords to the English rose fancier; and is modelled after the latter work: our extracts already given, are a specimen of the style in which he takes up the subject.

We have now referred to Mr. Buist's volume again, in order to supply some interesting information, to lovers of the rose, which we had not time nor space to do before, and shall also give several extracts from the *Guide* of Mr Rivers, which will be valuable to all cultivators.

When the multiflora rose was first introduced into Philadelphia, it is said that twenty dollars were frequently paid for a single plant. *Laure Davoust* is now the most splendid of this class, but it is too tender to stand our winters, though, in some sheltered and dry situations it does very well. *Russelliana* is a fine variety of the multiflora, and the author thus speaks of it, and the mode of pruning this family.

Russelliana—Scarlet Grevilla, Russell's Cottage Rose, Cottage Rose, and I believe it is sold under some other titles besides, is considerably hybridized, but not so as to lose its character as a pillar rose, of which it is one of the best. I have pillars of it twenty feet high, forming, during the month of June, a very attractive object, having a profusion of flowers of the richest shades of crimson; many of them being striped with white. From the base to the pinnacle it is one mass of glowing beauty. Perfectly hardy in our coldest latitudes, it has large, rich, green foliage, very distinctly and deeply nerved, the shoots are strong and erect, and will grow freely in any soil or situation. The old shoots only should be thinned out; the young wood ought never to be shortened unless locality demands it. The same style of pruning will apply to all the varieties of the Multiflora. This operation should be performed early in the spring, before the buds swell, but never when the wood is in a frozen state. In more southern climates pruning can be done at any period, from December to January; but in the middle and eastern states it should be undertaken as soon as frost is out of the wood, in February or March, and the plants tied or nailed at once to their respective supports.—Buist's *Manual*, p. 23.

Hints on the General culture of Climbing Roses.—They will grow luxuriantly on any aspect or situation, provided they are not entirely shaded by trees overhead. The roots of trees and plants, generally, are of a growth proportionate to that of their branches; from this data, and experience proves it, we find that roses of strong growth make strong roots, striking deep into the soil, and extending horizontally in quest of food to a surprising length; they require a rich soil, which before planting, should be well pulverized and freely broken; it should be of a character inclining more to sand than clay; if the latter predominate it must be well incorporated with sand and old manure until it becomes of a friable nature. With two feet depth of such a soil, they will grow many years and bloom profusely. When any decline is observed, it will indicate that they are in want of nourishment, which can easily be supplied by digging in about their roots three or four inches thick of manure or rich compost. For such an operation the month of November to early in spring is the best period of the year. Wherever their situation may be, all the pruning they require is merely to thin out the wood where it is too crowded, and

to keep it within bounds. I have seen fine plants of many of the roses now described totally ruined for one year by the free use of the knife.

Where manure cannot be conveniently obtained, fresh soil from the woods or rich grounds will be of great service; an occasional watering with soap suds is also very beneficial to the rose. In city gardens we have often seen a few inches of very common poor soil thrown over clay, old bricks, lime rubbish, &c., whereon roses were planted, and grew well the first season, but the following they made barely sufficient wood and foliage to keep them green; the result was unsatisfactory, and the fault laid to the rose; whereas the whole fault was in the preparation of the ground. "Any thing that is worth doing at all, is worth doing well," is a maxim always to be kept in mind in all gardening operations.—(*Id.* pp. 29, 30, and 31.)

Planting and Management of Pillar Roses.—For a variegated pillar choose plants of the same growth, and plant them in a rectangular form, allowing the pole or pillar to occupy the centre. The first season after planting they should be watered twice a week, in dry weather; if watering cannot be attended to, cover the soil with three or four inches of manure. For pillars or trellising, plants on their own roots are the best. The pruning of these require to be performed in a very different manner from that usual for the generality of roses. Those plants that make very long shoots, should have only about a foot or two of the tops cut off, the wood of three or four years old thinned out, and the short shoots or twigs cut in to within two eyes of the preceding year's growth. They require to be tied to a strong post; if permanency is the object, use red cedar or locust for the purpose; in the country, where wood is plenty, any sapling can be taken; if three or six inches of the branches are left on it, the effect will be improved. Although rich soil is strongly recommended for these roses, they will nevertheless do on any soil. I have seen them in the very poorest earth make fine bushes when they can be pruned as common garden roses, only the luxuriant beauty of the foliage, and the large size of the flowers will be lost. It must be admitted that plants, trees, and shrubs, grown and protected by nature, are in their greatest beauty, and bring forth their flowers, fruits, and seeds to perfection; yet while this is conceded, we say that those plants, brought up and nurtured by art, under every exciting cause, to produce the greatest amount of wood, foliage, flowers, and fruits, also require skilful assistance in depriving them of their superabundance, to keep them within bounds, and lead them to the space they are intended to occupy. The period best adapted for pruning is subject to various opinions; but extensive practice and sound judgment give the preference to the months of November and December. Pruning in the spring should be avoided, as the sap is then drawn towards the extremities of the shoots, and when these are shortened the lower buds will be found more dormant, and will require some time to move, whereas by fall pruning the sap in the spring flows instantly to the buds that are left on the plant, which are at once strengthened, and prepared to push out as early as the season will permit. The first season after roses are transplanted they should be watered once or twice a week in dry weather, or should have placed all round the plant, moss or manure, to prevent evaporation, or the sun from parching the earth and drying the young rootlets. It is lamentable to see the destruction of plants the first season, from mere carelessness and want of attention; whereas a few

judicious waterings would have prevented the loss.—*Id.* pp. 70, 71, and 72.

Planting Roses.—We have advocated November and December as the best period for pruning; these are also the best months for planting all kinds of roses of the hardy sorts that bloom once a year, or what are termed “Hardy Garden Roses,” unless the soil be of a wet and retentive nature; in such case the planting should be deferred till spring. The ground must be well prepared by deep digging, and well incorporated with old rotten manure, decayed leaves, or soil brought from the woods. I am aware that some of my southern and western friends will smile at this recommendation; for their soils are from three to twelve feet deep, and will grow roses, without any artificial means, for the next century; but these suggestions are only offered to those who need them. Before the operation is begun, the mind should be made up on the proper disposition of the plants: avoid crowding, avoid formality, avoid hurry. Crowding plants together is injurious in every respect; if space is limited choose the fewer sorts, or distribute the inferior sorts to hedge rows or fences, and put only the best that can be had, where they are to form a permanent attraction; formality of design attracts attention for a time, but the eye soon wearies of it. The most interesting disposition, and one that will offer the greatest variety, is to plant the whites, blushes, pinks, roses, reds, crimson and purples, each in separate clumps, figures, or patches; and to carry out a grand arrangement, let each division of the rose have its appropriate locality. This ROSARY can be formed on any piece of ground, from a quarter of an acre to any required extent, either on the lawn or any other spot for the purpose. Let the ground be laid down in grass, or if it is there already so much the better; then cut out on the grass the various figures that may be required, giving every plant from two to four feet of room. With these few hints the reader will see that such an arrangement will form a scene of enchantment that language cannot portray. It is not necessary to remove the old soil; very decayed manure (with an addition of road or river sand to heavy soils) well incorporated with it, twelve to eighteen inches deep, is all that is required.—*Id.* pp. 72 and 73.

Propagation of Garden Roses.—There are three modes, within the reach of all, for the propagation of these roses, namely, by layering, budding, and grafting. Layering, wherever it can be accomplished, is preferable, and will produce the most permanent plants. There are two methods of performing the operation; the one we prefer is as follows:—In the month of July, or two first weeks of August, look over the plants required to be propagated, and take any of the young shoots that have made eighteen inches or two feet in length, bend them gently to the ground, and make fast by a peg, stone, or block; they will in a few days take a set in this form; then under the part that has come in contact with the soil, make a hole four inches deep, and about the same width; have a portion of prepared sandy rich loam (if your soil is not naturally such) at hand; bend the shoot in the hole, and look for a bud so situated as to come about three inches under the surface; then take a very sharp knife and commence by cutting off all the leaves that will be under ground: introduce the blade just below the bud and cut upwards so as to cut about half-way through, and make a slit about two inches long, thereby forming what gardeners call a “tongue;” this should be done at the side or back

part of the shoot, and to prevent the tongue from closing introduce a portion of the soil, or a chip of any hard substance, which will keep it open, then lay it carefully in the space prepared, and fill up with the fresh compost, leaving the top of the shoot in as upright a position as possible; to finish, make it fast to a small rod to prevent the wind from blowing it about. The tongue should not be in the very spot that forms the bow, as thereby the branch would be too much weakened; the lower eye of the upright portion of the shoot is the most successful spot. When the whole is done place the stone or block on the surface, over the layer, which will prevent the sun from drying the earth, and greatly facilitate the growth of the roots. In the month of November the layers that are rooted may be taken off, and either potted as required, or planted out where they are to remain, heading down the shoot to within three or four eyes of the surface. Those that are not rooted will have to remain another year; prune them the same as directed for the parent plant. If the operation by layering is not performed in the summer it can be done in February, March, or April, before the plant has begun to grow, observing the same directions as given above. About Philadelphia we have pots made about four inches wide and deep, with a cut in the side wherein we place the layer, and either plunge the pot entirely under ground, set it on the surface, or elevate it as required; if in the two latter positions, we water it freely every evening, and cover it with moss or some other litter, to prevent, as much as possible, the sun from affecting it. We also make boxes for the same purpose wherein to lay shoots from the Standard or Tree Roses.—*Id.* pp. 78, 79 and 80.

Noisette Lamarque.—This is a celebrated variety, now known over the whole country for its magnificent, large, perfectly double, yellowish-white, pendulous flowers, which it produces in clusters of three to ten in each. In good dry, rich soils it will grow twenty feet in a season, and in South Carolina, one of my correspondents informs me, that their plant now eight years old, covers a veranda fifty feet long and twenty feet high, and is one mass of flowers from May to December. There is also a plant in this city, that occupies twenty feet by eight of a fence that faces north where it is influenced by the morning and evening sun, but the sun, from November to March, never touches the plant, confirming the opinion that in winter the sun does more injury to delicate roses than the cold. This plant does much better on its own roots than when budded or grafted. The plant that I imported of it in 1833 is budded on the French Dog Rose, and makes a very fine standard, but bears no comparison with the magnificent plants that have been grown from it, although cherished and nurtured in my city garden.—*Id.* p. 96.

Growing Tea Roses in Frames.—A selection for this purpose, should be made from the Tea, Bengal, and Bourbon families, all on their own roots or budded very low. Presuming that these roses are already in pots, or to be procured from the Nurserymen in the small* pot they are generally grown in for sale, they should at once be placed into those of six inches in diameter, carefully and freely watered, during July and August, cutting off all the flower buds they show in the latter month. About the

* The plants for winter blooming should be ordered from the venders of an extra size; the very small plants sold at low prices would defeat the object.

middle of September, shorten the overgrown shoots, and thin out the slender ones, turn the plants out of the pots, depriving them of some of the soil, and repot in those of seven inches diameter, using a compost of sand, turfy loam, and manure in equal proportions; they will also grow admirably in the black soil, from the woods, composed principally of decayed leaves; put several pieces of broken crockery in the bottom of the pot, then a portion of soil; place the plant so that its surface roots should be under the rim of the pot, and then fill all round with the soil; put them in a situation partially shaded,—water sparingly, till they begin to grow—then expose them fully to the sun, and water freely every day. There they may remain till the middle or end of October, and in the South till November, when they should be removed to the greenhouse or rooms, for flowering. Previous to their removal, the pots should be washed, and the plants neatly tied up. Thus treated they will mature all the buds they will then show, and produce a profusion of flowers again in January and February. Where there is the convenience of charcoal, it will be found of prime utility in rose pot-culture, broken to the size of nuts and about one fifth mixed with the soil; the roots will delight to ramble through it, and the foliage will be of a richer and darker green; the surface of the soil must have frequent stirrings. The plants must be carefully examined, and whenever infested by the aphid, or green-fly, they should be destroyed, if in the greenhouse, by tobacco smoke. But, if in rooms, that method cannot well be adopted, for the odor would penetrate into every part of the dwelling. They should in that case be brushed off into a pail of water; or the safest plan will be to make a strong tea of tobacco, fill a pail with it, and while in a tepid state invert the plant therein, holding the hand or a cloth over the surface of the pot, to prevent the earth from tumbling out. Roses in pots are wonderfully benefited by a watering of manure water about once in two weeks. This water is very easily prepared either in town or country. The droppings from the horse or cow stable put into a large tub or barrel, with water kept over it for a week or two, occasionally stirred up; the water then poured or drawn off for use about the color of good tea; or one quart of *POUDRETTE*, put into three gallons of water—stir it a few times.—in two days it will be fit for use. A new species of manure from the Islands of the Pacific, called *GUANO*, the deposit of sea-fowls that has accumulated for centuries, is very valuable for making liquid manure. A quarter of a pound, in three gallons of water, frequently stirred before using, will be found very nourishing; indeed, one pound to sixteen gallons, will be strong enough to use by the inexperienced, for if used much stronger than I have stated, it would injure plants in pot culture. When required for the open ground, watering with any of these liquids may be made stronger, or used more frequently.—*Id.* pp. 165, 166, 167 and 168.

The introduction of Whitney's Chemical Transparent Composition for making frames of cotton sheeting translucent, will be of great assistance in this mode of cultivating tender roses. It will wholly supersede the use of glass; the small expense at which a small pit can be put up for the protection of plants, is a great inducement for amateurs of roses to plant out beds as advised by Mr. Buist.

Protecting Bourbon Roses.—The Bourbons generally make fine standard plants, either on low or high stems; as they are nearly all of strong growth, and produce a constant succession of bloom the whole season, they require to be highly nourished, either with rich soils, or copious waterings with liquid manure. If on standards, the tops of them will be benefited if protected as advised for Tea and Bengal roses; or the whole plant may be removed to a shaded situation, where, after sheltering them, lay them in by the heels, and cover them with boards; when spring opens prune them close, and plant them where desired, in fresh prepared soil. This removal is even beneficial to them, for it is well known to all growers that the Rose is improved by change of soil, unless it be in those deep alluvial soils that have never been cultivated; in such, the roots run yearly in quest of, and obtain, genial nourishment for any length of time. But in the eastern and northern states, it is absolutely necessary to lift the plants that are budded, and place them under protection. Those grown on their own roots may be well surrounded with dry leaves, which will protect them from the sudden changes of our winter seasons in latitudes north of this; and even if their tops be destroyed, they will push vigorously from the roots, and produce their flowers in full perfection. They should not be allowed to go to seed; remove the flower stems as soon as they are faded; it increases the reproduction of bloom.—*Id.* pp. 145 and 146.

The Bourbon Rose, according to Mr. Buist, was introduced to this country by Mr. Thomas Hibbert of Philadelphia, in 1828, having been first received in France from the Isle de Bourbon, in 1822. The varieties now number upwards of a hundred.

The only fault we have to find with Mr. Buist's *Manual* is the gross mistakes in the spelling of the names; a few errors among such a multitude of French names would be pardonable; but they occur too often: should another edition be issued, we trust this fault will be corrected.

Mr. Rivers, in the preface to his work, states, that he has given "the result of twenty years' experience, gained by the culture of roses on a much larger scale than anywhere in Europe," ten or twelve acres being entirely devoted to the cultivation of select varieties. In addition to descriptions of all the choicest kinds, he has added instructions for budding, grafting, and propagating, and the best mode of cultivating the various classes.

Mr. Rivers has raised several Seedling roses, some of which are the best of their class. Geo. IV., Ayrshire Queen, and Princess Royal Moss are three of the finest he has produced.

Treatment of Moss Roses—Production of new kinds.—Moss roses, when grown on their own roots, require a light and rich soil: in such soils, they form fine masses of beauty in beds on lawns. In cold and clayey soils they in general succeed much better worked on the Dog Rose, forming beautiful standards. I have ascertained that they establish themselves much better on short stems, from two to three feet in height, than on taller stems. If short, the stem increases in bulk progressively with the head, and the plants will then live and flourish a great many years.

To give a succession of bloom, the plants intended to flower early should be pruned in October, and those for the second series the beginning of May,—shortening their shoots, as recommended for the Provence Roses. Give them also an abundant annual dressing of manure on the surface, in November.

To raise Moss Roses from seed is a most interesting employment for the genuine rose amateur; such a pleasing field is open, and so much may yet be done. The following directions will, I hope, assist those who have leisure, perseverance, and love for this charming flower. A plant of the Luxembourg Moss and one of the Single Crimson Moss should be planted against a south wall, close to each other, so that their branches may be mingled. In bright, calm, sunny mornings in June, about ten o'clock, those flowers that are expanded should be examined by pressing the fingers on the anthers; it will then be found if the pollen is abundant; if so, the flower of the former should be shaken over the latter; or, what perhaps is better, its flower-stalk should be fastened to the wall, so that the flower will be kept in an erect position. Then cut a flower of the Luxembourg Moss, snip off its petals with a sharp pair of scissors, and place the anthers firmly but gently upon a flower of the Single Crimson, so that the anthers of each are entangled: they will keep it in its position: a stiff breeze will then scarcely remove it. The fertilising will take place without further trouble, and a fine heap full of seed will be the result. To obtain seed from the Luxembourg Moss, I need scarcely say that this operation must be reversed.—*Rivers's Amateur's Guide*, pp. 19 and 20.

George IV. Rose, its origin.—Rivers's George the Fourth is still, perhaps, one of the best of this family: it was raised from seed by myself, about twenty years ago, and contributed probably more than anything to make me an enthusiastic rose cultivator. I hope to be pardoned the digression, but even now I have not forgotten the pleasure the discovery of this rose gave me. One morning in June I was looking over the first bed of roses I had ever raised from seed, and searching for something new among them with all the ardor of youth, when my attention was attracted to a rose in the centre of the bed, not in bloom, but growing with great vigor, its shoots offering a remarkable contrast to the plants by which it was surrounded, in their crimson purple tinge; upon this plant I set my mark, and the following autumn removed it to a pot situation. It did not bloom in perfection the season after removal, but, when established, it completely eclipsed all the dark roses known, and the plant was so vigorous that it made shoots more than ten feet in length in one season. This plant is still living, and nearly as vigorous as ever. It is now much esteemed in France, where it is comparatively a new variety.—*Id.* p. 46.

Great Western Rose.—Those who know the old rose, Céline, may at once form an idea of the habit of this rose, which is even more robust, and

has made shoots this season more than six feet in length, and thick as a moderate sized cane ; its leaves are enormous, and measure from the base to the tip 9 inches, leaflets $3\frac{1}{2}$ by 2 inches ; its large clusters of flowers are produced with from ten to fifteen in each, but as these are often too much crowded to expand properly, it is better to thin each cluster, removing about half the buds ; the flowers of this truly gigantic rose, are of a peculiar deep rich red, sometimes tinted with purple ; they are variable according to the season, but their prevailing color is as described. Budded on stout stocks of the Dog Rose, this variety will form a large umbrageous tree, it will form also a fine pillar rose, and as a bush budded on a two-foot stem, so that the whole plant is taken at once by the eye : it will give a magnificent mass of flowers at one view.—*Id.* pp. 52 and 53.

We copy the following account of the new double Yellow rose. This variety flowered in our collection this spring, and is truly a superb yellow rose.

Persian Yellow Rose.—A new yellow rose has been given to us from that land of flowers, Persia. This was introduced to the gardens of the Horticultural Society of London, in 1838, and is now called the Persian Yellow Rose. In habit it is so exactly like the Single Yellow Austrian Briar, as not to be distinguished from it : it seems to grow readily budded on the Dog Rose, as my plants this season have made shoots three feet or more in length : in color it is of a deeper yellow than *Rosa Harrisonii* ; its flowers are quite double, cupped, and not so liable to become reflexed as that very pretty and brilliant rose. Like the Yellow Austrian Briar, it loves a pure air and rich soil, and will probably bloom as freely. It bloomed beautifully in the garden of the Horticultural Society, even on a very small plant in a pot.—*Id.* pp. 74 and 75.

The yellow Harrison is highly esteemed in England, and is considered one of the handsomest of this family ; no French or English seedling has yet been produced equal to it.

Management of Perpetual Roses.—This tribe of roses is likely, in our climate, to become exceedingly valuable. In the middle States, and at the South, where all the Bourbon and a great variety of the Chinese, Tea and Noisette roses stand the winters without injury, hardy perpetual roses are of less value : but in our climate we cannot rely upon a good autumn bloom unless we plant the perpetuals. It is true, the tender kinds will bloom freely till winter, if taken up every fall and planted out every spring ; but this is too much trouble in some collections, and the disrooting every year greatly reduces the abundance and size of the flowers ; if they could stand out, and take deep root in the soil, as they do in the South, they would be scarcely known as the

same plants; this fact is borne out by the statements of Mr. Buist relative to the Lamarque, which we have quoted, in a previous page, 261. We cannot, therefore, too highly recommend the perpetuals and hybrid perpetuals to the notice of all lovers of roses, keeping up as they do an abundant bloom till the approach of winter. The following hints on the management of these plants will be interesting:—

As the culture of this class of roses is at present but imperfectly understood, I shall give the result of my experience as to their cultivation, with suggestions to be acted upon according to circumstances. One peculiar feature they nearly all possess—a reluctance to root when layered; consequently, Perpetual Roses, on their own roots, will always be scarce: when it is possible to procure them, they will be found to flourish much better on dry poor soils than when grafted, as at present. Perpetual Roses require a superabundant quantity of food: it is therefore perfectly ridiculous to plant them on dry lawns, to suffer the grass to grow close up to their stems, and not to give them a particle of manure for years. Under these circumstances, the best varieties, even the *Rose du Roi*, will scarcely ever give a second series of flowers. To remedy the inimical nature of dry soils to this class of roses, an annual application of manure on the surface of the soil is quite necessary. The ground must not be dug, but lightly pricked over with a fork in November; after which, some manure must be laid on, about two or three inches in depth, which ought not to be disturbed, except to clean with the hoe and rake, till the following autumn. This, in some situations, in the spring months, will be unsightly: in such cases, cover with some nice green moss, as directed in the culture of Hybrid China Roses. I have said that this treatment is applicable to dry poor soils; but even in good rose soils it is almost necessary; for it will give such increased vigor, and such a prolongation of the flowering season, as amply to repay the labor bestowed. If the soil is prepared, as directed, they will twice in the year require pruning: in November, when the beds are dressed, and again in the beginning of June. In the November pruning, cut off from every shoot of the preceding summer's growth about two thirds: if they are crowded, remove some of them entirely. If this autumnal pruning is attended to, there will be, early in June, the following summer, a vast number of luxuriant shoots, each crowned with a cluster of buds. Now, as June roses are always abundant, a little sacrifice must be made to ensure a fine autumnal bloom: therefore, leave only half the number of shoots to bring forth their summer flowers, the remainder shorten to about half their length. Each shortened branch will soon put forth buds; and in August and September the plants will again be covered with flowers. In cultivating Perpetual Roses, the faded flowers ought immediately to be removed; for in autumn the petals do not fall off readily but lose their color and remain on the plant, to the injury of the forthcoming buds. Though I have recommended Perpetual Roses to be grown on their own roots, in dry soils, yet, on account of the autumnal rains dashing the dirt upon their flowers when close to the ground, wherever it is possible to make grafted roses grow, they ought to be preferred; for,

on stems from one and a half to two feet in height, the flowers will not be soiled; they are also brought near to the eye, and the plant forms a neat and pretty object.—*Id.* pp. 125, 126 and 127.

Forcing Perpetual Roses.—The Crimson, and, indeed, nearly all the Perpetuals, force admirably: for this purpose, it is better to graft or bud them on the Dog Rose, as it is so easily excited. It requires, also, but small pot-room; as, previous to potting, its roots may be pruned to within two inches of the stem, and apparently, with advantage; for, if placed in gentle heat, an abundance of fibres are immediately put forth, and the whole plant will soon have an appearance of great vigor. Those who wish for the luxury of forced roses, at a trifling cost, may have them by pursuing the following simple method:—Take a common garden frame, large or small, according to the number of roses wanted; raise it on some posts, so that the bottom edge will be about three feet from the ground at the back of the frame, and two feet in front, sloping to the south. If it is two feet deep, this will give a depth of five feet under the lights, at the back of the frame, which will admit roses on little stems as well as dwarfs. Grafted plants of any of the Perpetual Roses should be potted in October, in a rich compost of equal portions of rotten dung and loam, in pots about eight inches deep, and seven inches over, and plunged in the soil at bottom. The air in the frame may be heated by linings of hot dung; but care must be taken that the dung is turned over two or three times before it is used, otherwise the rank and noxious steam will kill the young and tender shoots; but the hazard of this may be avoided, by building a wall of turf, three inches thick, from the ground to the bottom edge of the frame. This will admit the heat through it, and exclude the steam. The Perpetual Roses, thus made to bloom early, are really beautiful. They may also be forced in any description of forcing-house with success, by plunging the pots in old tan, or any substance that will keep their roots cool. It will at once give an idea how desirable these roses are, when it is stated that, by retarding and forcing, they may be made to bloom for eight months in the year.—*Id.* pp. 127 and 128.

Tea Scented Roses in France and Italy.—In France the Yellow Tea Rose is exceedingly popular, and in the summer and autumn months hundreds of plants are sold in the flower markets of Paris, principally worked on little stems or “*mi-tiges.*” They are brought to market in pots, with their heads partially enveloped in colored paper in such an elegant and effective mode, that it is scarcely possible to avoid being tempted to give two or three francs for such a pretty object. In the fine climate of Italy Tea-scented Roses bloom in great perfection during the autumn: our late autumnal months are often too moist and stormy for them, but in August they generally flower in England very beautifully. I was much impressed in the autumn of 1835, with the effects of climate on these roses; for in a small enclosed garden at Versailles I saw, in September, hundreds of plants of Yellow Tea Roses covered with ripe seeds and flowers. The French cultivators say that it very rarely produces a variety worth notice. The culture of Tea-scented Roses is quite in its infancy in this country, but surely no class more deserves care and attention; in calm weather, in early autumn, their large and fragrant flowers are quite unique, and add much to the variety and beauty of the autumnal rose garden.—*Id.* p. 153.

Noisette Jaune Desprez and Lamarque.—We notice the latter variety again in order to show the opinions of two cultivators respecting the best mode of cultivating this fine rose :—

Jaune Desprez, or the new French Yellow Noisette, is a well-known and much esteemed Rose : as a pillar or a standard it is equally beautiful ; its fragrance is also very remarkable. This was originated by M. Desprez about fifteen years since, and is still, and will be for some time to come, a very popular rose. It is, most probably, a hybrid between the Yellow Tea and a Noisette Rose of some kind : it sold for a high price in France, when first sent forth to the rose world, as its name was very tempting, for a Yellow Fragrant Noisette Rose was thought to be worth any price. The name, like many other floral names, was, certainly, quite calculated to make an impression. Its rosy copper-colored flowers are very singular, and so powerfully fragrant that one plant will perfume a large garden in the cool weather of autumn. A pillar of this rose, twelve or twenty feet high, would be a grand object on a well-kept lawn. Lamarque is another hybrid Noisette, approaching to the Tea-scented Rose in the size and fragrance of its flowers. This is a most vigorous grower, but not quite so hardy as Jaune Desprez. As a standard it is quite superb, for its large pale sulphur-colored or nearly white flowers are pendant from their weight, and have a fine effect. It is rather impatient of cold, and will not bloom unless budded on some strong-growing rose : on its own root it is a weak grower, and scarcely like the same rose when grafted and grown vigorously.—*Id.* pp. 167 and 168.

Mr. Buist states that it does best on its *own roots*, while Mr. Rivers here tells us that it will not flourish unless *budded* upon some vigorous stock ; this discrepancy can only be accounted for in the great difference of climate : that of England being too humid and cold. Jaune Desprez and Lamarque are yet two of the best Noisette roses that have been produced.

We might follow Mr. Rivers much farther, and give many more extracts ; but we have already extended our allotted space, and for the present submit the information we have gleaned from these volumes, trusting to renew the subject again in a series of communications in our next volume.

ART. II. *The New England Fruit Book. Being a descriptive Catalogue of the most valuable varieties of Pear, Apple, Peach, Plum, and Cherry, for New England Culture. By Robert Manning. To which is added other varieties ; also the Grape, Quince, Gooseberry, Cur-*

rant, and Strawberry; with outlines of many of the finest pears drawn from nature; with directions for Pruning, Grafting, Budding, and general modes of culture. Second Edition enlarged, by John M. Ives. 1 Vol. 12mo. pp. 133. Salem 1844.

THE copiousness of the title fully explains the object of this volume, a review of the first edition of which will be found in our IV. p. 185.

It was the intention of Mr. Manning, when he first published his *Book of Fruits*, which he called the first series, to issue a new series every autumn, or as speedily as he proved the various fruits in his extensive collection. But owing to his declining health, and other causes, he never carried out his original plan; all the information which he acquired relative to new varieties of fruit, was afterwards given in our pages, and we have only to refer to his descriptions of pears, apples, and cherries, in our several volumes, as proof of this. The reputation of Mr. Manning for correctness of nomenclature, and his collection of fruits, becoming more extended, the demand for his work continued to increase, until, at the time of his decease, scarcely a copy could be found. In consequence of this, the compiler, Mr. Ives, has thought it expedient to issue a new edition, and to add thereto what information has been gathered up during several years spent in the cultivation of fruit. He states in the preface, that "his object is to render some service to the cultivator, by collecting and condensing from various sources, such directions as seemed of most importance in practice."

Mr. Manning's descriptions remain as in the original edition, without alteration; but a few of the varieties of pears "which, from further experience, were found not desirable," are omitted; and, as a further aid to the cultivator in identifying the different kinds, outline engravings of above twenty kinds of pears have been added, embracing such as, in the opinion of the compiler and his friends, "could be safely recommended as among the best." The additional remarks, upon the fruits described, are printed in smaller type. Several pages are added on grafting, pruning, &c., and upon the culture of the grape vine, gardening, &c.

The volume forms a very good little guide to those who

are making selections of trees for a small garden. It is the result of many years' experience by Mr. Manning. The practical information is such as is needed by the new beginner; and we may commend it as a useful and desirable work.

ART. III. *European Agriculture and Rural Economy, from personal observation.* By Henry Colman. Vol. I. Part I. To be completed in ten numbers. Pamphlet 8vo, pp. 80. Boston, 1844.

THIS long expected publication has made its appearance. Owing to various causes, in their nature unavoidable, it has been delayed sometime beyond the period at which it was intended to have been issued. In future we may look for the numbers in regular succession.

Mr. Colman left Boston early in the spring of 1843, and had, already, up to January last, traversed through a considerable portion of England and Scotland; and as soon as time allowed, would complete the tour of such parts as had not already been visited. The present report is necessarily of a prefatory and miscellaneous character. The topics are named which will be comprehended in the survey. The subjects are noticed which will come within the province of his tour. Personal and private narration must not be expected to form part of the report, and with a just sense of propriety, he refuses to detail private conversation. Agriculture—its importance—its social, political and moral bearings—its connexion with the subsistence of mankind, and with the progress of civilization—will be the one main object; with incidental notices of Gardens and Gardening, Rural Architecture and Farm Buildings, Rural Life, Manners, Customs, &c.

The following extract from the preface will convey the objects of the author:—

My first report will be, to a considerable degree, miscellaneous, and not so full of that practical information and detail which I design to give hereafter. More than this was not to have been expected; but I trust it will not be found deficient in practical value. Many persons may think that I should particularly point out what is to be learnt from European agriculture; but I understand it to be my province to give an honest account of what I see, premising that there is nothing to be seen from which something may not be learnt, and that it is for others, and not for me, to say

what they will learn from that which is placed before them. Where we find ourselves inferior to others, it may be desirable to ascertain how we may reach the excellence to which they have attained; and where the advantage is obviously on our side, it may be a subject of honest congratulation. In circumstances, even the most different, a sagacious mind will gather instruction from contrast as well as from analogy; and the success of any man, in any trade, pursuit, manufacture, or art, is in itself a powerful stimulus to others to exertion; and, therefore, an instrument of excellence in any and in every other art or pursuit. I know no better way than to record my impressions of what comes under my notice in the field, which I have undertaken to explore, as faithfully as I can and with as much detail as seems expedient; and to do my best, that every one who condescends to read my pages with a just candor, will not close the book without finding something agreeable and instructive, something for improvement in the important art to which my labors will be particularly devoted, and something to make him wiser, better or happier. These latter are the proper ends of knowledge and of life; and this honest aim will in itself sanctify and elevate the humblest efforts.

The following is the arrangement of the present part. Preface; Credentials. I. General Facts and Considerations; II. Particular Objects of Inquiry; III. Science and Agriculture; IV. English Agriculture; V. English Capital; VI. General Appearance of the Country; VII. Hedges and Inclosures; VIII. Iron and Sunken Fences; IX. English Parks; X. Ornamental Shrubs and Flowers; XI. Climate of England; XII. Agricultural Population; 1. Landlords, Rents, and Taxes; 2. The Farmers; 3. The Agricultural laborers; XIII. Allotment System.

We have only room to give a portion of the chapter on English Parks, which we recommend to the attention of every reader:—

The extent of these parks, in many cases, filled me with surprise. They embrace hundreds, in some instances thousands of acres;* and you enter them by gates, where a porter's lodge is always to be found. After entering the park gate, I have rode sometimes several miles before reaching the house. They are in general devoted to the pasturage of sheep, cattle, and deer. In the park at Chatsworth the herd of deer exceeded sixteen hundred. These deer are kept at no inconsiderable expense, requiring abundant pasturage in summer, and hay and grain in winter. An English pasture is seldom or never ploughed. Many of them have been in grass beyond the memory of any one living. The turf becomes exceedingly close and hard; and the feeding of sheep and cattle undoubtedly enriches the land, especially under the careful management of one eminent farmer—and many more, doubtless, are like him—on whose pasture grounds the manure of the cattle was daily collected and evenly spread.

* Windsor Great Park contains 3,500 acres, and the Little Park 300 acres.

In speaking of the parks in the country, I surely ought not to pass in silence the magnificent parks of London, as truly magnificent they must be called, including St. James's Park, Green Park, Kensington Gardens, Hyde Park, and Regent's Park.

Kensington Gardens, exclusive of private gardens, within its enclosures contains 227 acres; Hyde Park, 380 acres; Green Park connected with St. James's Park, 56 acres; St. James's Park, 87 acres; Regent's Park, 372 acres; terraces and canals connected with Regent's Park, 80 acres—making a grand total of 1202 acres. To these should be added the large, elegant, and highly embellished public squares in various parts of London, and even in the most crowded parts of the old city, which, in all, probably exceed 100 acres. These magnificent parks, it must be remembered, are in the midst of a populous town, including upwards of two millions of inhabitants, and are open to the public for exercise, health, and amusement. They are, at the same time, to a degree stocked with sheep and cows.

It is impossible to over-estimate the value to health of these open spaces, and the amount of recreation and rational enjoyment which they afford to this vast population. In each of the large parks—Kensington, Hyde Park, and St. James's—there are extensive bodies of water, artificial lakes, in some places adorned with elegant bridges, and in St. James's Park studded with pretty islands and shrubbery. Here large varieties of aquatic birds are kept, to the great amusement of thousands of children, who coax them to the shore with crumbs of bread and cake, the birds being so tame as almost to feed out of their hands, and for the instruction of older heads. There is likewise an exceedingly beautiful and tasteful cottage of gothic architecture, at the end of the lake in St. James's Park, for the residence of the keeper of the birds. There are always to be found in some parts of the parks, or at the keepers' different lodges, some cows kept, where a glass of milk, unadulterated and fresh from the fountain, can be had for those persons, who for health or pleasure, seek the delicious beverage in its purity. The numbers and tameness of the birds in these pleasure grounds is a beautiful circumstance, which it might be well to consider in some other quarters. Their safety and lives are held sacred; and the birds gratefully and, to the feeling heart, delightfully acknowledge this kindness by the most expressive confidence, alighting fearlessly in the path before you, as though they would invite you to cultivate their acquaintance. Man, in general, is a great savage, and a ferocious and insatiate animal of prey. He makes continual war upon many of the animals below him, not for subsistence merely, but for pleasure. His conduct towards the brute creation shows, too often, how certain he is to abuse unlimited power, and conveys a strong argument against despotic authority. Indeed, his war upon the birds merely as matter of sport, always makes me look upon him with a degree of shuddering, and feel that a man who can find his pleasure in the wanton destruction of little birds, the most humble of all animals in their claims, the most delicate, innocent, and pure in all their tastes and habits, and comparatively useless for food, puts himself beyond the pale of humanity, and could scarcely, with safety, be trusted with a child. It were worth considering always, how many of our pleasures are purchased at a most bitter expense of happiness and life to others! Two or three days' coursing, manly and healthful as the exercise on horseback undoubtedly is, and

strongly exciting as the sport is, did not quite reconcile me to it; and the wailings and shriekings of the affrighted and dying hares in the jaws of the hounds, sounded in my ears for several days afterwards like the cries of expiring children.

I shall not be straying from my proper duty if I urge the beneficent example of London strongly upon my own countrymen. Excepting the Common in Boston—containing about forty-five acres of ground, exceedingly beautiful in its location and improvements—and two other small openings in Franklin-Place and Louisburg-square, both upon a very limited scale, here is a large and constantly increasing population crowded together in one dense mass, with narrow streets and confined alleys, and basement stories, doomed to a comparative privation of Heaven's freest and greatest blessings—light and air. A Botanical and Pleasure Garden has been laid out, and is maintained by private subscription, accessible to subscribers or upon the payment of a light fee, which it is earnestly to be hoped for the credit of this city, long distinguished by its liberality and public spirit, may receive every encouragement, so that its improvements and advantages may be greatly extended. New York, with a population of three times the extent of Boston, is scarcely more favored, excepting in the width of its streets; for, with the exception of those delightful grounds, the Battery, at the very extremity of the city, the open space in front of the City Hall, dignified, *par excellence*, by the name of the Park, and the open grounds attached to St. John's Church, but not accessible to the public, the city has no provision of this kind for public recreation and health. As there is little room in the city proper which can now be obtained, she ought at once, at any expense, to secure the charming grounds at Hoboken, to be devoted forever and exclusively to these objects. Having already, with the most honorable enterprise, achieved one of the most extraordinary enterprises of the age, or indeed of any age, that of bringing, by a capacious tunnel of forty miles in length, a river of pure water into her city, and dispensing, with an unrestrained munificence to those who cannot purchase it, this most important element, next to vital air, of human existence; let her go on, and make the other provision, to which I have referred, for the health and comfort of a population already great, and destined to increase with an unexampled rapidity beyond any bounds which the imagination would now even dare to prescribe.

Philadelphia has set a better example than most other cities in this respect, in having laid out her streets of a capacious width, in having given to most of her houses, yards or gardens of a good size, and in having formed, in different parts of the city, public squares of some extent, which are equally ornamental and useful. But she has done little compared with what she might have done; and it is to be hoped that she will be prompted to add to a city, the most convenient and beautiful in the Union, some public gardens and pleasure grounds, admission to which shall be freely offered to her inhabitants; and more especially for the benefit of that class of them who can have no such indulgences but as the offerings of public beneficence. Baltimore has nothing that deserves the name of a square or pleasure-ground, unless we are to rank under that designation the beautiful enclosure which she has recently purchased for a cemetery; a place, indeed, for a melancholy and instructive pleasure, but more properly devoted to silence and seclusion, and not at all of the character to which I refer. Lowell—destined to contain a large and laborious popula-

tion, and of a character particularly demanding such places of recreation, with an unlimited extent of land at her disposal costing scarcely anything, and with an investment in her manufacturing establishments of ten or eleven millions of dollars—has not a public square so large as a pocket-handkerchief. This omission has always impressed me with painful surprise. Knowing, as I do, the high character of the gentlemen who founded and built this flourishing city, now grown to manhood almost in a day, I can ascribe such an omission only to a want of consideration, and to the fact that the population has already extended far beyond any calculations which they could, with sobriety, have formed at its commencement. It is not too late to supply this omission, which interest as well as philanthropy most strongly dictates.

Cleanliness, fresh air, and pure water, and the opportunity and the means of relaxation and innocent recreation, are almost as essential to morals as to health. No one can doubt, in this respect, their direct and beneficial influence. The rich can take care of themselves, and can flee the sources of pestilence, and go after health and recreation where they are to be found. Not so with the poorer and humbler classes in society, to whose labor and service the rich owe all their wealth and many of their pleasures. Whoever goes into the low places in crowded cities, into the subterranean abodes where these wretched beings congregate like rabbits in a warren, or, rather, like swine in their styes, and enters into the melancholy statistics of mortality, in such cases will learn some measure of the suffering which is here endured. In London, and other places of a similar character, the presence of the police and the officers of the peace, always in such places in strong force, will remind him that there is a connection not to be overlooked between condition and character, between destitution and crime, between outward filth and impurity of mind, neglect of person and neglect of morals. The most crowded parts of London are the most vicious parts; and a new should not neglect the experience of an old country. A city without public squares and public gardens should provide them, and on a most liberal scale. In a pecuniary point of view, as rendering a residence in the city the more desirable, and so increasing the value of estates in it, I have no doubt that it would yield ample advantages and profits. But health and morals are not to be measured by any pecuniary standard; and where wholesome water, and fresh air, and light, and sunshine, and cleanliness are concerned, no expense and cost are to be considered as exorbitant. To talk about the value of land in such cases, and to place this in competition with health, comfort, and morals, is equally short-sighted and inhuman.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Massachusetts Horticultural Society.*

Saturday, June 1, 1844.—Exhibited. Flowers:—From Hovey & Co. a variety of fine roses, among which were *Tea*, *Devoniensis*, *Leonie Charmante*, *Calliope*, *Caroline*, *Philadelphia*, &c.; *Bengal*, *Marjolin*, *Triumphant*, *Cramoisie Superieure*, *Augustin Hersant*, *Theresa Stravius*, *Eugene Perolle*, *General Soyz*, &c.: *Bourbon*, *Hermosa* and *Marshall*

Villers; *Noisette*, Smith's Yellow, Comtesse de Grillon, &c.; also bouquets. From J. Breck & Co., double red, albicans pleno, rosea, and other pæonies, irises, and bouquets. From S. R. Johnson, double Yellow Harrison and Austrian Copper roses. From J. A. Kenrick, several pretty varieties of azaleas, Scotch laburnum, double white and double pink thorns, pæonies of several kinds, day lily, fringe tree, &c. &c. From W. Kenrick, pæonies, laburnums, honeysuckles, Purple beech and other flowers arranged in baskets and bouquets. Bouquets from S. Walker and John Hovey. From Mr. Warren, three dahlias. From J. F. Allen, fine large clusters of *Noisette Amiée* Vibert rose, cut from a plant set out in the border of a peach house.

Fruits: From J. F. Allen, Black Hamburg and Chasselas Bar Sur Aube and Ferral grapes, Grosse Mignonne, Coolidge's Favorite, and early Royal George clingstone peaches, (measuring eleven inches in circumference), and Fayal figs. Fine cucumbers from Mrs. Howard, Woodland. Cucumbers from Geo. R. Russell, West Roxbury.

From Messrs. Ellwanger and Barry, Rochester N. Y., handsome specimens of a new apple, called the Northern Spy, accompanying which, was the following letter to the President of the Society.

SIR—We send, accompanying this, a few of the Northern Spy apple, to your address. It is considered a native fruit of western New York, the original tree having produced numbers of suckers, that are now bearing the identical fruit. It is esteemed here, one of our best fruits of this season, and it commands almost any price in our market. They are sold at two to three cents each, now in the streets, at the fruit shops. The tree is one of the most vigorous and handsome growing, and bears abundantly. You will please present these specimens to the society in our name. There are several quite superior fruits, considered natives of our region, that we will forward in season for the inspection of your society. We have now growing, over three thousand young trees of the Spy, that will be two years old next fall. *Very respectfully, &c., Ellwanger & Barry, Mount Hope Botanic Garden and Nursery, Rochester, N. Y., May 23, 1844.*

The Spy appears to be a very superior fruit; size, large; form, somewhat similar to the Baldwin, bright shining red, with a tender and juicy flesh, of a pleasant and agreeable flavor. It keeps till June.

June 8th. An adjourned meeting of the society was held to-day,—the President in the Chair.

A letter was read from H. O'Reilly, Secretary of the New York State Agricultural Society, accompanying a volume of the *Transactions* of the Society, with a request for an interchange of publications.

Adjourned two weeks, to June 22.

Exhibited.—Flowers: From the President of the society, *Erica radiata*, and *ampullacea*, both fine specimens. From W. E. Carter, a variety of cut flowers, embracing *Phlomis tuberosa*, *Briza máxima*, (curious) white *fraxinella*, *Polemonium grandiflora*, *Whittleji*, *Póttssii*, *Reevesii*, and other pæonies; lupins, Harrison roses, *Amaryllis jacobæa*, *Baptisia leucophæa*, and bouquets. From S. Walker, white *fraxinella*, *Lychnis viscaria* pleno, *Spiræa aruncus*, bouquets, &c. From P. Barnes, honeysuckles pæonies, &c. From Jos. Breck & Co., irises of sorts, red *fraxinella*, pansies, *Papáver orientale*, pæonies of several kinds, new Crimson Bour-sault roses and bouquets.

Hovey & Co. exhibited a variety of roses, viz:—*Tea*, Lady Warrender, Comte de Paris, Aurora; *Bengal*, Triumphant, Roi des Cramoises, and Augustin Hersant; *Bourbon*, Bouquet of Flora; *Noisette*, Ne Plus Ultra, and Comtesse de Grillon; *Hybrid China*, Lansezeur; *Boursault*, new Crimson, or Amadis; also bouquets. From J. A. Kenrick, *Magnolia macrophylla*, a fine specimen, pæonies of several kinds, azaleas, &c. From W. Kenrick, roses, pæonies of several kinds, including *Pötsii* and *Whittleji*, fraxinella, and baskets and bouquets of flowers. From S. R. Johnson, beautiful specimens of the Austrian red and yellow or copper rose and yellow Harrison. From Mr. Warren, Seedling picotees, three dahlias, and pansies. From S. Sweetser, a large plant of *Noisette Jaune Desprez* rose, and *Cereus speciosissimus* in bloom.

Fruits: From the President, several boxes, and a branch of the tree, of the Bigarreau de Mai cherry, a new variety, remarkably early. From J. F. Allen, fine Black Hamburg, Ferral, and Chasselas Bar Sur Aube grapes, very large and handsome Royal George clingstone peaches, Golden nectarines, and black St. Michael figs. From Mrs. Howard, Black Hamburg, Miller Burgundy and Sweet Water grapes, the first very fine, and well colored. From Mr. Warren, fine early Virginia strawberries.

Vegetables: From Mrs. Howard, early pears. From John Hill, W. Cambridge, early pears.

Mr. H. W. Dutton exhibited two frames of cotton cloth, prepared with Whitney's water-proof composition, an article which has lately been brought into notice in England, and said to be an admirable substitute for glass for covering frames, melons, &c. It appears to answer a very good purpose.

June 15th.—*Exhibited*. Flowers: From the President of the Society, several beautiful varieties of roses, among which Roi de France, Brilliante, Fabert carnea, Belle Marie, Paul Perras, and several mosses were the most prominent; also *Whittleji*, *Humei* and fragrans pæonies. From W. Meller, Seedling pelargoniums (some of them fine), yellow tea roses, pinks, verbenas, pæonies of several kinds, bouquets, &c. From S. R. Johnson, fine specimens of *Jaune Desprez* and *Lamarque* roses; also yellow Harrison, several kinds of hardy roses, pæonies, &c. From P. Barnes, bouquets. From Messrs. Winship, red fraxinella, Douglas's honeysuckle, spiræas, pæonies of several kinds, and a fine variety of perennial flowers, bouquets, &c.

Hovey & Co. exhibited upwards of thirty varieties of fine pelargoniums, among which were King John, Bridegroom, Roseum elegans, Arabella, Priory Queen, Britannia, Sylph, Matilda, Portia, Masterpiece, and several seedlings; twenty varieties of verbenas, including *Fine Blue*, *Gazelle*, *Bedfordii*, delicatissima, *Bridesmaid*, *stellata*, &c.: also fifty named varieties of roses,—the thirty finest specimens, which were awarded the premium, being as follows:—*Hybrid-China*, Ne Plus Ultra, Moyenna, La Touterelle, Reine des Belgique, Columbienne, Violet de Belgie, Madame Plantier, Mrs. Rivers, Lansezeur, George IV., Pomponne bicolor d'Audigne de la blancheire, Parigot, Holmes's Mandarin, and Richelieu; *H. Bourbon*, Capitaine Sissolet, Brilliante, Henri Barbet, and Las Cases; *French*, Aspasic, Amiable Queen, Belle de Fontenay, and Champion; *Alba*, Felicité Parmentier, Venus, Belle Clementine; *Damask*, Madame Hardy, La Fiancée, and Painted; *Hybrid Perpetual*, Lady Fordwich. From J. T. Buckingham, a fine specimen of *Cypripedium spectabile*

From W. E. Carter, *Kalmia latifolia*, in full flower, very beautiful, *Lilium japonicum*, magnolias, fine; *Humei*, *Whittlèji* and fràgrans pæonies, with other cut flowers and bouquets.

From J. E. Teschemacher, two pelargoniums in pots, cultivated from cuttings, entirely in a chamber window and without any other manure, than *guano* and charcoal: the plants were 22 months from cuttings, and each measured 2 feet 6 inches in breadth and 18 inches high; they were yet in fine bloom. From Jos. Breck & Co. fifty varieties of roses, including *La Touterelle*, *Madame Hardy*, *Globe Hip*, *White moss*, red *Luxembourg moss*, &c.; also, sweet williams in variety, several pæonies, campanulas, &c. with fine bouquets. From S. Walker, six specimens of ranunculuses, some of which were remarkably fine; also pinks. From J. A. Kenrick, several roses, pæonies of the principal sorts, and other flowers: also a noble flower of *Magnolia macrophylla*. From W. Kenrick, a showy display of pæonies, roses, including the *Village Maid* or striped rose, perennial and other flowers. From Mr. Warren, four dahlias, roses, pansies, carnations, passion flowers, verbenas and bouquets.

The premiums for pæonies and roses, agreeably to notice, were awarded at this meeting, as follows:—

PEONIES.—For the best 12 flowers, a premium of \$3 00 to W. E. Carter.

For the second best 12 flowers, a premium of \$2 00 to Jos. Breck & Co. Messrs. P. Barnes, W. Walker and H. W. Dutton, judges.

ROSES. *Class I.—Hardy kinds.*

For the best thirty dissimilar flowers, a premium of \$5 00 to Hovey & Co. For the second best thirty dissimilar flowers, a premium of \$4 00 to Joseph Breck & Co.

For the third best thirty dissimilar flowers, a premium of \$3 00 to J. A. Kenrick.

No premium was awarded in Class II. Messrs. Carter, Meller, and Copeland judges.

Fruit: From the garden of J. P. Cushing, Esq. by Mr. Haggerston, superior Black *Hamburgh*, *Muscat of Alexandria*, *White Frontignan*, *Sweet Water*, and *Grizzly Frontignan* grapes; these specimens were in fine perfection. From H. Hazeltine, *Haverhill*, fine large and very high colored *Black Hamburgh* and *White Chasselas* grapes, cultivated in a vinery, and brought forward with an air-tight stove, the vines started on the first of January; we have not seen better colored berries of the *Hamburgh* during the season. From J. F. Allen, *Black July*, *Ferral*, *Black Hamburgh*, *White Frontignan*, *Chasselas Bar Sur Aube* and *Muscadine* grapes: also *Golden nectarines* and *Black St. Michael's* figs. From Mrs. Howard, *Woodland*, *Brookline*, fine *Black Hamburgh* grapes. From J. Bumstead, *Roxbury*, *Keen's Seedling* strawberries, very good. From A. H. Hovey, *Hovey's Seedling* strawberries. From John Gordon, *Brighton*, *Methven Scarlet*, *Keen's Seedling* and *Early Virginia* strawberries. From Hovey & Co., *Hovey's Seedling* and a *new Seedling* strawberry, the latter not yet named; these were both on the trusses, showing the immense productiveness of each kind. From E. K. Whittaker, strawberries. From Mr. Warren, *Hovey's Seedling* strawberry. From Thos. Galvin, gardener to Geo. Jones, *Newport, R. I.*, a fine cucumber 25 in. long.

Vegetables: From S. Walker, six stalks of *Myatt's Victoria* rhubarb, weighing 7½ lbs. large, fine, and well grown.

ART. II. Faneuil Hall Market.

	From	To		From	To
	\$ cts.	§ cts.		\$ cts.	§ cts.
<i>Roots, Tubers, &c.</i>			<i>Squashes and Pumpkins.</i>		
Potatoes, new:			Summer Bush, per doz.	20	25
Chenangoes, { per barrel,	1 25	—	Canada Crookneck, per cwt.	—	—
{ per bushel,	50	60	West India, per cwt.	2 50	3 00
Common,.... { per barrel,	1 00	—	Pumpkins, each,	10	12½
{ per bushel,	50	—			
Eastports,... { per barrel,	3 00	—	<i>Fruits.</i>		
{ per bushel,	1 00	—	Apples, dessert and cooking:		
New, per bushel:			Baldwins, per barrel, . . .	—	—
Early Hill,	1 00	1 25	Russetts, per barrel, . . .	4 00	—
Chenangoes,	1 25	—	Common, per bushel, . . .	1 50	—
Sweet, per bushel, . . .	2 00	—	Early Sweet Bough, . . .	1 50	2 00
Turnips:			Pears, per half pk.:		
New, per bunch,	4	6	Common,	37½	50
Onions:			Strawberries, per box:		
Rareries, per bunch, . . .	3	4	Wood,	25	37½
Yellow, per bunch,	—	—	Peaches, per doz.	3 00	4 00
New White, per bunch, . . .	3	4	Cherries, per quart,		
Beets, new, per bunch, . . .	6	—	Common,	10	12½
Carrots, new, per bunch, . . .	6	—	Extra,	12½	17
Parsnips, per bushel,	—	—	Gooseberries, pr qt.		
Radishes, per bunch,	3	—	Common,	12½	—
Horseradish, per lb.	—	—	Large,	20	25
Garlic, per lb.	8	10	Green (for cooking,) . . .	10	12
			Blueberries, per qt.	12½	17
<i>Cabbages, Salads, &c.</i>			Raspberries, per qt.	37½	50
Cabbages, per doz.:			Currants, per qt.		
Early York,	75	1 00	Red,	6	8
Common Early,	75	—	White,	8	10
Brocolis, each,	—	—	Black,	6	8
Cauliflowers, each,	—	—	Grapes (forced) per lb.:		
Lettuce, per head,	3	—	Black Hamburg,	1 00	—
Rhubarb, per lb.	2	3	White Sweet Water, . . .	75	1 00
Water Cresses, per quart, . . .	6	—	Watermelons, each,	50	75
Peas, per bushel.			Cucumbers, per hundred, . .	1 00	1 50
Common,	50	—	Tomatoes, per doz.	20	25
Marrowfat,	1 00	—	Cranberries, per bushel, . .	3 00	—
Beans:			Pine-apples, each,	12	25
String, per bushel,	75	1 00	Lemons, per doz.	17	20
Cucumbers, (pickled) pr gal.	25	—	Oranges, per doz:		
Peppers, (pickled) per gal. . .	37½	—	Sicily,	20	25
			Havana,	37½	59
<i>Pot and Sweet Herbs.</i>			Walnuts, per bushel,	1 50	2 00
Parsley, per half peck,	20	25	Chesnuts, per bushel,	—	—
Sage, per pound,	17	20½	Cocoanuts, per hund.	3 00	4 00
Marjorum, per bunch,	6	12½	Butternuts, per bush.	1 00	—
Savory, per bunch,	6	12	Almonds, per lb.	14	—
Spearmint, per bunch,	3	—			

REMARKS.—A succession of dry weather,—beyond even the recollection of that personage “the oldest inhabitant,” has prevailed throughout the entire month. Crops now begin to show the effects of the drought. Grass in many places is not worth cutting. Potatoes are scarcely worth hoeing; and other crops are suffering severely. Insects have been un-

sually abundant this year, and the cut worm has mown down crops as if a scythe had been through them. We never knew this pest of the farmer more troublesome.

Vegetables.—New potatoes have made their appearance since our last; first from Philadelphia, and then from the vicinity; and they now come in of good size. The old stock is nearly gone; some few Chenangoes and Long Reds only remaining. Turnips have been abundant and good. Rare-ripe onions have come to hand from the Cape and of fair size. New beets and carrots in bunches are now plentiful. Cabbages are not abundant. Lettuce plentiful and good. Peas have been abundant; but if the dry weather continues, the crop will be limited. String beans are now brought in from the vicinity. Rhubarb remains the same. New squashes have just come to hand. A few small lots of Southern corn have been received from Virginia.

Fruit.—The market is now rather bare of fruit; scarcely any old apples remain; and new ones have only been received within a day or two in small lots. Sweet and sour apples from Virginia command fair rates. A few barrels of pears from New York have comprised the whole stock. Cherries have been abundant and excellent beyond any season for some years, and have commanded good prices. Strawberries from the drought have been less than half a crop. Forced peaches and grapes have been tolerably plentiful at our prices. Cranberries, owing to the season of other fruit, are lower. Currants have yet scarcely ripened, but they are selling freely. Green gooseberries plentiful. Tomatoes from Philadelphia are now daily received. Cucumbers have just made their appearance from the gardens around the city; the supply during June has been entirely from New York. In other fruit but little doing.—*M. T., Boston, June 28th, 1844.*

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape Vines will now be swelling their fruit rapidly, and the clusters will need thinning. Let this be attended to immediately, unless the vines are so advanced that it has already been done. Give due quantities of air, and be on the guard against the red spider or mildew. Shoulder all the fine clusters, and continue to lay in the new wood for next year; prune out all useless branches and laterals, stopping the spurs which have fruit upon them, two joints beyond the branch. Treatment must of course be varied according to the forwardness of the crop. Vines in the open air will now have set their fruit: cut away all superfluous branches, and nail in wood for next year. Water with liquid guano *once* a week, in the proportion of 4 lb. to a barrel of water.

Strauberry Beds. The latter part of the month preparations may be made for planting out new beds. The ground should be deeply dug or trenched, and well enriched with good old stable manure, adding a small quantity of *guano*. Early in August, as soon as the young runners are well rooted, the plants may be set out. Keep old beds free from weeds, and cut off the runners if not wanted to make new plantations.

Cherry Trees may be budded the latter part of this month.

Plum Trees may be budded the last part of the month.

Summer Pruning of fruit trees may be performed now, if not done before.

FLOWER DEPARTMENT.

Dahlias during the present exceeding dry weather will suffer greatly. The best mode to prevent drought is to mulch the roots with coarse manure; this is as effectual as watering; syringing the foliage, however, always has a good effect. Continue to stake, prune, and tie up the plants.

Hardy Roses may be layered this month; budding may also be performed.

Tulips and Hyacinths should be taken up if not already done.

Achimenes of the several species should now be reotted. They may be increased by cuttings.

Geraniums not yet cut down should be attended to soon, and the cuttings put in if young plants are wanted.

Carnations and Picotees may be layered this month.

Camellias should be constantly syringed and kept well watered. Cuttings may be yet put in. Grafting should be commenced the latter part of the month.

Brompton and other stocks should now be sown for flowering next spring.

Mignonette and Schizanthus seed, for blooming in November, should be planted now.

Cactuses should be reotted if not done before.

Tree Paeonies may be increased by grafting them on the roots of the herbaceous kinds this month.

Azaleas may be safely reotted this month.

Chrysanthemums should be layered this month. Such plants as have been raised from cuttings should be reotted now. Water occasionally with *guano*.

Orange and Lemon Trees may be budded this month.

Hardy Perennial Plants, raised from seed, should be planted out this month where they are to remain.

Oralis Bowei and Hista, may be potted the latter part of this month for blooming in September.

Fuchsias should be shifted into larger sized pots.

Verbenas cultivated in pots should be shifted into a larger size, and trained up to a neat trellis.

Hardy shrubs of many kinds may be increased, if desired, by layering the branches.

Greenhouse plants, of such sorts as are not particularly mentioned, may be propagated this month.

THE MAGAZINE
OF
HORTICULTURE.

AUGUST, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Additional remarks on Root-pruning Pear Trees ; with an engraving illustrating the subject.* By T. RIVERS, JR., Sawbridgeworth, Eng. Extracted from the Supplement to his *Catalogue of Pears.* By the EDITOR.

Two years ago (Vol. VIII., p. 210), we copied, entire, the *Treatise* of Mr. Rivers on root-pruning trees. Great interest was created among the amateur and practical cultivators of England, relative to this improved mode of bringing trees more speedily into a bearing state, and adapting them to the wants and purposes of garden culture; and many experiments were put into operation to test its merits. The results, so far, have been, we believe, highly satisfactory, and show that the advantages to be derived from the general introduction of the system, are fully as great as stated by Mr. Rivers in his pamphlet.

Since its publication in 1842, further experience has enabled him to add some additional information, which he has embodied in a supplement to his catalogue of pears, and has illustrated the system by an engraving of a root-pruned tree: he has also represented the three common modes of training, viz. *conical*, *pyramidal* and *en quenouille*.

We are glad to see the interest with which many of our amateur fruit growers have entered into the cultivation of dwarf pear trees; the results of their experiments, if dictated by judgment, cannot but be satisfactory. Too much, however, must not be expected at once, or without some labor. Mr. Rivers has been at work fifteen or twenty years, and is thoroughly conversant with the details of the

system, and new beginners must not expect to be entirely successful at first: with practice, information will be acquired, and eventually all difficulties will be overcome.

To be enabled to grow fifty, or even *twenty*, of the best varieties of pears, in a garden, only fifty or a hundred feet square, is a great desideratum. Yet this may be as easily accomplished by root-pruning, as cultivating the common Dutch currant; a tree, indeed, scarcely needs more room than a bush of good size. To the owners of small gardens, therefore, this system must be invaluable.

In our volume already referred to, Mr. Rivers has given some directions upon the mode of cutting off the roots by the use of a spade. He still considers that the best instrument for this purpose; and although it may seem to be, as he states, "an ungarden-like operation," yet, to perform the operation with a knife would be altogether too tedious. In defence of spade pruning he "can only say it seems to answer perfectly well with his trees, and experience is generally a tolerable guide." The operations are below the ground, and the trees are in no way disfigured.

The following are the remarks of Mr. Rivers on his system, and the *three* modes of pruning, which are illustrated by engravings; the second being that which represents a tree root-pruned, and of which, only, we annex a copy of the drawing. The "en quenouille" system is just the same as the pyramidal, with the exception of tying down the ends of the branches. The pyramidal form, from the less care which it exacts from the cultivator, is that which will, we expect, be more generally adopted than the en quenouille:—

"After several years' experience, I feel more than ever convinced of the utility of root-pruning of fruit trees when cultivated in gardens, and more particularly when applied to pears, which in our moist climate, and in rich and moist soils, are apt to grow so vigorously that no fruit is produced till many years after planting. There are seven eligible modes of cultivating pears in gardens, viz., as espaliers trained to stakes; espaliers trained to walls; trees pruned so as to form more or less of a cone; pyramidal trees, for which see figure No. 2 [our *fig.* 9]; as quenouilles, in which the ends of the branches should be brought down and fastened to the stem by ligatures of copper wire; dwarf bushes, and as half standards: the two latter should have

their shoots shortened in summer, so as to form round and compact heads. To make all these fruitful, and to occupy as small a space as possible in the garden, they must be biennially, or in some rich soils even annually, root-pruned.

A valuable auxiliary to precocious fruitfulness in pears is the quince stock. Pears grafted on the quince may be safely recommended for all rich moist soils; the quince is almost an aquatic tree, and pears seem to flourish on it even in soils excessively cold and wet; but even for light and sandy soils, I am induced to recommend it; only when planted in such soils the trees must have more care and higher cultivation. In such soils I should recommend the surface of the soil round the tree to be covered during June, July and August with short grass, moss, or manure, and to give them once a week, in dry weather, a drenching with guano water, about two pounds to six gallons, which must be well stirred before it is used, each tree should have twelve gallons poured gradually into the soil; by this method the finest fruit may be produced; and, as it is very probable that ere many years elapse, we shall have exhibitions of pears, this will be the mode to procure fine specimens to show for prizes. Our oldest gardening authors have said, that "pears engrafted on the quince stock give the fairest fruit;" and they are correct. It has been asserted that the fruit is liable to be gritty and deficient in flavor; I can only say that this season (1843), from my trees growing on a cold clayey soil, I have tasted fruit of Marie Louise, Louise bonne of Jersey, and others, all that could be wished for in size and flavor; this, in part, I impute to the season having been so moist; it, therefore, points out the necessity of keeping the trees, even in cold soils, mulched on the surface and well watered in dry, hot seasons.

I may now be permitted to point out selections of pears for different situations. I will commence with those adapted for pyramidal trees and quenouilles on quince stocks. These may be planted in rows, six feet apart, or a square may be allotted to them, giving each plant six feet, which will be found amply sufficient for garden culture, viz., for root-pruned trees. Some few esteemed sorts of pears do not grow well on quince stocks, unless 'double worked,' viz.; some free growing sorts are budded on the quince, and after having been suffered to grow one or two seasons, those not so free growing are budded on them. As plants of these

are not yet to be had, they are not inserted in the following list, for ten varieties, (their respective seasons are given in the catalogue):—Beurré Diel; Beurré, Easter; Beurré de Noirchain; Bon Chrétien (Williams’); Duchesse d’Angoulême, Glout morceau, Hacon’s Incomparable, Jargonelle, Louise bonne of Jersey, and Marie Louise. For twenty, add Passe Colmar, Napoleon, Summer Franc Réal; Beurré d’Amalis; Van Mons Leon le Clerc; Fortunée (Parmentier); Saint Germain, Chaumontelle, and Beurré Moiré. For ten varieties to be cultivated as pyramidal trees, on pear stocks, the following will be found very eligible:—Captif de St. Hélène; Beurré d’Aremberg; Beurré Bosc; Dunmore; Beurré gris d’Hiver nouveau; Beurré Picquery; Beurré Rance; Broom Park; Thompson’s and Althorp Crassane. For twenty, add Doyenné gris; Duchesse de Mars; Fondante d’Automne; Fondante du Bois; Inconnue, Van Mons; Jean de Witte, Knight’s Monarch, Winter Nelis; Ne plus Meuris; and Suffolk Thorn. Several names may be added to these two latter lists, with advantage; or, if early pears are required, Citron des Carmes, Green Chisel, Musk Robin, and Summer St. Germain may be substituted in lieu of some of the above; in general, the very early varieties are inferior in flavor. For espaliers, to be trained to stakes, Marie Louise; Beurré d’Aremberg; Beurré Rance; Easter Beurré, Glout morceau, Hacon’s Incomparable; Beurré Bosc; Beurré Diel; and Ne plus Meuris may be selected. For a south wall, where pears are preferred to peaches and nectarines, the more tender varieties should be planted, as these are all of first-rate quality, viz., Crassane, Colmar, Brown Beurré, St. Germain, Gansel’s Bergamot, Chaumontelle, Jargonelle and Passe Colmar, the latter is always rich and sugary when grown on a wall. For a west wall, Marie Louise, Glout morceau, Beurré d’Aremberg, Easter Beurré, Winter Nelis, Ne plus Meuris, Van Mons Leon le Clerc, and Beurré Bosc, are recommended. For an east wall, Beurré Picquery, Beurré gris d’Hiver nouveau, Delice d’Hardenpont, Forelle, and Napoleon, will not disappoint the planter. As a general rule, much larger fruit will be produced by pear trees trained to walls, but these are often, more particularly in warm, dry summers, not of so piquant a flavor as those from trees in the open quarters.

In the extreme north, however, the finer sorts of pears can only be had from walls, consequently situation must in

many instances direct the choice of the planter; in recommending pears on quince stocks, for all cold soils and situations even in the far north, I may appear theoretical, but from my own experience in some very cold and clayey soils in this neighborhood, I feel sanguine as to the result, for I have observed in my frequent visits to the pear gardens of France, that many sorts are often too ripe. Now, this is just the tendency we require. In our cold and moist climate, most certainly pears will not get too ripe, more especially in the north of England and in Scotland.

Pears seem to require a warm moist climate; Jersey is probably the most favorable site for pears in Europe, and next to that fertile spot, the low moist situations near London, particularly in the neighborhood of Rotherhithe; in that deep, alluvial soil, the Jargonelle and other fine pears may be said to attain to the highest possible degree of perfection. In many parts of France the climate is too warm; I observed, when at Nantes, in 1842, the Chaumontelle and several others, very small and gritty. On inquiry, I was informed that they seldom attained full perfection, as the climate was too warm for them. The neighborhoods of Cheltenham and Worcester are very favorable for the culture of pears. Many of the Flemish and French varieties ripen their fruit well, and are first-rate in size and flavor.

1. *Pear tree trained conically.*—This shape is adapted for small orchards into which cattle are not turned, and for large gardens; the lower shoots must be encouraged, and the upper shoots constantly shortened in summer, till the tree has attained the conical form; trees of this shape cannot at present be bought in the nurseries, therefore grafts of one year's growth should be planted (those of two years are generally drawn up, and are bare of shoots at the base); from these all but one shoot should be cut off, leaving that which is most vigorous and erect; this may be shortened to within two feet at the time of planting; the following summer a leading shoot may be suffered to grow till July; this should then be shortened to about one foot, which will encourage the growth of shoots on the lower part of the tree. An annual shortening of the leading shoot in July may continue till the tree has attained the height required, say from six to eight feet; and then, supposing the tree to be well-furnished with branches on its stem, so as to form more or less of a cone, root-pruning may be commenced,

and continued annually or biennially as required, its leading shoot being constantly shortened and the tree not suffered to increase in height. By root-pruning, and pinching off the ends of the side shoots in summer, the tree will in time become a compact cone, bearing abundance of fruit.



Pear Tree trained in the Pyramidal form.

2. *Pear Tree trained pyramidically* [our fig. 9].—No. 2 is a portrait of a tree of Louise Bonne, of Jersey, taken here in autumn, 1843, the tree four years old, six feet in height, grafted on a quince stock, and root-pruned; this approaches to the pyramidal shape, so well adapted for small gardens; for trees of this form may be planted six feet apart, either in a square appropriated to them, or in rows by the sides of garden walks. The above was one of a group, all of which were laden with fine fruit, so much so, that they required to be fastened to stakes; it will be seen that its roots are a mass of fibres, showing the effects of root-pruning; the tree was taken up, that the artist might give it with its roots, exactly after nature, or rather art. The pyramidal form is perhaps, of all shapes, the most eligible for pears in the open quarters, as scarcely any pruning of their branches is required. By merely going over the trees in June and July, and pinching off the ends of the side shoots to within two or three buds of their base, they soon become well-furnished with bearing shoots, and assume a close pyramidal form.

The height of the trees may be regulated by fancy; from six to eight feet seems the most eligible. Nothing can be more

interesting than these pyramidal trees when in full bearing: indeed they are perfectly beautiful, and their fruit, from being fully exposed to the sun, are always fine and high flavored. Plants calculated to form these pyramidal trees can be purchased here grafted on quince stocks and also on pear stocks.

3. *Pear Tree trained en quenouille*.—This is merely the pyramidal tree with its side shoots suffered to grow to a proper length, say from fifteen to eighteen inches, and then brought down gradually and fastened to the stems by stout copper wires, as given in the engraving. This must be done at intervals of some days, otherwise the shoots may be fractured. To prevent the branches and stem from being injured, the loops of the wire should be made sufficiently large to allow the increase in girth by the annual growth. Laid-cord, soaked in boiling linseed oil, will answer equally well, as it will last two or three seasons, and by that time the branches will be fixed in their respective positions. Pyramidal trees intended for quenouilles must not be root-pruned till the branches have attained sufficient length to form the curve required; in short, the tree must be made a quenouille before its roots are touched. This will probably require two seasons or more, depending upon soil and culture. Quenouille trees in France are often from ten to twelve feet in height, and as they are not root-pruned, they are often, from excessive pruning of their branches, unsightly masses of foliage, with but few fruit-bearing spurs. With root-pruning, six to eight feet seems the most agreeable height; and summer pruning of the shoots, a pleasant occupation, can be followed without inconvenience. Trees formed into quenouilles cannot at present be supplied."

Our figure will show, at once, the form and appearance of the roots. Under this mode they are one mass of fibrous roots, destitute of large and long feeders, which go deep into the subsoil and take up nourishment often times injurious to the tree. Here we see it is rendered almost independent of the soil, and the "feeding at home," as Mr. Rivers expresses it, is fully attained. By the means of *guano*, which affords the most valuable liquid manure, they may be successfully cultivated in soils where, naturally, a tree would scarcely grow. In light sands, such as a portion of Cape Cod, by root-pruning and *guano*, pears may be produced in great abundance.

The selections of pears for particular situations, are for the climate of Great Britain, and may not be applicable in our climate. They may, however, offer some new hints in regard to certain kinds on certain soils, and suggest to the amateur the necessity of making judicious selections, adapted to the locality in which they are to be planted.

Our object is to interest every lover of good fruit: we would not be understood as recommending *all* trees to be root-pruned: orchard cultivation does not, unless in certain instances, of long barrenness, require it. We wish to see the pear growing freely and abundantly in every garden, even in the small city enclosure, where we know some are already to be found; and if Mr. Rivers's advice is attended to, success is certain.

ART. II. *Pomological Notices ; or notices respecting new and superior of fruits worthy of general cultivation. Descriptions and engravings of six varieties of native pears.*
By the EDITOR.

OF the engravings and descriptions of pears, which we have given in the present series of articles, commencing in our last volume, only three have been American varieties, viz., the Cushing, Dearborn's Seedling and the Columbia virgoulouse; we now add six more to the number, and shall endeavor hereafter to augment the list until we have included every native seedling worthy of cultivation. We have on hand drawings of several others, including many new and esteemed kinds, but some further information is wanting to render our descriptive account of them complete.

Our native varieties of pears are but just beginning to be appreciated. Some of them, which have been cultivated in England, stand equally high with many of the Flemish seedlings; and when others are well known, they will be deemed important acquisitions to the best collections in Europe.

25. FULTON. *N. E. Farmer*, Vol. VII., p. 386.

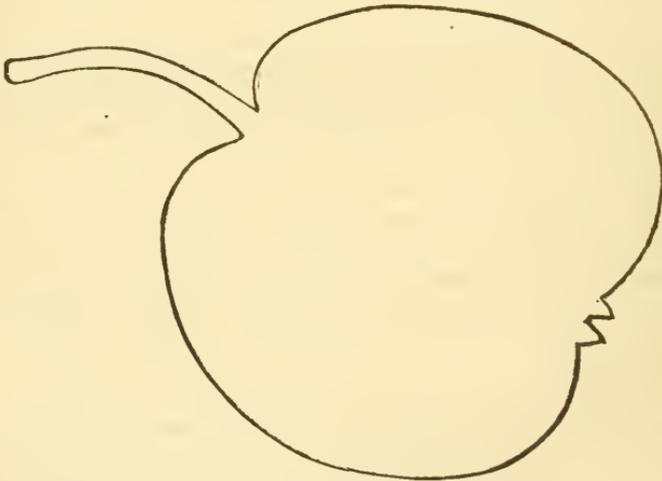
Very few of our native pears possess more real merit than the Fulton. Though not of the largest size, its general good qualities and abundant fruiting, claim for it a high reputation. This variety is a native of Topsfield, Maine, and was first introduced into the vicinity of Boston about the year 1826, when scions were sent to Mr. Thomas Greenleaf, of Quincy. These scions produced fruit in the fall of 1828, and specimens were first exhibited at the annual exhibition of the Massachusetts Horticultural Society, in September, 1829. It was brought into notice by Mr. Downer, through whose exertions many native pears were first made known to the public; and in our Vol. 1, (p. 89), he has given a brief description of it, with several other native kinds. As the history of our native varieties is interesting to all cultivators, we here add the particulars of its origin and introduction, which were communicated in the *N. E. Farmer*.

In the autumn of 1829, Mr. Downer, being on a visit to Mr. Greenleaf, of Quincy, first saw the Fulton in bearing in his garden; upon inquiry as to its origin, he was informed that the scions were received from Mr. John Abbott, of Brunswick, Me. about three years previous, and that it was thought to be a seedling variety. A single specimen was given to Mr. Downer, who preserved it until it was in eating, when its qualities appeared so excellent, that he immediately addressed a letter to Mr. Abbott, requesting a description of the pear, and some account of its origin. In reply to this letter, Mr. Abbott communicated the following information:—

“With regard to the Fulton pear, which I furnished to my friend Mr. Greenleaf, of Quincy, and which you saw and tasted last autumn, you appear to me to have, in all respects, well described it. I need not therefore attempt any alteration of your description. With respect to its history, I have to inform you that a family by the name of Fulton, about fifty years ago, removed from the county of Plymouth, Mass., to Topsham, in this neighborhood, and commenced a new farm. In a year or two after they commenced their farm, Mr. Fulton and his wife, as the woman informed me, returned to Massachusetts to visit their friends, where she collected a considerable quantity of pear

seeds, which she planted on her return home. I have counted on this farm, by this woman's planting, about forty trees. There are two or three trees, the fruit of which very nearly resembles each other. The rest of the trees produce only ordinary pears,—some of them very ordinary. The family derive a considerable income from these pears, as this sort of fruit is rather scarce with us. Their more ordinary kinds sell pretty well to those whose taste for fruit is not much cultivated, and also for preserves. Some of the sorts are well suited for this use. I have resided in Brunswick twenty-six years, and have nearly as long been acquainted with this pear. As this is the only good pear for the market in this neighborhood, I supply myself with it for three or four weeks, by having them gathered and brought me before they soften. I have thought them as delicious thus ripened in the house, as on the trees."

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*Fulton Pear.*

From Mr. Greenleaf's trees scions were disseminated, and the variety is now to be found in all good collections of fruits. The peculiarity of its gradual ripening we have already noticed, in the account of our visit to Mr. Manning's garden in 1839 (Vol. V., p. 407.) Every fruit that falls from the tree, mellows in the house; this greatly enhances its value as a market fruit, as it may be picked when quite hard and transported many miles without injury. Our

engraving (*fig.* 10, p. 290), is from a specimen, from the collection of Mr. Manning, in the autumn of 1842.

Size, medium, two and a half inches long, and two and a half inches in diameter: *Form*, nearly round, slightly uneven, flattened at the eye: *Skin*, fair, of a clear bright cinnamon russet, in some places showing a deep yellow ground: *Stem*, medium length, about one inch, smooth, light brown, deeply inserted in a round cavity: *Eye*, medium size, open, moderately sunk; segments of the calyx, rather long, projecting, stiff: *Flesh*, white, fine, melting and juicy: *Flavor*, rich and excellent, though not much perfumed: *Core*, large: *Seeds*, medium size, short, pale brown. Ripe in September and October.

The tree is of vigorous growth, upright in its habit, like the Seckel, forming a well shaped head; perfectly hardy and a constant and abundant bearer.

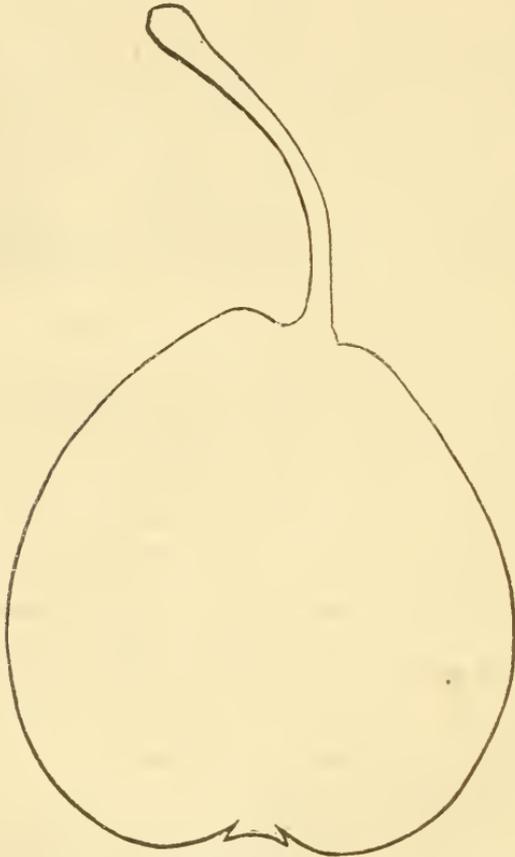
26. LEWIS. *N. E. Farmer*, Vol. VII., p. 266.

This excellent pear when first introduced, was scarcely considered as worthy of cultivation. Mr. Downer, whose knowledge of fruits is very extensive, was acquainted with the original tree for ten years before he was sufficiently convinced of the value of the variety, to introduce it to his collection. Subsequently he procured scions, which were grafted into old trees, in his garden, and they soon produced abundance of fruit, which gave him an opportunity to test its merits more fully. In some seasons it did not quite meet his expectations; yet the good crops which he had seen on a young tree in Mr. Williams's garden, gave him a good opinion of it, and he thought its good qualities were too numerous to allow him to give it up. Further experience has shown that he was correct, and it likewise shows the importance of fully testing any native variety before discarding it. In our Vol. I., p. 91, Mr. Downer's description of it will be found. So good did the Mass. Hort. Society esteem this pear, that a fine painting of it was executed by Harvey, for the ornament of the room.

In the garden of the London Horticultural Society, the Lewis has proved to be *first rate*, and is so classed in the 3d edition of their *Catalogue*, with the remark, "excellent, sugary and melting." It is now well ascertained, that its excellence greatly depends on the produce of the tree, and the mode of ripening the fruit,—and probably more on the

latter cause than anything else. We have ourselves tasted specimens which were quite inferior, and others which were of the highest character. The fruit from which our engraving was made, (*fig. 11*), was of the latter description ; it came

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Lewis Pear.

from the excellent collection of J. S. Cabot, Esq., of Salem, whose fruits are always of remarkable size and beauty, and was a fine specimen of this variety. It fully sustained the judgment of Mr. Thompson. The tendency of the tree to produce immense crops, is as great as the Seckel, and in consequence of this they are generally found, like the latter, quite small, and often possessing but few of the real qualities of the pear:

The Lewis pear is stated, by Mr. Downer, to have originated on the farm of John Lewis, Esq., of Roxbury; he was acquainted with the variety as long ago as 1819, when he visited the tree in the fall, and found it loaded with fruit, some of which were "middling large and pretty fair, but more under middling; some blasted and many small ones;" and he concluded not to try it. Having repeatedly heard of its selling well in the market, under the name of Roxbury St. Germain, five years afterwards he looked at it again, at the same season of the year, and he thought no better of it than before. The tree was entirely too full. Both times he saw the tree, it stood in the grass ground, under common cultivation. In the autumn of 1828, Mr. Downer visited the "highly cultivated vegetable fields of A. D. Williams, in Roxbury;" there was a fine young tree, grafted from the above mentioned tree, in full bearing (about three bushels on it) fair and large sized fruit, also bearing the same the year previous. It resembled the St. Germain in taste but not so highly flavored. Mr. Lewis states that the tree sprang from seeds of the common button pear, planted many years since. The tree of this variety growing more vigorous than the others, and showing larger and handsomer leaves, induced him to let it remain, and it had then (1829) been in bearing twenty years. Suckers from the original tree as well as the parent, have given *constant crops* of fruit for the last ten years.

Size, medium, two and three quarter inches in length, and two and three quarter inches in diameter: *Form*, rounded, obovate, large at the crown, tapering in a swollen manner to the stem when it ends obtusely: *Skin*, fair, nearly smooth, yellowish green when mature, very regularly covered with russet points: *Stem*, long, about one and a half inches, smooth, dark brown, with some greyish specks, inserted in a very shallow cavity: *Eye*, medium size, open, slightly depressed in a broad shallow cavity; segments of the calyx, short: *Flesh*, yellowish, coarse, melting and juicy, with a slight grit at the core: *Flavor*, rich and sugary, with an agreeable spicy perfume: *Core*, large: *Seeds*, large, pale brown. Ripe from November to February.

The tree grows vigorous and handsome, with long branches, often bending like the weeping willow.

27. ANDREWS. *N. E. Farmer*, Vol. VII., p. 266.

Amory or }
Gibson, } Of some collections.

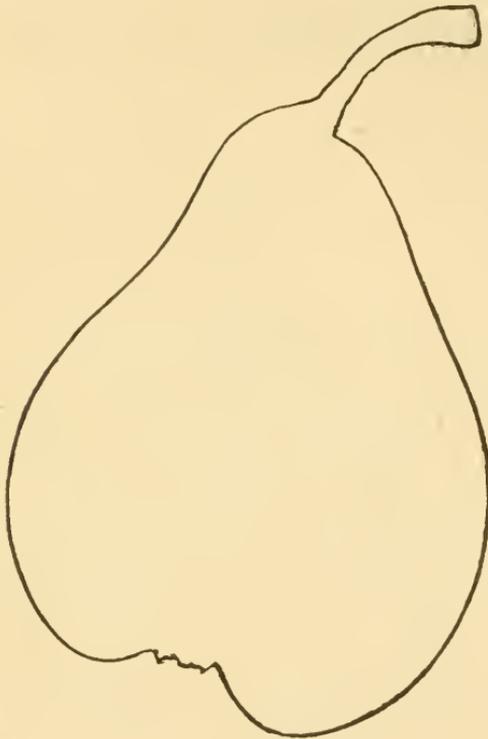
About the period of the establishment of the Massachusetts Horticultural Society, in 1829, much attention was given to native varieties of fruits, and our correspondent, Mr. Downer, to whom we have been indebted for the excellent article, which we have already referred to in our first volume, was among the most zealous in seeking out and making known such as were worthy of cultivation. The Society, anxious to promote a commendable zeal among cultivators, and proud to possess such native varieties as had been introduced, was at a large expense to have accurate paintings, of several of the choicest kinds, executed for the ornament of their room; six or more were completed, and among the number the Lewis and Andrews. These beautiful paintings, by Harvey, were destroyed or injured beyond recovery, by a fire, in 1835, which partly destroyed the building occupied by the Society. We have now before us the painting of the Andrews, blackened and disfigured by smoke, but sufficiently distinct to show the form and color of this excellent pear.

The best account we have of the Andrews pear (*fig. 12*, p. 295), has been given in our Vol. I., p. 89, by Mr. Downer, and if all our readers could turn to that article, it would be unnecessary to repeat it. It is supposed to have been a native of Dorchester, from whence the original tree was removed about fifty-five or sixty years ago, to the garden of Mr. Andrews, in Court street, Boston, where it produced abundantly for many years, until it died. Previously, however, to its death, from its known excellence, scions had been taken off and inserted in other trees. It was originally supposed to be a foreign variety, but all subsequent importations of trees from Europe have never produced its like, and it is now considered, beyond a doubt, a native fruit.

Without doubt this variety stands among the very best American seedlings; in size and appearance as well as in its peculiar flavor, it is second to no other. The tree is not a vigorous grower, but it produces constant and excellent crops. No collection can be considered complete without it.

Size, large, three inches long, and two and three quarter inches in diameter: *Form*, obovate pyramidal, large and

12



Andrews Pear.

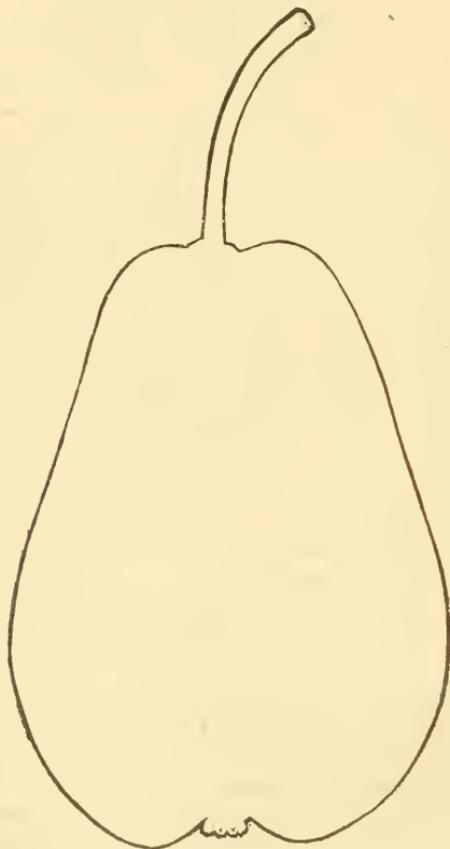
full at the base, gradually diminishing till near the stem, when it is suddenly contracted and tapers to a point: *Skin*, fair, smooth, yellowish green, broadly tinged with dull red on the sunny side, through which appears scattering points of brownish russet: *Stem*, medium size, about three quarters of an inch in length, stout, curved, smooth, pale brown, fleshy at the base, adjoining the fruit obliquely, on the side of a prominent projection: *Eye*, medium size, open, and deeply sunk in a round cavity; segments of the calyx medium length: *Flesh*, yellowish white, coarse, melting and juicy: *Flavor*, rich and sugary, with a peculiarly delicious aroma: *Core*, medium size: *Seeds*, large, very long, light brown. Ripe in September and October.

28. WASHINGTON. *American Orchardist*, 2d Edition.

Robertson. *N. E. Farmer*, Vol. VII., p. 259.

The Washington pear (*fig. 13*) is a native of Delaware. It was first introduced into the vicinity of Boston, by Mrs. Griffith, of Charlieshope, New Jersey, who sent scions of

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Washington Pear.

it to Gorham Parsons, Esq., about the year 1831 or 32. It was first described, under the present name, in the *American Orchardist*, and subsequently by the late Mr. Manning, in his excellent article in our volume for 1837 (III., p. 47), and in his *Book of Fruits*, p. 80.

The first notice of it we can find, is in the *N. E. Farmer*, for 1830, as referred to above, where an account of it is given, in a letter dated November, 1828, from Gen. Forman, of Maryland, to the late Wm. Prince, of Flushing, L. I., under the name of the Robertson pear. This letter reads as follows:—"The Robertson pear, which I send, is highly esteemed and universally admired. It was discovered in a thorn hedge at Naaman's Creek, Delaware, by General Robertson, the owner of the land, a gentleman who was very attentive to fruit. You may call it the Naaman's Creek or Robertson pear, as you please. It is a healthy tree and certain bearer, and comes in about ten days after the Doyenné or butter pear."

Another and later account has been given of this variety in Hoffy's *Orchardist's Companion*, where it is stated in a letter from Dr. J. W. Thompson, of Wilmington, dated August, 1841, "that this delightful pear was discovered and brought to notice by the late General Thomas Robinson, of Naaman's Creek, New Castle Co., Delaware. On moving a fence on his farm, about forty years ago, he found a young pear tree nearly grown,—in a short time it produced fruit, precisely similar to the specimens I now send you, for these pears are from the same original tree, which is now alive and vigorous and bears every year." The same writer also states, that "it was called by General Robinson the Washington pear, in honor of his valued friend and revolutionary commander." The variety described as the Robertson and the Robinson is undoubtedly the same, and the error probably arose from a mistake of General Forman. It is now, however, well known as the Washington pear.

Size, medium, three inches long and two inches in diameter: *Form*, oblong, largest about one-third from the eye, contracted in the middle, ending very obtusely at the stem: *Skin*, very fair, smooth, beautiful lemon yellow when mature, broad and faintly tinged with red on the sunny side, thickly and regularly covered with reddish russet points, paler and smaller on the shaded side, and around the stem a few touches of clear russet: *Stem*, medium length, about one and a quarter inches, pale brown, slightly wrinkled, and inserted on one side of a slight projection in a very shallow cavity: *Eye*, small, closed, moderately sunk in a somewhat furrowed depression; segments of the calyx

rather short, pointed: *Flesh*, white, fine, buttery, melting and juicy: *Flavor*, rich and sugary, with a peculiarly delicious perfume: *Core*, large: *Seeds*, medium size, pale brown. Ripe in September.

The Washington is a pear of the first quality, and ranks among our best native varieties. It is remarkably beautiful, perhaps, in this respect, the handsomest pear yet originated in this country: its clear yellow skin, dotted with red and russet points, and its blushing cheek, render it preëminent. The tree grows vigorously, but does not attain a large size; and is an abundant bearer. In some soils the pears are rather small, but in several collections, particularly in Salem, from whence we have been favored with many specimens, they are remarkably fine. We can with Mr. Manning recommend it as every way worthy of extensive cultivation.

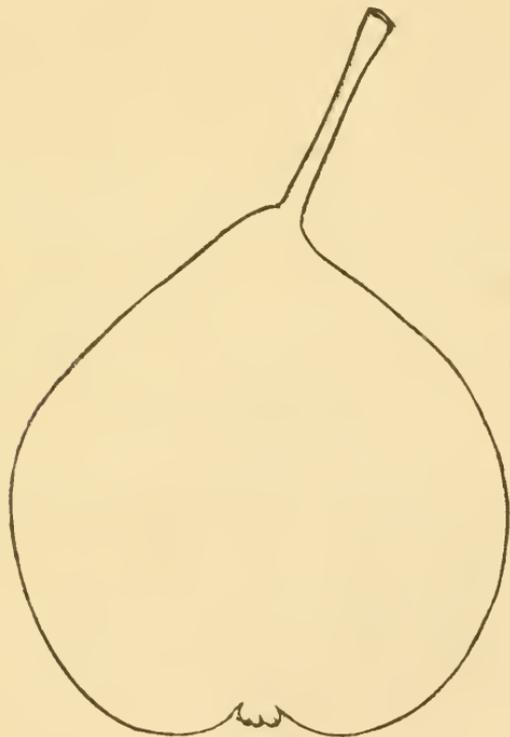
29. CABOT. *Book of Fruits*, p. 81.

Our drawing of the Cabot pear (*fig. 14*, p. 299), is from a very fine specimen we received from Mr. Cabot's collection last autumn (1843). We had previously received it from the late Mr. Manning, in 1841, but not in such perfection as the present. Wishing to know the true history of every variety we describe, we addressed a note to Mr. Cabot respecting the origin of this variety, to which he sent the following reply:—

“The ‘Cabot pear,’ so named by the late R. Manning, about which you ask me, was, with many other seedling pear trees, raised by me from a seed, I think of the Brown beurré. It was planted about the year 1821 or '22, and bore fruit for the first time while standing in the nursery row, at eight years from the seed, about 1829 or '30. The original tree is dead, having been taken up, with others, contrary to my intentions, during my absence, to plant out in another situation. For the want of proper precaution or some other cause, it perished: it had been, however, previous to its removal, propagated to some extent by grafts from the original tree. With me, on a *pear stock*, it is a strong growing tree, bearing freely and rather abundantly, not keeping long after its season of ripening, in September. In some situations in this vicinity the fruit cracks, but it has shown no disposition to do this in my garden;—the fruit with me is perfectly smooth and fair.”

Mr. Manning first fruited it in 1837, and after two years trial he pronounced it "decidedly a first rate fruit and worthy of extensive cultivation." Its liability to crack in certain localities, may induce some cultivators to discard it, though we think this should be no objection till it is fairly tried. The beurré Diel, in some soils, cracks as much as the white Doyenné.

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Cabot Pear.

Size, medium, two and a half inches long, and two and a half inches in diameter: *Form*, roundish obovate, slightly irregular, full around the eye, regularly tapering into the stem: *Skin*, rough, uneven, clear cinnamon russet, with some indistinct whitish points, and a little marbling of red on the sunny side: *Stem*, medium length, about one inch, light brown, with russet protuberances, fleshy at its junc-

tion with the fruit: *Eye*, medium size, open, considerably sunk in a round cavity; segments of the calyx, broad, medium length: *Flesh*, greenish white, melting and very juicy: *Flavor*, sprightly and pleasant with an agreeable perfume: *Core*, medium size: *Seeds*, small, black. Ripe in October.

30. BUFFUM. *New American Orchardist.*

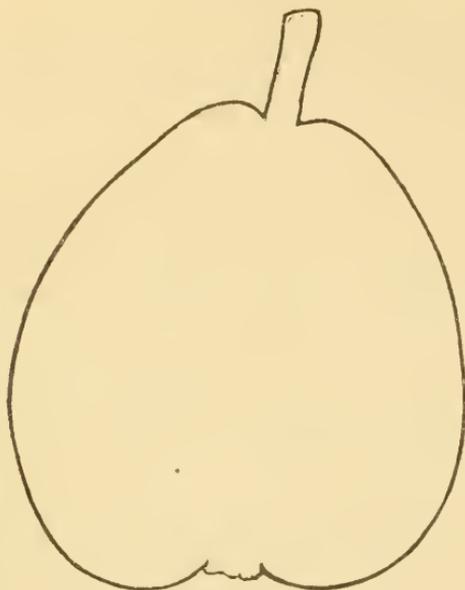
The Buffum pear, though ranking only as a second rate fruit, as regards its eating qualities, is, notwithstanding, one of the most valuable native seedlings. In the first place, its growth is unusually handsome; the branches grow erect and straight, and the tree forms a beautiful cone, even without scarcely any attention to pruning; indeed, if it only produced an ordinary pear, it would then be a tree which should find a place in every suburban garden. The Glout Morceau, from the handsome growth of the tree, independent of its fruit, has been highly recommended by the late Mr. Loudon, in his *Arboretum Britannicum*, for picturesque plantations, and a fine drawing of a full grown tree is given in that splendid work. The Buffum is another variety, equally eminent in this respect, and a vigorous and healthy tree will always claim the admiration of the lover of ornamental plantations. In the second place it is a very good fruit, coming in at a desirable season, and of handsome appearance. And in the third, it is a most abundant bearer, and what is of material consequence, always sells well in the market.

The Buffum originated in Rhode Island, and was introduced into the vicinity of Boston about the year 1828 or '29. Mr. Manning exhibited specimens of it just after the organization of the Massachusetts Horticultural Society in 1829, since which time it has gradually found its way into collections of fruit, but is not yet so well known, as its merits, taken as a whole, deserve. Our engraving (*fig. 15*, p. 301), is from an excellent specimen from the collection of Mr. Manning.

Size, medium, two and a half inches long, and two and a quarter inches in diameter: *Form*, oval, largest at the eye, rounding to the stem, where it ends obtusely: *Skin*, fair, smooth, pale yellow, interlaced with russet, brownish red on the sunny side, with a few scattered, greenish, spots;

Stem, short, about half an inch, stout, rough, and slightly sunk in a shallow cavity: *Eye*, rather large, little de-

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Buffum Pear.

pressed: *Flesh*, fine, white, and melting: *Flavor*, agreeable and good: *Core*, medium size. Ripe in September.

The examination of specimens, and drawing up descriptions, is necessarily slow. Every season, for three years, we have made many additions to our list of drawings; yet, with some varieties, owing to the imperfection of the specimens in some way, full and accurate descriptions could not have been made out without this repeated inspection of the fruit. The seasons have such an influence, that when one year a pear is first rate, another it is quite indifferent: again, in some years they are high colored, when in another they would not be readily recognized as the same variety. We have, in some instances, examined many specimens from various cultivators, to make one description complete. The coming autumn will afford us an opportunity to examine many new fruits as yet but little known, and others whose qualities are not fully ascertained.

REVIEWS.

ART. I. *Third Annual Report of the American Institute, on the subject of Agriculture, to the Legislature of New York.* 1 Vol. 8vo. pp. 343. New York. 1844.

THE report of the Institute, the publication of which, for some time, has been looked for, has made its appearance, and contains its whole proceedings for the year, up to April, 1844. It embodies a mass of information on various agricultural subjects, particularly on silk, to which upwards of one hundred and fifty pages are devoted, comprising the greatest amount of information respecting the actual condition of the silk manufacture in this country, ever published. We only wish the statements and facts presented could reach every intelligent farmer in the United States.

In the prefatory remarks to the report, which is made, a Senate document, according to a law of the State, it is stated, that about 240,000 visitors attended the 16th Annual Fair, and that the number of articles exhibited was 20,000; twenty times greater than in 1828. During the sixteen years, 674 premiums have been awarded in gold and silver medals, books and diplomas.

Mr. Teschemacher's excellent address before the Institute forms part of the report, and will be read with interest by every lover of agricultural improvement. We have already, in anticipation of its appearance, given his remarks on guano (p. 232), which forms the principal subject of the discourse: other portions of it are interesting, but we can only find room for his remarks on the benefits derived from agricultural meetings:—

“If there is any man who stands high in the estimation of his fellow men, may I add with great reverence in that of his Creator, it is the intelligent, the liberal cultivator of the land; it is he, who not only anxious to till his own soil well, is also ready to communicate his experience and knowledge to others; it is he who is not only delighted with the luxuriance of his own crops, but who smiles with pleasure and complacency on the successful efforts of his neighbor; it is he, who, far from feeling disappointment in the superior success of a fellow laborer, is always anxious to learn, to improve, and to exert his utmost intelligence in exciting the progress of the important pursuit of his life. Such are the men who

ennoble the state of agriculture—who raise the standard of the cultivator of the soil. The more science, intelligence, and indeed all the powers of the mind, are pressed into the service of agriculture, the more sensible will its professors become of its dignity and worth; and in proportion as these mental efforts are crowned with success, which they certainly will be, in the same proportion will these men feel themselves elevated in the scale of human existence, and find their happiness augmented. You will perceive that my earnest desire is to raise in public opinion the tiller of the soil; not only because I am fully persuaded that there is no occupation which conduces so much to the independence, health and happiness of a whole people; but also, because it is sure that unless it is so elevated, and can by that means command the association of superior talent and education, it is not possible to introduce into practice, or even to imitate, the vast improvements which the last few years have given to the agriculture of other countries. What a spectacle, for instance, has been this year exhibited at the various agricultural meetings in England.

Men of the highest classes and character associating freely with all cultivators of the soil like brothers; every one feeling that the common welfare and safety of his country, as well as of himself, depended more on the free development of the resources of the earth, than on any other circumstance. These meetings are proud days for agriculture; the mass of information exposed, exhibited and interchanged, would fill volumes. It is a subject of great congratulation, that such meetings are becoming frequent here also. For it must be conceded, that although the information collected at these assemblies may be afterwards condensed and disseminated in a printed form, yet it is quite evident that knowledge of this nature is more readily and clearly acquired when the senses of the eye and ear are engaged, than when the acquisition of it is left simply to the mental exertion of reading. It is quite impossible for us at present to estimate the real value of these agricultural associations and assemblies. There, meet men of various calibre, of all opinions and ideas; the practical farmer and breeder, the theoretical agriculturist, the inventive genius, the scientific and practical mechanic, the student of vegetable economy, as well as the student of nature in its animal forms, the meteorologist, and the observer of times and seasons; and their polar star, agriculture,—guided by this they wend their way, each anxious to throw his mite into the common stock of knowledge, and to acquire further information. There, are exhibited the finest specimens of the triumph of the mind of man over mere brute force and passion, in the magnificent breeds of cattle, sheep and swine. One is valuable for its power of draft, and another for its milk; a third for its meat; a fourth for its fat; another for its wool, &c. Here, on this side, stands the man of science, ready to explain the nature of the various foods on which these animals are nourished; and to excite to comparison and experiment on that species of food most productive of muscle and sinew, of bone or of fat: willing to expatiate on the nature of milk and the other animal secretions, and to point out the results of researches into the mysterious relation which exists between these and the food or treatment such animals require. In another group may be observed the mind of the mechanic, dilating on the value of various machines and implements of husbandry; there again is the laborer in chemistry, explaining the nature of soils, their capacities, the value of various manures, and collecting from the practical farmer his results. For

the purpose of comparison and further researches ; while another group is discussing the value of various grasses, grains, and other vegetable products,—and what, my friends, is the general result of all this interchange ? Scarcely a single man goes home without having learned something useful ; many learn much, others little, but all are gratified : all look at such meetings, with satisfaction in those that are past, and with hope in those that are to come. What is the final end of this mass of ideas collected in one spot ? It is this,—it becomes a matter of history ; these ideas are winnowed out, the chaff is scattered to the four winds of heaven, but the heavy valuable seed is sown in the mind, and produces, some twenty, some forty, and some an hundred fold. Such is the scene I have endeavored faintly to sketch to you, although its results are far more extensive than I can lay before you : for the mere personal introduction to each other of those who attend these meetings, is productive of the greatest good. I have been chiefly engaged in my leisure hours in that minor branch of agriculture, called horticulture, and have always found that the greatest stimulant to the gardener was the examination of his neighbor's garden ; his practised eye would always, silently perhaps, but surely, detect where he was wanting, and where he could improve. So at these meetings, farmers are stimulated to visit each other's farms, to view the various processes going on, to take examples from the superior neatness and cleanliness in the barns, fences, tools, &c. &c.

And there is certainly nothing which so much advances a man in the estimation of all around him, as order, cleanliness and system in practical farming ; nor is there anything in the whole routine of agriculture, more important or finally more productive than attention to these points ; emulation, in which these meetings are eminently calculated to produce. Permit me, therefore, to impress on your attention the great value of these agricultural associations, and to call on every individual to afford to them his most hearty countenance and support ; for there is no pursuit in which every member of the community has so direct an interest as agriculture. The quantity, and what to many in civilized life is of as much consequence, the quality of our daily food, is entirely dependent on the successful efforts of the farmer. Within the last ten years, there has been certainly considerable improvement in the quality of beef and mutton, and particularly of butter, and not only this, but the quantity of these good articles has materially increased, so as to bring them within reach of moderate incomes. In the neighborhood of Boston, for instance, I have observed even within the last two years a manifest improvement in the quality of veal, owing, I believe, to introduction of superior breeds. Almost all these may, I think, be referred to the influence of agricultural meetings and associations ; therefore those who are not farmers, in subscribing to and in countenancing them, do but increase their own personal and domestic comforts, while at the same time they are benefiting the whole country.

The report, if published for sale, should be in the hands of every agriculturist.

ART. II. *Transactions of the New York State Agricultural Society, together with an abstract of the proceedings of the County Agricultural Societies.* Vols. II. and III. 8vo. pp. 410 and 671. Albany. 1842 and 1843.

THE Transactions for 1842 have been a long time before us, and the receipt of the new volume for 1843, has reminded us of our neglect in so long allowing it to remain unnoticed.

Vol. II. is mostly composed of essays on various subjects for which premiums were offered by the Society; the most valuable of which is the Essay on the preparation and use of manures, by the late Willis Gaylord. Other essays are also very interesting, while some of them add very little to the value of the report.

Vol. III. contains another valuable paper on Insects injurious to the field crops, orchards, gardens, &c. by Mr. Gaylord, and another on the cultivation of Madder, which is now attracting the attention of agriculturists, by our correspondent, M. B. Bateham. In addition to the usual county reports, the remarks of Mr. Webster, Gov. Seward, Mr. Van Buren and Mr. Granger, at the State Fair, are reported, together with the addresses and remarks of several gentlemen at the county fairs and cattle shows, and the annual address by Mr. J. W. Knevels.

New York feels the importance of cherishing her agriculture; unlike our own State, she has appropriated liberal sums to be distributed among each of the county societies, and the result of this liberal expenditure is beginning to be felt in every part of the State. We commend the example to the legislature of Massachusetts. May she not be behind the Empire State in the great work of agricultural improvement.

ART. III. *Annual Report of the Commissioner of Patents for the year 1843.* 1 Vol. 8vo. pp. 522. Washington. 1844.

WE have been indebted to our representative in Congress, the Hon. Mr. Winthrop, for the Report of Mr. Ellsworth,

the commissioner of patents. By the act of March 3, 1839, a certain annual sum was appropriated from the patent fund, for the collection of agricultural statistics. Similar appropriations have been made in successive years, and the present report is for the year ending with the close of 1843.

No act of Congress or appropriation of money, could be better applied than for the purpose of disseminating information relative to the state and condition of our agriculture. It will awaken the attention of every intelligent cultivator, and bring him to appreciate the importance of his profession, and the certain results which are to be derived from its successful practice.

Upwards of 200 pages are entirely devoted to agricultural subjects,—Wheat, Barley, Oats, Corn, Potatoes, Hay, Flax and Hemp, Tobacco, Cotton, Rice, Silk, Sugar, Wine, &c. their growth or production,—experiments in cultivation,—improved varieties,—and other interesting statistics, are detailed, forming a valuable mass of intelligence.

From the prefatory remarks of Mr. Ellsworth, we learn that no less than 12,000 packages of seeds have been distributed from the Patent Office this year; it is supposed by the commissioner that an improvement of 10 per cent. may be made by the selection of seeds, thus increasing the value of our agricultural products \$30,000,000 annually.

As a means of still further increasing the value of the annual report, Mr. Ellsworth remarks as follows.—

“ The annual reports will show that much time is necessarily occupied in collecting information. The materials are to be gathered both at home and from abroad. Vastly more might be done, and with still greater accuracy, were the energies of an individual devoted to this subject. The present duty on my part is, in a great measure, performed out of office hours. The examination of agricultural journals and correspondence is the means now chiefly employed for the purpose of gaining information. Personal conversation, and occasional journeys, have likewise afforded some aid in the prosecution of the subject. While engaged in this duty, I have felt a strong desire to visit the cotton, rice, and sugar plantations, as well as the corn and wheat growing sections of the country; to examine the cause of improvements, or the reason of failures; and to gather all the information practicable for the public benefit. The expense of such an exploration would be small, and might be charged to the patent fund, leaving still an annual surplus for other purposes.

Allusion to personal feeling may possibly seem out of place. The fact, however, is a pledge that I cherish at least a strong desire to aid the agri-

cultural community, embracing by far the larger portion of our whole population.

During the eight years that I have had the honor to superintend the bureau entrusted to my charge, it has been wholly reorganized; and within this time, it will be recollected, all its papers and records have been destroyed, but are now mostly restored. Having been instrumental in the reorganization, I felt desirous to carry out the plan then proposed. The time has now arrived, when my duties might be changed, without injury to the public service. I pretend not to say how much could be done; but I venture the opinion, that an appropriation to cover the expenses of a single year, in the prosecution of an object so important, would never be regretted. The country might understand more fully its resources, and Congress be enabled to legislate with still greater prospect of benefiting all the parts of our common Union."

Mr. Ellsworth states that constant applications are made to the Patent Office, for copies of the reports, thus showing the deep interest manifested in the subject. 15,000 copies of the present one were ordered to be printed, but if not sufficient, we trust another year it will be augmented to 50,000 copies.

ART. IV. *Topographical and Geological Description of Wisconsin, &c.* By I. A. LAPHAM. Pamphlet. 12mo. pp. 96. Milwaukie. 1843.

A LITTLE pamphlet, sent to us from the author, giving some account of the geological character of this new section of the country,—its mineral and botanical riches, &c. The number of plants that have been detected and examined in the county of Milwaukie, without including mosses and the lower order of Cryptogamæ, is 678; and in other parts of the state, 179; making in all, 857. This, however, is supposed to be far from the actual number, as much of the county has not been visited by any botanist.

The following remarks, upon the climate of Wisconsin, may interest some of our readers:—

“From the observations made at the military posts within the territory, we are able to form a pretty correct estimate of the climate of Wisconsin; and by comparison with the observations reported to the Regents of the University of the State of New York, we find a remarkable similarity between the climate of Wisconsin and that of the interior and western

counties of that State. But as two of these military stations are much north of the most populous portions of Wisconsin, it is evident that the southern portions must have a climate rather warmer than New York ; and this accords with the first impressions of most persons of intelligence and observation, who have had the opportunity of direct comparison. One person remarks, that he passed the 23d, 24th, and 25th of June in the heart of the far-famed Genesee country, and then not one of the farmers in a dozen had hoed his corn the first time. On the third of July, he landed at Milwaukie, and along the road west from that place, corn was about "tasselling out," and was at least five weeks in advance of the same crop in western New York. Persons, therefore, who are familiar with the climate of New York, may form a pretty correct judgment of that of Wisconsin.

The winter of 1835-6, was almost entirely without snow, the ground being frozen very deep, became worn quite smooth on the roads, so that teams were able to do about as much work with wagons, as would have been done with good sleighing. This kind of winter, is, however, rare, as none like it has been seen since. unless, indeed, the present one should prove to be such. Snow usually falls in December sufficient for sleighing,—is carried off by the 'January thaw,' but is soon restored, and lasts until March. The winter of 1842-3, was distinguished by the unusual quantity of snow, and the great length of time it remained on the ground. Sleighing commenced about the tenth of November, and continued until about the same time in April, being five months."

ART. V. *The American Agriculturist's Almanac for 1845.*

By A. B. ALLEN, Editor of the *American Agriculturist*.
Pamphlet. Svo. New York. 1844.

THIS is the second year of the publication of this Almanac, under the superintendence of our cotemporary, Mr. Allen. It is got up on the same plan as that of last season, containing, in addition to two tables of astronomical calculations, one designed for the east and the other for the west, a variety of useful intelligence to the farmer. A brief account is also given of the period of the settlement, and the time of admission of each State into the Union,—the number of square miles to each, and the population in 1840. It concludes with Mr. Ellsworth's Tabular Estimate of the crops for 1843, an important, though very incorrect report.

MISCELLANEOUS INTELLIGENCE.

ART. II. *Domestic Notices.*

Annual Fair and Cattle Show of the New York State Agricultural Society, at Poughkeepsie, Sept. 18th and 19th, 1844.—The next annual exhibitions of this flourishing society will be held at Poughkeepsie, on the 18th and 19th of September next. Exhibitions of Flowers and Fruits form part of the Horticultural Department, and collections are solicited from cultivators throughout the country. We copy the following from the circular of the association :—

The Annual Exhibitions of the State Society, it is already well known to the public, are steadily increasing in interest and importance. The Fairs held within the last three years at Albany, Syracuse and Rochester, have proved every way satisfactory. The exhibition at Rochester, particularly, was attended by immense throngs from different sections of this State, and by large representations from several other States, as well as from the neighboring British Provinces.

The next Fair, to be held at Poughkeepsie, will doubtless surpass any of its predecessors, if we may judge from the interest excited and the arrangements in progress. The facilities of reaching that place by water communication, will greatly promote the convenience of persons who have articles to exhibit, as well as of visitors generally. The numerous excellent steamboats on the Hudson offer ready access and egress, which will prevent inconvenience from over-crowded hotels—enabling visitors to spend a day at the Fair, and return homeward in the evening. Visitors leaving New York or Albany in the morning boats, will be able to take evening boats homeward, after spending eight or ten hours at the Fair : so that, with the reasonable charges and excellent fare on the steamboats, and the arrangements of the State Society in connection with the liberal preparations of the citizens of Poughkeepsie, (including the facilities for visiting West Point, Newburgh, and other places where good hotels may be found,) the fullest confidence may be felt that the thousands who annually visit the State Fairs will be satisfactorily accommodated this year, whether they remain during the whole days of the Fair or spend merely a few hours on their route up or down the Hudson.

The example of former years enables the officers of the State Society to remedy some inconveniences heretofore experienced ; and the efficient police that will be maintained, with the improved mode of arranging the grounds and buildings for the Fair and Cattle Show, must render the exhibition more than usually satisfactory to families visiting the place in carriages and otherwise.

In addition to the multitude of premiums specifically offered, many *discretionary premiums* will be awarded by the committee on non-enumerated articles, so that persons who have articles of any kind proper for exhibition or competition on such an occasion, may feel assured that their articles will be properly considered in the Reports and Premiums.

Premiums are also offered specifically for competition among animals of various kinds from other States ; and the premiums for essays on Agri-

cultural Improvement, and for improved farming implements, are also thrown open for competition to the citizens of other States. Various members of examining committees are selected from New England, New Jersey, Pennsylvania, &c. ; from which States, it is hoped, there will be sent to the State Fair many specimens of improved breeds and agricultural implements.

Persons who have animals or other articles to send to the Fair, are requested to inform the Recording Secretary at the earliest practicable period, that the Society may be better able to make adequate arrangements with rail-road and steamboat companies ; and it is believed that all those companies, whether in New England, New Jersey or New York, will, as far as practicable, encourage the cause of Agricultural Improvement by complying with the applications which will be made by the Society for facilitating travelling to and from the Fair at the cheapest rates. The liberality experienced in this way in reference to former exhibitions, warrants a confident belief that neither the State Society nor the visitors at the Fair will be disappointed in the charges and accommodations in steamboats and railroads.

In order to have the arrangements satisfactorily made, it is repeated, animals and articles designed for exhibition should be reported (post free) as soon as practicable.

Visitors from other States, and from remote sections of the State of New York, can have accommodations secured in Poughkeepsie or its neighborhood, by addressing the Recording Secretary in due season.

It may not be improper to add, in this connection, that many eminent Agriculturists and Public Officers from other States will be present, and participate in the proceedings of the Fair, as in former years ; and that meetings of the Friends of Agriculture will be held during the evenings of the Fair, as well as on the Show Ground during the last day, for the purpose of interchanging opinions on subjects connected with the progress of Agriculture in this and other States of the Union.

It is hoped that friends of Agriculture in all sections of this and the neighboring States, (and especially the conductors of the press, whose presence is invited to the greatest practicable extent,) will exert their influence in arousing attention among their neighbors to the satisfaction and advantage which may be derived from attending exhibitions like those at the Annual Fairs and Cattle Shows of the New York State Agricultural Society.

Deputations are respectfully invited from the Agricultural Societies in other States, as well as from the County Societies in this State. Particular attention will be paid to the arrangements for accommodating the Ladies in the exhibition of articles of domestic economy ; and such order will be preserved as may enable all to examine the articles exhibited, without confusion from crowds.—*Henry O'Rielly, Recording Secretary, Albany.*

The Chenango Potatoe.—Is this potatoe and the Mercer identical ? The Mercer, it is now known, was produced on Neshanoc Creek, in Mercer County, Pennsylvania, from planting potatoe seed. There is, in Mercer County, a creek called Shenango, but not not Chenango. This last is a Chenango in New York. The true name of the potatoe, if it be the same, is the Mercer or Neshanoc potatoe. The truth of history might as

well be preserved, as far as it can be, in the vegetable as in other departments.—*J. S. Skinner, Washington, D. C., April, 1844.*

Seaweed—Preventative of the Curculio.—At a late visit to Col. Wilder's garden, we noticed that the plums were producing a heavy crop, and the Curculio seems less injurious this year than heretofore. On one tree, around which seaweed had been spread as far as the branches extend, Col. Wilder informed us he had not seen a single insect; should it have the effect of keeping them off, it will be a neat and cheap remedy. Perhaps salt strewed on the ground before the seaweed is put on, would be an additional preventive.—*Ed.*

Rocky River Grape.—You will receive, in due time, cuttings of the Rocky River grape. Dr. Kirtland, the most intelligent horticulturist in this section of the State, lives in the immediate neighborhood of these grapes, and I hoped to have seen him; but unfortunately for my purpose, he was at Columbus, on my journey out and back. I called at Rocky River, and saw Mr. Wright, on whose farm (a mile distant,) the grapes grow. He told me he had three kinds of the native grape: one purple, very good; one white, excellent; and one small, but good for wine. He promised me cuttings on my return. I called, and was informed by him, that he was told the month of March was the time for cutting them. I gave him particular directions, in writing, to send two slips of the different kinds to you. To this subject every attention has been paid, and I regret not to have seen the slips in a letter to you. They will, however, be sent, without any doubt.—*Yours, E. Whittlesey, Ohio, Feb. 1844, in a letter to J. S. Skinner, Esq.*

Phlox Drummondii.—I have plants of this beautiful species, which have furnished me with a constant bloom throughout the entire winter, and turned out into the open border is at this moment covered with flowers and buds. It cannot be too highly recommended, both as a parlor plant for winter and to furnish a rich patch of divers colored elegance through the summer months. Seeds sown in dry weather, in spring, may not appear until autumn,—which indicate that autumn sowing, and cooler, moister weather, are most favorable to its growth.—*R.*

Insects destructive to the Lime Tree.—I have received a very interesting letter from Dr. Paul Swift, of Philadelphia, relative to an insect which is destroying the European and American Lime trees, (*Tilia europea* and *americana*). A short paper of mine, on this subject, was printed in the *Farmer's Cabinet*, and I propose to write another, containing additional information, accompanied with figures of the borers in all their states; and, when it is ready, will let you have it for publication, if you wish for it. In Washington Square, alone, in Philadelphia, 47 European Lindens have been destroyed by these insects within two years; and two rows of the trees, in front of the State house, in Chestnut street, have been attacked, and will soon be destroyed by them. The same insects are found here, and considerable numbers have been taken on our Cambridge Limes or Lindens this summer.—*Yours, T. Wm. Harris, Cambridge, June 20th, 1844.*—[This paper will appear in our next.—*Ed.*]

Tradescantia virginica, a test for the detection of Acids.—Dr. C. T. Jackson states that the petals of the spider-wort, or *Tradescantia Virginica*, a common and light blue flower, seen in many gardens, will furnish, on being bruised and squeezed in a piece of linen, a rich blue juice, which has the property of turning red by acids and green by alkalis. The

pulp, after being pressed, may be treated with a little alcohol, and will yield still more coloring matter. It may be mixed with alcohol and put up in corked phials for use; or unsized paper may be stained with it and dried, and will serve for testing solutions; or the alcoholic solutions may be evaporated to the consistency of an extract, and be kept in that state until wanted for use,—when, by dissolving a little of it in water, or alcohol, it may be employed for testing any solution for acids and alkalies. It is very sensitive, and is as convenient for use as litmus or tincture of violets, while it possesses the advantage over red cabbage liquor in not readily undergoing putrefaction and loss of color. I have occasionally used it for some years in chemical experiments.—(N. E. Farmer.)

The Sixteenth Annual Exhibition of the Massachusetts Horticultural Society will be held in Boston, on Wednesday, Thursday and Friday, the 18th, 19th, and 20th of September next. A larger and finer exhibition is anticipated, than has ever been made—especially of fruits—as the season thus far has been more favorable than for the two or three past years. We hope to see many of our horticultural friends present at the exhibition.—Ed.

Hovey's Seedling Strawberry.—Success seems everywhere to have attended the cultivation of our seedling this year. At the exhibition of the Cincinnati Horticultural Society, they were the principal object of attention. The report of the committee states that “the baskets of Hovey's Seedling strawberry, raised by Mr. Jackson, formed the most striking feature of the exhibition, and challenged the admiration of every spectator. The size of the berries ranged from four to five inches in circumference. There were three or four quarts of them, which were sold at auction, in the evening, at about a dollar a quart.” At the exhibition of the Flushing Horticultural Society, L. I., Parsons & Co. exhibited a bowl of Hovey's Seedling, containing the greatest number of fine berries in the room, although in competition with the famous British Queen and Prince Albert.—Ed.

ART. II. Retrospective Criticism.

Errata.—In our last number for July, p. 245, 22 lines from the bottom, for “thus” read “this.” In our number for May, the engraving should have been “fig. 8” in the place of “fig. 7,” as fig. 7 had already appeared.

Hovey's Seedling Strawberry.—I have your strawberry in bearing for the first time this spring, and I find that every flower is impregnated and swelling finely, promising a large yield and large fruit. I have taken a strong interest in the controversy about the diœceous character of the strawberry, and as yet am disposed to side with Mr. Longworth. I have not made any experiments with this object in view, but I have frequently obtained different varieties from New York and Philadelphia, and in most instances they all bore well for a year or two, when they would *run out*, or become barren, notwithstanding that I tried nearly all the different modes of cultivation recommended through the papers, with very indifferent success. I have planted your strawberry apart from all others, except the old white, the Elton Pine and the male and female Hautbois, wishing to

test the question whether they would impregnate themselves or not, as the three varieties noticed above I presume would not mix with your seedling, unless perhaps the Elton Pine, and of this variety there are only three or four plants, and of course these could not fecundate *all* the flowers of more than a hundred large plants of your seedling; but be it as it may, this I know,—that, on diligent search, I cannot find a single blossom on the whole bed but is swelling and producing a perfect fruit.

Although you have excluded the Hautbois as being a different species, and not coming under the controversy now pending, I cannot pass them over without saying a few words in relation to them. Three years since, I received *male and female plants* of this variety from a neighbor, an old lady, who is ardently devoted to the cultivation of flowers and fruit; she told me she had had the female plant in her garden for eight or ten years without obtaining a *hint* of perfect fruit, when she was told that she must get the male; she did so, and the result was,—as I can testify,—that the plants were literally bending under the weight of fruit. From her I obtained my plants of both sexes, and for the last two years, as well as the present, have been, and now are, bearing profusely.

You gave a cut in the Magazine, some time back, of a male and female flower, which agrees perfectly with the Hautboy variety. I received, some years ago, several varieties, such as Wilmot's Superb, Downton, Chili or Lima, extra large, which all had the male flowers and never bore a crop.—*Respectfully Yours, J. B. Garber, Columbia, Pa. May 20th, 1844.*

ART. III. Massachusetts Horticultural Society.

June 22d.—An adjourned meeting of the Society was held to day,—the President in the chair.

Messrs. Walker, Newhall and Macondry were appointed a committee to consider the expediency of holding an annual exhibition,—and to report at a future meeting. George R. Russell, West Roxbury, and R. S. Mackintosh, were admitted subscription members. Meeting dissolved.

Exhibited.—Flowers: Hovey & Co. exhibited upwards of one hundred varieties of hardy roses, among which were Madame Plantier, Glorieux, Capitaine Sissolet, Naissance de Venus, Catel, Vandael, Montean, Globe-hip, Pomponne bicolor, Bizarre Marbree, Flemish Mottled, La Fiancée, Columbienne, Moyenna, Vint neuf Juliet, &c. :—Ayrshire roses, Queen, splendens, and Rose Angle; also bouquets. From S. Walker, sixteen ranunculuses, some of which were very fine; also bouquets. From Jos. Breck & Co. pæonies of several kinds, *Delphinium Barlowii*, *Campánula persicæfolia* and *p. pleno álba* and *cærulea*, other perennial flowers, and a fine collection of roses, among which we noticed fine specimens of Brown's Superb blush. From P. Barnes, cut flowers and bouquets. From S. R. Johnson, Jaune Desprez, Lamarque and other tender roses, and several varieties of hardy kinds.

From Messrs. Winship a very large and fine collection of herbaceous

plants, including about 100 varieties of spiræas, delphiniums, campanulas, pæonies, honeysuckles, &c., with about fifty varieties of roses, and elegant specimens of the *Deutzia scabra*, a fine ornamental shrub. From W. Kenrick, a handsome show of pæonies, roses, honeysuckle, &c. From J. A. Kenrick, rhododendrons, *Kalmia latifolia*, pæonies, azaleas, roses, &c. From Mr. Warren, Queen, Striata and six other dahlias, carnations, pinks, verbenas, stocks, roses and bouquets. From S. Sweetser, roses, and a flower of *Cereus serpentinus*. Bouquets from J. Hovey and Misses Summer.

Fruit: The show to-day was one of the best of the season; the specimens of Hovey's Seedling strawberries were the admiration of every visitor; the grapes and peaches were also excellent. From J. F. Allen, fine Grosse mignonne and Early Crawford peaches, Elruge and Golden nectarines, Black figs, Black Hamburg grapes and Hovey's Seedling strawberries. From Capt. Lovett, very large and superior specimens of Hovey's Seedling strawberries; also fine early Virginias. From Joseph Richardson, Cambridgeport, very splendid specimens of Hovey's Seedling strawberries. From Mrs. Howard, Woodland, handsome and well colored Black Hamburg and Sweet Water grapes and Black Tartarian cherries. From John Gordon, handsome Methven Scarlet strawberries and Black Tartarian cherries. From Hovey & Co. fine Hovey's Seedling strawberries; also trusses of a new seedling, very handsome. From A. H. Hovey, handsome Hovey's Seedling strawberries. Seedling Cherries from B. Merriam, Roxbury. Fine Bigarreau of Savoy (new), and other cherries from George Walsh. Cherries from T. Motley, Jr. of Dedham, and strawberries from T. Edmands, Newton. From Mr. Warren, handsome specimens of Hovey's Seedling, Methven Scarlet and Keen's Seedling strawberries.

Vegetables: Large and extra specimens of lettuce from Capt. Lovett: one variety was called the *Turkish*, and the other the *Palestine* lettuce, the former the largest variety, but the latter having exceedingly solid heads and very tender; the seeds were received from Smyrna, two years since. J. A. Kenrick exhibited *twenty-four* stalks of Myatt's Victoria rhubarb, all gathered from *one plant*; twelve of them weighing 12½ lbs.

June 29th—*Exhibited*. Flowers: From Joseph Breck & Co. a variety of perennial flowers, among which were *Delphinium Barlowii* and two seedlings, double and very handsome; *Catananche cærulea*, with beautiful blue flowers, an old plant, but rarely seen in our gardens; *Pentstemon digitalis*, *Phlox carnea*, spiræas, pinks, carnations, &c., with three or four specimens of dahlias, one of which was the Painted Lady. From S. Walker a collection of ranunculuses, comprising a great assortment of colors and kinds; also a superb specimen of *Delphinium Barlowii*, double pinks, carnations, cut flowers of several kinds and bouquets. From S. R. Johnson, Bourbon and Noisette roses, including fine Jaune Desprez and Lamarque, several hardy roses, white lilies, delphiniums, &c. From W. Kenrick, pæonies, verbenas, roses, &c. with baskets of flowers and bouquets, prettily arranged; among the number were specimens of a variegated leaved plum (*Prunus foliis variegata*.) Mr. Carter exhibited a beautiful seedling phlox, with a large rosy eye, shading off at the edge of the petals of a pale pink; also pinks, carnations, *Campanula grandiflora*, rhododendrons, bouquets, &c., and a pretty specimen of *Mauvevillea suaveolens*. From Messrs. Winship, white lilies, *Deutzia scabra* and large bouquets. From Mr. Warren, roses, verbenas, carnations, pansies and bouquets.

Bouquets from Hovey & Co., S. A. Walker, J. Hovey, and Misses Sumner. Large bunches of *Rhododendron maximum*, gathered from the woods in Medfield, by Eliakim Morse.

Fruit: The strawberries were the most attractive feature of the exhibition, and some very remarkable specimens of Hovey's Seedling were shown by Capt. Lovett; the largest measured $5\frac{1}{2}$ inches in circumference, and *thirty-eight* were sufficient to fill a quart box. The cherries were also very large and fine.

From J. F. Allen, Ferral and Black Hamburgh grapes, Early Crawford and Royal George peaches, Elruge and Golden nectarines and St. Michael figs,—all fine. From Capt. Lovett, Hovey's Seedling, Early Virginia and a variety called the Aberdeen strawberry; the latter of good size, and very dark color, probably belonging to the class of Black strawberries; it is said to be a good bearer. From O. Johnson, Bigarreau, Sparhawk's Honeyheart, Black Tartarian and Bigarreau Gros Cœur cherries,—all large and handsome. From Geo. Walsh, Black Bigarreau cherries. From E. McLennan, Prolific Hautbois and Prince Albert strawberries, the latter new; in size medium, flat and irregular or coxcomb form.

From Messrs. Winship, Ox Heart, Black Eagle, Bigarreau, White Heart, Carnation, and two or three other varieties, with several Mazzard Seedlings. From S. Downer, fine Downer cherries. From Mrs. Bigelow, Carnation cherries. From W. P. Jenny, Fairhaven, Seedling strawberries of good size and handsome appearance. From J. A. Kenrick, Black Tartarian, Ox Heart, and Bigarreau cherries. From Mrs. Howard, Black Hamburgh, White Chasselas and Miller Burgundy grapes; also Ox Heart and Napoleon Bigarreau cherries. From P. Barnes, Bigarreau cherries. From S. Barnard, fine Black Tartarian cherries. From K. Bailey, raspberries.

Vegetables: Two fine cucumbers were exhibited from the garden of J. Arnold, Esq., New Bedford.

July 6th.—A stated meeting of the Society was held to-day,—Vice President C. Newhall in the chair.

The committee appointed at the last meeting reported that it was expedient that the Society should hold an annual exhibition.

On motion of S. Walker, it was voted that J. Lovett, S. Walker and C. M. Hovey, be a committee to report at the next meeting, a general committee of arrangements, of nine, to superintend the Annual Exhibition.

Dr. Hiram Hosmer, of Watertown, was admitted a member. Adjourned one week to July 13th.

Exhibited.—Flowers: From W. Kenrick, six fine bouquets and a basket of flowers, comprising a great variety of verbenas, roses, and other flowers. From Joseph Breeck & Co., perennial and annual flowers in great variety, among which were *Catananche cœrulea*, *Pentstemon digitalis*, *Phlox carnea*, picotees, pinks and carnations, some of them excellent, roses, three or four dahlias, *Delphinium Barlowii*, *Spiræa palmata*, *Phlox Drummondii*, *Centaurea suaveolens*, candytufts, &c. From S. Walker, moss roses, Queen of the Prairies, *Lythrum salicaria*, variegated monkshood, *Spiræa lobata americana*, *Astrantia major*, picotees, pinks, &c. From S. R. Johnson, Noisette and Bourbon roses, picotees, lilies, phloxes, &c. &c. From S. A. Walker, bouquets and cut flowers. From J. A.

Kenrick, bouquets, cut flowers, and fine specimens of *Rhododéndron máximum*. Bouquets from Hovey & Co. From Mr. Warren, flowers of the wax plant, dahlias, verbenas, &c. &c.

Fruit: From Capt. Lovett, four boxes of Hovey's Seedling strawberries, very large and handsome. From G. Merriam, Newton, superior Black Tartarian cherries. From C. Newhall, Giant Nottingham raspberries, very large, resembling the Franconia. From O. Johnson, fine Bigarreau and Black Tartarian cherries. From A. D. Williams, Downer cherries. From S. A. Walker, large and fine Bigarreau cherries. Geo. Walsh exhibited fine Bigarreau of Savoy cherries. Cherries from T. R. Raymond, Medford. Melons from James Arnold, Esq., New Bedford. From Mrs. Howard, Black Hamburg and Sweet Water grapes.

July 13th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

The committee appointed at the last meeting reported the names of a committee of arrangements for the next annual exhibition, and the following gentlemen were chosen.

Samuel Walker, P. B. Hovey, Jr., Jos. Breck, E. M. Richards, O. Johnson, J. A. Kenrick, D. Haggerston, J. Lovett and Wm. Quant.

Adjourned three weeks to August 3d.

Exhibited.—Flowers: From W. E. Carter, a fine plant of *Gloxinia*, álba, and cut flowers of *Phlóx picta*, pinks, carnations, seedling delphiniums. Chelone barbata, double nasturtium, bouquets, &c., &c. From Jos. Breck & Co., *Spiræa palmata*, *Aconitum variegatum*, *Phlóx Shephérdia*, speciosa, grandiflora, and *Drummondii*, *Catanánche cærúlea*, double scarlet lychnis, fifty varieties of picotees and carnations, several kinds of holly hocks, *Clárkia rósea*, *Calandrinia discolor* and a variety of other annuals and bouquets; also, specimens of native plants, gathered from a swamp in Medfield, viz.; *Rhododéndron máximum*, *Lilium canadénsis* and *philadelphicum*, *Córnus canadénsis*, *Pyrola rotundifolia*, *Azálea viscosa*, &c. &c. From S. Walker, *Aconitum variegatum*, *Spiræa palmata*, *Lythrum salicaria*, phloxes, carnation and picotee pinks, and other flowers. From S. R. Johnson, carnation and picotee pinks, *Noisette Jaune Desprez* and Bourbon roses, double pomegranate, verbenas, &c. From S. A. Walker, dahlias, petunias, marygold, bouquets, &c.

From Hovey & Co., picotee pinks, carnations and bouquets. From W. Kenrick, bouquets and a basket of flowers, handsomely arranged. From John Parker, 2d, Roxbury, fine specimens of Marshal Soult and Striata formosissima dahlias. From John Hovey, carnations, *Lilium japonicum*, bouquets and other flowers. From Mr. Warren, fine large specimens of the common water lily, cultivated in his garden pond; also dahlias, picotees, a variety of cut flowers and handsome bouquets. From W. H. Conant, three dahlias. From Rev. Mr. Barry, Newton, a beautiful cluster of double flowering pomegranate. Bouquets from Misses Sumner.

The premiums for picotees and carnations were awarded to-day. The following is the report of the judges:—

For the best six dissimilar blooms, a premium of \$3 00 to Joseph Breck & Co.

For the second best six dissimilar blooms, a premium of \$2 00 to S. R. Johnson.

Messrs. Dutton, Barnes, and Nugent, judges.

Fruit : From J. F. Allen, beautiful specimens of peaches called Lemon Rareripe (!) from a tree cultivated in a pot, and watered with *guano* : the largest specimen weighed seven oz. ; also Golden and Elruge nectarines. From James Arnold, red and white Dutch currants, Franconia raspberries, and a branch of the coffee tree full of fruit. From Captain Lovett, Ohio everbearing and Franconia raspberries, two boxes of handsome seedling currants, and one box black Naples currants. From Mrs. Howard, very fine Black Hamburg and Sweet Water grapes. From H. Vandine, large black cherries, supposed to be Tradescants Black Heart. From N. D. Chase, fine black Tartarian cherries. Large gooseberries from S. R. Johnson. Red and white currants and cherries from George Walsh. From J. G. Thurston, Lancaster, large gooseberries. From E. McLennan, 12 kinds of named gooseberries, some of them large and fine. S. A. Walker exhibited four boxes red and white currants, four of red and white raspberries, and four of gooseberries. From A. D. Weld, fine large red and white currants, and early scarlet plums. From R. Bailey, red and white raspberries. From J. Hovey, fine large gooseberries. From J. S. Cabot, Amire Joannet pears. From E. E. Bradshaw, Franconia raspberries and gooseberries. From Mr. Warren, very large and handsome seedling raspberries, and Mazzard cherries.

July 20th.—Exhibited. Flowers : From W. Carter, *Chelone barbata*, *Tweedia cœrulea* (new and pretty), *Campánula hepática*, *Betónica carnea*, *Convolvulus panduratus* (double, hardy, and very handsome), *Delphinium tricorneis*, *Fedia grassifolia*, *Lobelia cardinalis*, *Gaura Lindenmèrii*, dahlias, seedling phlox (striped and beautiful), carnations, picotees, bouquets, &c. From S. Walker, variegated monkshood, seedling delphiniums, phloxes, sweet scabious, picotees, bouquets, &c. From S. R. Johnson, fine double balsams of various colors, roses, double pomegranite, picotees, carnations, and a variety of other flowers. From P. Barnes, double white and scarlet poppies, picotee pinks, marygolds, &c. From W. Kenrick, hollyhocks, and a variety of fine bouquets. Bouquets from J. Hovey, J. A. Kenrick and S. A. Walker. White lilies, a bouquet of dahlias, and several other bouquets from Mr. Warren.

Fruit : From J. F. Allen, very large and superior specimens of Franconia raspberries, and Sweet Montmorency cherries. Capt. Lovett exhibited very large and fine seedling and red Dutch currants. From S. Pond, Franconia raspberries. From N. D. Chase, Lynn, gooseberries. From James Arnold, New Bedford, gooseberries. From J. Hovey, handsome Early Harvest apples, mulberries, and very large gooseberries. O. Johnson exhibited fine black Hamburg, Zinfindal and Muscat of Alexandria grapes. From A. D. Williams, fine red and white Dutch currants, and very large and handsome tomatoes. From J. Washburn, Plymouth, red Astrachan apples. From Dr. E. Wight, gooseberries. From Mrs. Howard, fine black Hamburg and Sweet Water grapes, and red and white Dutch currants. From J. A. Kenrick, large and fine specimens of Belle Magnifique cherries. From A. D. Weld, fine red and white Dutch currants. From Mr. Warren, Seedling cherries, and Seedling and Franconia raspberries ; the Seedling so much like the Franconia as not to be distinguished, except by the wood and foliage.

Vegetables : From Capt. Lovett, Early Flat and Early Hill potatoes, large and well grown. From A. D. Williams, large and fine Drumhead cabbages and excellent potatoes.

ART. IV. Faneuil Hall Market.

	From	To		From	To
<i>Roots, Tubers, &c.</i>	\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>	\$ cts.	\$ cts.
Potatoes, new:					
Chenangoes, { per barrel,	2 00	2 25	Summer Bush, per doz.	8	12
Common,.... { per bushel,	1 00	—	Summer Crookneck, pr doz.	20	—
Old, per bushel:			Autumnal Marrow, per lb.	4	5
Common,	40	50	Canada Crookneck, per cwt.	3 00	—
Chenangoes,	50	60	West India, per cwt.	2 50	3 00
Turnips, new:					
Per bushel,	75	—	<i>Fruits.</i>		
Per bunch,	4	6	Apples, dessert and cooking:		
Onions:			Early Sweet Bough, pr bl.	2 75	3 00
Rarripes, per bunch,	3	4	Early Sour Bough, pr bl.	2 50	2 75
Yellow, per bunch,	—	—	Early Harvest, per bush.	2 00	—
New White, per bunch,	3	4	Red Astrachan, per bush.	1 50	—
Beets, new, per bunch,	4	6	Pears, per peck.:		
Carrots, new, per bunch,	4	6	Jargonelle,	62½	—
Parsnips, per bushel,	—	—	Citron des Carmes,	62½	—
Radishes, per bunch,	3	—	Sugar Top,	50	—
Horseradish, per lb.	8	10	Common,	37½	50
Garlic, per lb.	8	10	Peaches:		
<i>Cabbages, Salads, &c.</i>			Common, per half peck.	50	75
Cabbages, per doz.:			Extra, (forced) per doz.	2 00	3 00
Common Early,	50	75	Plums, per quart:		
Drumhead,	62	75	Common,	12½	20
Savoy,	62	75	Whortleberries, per quart,	8	10
Brocolis, each,	10	20	Blackberries, per quart,	17	20
Cauliflowers, each,	10	20	Gooseberries, pr qt.		
Lettuce, per head,	2	3	Common,	12½	—
Rhubarb, per lb.	2	3	Large,	20	25
Water Cresses, per quart,	6	—	Blueberries, per qt.	10	12
Peas, per bushel.			Raspberries, per qt.	25	37½
Marrowfat,	1 00	—	Currants, per qt.		
Beans:			Red,	8	10
String, per bushel,	75	1 00	White,	8	10
Shell, per quart,	17	—	Black,	6	8
Corn, Early White, per doz.	12½	15	Grapes (forced) per lb.:		
Cucumbers, (pickled) pr gal.	25	—	Black Hamburg,	1 00	—
Peppers, (pickled) per gal.	37½	—	White Sweet Water,	75	—
<i>Pot and Sweet Herbs.</i>			Watermelons, each,	20	25
Parsley, per half peck,	20	25	Muskmelons, each,	12½	25
Sage, per pound,	17	20½	Cucumbers, per hundred,	50	75
Marjorum, per bunch,	6	12½	Tomatoes, per half peck,	37½	—
Savory, per bunch,	6	12	Cranberries, per bushel,	3 00	—
Spearmint, per bunch,	3	—	Pine-apples, each,	12	25
			Lemons, per doz.	17	20
			Oranges, per doz.:		
			Sicily,	20	25
			Havana,	37½	50

REMARKS.—The refreshing rains of the present week have given a new life to vegetation in our vicinity. The grass now springs up with a vigor and depth of color, like that of early spring. Corn again spreads out its wavy leaves, and the varied crops of the marketman are rapidly recovering from their parched condition. We doubt if any individual can recollect such a long and continued spell of dry weather.

Vegetables.—In consequence of the drought, potatoes have but just

made their appearance in any quantity in our market, and the crop is yet small; a week or two will, however, swell them up to a good size. The principal supply has been from New York, comprising chenangoes and pink eyes: some old remain on hand, but the stock is pretty well reduced. Turnips now come in by the bushel, of good quality. Onions are more abundant. Beets and carrots now come to hand of good size. Cabbages are now more plentiful, and both Drumheads and Savoys may be had of good size; of the common early sorts, there is a good supply. Brocolis and cauliflowers, large and well grown, are now to be had at our quotations. Lettuce abundant. Rhubarb is now less called for, as apples come in. Peas have been scarce throughout the month, and have not sold below our prices; the dry weather decreased the crop one-half. Shell beans are now brought in of the early bush kind. Early corn has made its appearance. Squashes are plentiful and good, and the supply is now from our own marketmen; a few marrows have also been received, which is remarkably early.

Fruit.—We discontinue our quotations for old apples, as none now remain; the new crop comes in well, and chiefly from the New York market; some very fine Early Harvest, from the vicinity, brought our prices readily: the principal sorts are the Early Sweet Bough and one called the Early Sour Bough. Pears are now abundant and good, and hundreds of barrels have been received from New York. Strawberries are all gone; the dry weather injured the crop severely. Peaches have been received from New Jersey, but they are yet of premature growth and indifferent quality: good forced ones command our prices. Cherries are gone. Gooseberries abundant and good. Raspberries have been scarce, but the rains are now swelling off the crop; the Franconia has been the principal variety. Currants very abundant and good. Grapes are plentiful for the season. Watermelons are abundant from recent arrivals. A few muskmelons have also come to hand this week. Cucumbers are now plentiful from the vicinity; until within a day or two the whole supply has been from Long Island. Cranberries remain the same, with fair stock. Whortleberries have been received from New York in great quantities. Oranges and Lemons remain the same.—*M. T., Boston, July 27th, 1841.*

HORTICULTURAL MEMORANDA

FOR AUGUST.

FRUIT DEPARTMENT.

Grape Vines will now have swelled their fruit to a good size, and will soon begin to change color. Abundance of air should now be given early in the morning, shutting up early in the afternoon. Occasional syringings may be given, but the principal supply of moisture should arise from the sprinkling of the walks before shutting up the house. Continue to lay in new wood, and top all the principal shoots a few eyes above where it is intended to head them down at the winter pruning. If the border needs manure, water freely with *guano*, which is the most valuable of all substances for the grape. Young vines in pots should be shifted now. Vines

of hardy kinds, in the open air, will need frequent tying up, and all the small and useless foliage removed.

Strawberry Beds may be now prepared for planting out by the fifteenth of the month. Dig and enrich the ground well, previous to planting. *Guano* is the finest manure for the strawberry.

Cherry, Pear, Apple and Peach Trees may be budded this month.

Transplanting Trees may be commenced the latter part of the month, according to Capt. Lovett's plan, at p. 161.

Grafting Trees with fruit buds may also be commenced the latter part of the month.

Summer Pruning should yet be attended to.

Insects should be attended to now : nothing is more important than this.

FLOWER DEPARTMENT.

Dahlias, after the refreshing rains of the last week, appear to be rapidly improving, and will soon begin to bloom freely. Keep them neatly and firmly tied up to the stakes ; prune freely ; and water with *guano weekly*. Keep the oil soap in use to drive off insects.

White Lilies may be taken up now, separated and replanted again : or laid away on a dry shelf for planting out in October.

Seedling Calceolarias should be repotted this month.

Roses will now be in fine condition for layering ; attend to this. Bud all good stocks this month ; put in cuttings of such sorts as root freely. Repot those intended for blooming in November ; pot off cuttings put in in June. Water freely with liquid *guano*.

Chrysanthemums layered last month, should have their tops pinched off the end of the month.

Orange and Lemon Trees may yet be budded.

Ericas should be repotted now if they require it, and placed in a frame facing towards the north.

Pelargoniums may yet be cut down and the cuttings put in : repot the old plants the latter part of the month.

Cactuses should now be watered more freely, using liquid *guano*.

Camellias will now need repeated syringing to keep them in good condition. Repot such as need it ; put in cuttings ; continue to graft ; pot off cuttings already rooted.

Oxalis Bowiei and hirta and floribunda may be potted this month.

Amaryllis floribunda should be watered freely as soon as signs of flowering appear.

Verbenas may be layered the latter part of the month, into small pots, for winter plants.

Tree Paonies may be increased by grafting, till the 15th of the month.

Fuchsias should be again repotted if large specimens are wanted.

Pansy Seed should now be sown in beds, for spring flowering.

Carnations may yet be layered, if not already done.

Mignonette, Schizanthus and Sweet Alyssum should now be sown, if flowering plants are wanted in winter.

Cyclamens should be repotted this month.

Callas should be repotted this month.

Greenhouse Plants of all kind should be put in order for the winter, the latter part of the month.

THE MAGAZINE
OF
HORTICULTURE.

SEPTEMBER, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Agricultural and Horticultural Chemistry.* By ROBERT CARMICHAEL, Newton, Mass.

I AM happy to see that Agricultural and Horticultural Chemistry is beginning to engage the attention of a numerous class in this advancing country. The advantages to be derived from a knowledge of chemistry, as applied to horticulture, were surprisingly manifested to me by the many excellent and conclusive experiments which came under my observation, during my residence in the London Horticultural Society's Garden. The society, feeling the importance of the subject, appointed a chemist, in 1841, for its investigation; and entrusted Mr. Edward Solly, Jr. to conduct the experiments in such a manner, that their results might be unquestionable, and furnish trustworthy and valuable information.

The first object was, to trace out the connection between the various vegetable productions and the soils on which they were grown, by a chemical analysis of both; by this means they were enabled to ascertain the quantity of earthy or saline matter, which different plants contain, and the different proportions of organic and inorganic substances which enter into their composition. It was necessary to ascertain, by a careful analysis of the soil previous to cropping, its chemical composition also; and the same process was necessary after the crops were removed, in order to ascertain if the amount of matter taken from it bore an exact proportion to the first analysis, as deduced from the quantity found in the vegetable productions, arising from the soil, whose constituent parts were first ascertained.

The second stage of these experiments was to improve or alter the quality of the produce, by the application of those substances, which were found to have been absorbed from the soil in the largest quantities. In the course of the experiments, many interesting facts have been ascertained worthy of record.

The recent labors of chemists in Europe have done much to lay a foundation and form a practical system of agricultural and horticultural chemistry. Considering the little attention, previous to their labors, bestowed on the subject, and the numerous ill understood facts, until a very recent period, which hung around it, it is surprising to notice the benefits which chemistry has already conferred on the processes of cultivation, as connected with vegetation; and the beneficial results which have been made known in such a short time. The great sources of the food of plants have been traced out and determined; the manner in which they obtain the various elements necessary to their growth has been investigated, and attention has been drawn to the importance of the inorganic substances always present in plants. Liebig has more especially drawn attention to the necessity of supplying these substances to growing plants, as well as those which, more properly speaking, constitute their food, viz., such as supplying them with carbon, oxygen, hydrogen and nitrogen, the four elements, which, by entering into combination with each other, in different proportions, give rise to the formation of woody fibre, gluten, starch, gum, and all the various proximate elements of plants, and which, consequently, compose the whole of their organic structure. I shall now select a passage or two from Mr. Solly's report to the chemical committee, wherein he endeavors to trace out the sources of those elements which give rise to the formation of all vegetable productions, and cannot do better than give it in his own words:—

“Much has been written on the source of carbon, and the state it must be in, to enable it to enter into the organs of plants, and assist in their growth by undergoing assimilation. It was long ago believed, by Drs. Priestley and Ingenhousz, as well as other observers, that plants derive the carbon which they contain from the carbonic acid always present in the air. They observed that it was impossible for the carbon contained in a large tree, for example, to have been derived from the soil, because the space of

earth, through which the roots of such a tree spread, never contains carbon enough to supply the very large quantity of that element required by the tree. They therefore conceived that the carbon was derived from carbonic acid; partly from that existing in the air, and partly from gas generated in the soil by the gradual oxidation of carbonaceous matters. More recently a theory was started, which derived considerable importance from the names of the eminent chemists who supported it; it was supposed that the brown carbonaceous matters of the soil were the principal source of the carbon of plants, and that these substances, being rendered soluble in water by the presence of alkaline and other inorganic compounds in the soil, were thus brought into a fit state to be absorbed by the roots of plants. These two theories have been well contrasted together by Liebig, who has shown the many great objections to the latter view, and very completely reestablished the old theory, that plants derive their carbon from the decomposition of carbonic acid gas, and not from the absorption of solid carbonaceous matters existing in the soil.

“The chief use, then, of the various organic substances added to land, as far as they supply carbon, consists in their furnishing a continual source of carbonic acid, a gas which is evolved by all organic substances whilst undergoing decay.

“The importance of *nitrogen* in the growth of plants has in former times been greatly overlooked, and by some observers entirely forgotten; it is true that Priestley and his contemporaries thought it probable that this gas must have some influence on vegetation, but their experiments were imperfect, and the conclusion to which they appear to have arrived at was, that nitrogen was of very little importance compared to carbon and oxygen. More recently, as chemistry advanced, the assimilation of nitrogen began to be thought more necessary to the growth of plants, but still very indefinite ideas were entertained respecting the mode in which it was absorbed; and although the agricultural chemists, at the commencement of this century, were aware that nitrates and salts of ammonia had strong influence on the growth of plants, and considered that they were valuable chiefly as sources of nitrogen, yet they did not take into consideration the fact, that nitrogen can only be assimilated in a state of combination, and

they were not aware that the absorption of nitrogen, by plants, was essential to the formation of those compounds on the presence of which, the value of nearly all vegetables and plants, as articles of food, mainly depends. Chemical enquiries into the compounds of nitrogen have shown, that this singular element has, as it were, a reluctance to enter into combination with other substances, not uniting with them under ordinary circumstances when in the free state, but combining with them for the most part easily when in the nascent state, or at the moment of being evolved from one of its compounds in a state of decomposition. It is known, for example, that the nitrogen of the air is unable, under all ordinary circumstances, to unite with oxygen, carbon, and similar simple substances, and from a knowledge of this, we are led to conclude, that plants cannot derive their nitrogen from that great reservoir of free nitrogen,—the atmosphere.

“Liebig; who was the first to point out the vast importance of this element in the processes of vegetation, has also investigated the source whence it is derived. He has shown, that the nitrogen of the air cannot be assimilated, but that the air always contains a minute trace of ammonia,—a compound of nitrogen, and therefore a substance in which it exists in a form capable of being assimilated by plants. By a most ingenious series of experiments and deductions, he has established the theory, that plants derive the nitrogen which is necessary to their growth by decomposing ammonia and assimilating the nitrogen it contains; and that the ammonia which thus supplies them with nitrogen is *constantly* being formed by the decay of animal and vegetable substances and similar organic matters.”

Nitrogen, then, being of such vast importance in the formation of all vegetable substances, and ammonia being the compound which supplies this element, consequently rendering it a substance of the greatest interest in vegetable chemistry, the necessity must appear evident to every one, of preserving this gas, which is continually being evolved from all animal and vegetable substances, whilst undergoing decay. Owing to the very volatile nature of this gas, the greater part will be dissipated and lost in the surrounding atmosphere, unless it is fixed by strewing gypsum or some other substance which combines with it, on those materials from which the gas is escaping. The

substances which, according to the views of Liebig, constitute the food of plants, are water, carbonic acid, and ammonia; these not only contain the four elements of organic matter necessary for their composition, but contain them in a condition, capable of being assimilated by the organs of plants. In addition to these substances, it is well known that plants absorb others of an inorganic nature, which are obtained wholly from the earth, and therefore, of course, consist of substances existing in the soil, in contact with their roots. From what has been stated it must appear evident, that those manures, which contain those organic and inorganic substances the most and in the best state of being absorbed and assimilated by the organs of plants, are the best, and consequently act the most beneficially; hence the preparation of manures, now becoming such an important study amongst cultivators of the soil. In fact, it is not so easy as it is generally believed, to prepare a compost perfectly suited to the purposes of the cultivator. It requires a knowledge of the component parts and the several qualities of the substances to be mixed; and whoever wishes to prepare the best possible manure, must leave nothing to chance; on the contrary, certain fixed principles must be attended to, and chemistry must be consulted, because it is that science only which can teach us in what substances soil is deficient, and what are to be supplied, if the most abundant crops are to be produced.

In making compost, some general rules are always to be observed, and the chief point to consider is, that no substances are mixed together which act disadvantageously upon each other, or cause the evaporation of the volatile parts; on the contrary, such only are to be brought together as mutually decompose and improve each. Layers of different materials collected into large heaps,—such as dung, marl, lime, common ashes, the ashes and lye of soap manufacturers, loam, clay, gypsum, common salt, bone dust, the refuse of salt works, peat, turf, weeds obtained from fields, meadows and gardens, charcoal, night soil, the sweepings of threshing-floors,—in short, all those materials may be used and converted into the most powerful fertilizers, without any of the enriching qualities being lost. Those substances thus brought together, being of little original value as a manure, are, by this means, converted into an excellent fertilizer; and owing to the powerful aid

of chemical combinations, effected by mixing them together, no part of the ammonia disengaged by those substances escapes, because it becomes chemically combined with some one of them.

ROBERT CARMICHAEL.

Nonantum Hill, Newton, August, 1844.

(To be continued.)

ART. II. *Some Remarks on the cultivation of the Ranunculus Asiaticus, with directions for Planting, &c.* By S. WALKER.

IT is not my intention, Mr. Editor, to go into a general description of this beautiful florist's flower, but rather to lay before your readers my mode of cultivation.

It is nearly twenty years since I first imported the *Ranunculus*; and, that I might be successful in the cultivation of the plants, I had reference to all the authorities on the subject which were within my reach, and also consulted with all the persons who I could ascertain had grown them. After diligent search and careful examination, I collated all the information thus obtained, and found that all agreed on a light, fresh, sandy soil, made rich by cow manure, with the addition of one eighth of sea sand, as being a suitable and proper compost for the successful cultivation of the *Ranunculus*. With a bed thus prepared, I labored unsuccessfully for years, and at last almost gave up in despair; still my love for the *Ranunculus* would revive, and I was again and again induced to import plants and cultivate them in various soils; and although I was repeatedly disappointed, yet I could not, or rather would not, give up the idea that the *Ranunculus* might be successfully grown in Massachusetts.

In the year 1840, I imported about 200 plants, which I cultivated in a new compost, planting them in November, and covering them with a frame during the winter. This was attended with much labor and some expense. The bloom was good, and I felt satisfied that I had accomplished something, if I had not overcome all the difficulties; and

from this successful trial, I made up my mind to try my new compost and *spring planting*, which I did the present year.

Having prepared my bed in the summer of 1843, I imported, in November, from Messrs. Tyso & Son, of England, 1000 roots, (I ordered 1400 plants, but they could only supply 1000 of their *strong, free-growing* seedlings,) which I planted on the thirteenth of March of the present year. The result more than realized my expectations. The bloom was equal to any I ever saw in England; the roots came up plump, and are larger than they were when they were planted;—a pretty good sign that the soil suited them, and that they will do well another season.

Directions for the Cultivation and Planting of the Ranunculus.—The soil should be trenched 18 or 20 inches, and composed of good rich loam, to which add 1-6 part of very old, well rotted cow manure, and the same quantity of clay broken into small pieces; add to this a little sand, and thoroughly mix the whole; if the soil binds, add some sandy peat; make the bed on a level with the path or walks; the plants would do better if the bed was *below* rather than *above* the level.

Having prepared the soil, as above, sometime during the summer or autumn, take the *earliest* opportunity in the spring succeeding to stir up the bed one spit, and take off 1 1-2 inch of the soil; then place the plants in an upright position on the surface, 6 inches apart each way, and replace the soil carefully, which will cover the crown of the Ranunculus about 1 1-2 inch; deeper planting would be injurious. After the plants appear, keep them free from weeds, and press the soil firmly around the plants after they get two inches high. If the weather prove dry, water them freely early in the morning, and shade them from the sun from 9 o'clock, A. M. to 3 o'clock, P. M. As soon as the foliage becomes yellow, take the roots up and dry them thoroughly in the shade, and keep them in a dry place.

The Ranunculus loves a cool and moist location, but no stagnant water should be permitted, nor should they be placed under the shade or dripping of trees. The morning sun, free circulation of air, and shade as directed, will ensure success.

S. WALKER.

Roxbury, August 3d, 1844.

ART. III. *On the Propagation and Culture of Prize Pelargoniums.* By JAMES W. RUSSELL.

THE great improvement in the color and shape of the flowers, has given entirely a new stimulus to the cultivators of this delightful family of plants. At the prize exhibitions in England the plants are objects of great beauty, the whole contour of the plant being so perfect, spreading in a horizontal direction, so that the plant completely covers the pot from the view of the admiring multitude,—the close, compact and spreading top, thickly studded with flowers of the most charming shades and colors, mark it at once as one of the choicest of Flora's productions.

In order to be successful in obtaining a fine specimen plant, raised from a cutting, preference should be given to a strong, short-jointed growth; about 3 inches in length or less, but not more, would be found to be the best suited for this particular mode of growth; a good method of obtaining the cuttings would be to cut in an old plant early in the spring, and place it in an airy situation near the glass; and when the lateral growths arrive at the length proposed, cut them off close to the old wood, and take off two or three of the lower leaves, and they will be ready for the earth, which should be light vegetable mould, mixing with it one third pit or fresh water sand. The smallest size thumb-pot should be used. Having the cuttings ready, and the pots and compost at hand, fill them with the earth nearly to the rim, and put a little sand on the top; smooth it off and press it gently down, and insert the cutting in the centre of the pot, one inch in depth; a piece of porous pot placed for the base of the cutting to rest on, would facilitate the emission of roots; a moderate bottom heat to plunge them in, with a slight shade over the glass through the hours of sunshine, with a little water when needed, finishes the work until the plants begin to grow; at this period air must be admitted to circulate through the plants at every opportunity, except in severe cold weather.

Now will be the time for stopping the growth, by cutting out one fourth of an inch of the leading shoot; this will be the means of starting the lateral or side shoots, which are

to form the plant; three or four will be sufficient; therefore all above this number should be carefully taken off.

It will now be time to remove the plants for the first time into No. 2 pots, being mindful to give them a bountiful supply of air, which is indispensably necessary for their well doing; if this is neglected the plants will be drawn to a weak spindling growth, and the whole of the care and labor will be lost, for a good strong growth cannot well be obtained without cutting the whole back again and commencing anew. Having selected the shoots, which should be trained in a horizontal position, bring them down with hooked pegs, put into the pot at a regular distance from each other; however, this cannot well be done before the plants are shifted to No. 4 pots. In order to ascertain the proper time to repot the plants, examine the roots; and when you find the spongioles or young roots gathering around the side of the pot, the sooner it is done the better, and the stronger the plant will grow. By keeping the lower shoots regularly trained, as before advised, and by continuing to shift the plants, as required, into larger pots, stopping the lower horizontal shoots at every *six inches* of their growth, and arranging the upright ones that issue from them, at regular distances, and stopping them, at the same time, you may have just as large and handsome a plant as you could wish for. If the plants become too much crowded, thin out all superfluous weak shoots.

For the compost, take the sod from an old pasture field, three or four inches in depth, laying it grass-side down into a square heap, about three weeks before it is wanted; then collect horse manure, free from straw or litter, and add about one third in quantity to the sods, and when the whole is blended together it will be the very best compost for the growth of the plants. At each time of repotting, a little bone dust may be placed on the pot-sherds that are used for drainage; the drainage, which is composed of broken pots called pot-sherds, or of porous bricks broken in small pieces, is an important item, and must not be overlooked; the larger the pot, the more drainage is necessary, in order to drain off all superfluous water. Occasionally water the plants with guano water, which is prepared by adding one pound of guano to eight or ten gallons of clean water. Pit or fresh water sand may be mixed with the compost at the time of potting the plants, if the earth is

labors, unnoticed and unsuspected, till the work of destruction is well nigh finished.

Some of these wood-eating insects are transformed to beetles, having long and tapering antennæ, or horns, and hard wing-covers. Such, when arrived at maturity, are the borers of the apple tree, and the gray borers of the poplar.

Similar to these, in form, is a long-horned beetle, which was described, in the year 1824, by Mr. Thomas Say, in the Appendix to Keating's Narrative of Major Long's second expedition, under the name of *Saperda vestita*. This insect measures from six to eight tenths of an inch in length; it is entirely covered with a short and close greenish yellow down or nap, and has two or three small black dots near the middle of each wing-cover. Mr. Say discovered it near the southern extremity of Lake Michigan, and states that it is also sometimes found in Pennsylvania. It has been known to inhabit Massachusetts for many years, but hitherto has been rarely seen, until this summer, during which several specimens have been taken in Cambridge, upon the European lindens, from the trunks and branches of which they had just come forth. A knowledge of the habits of this insect might have led to its more frequent discovery. One of the lindens, above named, is a noble and venerable tree, probably above two hundred years old, with a trunk measuring eight feet and five inches in circumference three feet from the ground. A strip of the bark, two feet wide at the bottom, and extending to the top of the trunk, has been destroyed, and the exposed surface of the wood is pierced and grooved with countless numbers of holes, wherein the borers have been bred, and whence swarms of the beetles have issued in past times. Some of the large limbs and a portion of the top of the tree have fallen, apparently in consequence of the ravages of these insects; and it is a matter of surprise that this fine linden should have withstood and outlived the continued attacks of such a host of miners and sappers.

The lindens of Philadelphia have suffered much more severely from these borers. Dr. Paul Swift, in some letters to the writer, states, that "the trees in Washington and Independence Squares were first observed to have been attacked about seven years ago. Within two years it has

been found necessary to cut down forty-seven European lindens in the former Square alone, where there now remain only a few American lindens, and these a good deal eaten. Two rows of these beautiful trees, in front of the state-house and city offices, in Chestnut street, were the ornament and comfort of this broad *pave*; and, though the branches were full of foliage and flowers in their season, the trunks and larger limbs are perforated in many places, and a little winnow of litter, thrown out by the insects, surrounds the foot of each tree in the latter part of summer. One or two stately trees have already fallen a sacrifice, and no person expects that any will be left two years hence. No other kind of tree, except a mountain ash or two, appears to have been attacked by these borers. Many of the beetles were found upon the small branches and leaves on the twenty-eighth day of May, and it is said that they come out as early as the first of the month, and continue to make their way through the bark of the trunk and large branches during the whole of the warm season. They immediately fly into the top of the tree, and there feed upon the epidermis of the tender twigs and the petioles of the leaves, often wholly denuding the latter, and causing the leaves to fall. They deposit their eggs, two or three in a place, upon the trunk and branches, especially about the forks, at their junction, making slight incisions or punctures, for their reception, with their strong jaws. As many as ninety eggs have been taken from a single beetle. The grubs, hatched from these eggs, undermine the bark to the extent of six or eight inches, in sinuous channels, or penetrate the solid wood, an equal distance. It is supposed that three years are required to mature the insect. Various expedients have been tried to arrest their course, but without effect. A stream, thrown into the tops of the trees from the hydrant, is often used with good success to dislodge other insects; but the borer-beetles, when thus disturbed, take wing and hover over the trees till all is quiet, and then alight and go to work again. The trunks and branches of some of the trees have been washed over with various preparations without benefit. Boring the trunk near the ground, and putting in sulphur and other drugs, and plugging, have been tried with as little effect."

This beetle is found, in Massachusetts, only in the month

of June; and, during the present season, mostly between the first and seventeenth, and none after the twentieth day of the month. The grub closely resembles that of other species of Saperda, and particularly the grub of the apple-tree borer, or *Saperda bivittata*. The accompanying figures, 1 and 2, were drawn from specimens sent to the writer by Dr. Swift. The first figure is from a grub of larger size than usual. The second represents the insect in the transition or pupa state, after it has done boring, and has cast off its grub-skin, previously to its final change to a beetle. This pupa was dug out of the trunk of a linden, in Philadelphia, on the twenty-seventh of May. Figure 3 is from a very large and fine beetle, captured in Milton, Massachusetts, more than twenty years ago.

These figures and observations may serve to make the insects better known, and, by directing attention to their ravages, may lead to the discovery of more successful means for arresting them.

T. W. HARRIS.

Cambridge, August 23d, 1844.

ART. V.—*Descriptions of twelve new Seedling varieties of the Pæonia Moutan or Tree Pæony.* By WM. R. PRINCE, Lin. Garden and Nurseries, Flushing, L. I.

AGREEABLY to promise, I transmit you, annexed, the descriptions of the twelve new seedling varieties of the *Pæonia Moutan* papaveræcea, and var. *Banksii*, and *rosea*, the most of which are remarkably splendid. I divided the plants last March, and now have from three to six of each variety. I have many seedlings that have not yet flowered, and the single flowering ones among those which have flowered, I rejected. This class of flowers was a very favorite one with my deceased father, and both he and myself have taken great pains in its extension, and the new catalogue now in press will contain forty-two varieties of the *Moutan* and ninety herbaceous varieties, many of which cost from ten to twenty dollars each for the imported plants. I was fortunate enough to obtain one col-

lection direct from China, brought out by H. Brevoort, Esq., an amateur of Flora.

Yours, very respectfully,

W. M. R. PRINCE.

The following are the names of the twelve varieties referred to above:—

Pæonia Moutan papaveræcea, var. coronata plenissima—Coronet flowered, splendid full double, shaded blush; monstrous size.

Pæonia Moutan papaveræcea, var. expansa plena—Large expanded blush; flat form, with four to five rows of petals.

Pæonia Moutan papaveræcea, var. pallida plenissima—Large double rosy blush.

Pæonia Moutan papaveræcea, var. purpuræscens minor plena—Purplish minor Banksia; full double; centre, crimson, and filled with small petals.

Pæonia Moutan papaveræcea, var. rosæcea plenissima—Double roseate Banksia; full double, protuberant; centre, splendid deep rose, extending near the extremity of many petals; border, pale pink, nearly white.

Pæonia Moutan papaveræcea, var. carnea semiplena—Semidouble blush poppy flowered; blush border, crimson centre.

Pæonia Moutan papaveræcea, var. rosæcea plena—Double roseate poppy flowered; pink border; dark crimson centre; petals veined with purple.

Pæonia Moutan papaveræcea, var. rosea pallida plena—Prince's imperial poppy flowered; pale pink border; crimson centre, very distinct.

Pæonia Moutan papaveræcea, var. nova plena—New, elegant poppy flowered.

Pæonia Moutan papaveræcea, var. rosea carminea plena—Prince's splendid Carmine; double; extra magnificent.

Pæonia Moutan papaveræcea, var. rosæcea purpuræscens mûltiplex—Rose and crimson; pink bordered; purplish crimson centre; semi-double, very distinct.

Pæonia Moutan papaveræcea, var. rosæcea atrorubens plenissima—Unique double bicolor; pink border; splendid crimson centre; full double, very distinct.

W. R. P.

Flushing, L. I., Aug. 6, 1844.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Cultivation of the Camellia.—To those who are admirers of this splendid genus of flowering plants a few remarks on their culture will, I hope, be unobjectionable, especially to those whose collection is limited. In propagating the camellia by cuttings, I have found August to be the best month, as the wood is then well ripened, and they are not found to damp off as if they were taken when the wood is in a younger state, and not too old, as then they are longer in rooting; the cuttings ought to be taken off close to the wood of the previous year, as they are found to emit roots sooner. I in general plant them in No. 48 size pots, placing them close round the rim, afterwards removing them to a cold frame or pit, the soil sandy peat. On a larger scale, they may be planted in deep pans, or in a frame. About March they will be much improved if they can receive the benefit of a little bottom heat, as this will cause them to root sooner. As they begin to root, I plant them singly into large 60 size pots, plunging them again into bottom heat, until autumn, when, if in a fit state, they are removed to the greenhouse. I have found this to answer both in striking double and single varieties, although the single red will generally root soonest. In grafting, I generally use the side-grafting, doing them in the spring, just before they begin to grow, afterwards placing them in a warm frame or pit, keeping them close and shaded, so that the air and sun may not cause them to flag, (the same as in cuttings,) until the graft is fully established, hardening them off gradually, and removing them to the greenhouse, where many of them will flower the following spring. To those who are lovers of novelty, various sorts may be grafted on the same stock, provided the stocks are good, taking those sorts whose growth is nearly alike, and their color the reverse: where there are few sorts and plenty of stocks, budding may be resorted to, doing them during the summer; the future management of them the same as in grafting; let the bud and graft be well united before the top of the stock is taken off, as this often causes a complete failure, even though the scion was doing well previous. A small incision made in a part which is to be taken off, a few days previously, will be found attended with great benefit, as the sap will not be thrown all at once into the graft, and as by that means it invariably causes them to fail in budding and grafting; do it as low down the stock as possible, as they will form dwarfer plants, and will bear heading back better. Those who wish to have large plants in a short time, and having some good clean stocks, may in-arch: this may be done during the summer or autumn, or in the spring; the best of this method is, they may remain in the greenhouse after the in-arching has been performed. In uniting them, take a small slice of bark, about an inch and a half long, with a small piece of wood, off each, placing them as close together as possible, binding them with bass-matting, placing on this some moist clay to exclude the air, and, if wanted, a little moss, that will keep

the clay moist. In about two months, if the plants have been in good growing state, they may be separated, observing the same caution in separating the stock from the scion as in budding, to hinder an overflow of sap. Afterwards they ought to be rebound again with some fresh matting, to hinder the part from swelling out; the whole may, from time to time, be removed. I have also layered the old single variety for stocks, but as this is only done in nurseries, the method may be useless to many; the same also with seeds,—but as some few may study to have new sorts, they ought to be sown as soon as ripe in pots, placing them in a cold frame, where they may remain two years before they come up, when they may be treated as cuttings, when, if they turn out, good flowers may be grown on; if not, will serve for in-arching over. The general management of large plants, or those that have been worked on, is, just before they begin to start into growth I re-pot them, the large ones in fibrous loam and sand, and the small ones in peat and sand, as I think the plant runs into more shoots and roots in peat than they do in loam, where I think they grow stouter and form flower buds better; for those I wish to form showy plants I seldom re-pot oftener than once in two years. I have potted them in the autumn and found it answer very well; but care must be taken they are not kept too warm and moist, or else they will form a second growth, which hinders them from blooming, and risks the shoots getting damp. During the period of their flowering, I keep them cool to preserve the bloom longer; but as soon as that is over, I start them into as rapid growth as possible, raising the heat of the house gradually until it is 75 or 80 degrees during the day, and rather lower by night, keeping the air in the house as humid as possible by syringing the leaves, and keeping the floor of the house well saturated with water. This answers a two-fold purpose, causes evaporation and lays the dust, so that the leaves may not get covered with it, as the camellia likes to be kept clean; and, even thus, handsome in the dullest months of winter, whether in flower or not, with their dark green leaves. Keeping them at regular distances that they may receive all the benefit of the air and light, and frequently turning them so that they may have all the shoots regular, without being drawn all one way, I keep up this heat until the flower buds are formed and well set, when I gradually lower it, and diminish the supply of water, neither of them too fast, as this often causes the buds to fall off. (*Gardeners' Gazette*, 1843, p. 426.)

Soot.—The most stimulating manure that ever came under my own observation for parsley is soot. It should be sown thinly all over it in showery or rainy weather, in order that it may be washed in. If sown on a dry day, I find the principal stimulating properties pass off at night by the dampness of dew and mist, and are thus lost in the atmosphere. I prefer sowing the soot very thin, twice or three times, to sowing it thick at once. By the above treatment I have parsley of the most luxuriant healthy growth; the leaves or branches very large, of the most beautiful dark green and curliness; handsome for garnishing and good for all purposes. Soot is not only a wonderful stimulating manure, applied to plants with caution and judgment when they are sufficiently strong, but it has also another good quality, that of killing and expelling any kind of vermin with which the plant should happen to be infested. Likewise, if the canker make its appearance, nothing that I could ever find will so completely eradicate it as soot and slacked lime, mixed together in equal

quantities, and sown over the plants. In a few days they will be completely clear of it, very much altered in color, and improved in growth. (*Gard. Gaz.* 1843, p. 440.)

Charcoal.—Charcoal having been apparently successfully employed in reference to plants and their food, may minister, I conceive, to vegetation in a three-fold character, though certainly *per se* altogether insoluble, and inert considered in relation to the assimilated food of plants. 1. Charcoal is a powerful antiseptic, and may therefore correct the vitiated or septic materials of a soil. 2. It is absorbent and retentive of moisture, and the gases; and the many volumes of ammoniacal and hydrochloric gases it will absorb is quite remarkable. And 3dly, it is quite possible that it may yield, in continuity, successive supplies of even carbonic acid gas, to minister to vegetation; as from some recent experiments it would appear that nascent hydrogen was developed by the transit of steam through charcoal, the latter at the common temperature; which must have been developed by the decomposition of the aqueous vapors, and the consequent combination of the oxygen, which would form, in chemical union with the carbon, carbonic acid gas. This aspect of the relations of charcoal to vegetation I believe is novel; at any rate, I have not before met with it. (*Gard. Gaz.* 1843, p. 441.)

To preserve late Grapes from mould or damping.—Instead of hanging the bunch by the stalk or shoulder, string the bunch by two of the lowest berries at the bottom, and inverted in a topsy-turvy position. I have kept grapes longer and better this way than any other way I ever tried. You will see at once, when the bunch is inverted and hung up, that the berries do not touch each other, as they would do by being tied and hung up in the usual way. (*Gard. Gaz.* 1844, p. 9.)

On Roses.—Closely associated with the love of roses is the very natural desire to possess them in their greatest beauty; and much of this necessarily depends, not only on the skill and attention with which they may be tended, but also, to an extent seldom appreciated, on the position or situation in which they are grown. The proper station for this, the queen of flowers, in our gardens has not yet met the attention we think it deserves. The best situation for a rosary, if choice can be made, is on a gentle declivity, facing to the southeast; an easy slope is to be preferred, because the plants receive more light, and are seen to greater advantage than when growing on a level surface, and the compartment itself looks larger; and also because the superfluous moisture will pass off quickly in such situations, for, though roses delight in a rich retentive soil, they receive much injury, in common with all plants, from stagnant aqueous matter in the soil.

In the disposition of the plants, the taste of the designer, aided by local circumstances, must be the chief guide: a few general rules, however, may assist the most refined; thus, for instance, the superiority of an arrangement would be self-evident in which the several families or classes were in juxtaposition, allowing the hybrids or doubtful kinds to approach the nearest to their affinities, so that if a division were occupied with the varieties of China roses, the next should contain their hybrids, followed by Perpetuals or Bourbons, according to the class the hybrids partake of: the arrangement in the beds requires but little explanation, being only to place the more vigorous kinds towards the centre, and to include as great a variety of colors as possible. Standard roses are fine objects when

planted singly, either in the centre of the beds or on the turf, though the number of them should be limited, as too many take from the appearance of the whole, by excluding from view the dwarf kinds in their rear, and by imparting an air of confusion where every thing should be as regular and neat as art can make it; a grove of them, however, may be allowed as an appropriate back-ground.

We are entirely opposed to the introduction of what is called "natural scenery" in rosaries: thickets and jungles of roses may be read of with pleasure, but they present a very untidy appearance in a garden, and we should therefore endeavor to possess the whole with a classic and chaste regularity, as being more in consonance with the plants themselves, so entirely the result of art and with the general idea of a collection. This principle excludes the misshapen masses of stones, shells, &c., which, dignified with the title of "rockwork," we frequently find occupying the centre beds of rosaries, than which nothing can be more opposed to a correct taste; in their places we would recommend the erection of a light, elegantly-proportioned building in the form of a temple, which, when covered with roses, would be in excellent keeping, and need not be a whit more expensive than are these misplaced piles of rockwork.

The boundaries of places set apart for the culture of roses, should be distinctly marked in a manner to be plainly seen; at the same time, to agree with the interior, wearing a light airy appearance, for this purpose, perhaps there is nothing more suitable than the roses themselves: a very pretty boundary line may be formed by placing short posts ten feet apart, with a chain fastened to the top of each, on which the climbing kinds may be trained in the manner of a festoon; these fences have a beautiful effect, realizing the pastoral idea of a "garland of roses." For the edgings of the beds we would also employ roses, the pretty little miniature or fairy roses being remarkably well suited, from their dwarf and very neat habit; they require some protection through the winter, which may be given by pruning close back in the autumn, and covering the remaining part with fern or dry leaves.

A rosary thus formed and arranged would possess a pleasing variation, while an air of harmony would pervade the whole. (*Florist's Journal*.)

On the cultivation of Grapes in pots.—The first impulse given to fruiting vines in pots was by a paper in the "Horticultural Register for 1831," by Mr. G. Stafford, then gardener at Willersly Castle, in Derbyshire, and which, at the time, elicited much surprise. Through him I became practically acquainted with the system he followed; and since then, having been more or less engaged annually in preparing and fruiting a considerable number of vines in pots, I can safely bear witness to the successful results that will follow the practice detailed below.

After fixing on the kinds of vines you intend growing, the first thing to be done is to procure eyes (or buds) of the required kinds, from some known good bearing vines, taking care to have the wood perfectly hard and ripe, with the eyes prominent and round. If the vines are intended to be fruited the next season, the eyes should be potted in 32-pots, placing them one inch below the surface, and using soil of a light turfy nature, or, if stiff, adding a portion of half-decayed leaves; only one eye must be planted in each pot. This should be done early in February, and, when finished, the pots containing the eyes may be plunged in any pit or frame that may be at work, where a bottom heat can be maintained of 90°, or

thereabouts. They may remain there until growth has commenced, when sun-light being indispensable to the welfare of the young plants, they should be placed (if they were not previously) as near the glass as possible, sinking the pots as the plants reach the glass, but still keeping a steady bottom-heat, and supplying them with air every day, if possible. It is supposed that the heat of the frame or pit varies from 60° to 90° in sunshine. When the pots are filled with roots, which will be some time in April, they may be transferred at once into their fruiting-pots, which should be 2s or 4s (14 or 16 inches) according to the strength you wish your vines to attain; bearing in mind that those in the smaller size will ripen their wood earlier, and consequently be available for forcing at an earlier period than the others. This operation will bring us to a consideration of the description of soil or compost most suitable for the vine. When growing naturally out of doors the vine will flourish in a variety of different soils and composts; but when its roots are confined in so small a space as a pot, we must place within the action of its roots that kind of soil from which it can most readily assimilate the elements which constitute its food. After trying nearly all the different composts recommended by the numerous authors on the vine, I am convinced that the more simple the constituents of the soil are for it, or any other kind of pot-plant the more successful will be the results. The compost I use is two thirds turfy loam, from a down having a chalky bottom, and one third decomposed night soil. Should the loam be strong, I use the same proportion of half-rotten horse droppings. The turves in the loam should only be half decayed, and it should be used as rough as possible.

After potting, the plants should be placed in some house or pit where a temperature from 60° to 80° , or 85° , is maintained; they should also be so arranged that the shoots, as they advance, can be trained immediately under the glass, and be exposed as much as possible to the light. Where there is only a vinery they may be trained between the permanent vines, or in any other place where the cultivator can make room for them. As the shoots advance, train them carefully, and stop the laterals as they appear. When first potted, the plants will want but little water, but it must be gradually increased as the pots become filled with roots; they will then require it regularly during their growth, and manure water may occasionally be given, although the quantity they demand the first season is small in comparison to what they require afterwards. The most suitable length of cane for pots is from four to six feet, but if, from any peculiarity in the house in which they are to be fruited, a longer length may be required, they should be left accordingly, as the vine will grow strong enough for fruiting, 8 or even 10 feet long. After it has grown a foot more than the length required the next season, it should be stopped; three or four of the upper laterals, however, may be allowed to grow at a few joints, to prevent the topmost eyes breaking. Manure water may now be applied to cause the buds to swell, and care must be taken to preserve the principal leaves, as they are now performing a most important part in regard to the crop next season. When the wood appears to be turning brown, or ripening, water should only be applied to prevent the vines flagging, the laterals should be taken off, and every means should be employed to ripen the wood perfectly. Indeed, if it is not convenient to allow a large admission of air when they are growing, it would benefit them much by removing them to a cool house, where they would have the

benefit of more air and a lower temperature at night. By the beginning of September, if the former directions have been followed, the vines will be ripe enough to place out of doors. The north side of a wall is the best place, and the pots should be laid on their sides, and every means taken to throw the plants into a state of rest; the cultivator will thus find himself in possession of vines which, for strength and vigorous habits, may justly be mistaken for older plants.

It will be seen, then, that the principles acted on above are, selecting properly matured wood for cuttings—inserting only one eye in each pot to prevent any check to the plant in repotting—placing them at once in the pot in which they are to fruit—exposing them during their growth to the greatest possible amount of light you can give them, taking especial care to have the wood perfectly ripe, and inducing an early state of repose. But if the above mode of obtaining fruiting vines for one year should be thought too troublesome, from the plants requiring bottom heat during their first stage, the eyes may be planted singly, as before, in 48-pots, (No. 2,) and set in any house or pit where there is a little heat; they will be longer, however, by this method in developing their roots, and may not want shifting into larger pots before May or June—when the plants may be shifted into 24s, (No. 4) in which they may remain through the season, in any house or pit in which room can be found for them, paying attention to watering, tying up, &c. They may be stopped when two or three feet high, and when the wood is fully ripened, removed out of the house and plunged in any material out of doors that is a non-conductor of heat. In February or March cut these plants down to two or three eyes, shake them entirely out of their pots, and place them in similar sized pots to fruit in as the former ones, taking care to spread their roots (in potting) regularly through the soil, that when growth commences, each spongelet may be in immediate contact with food; this is a much better practice than placing them in a pot without disturbing the ball, as is often done. The same routine of management must be followed with these through the season, as recommended for the others. From the larger amount of organizable matter the vine possesses by this mode of treatment, they will generally be found stronger than those raised the same year, and they possess the advantage of ripening their wood earlier in the summer. It will depend on the means the cultivator has at his disposal which plan he follows.

The next consideration is the time when you wish your grapes to ripen; this being ascertained, it is easily known when forcing ought to commence. It may be stated that vines under the above-mentioned treatment will be ready for forcing early in November, and consequently will ripen their crop by the end of March. As the principal use of vines in pots here are kept to occupy the houses (where vines are planted on the outside,) during the period that they are inactive, say from November to May, those in pots are generally forwarded in their first stage in any pit or house whose temperature may happen to suit them, and, finally, when the wood of the permanent vines is sufficiently ripened to allow of their being placed outside, the pots are taken in and arranged in their places on shelves put up for the purpose; by these means the houses are of far more use than if they remained empty nearly half the year. However, the precise mode in which the vines are to be fruited depends on the kind of houses the cultivator has at his command; a flued pit answers well;

but the best description of houses is that which admits the rays of the sun to pass through it in the winter at as near right angles as can be. Such a house, admitting considerably more light during the winter months, is much more suitable for such a plant as the vine than low flat houses. Whatever the house is, if not perfectly ready for the vines when you wish to begin forcing, get them placed in a dung frame where you can give them a moist heat of 55° ; this will cause their buds to swell regularly, and prepare them for their removal to the fruiting-house, when ready, without losing time. Previous to losing their leaves in the autumn, they may, if thought advisable, be disbudded on Roberts' system, leaving a few more buds than you want bunches; but one objection to this system is, that if by any accident through the winter the bud should get injured, it leaves a blank which, had the next buds remained, might easily have been supplied.

The number of bunches that may be left on each vine will depend on the soil, size of the pot, &c. When the vines are strong, and No. 2 pots are used, I usually leave six or seven bunches on the Hamburgh, the same on the Sweetwater, and one or two more on the Muscadine. If the vines are not so strong, four or five bunches on the Hamburgh will be sufficient. It is much better to have rather fewer bunches and the berries fine and well colored, than ill-colored puny bunches, which always is the case when too many are left on the vine. The vines from being placed in the house, presuming their buds to be swelled, must have their temperature raised from 55° fire heat to 65° when in bloom, and it will be better if this heat by night is never exceeded; of course, on all days when there is no likelihood of sun heat, the heat of the house should be raised 5° or 10° by artificial means. Air should be admitted by some means or other *every day*, early; this is of consequence, or the leaves are apt to get damp and their texture being so extremely thin, when the hot sun and drying winds of March act on the foliage, they often burn and shrivel, and consequently are unable to swell off the fruit or give it color. During all the time the vines are in a fruiting state, manure water in some shape or other must be frequently given. Dung water is made of various ingredients, but in whatever way it is made it ought to ferment before using, and should be applied in a pure state and at a temperature equal, at least, to that of the house. The draining from farm-yards is always good and safe. I use manure water, made by pouring nearly boiling water on equal parts of sheep or deer dung, and fresh horse-droppings; this is fined by a lump of fresh lime, is drawn off clear, and when used is diluted with equal parts of rain-water. A very weak solution of guano is beneficial, but great caution is required in using it. It is astonishing, during the period of active growth, what an immense quantity of dung water vines will take. I have frequently watered them twice a day with it, and this I prefer to placing bottom-pans or feeders under the pots, as is often done. If the dung water is properly cleared and diluted, it may be given twice for fresh water once; when the grapes are fully swelled, and beginning to color, water must be more sparingly applied, using clean water only. The flavor of grapes is often spoiled by being over-watered, when ripening their fruit, by the proper proportion of carbon and water, which constitutes the saccharine matter in grapes, being destroyed, and water formed in excess.

When the fruit is ripe, if the house is wanted for other purposes, the

plants may be removed to any dry house or room, where the grapes will keep until wanted.

The varieties I have found best for early forcing are, the Hamburgh, Dutch Sweetwater, and Muscadine. The small-berried varieties, as the Esperione and others, are hardly worth growing, compared with the above. Muscats, and all the delicate sorts, as the Frontignan, answer admirably later in the season, and thus the amateur, and those who possess but a small extent of glass, may cultivate all the varieties of grapes procurable in British nurseries, at but a trifling additional expense.

Although I have given directions how to render vines fruitful in one season, yet, when a stock is once acquired, they may be kept for years in a fruitful state by resting them at alternate seasons. Thus those plants which have fruited in spring may be turned out of their pots into a border, where they will require no farther trouble until the following spring, when they may be taken up, their roots reduced in some degree, and placed in pots again, planting them deeper than they previously were; they may then have the same management as young plants, and will make very strong canes in the course of the summer. I have vines in pots now in fruit that have borne three or four previous crops. Where the cultivator prefers boxes to pots, they may be used, from 14 to 16 inches square, which will be quite large enough; they can be packed on shelves more closely together than pots, and are more handy to move about.

By the above process, grapes may be procured by the end of March and April, without interfering with those planted outside, and I would particularly recommend its adoption by amateurs possessing small establishments, as affording them a means of prolonging their grape season; besides being productive of gratification and pleasure. (*Gardeners' Chronicle*, 1844, p. 195, 212, 228.)

Whitney's Composition.—To the many notices of the successful application to the purposes of horticulture of Mr. G. Whitney's (of Shrewsbury) Transparent Composition, which have appeared in your columns, permit me to contribute the following, which, I doubt not, will be perused by your numerous subscribers and readers with similar gratification which resulted to myself from its examination. During the last few weeks, Mr. Whitney has erected in his garden a house 28 feet long by 12 feet wide and 15 feet high, covered entirely with muslin prepared with his Transparent Composition. Internally the house is divided into a stove-pit, heated by a hot-water apparatus; and a greenhouse or conservatory. In the stove, a vine (Black Hamburgh) has been introduced for experiment, which bids fair, in a very few days, to be clothed with healthy and luxuriant foliage. Cucumber plants inserted there are thriving well, and never flagged or drooped in the least on their removal, although not shaded. In the greenhouse compartment, pæonies, fuchsias and other plants are healthily putting forth strong and vigorous shoots. Indeed, the whole promises speedily to be a scene of great beauty and luxuriant vegetation. Nor can it fail to be so, the light being so clear, abundant, and yet subdued, being very similar to that reflected from a white cloud, quite unaccompanied with any glare, and admirably and equally diffused throughout every portion of the house by the singularly radiant and repeated reflections from the white coverings, walls, and surfaces. The temperature in the stove, which is usually kept at 80°, is well and uniformly preserved, the air-tight nature of the whole apparatus not suffering

it to fall more than a very few degrees even during the late cold and severe frosty nights, although very little fire has been kept up. In addition to all this, economy speaks loudly, the cost of the prepared muslin not having exceeded one fifteenth that of glass for an erection of similar dimensions. I trust to hear that so successful an example has been followed throughout the kingdom, and that the time is near at hand when every one devoted to gardening in any department, however humble his means, will be found gratifying his taste in the possession of greenhouses, &c. similarly constructed, with this useful composition, for the ingenious invention of which the cordial thanks of high and low are abundantly due to Mr. Whitney. (*Gard. Chron.* 1844, p. 196.)

Grafting Pelargoniums.—In a late number is an account of M. de Méline, of the Botanic Garden at Dijon, having grafted numerous varieties of the Pelargonium on the same plant. There are very few plants that can be grafted with greater success than Pelargoniums, if the stock and scion be selected about the same diameter, and if the wood is neither too old nor too young and succulent. For the last ten years I have occasionally grafted some in August or September, using pretty well ripened wood of the same year's growth. I shall only detail one instance:—In August of 1842, I selected a plant of the Beauty of Ware, which had a single stem about a foot high, where it divided into several branches; these were cut back to about three inches long, and in ten days afterwards they were grafted with eight different sorts. They were done after the manner of whip-grafting, and tied with bast and clayed, over which was put a little moss, to keep the clay from cracking, and to preserve the whole in a moist state, being occasionally sprinkled with water. The plant was placed in a shadowy part of a vinery, and in a month every one of the grafts had begun to grow. The plant was then put into a cold frame for a few days; it was then taken out of the pot, and all the earth being shaken from the roots, it was repotted in fresh soil, and received the same treatment as the other pelargoniums. Two of the grafts were broken off by an accident, the other six flowered well in June and July. In August the branches were again cut back, and ten more varieties were grafted on it, including Smith's Superb Scarlet, Carnation Scarlet, Frogmore Scarlet, and the old variegated-leaved Scarlet; the last two failed along with two of the other sorts. This, perhaps, was owing to the plant having been placed in a shady place out of doors, immediately after it was grafted, where it remained until October, when it was placed in the conservatory. In December there were thirteen varieties growing on the same plant, which will be a novelty when in flower, having so many distinct colors, Smith's Superb Scarlet forming the centre. I have observed that weak growing sorts grow stronger when grafted on robust kinds than on their own roots. (*Gard. Chron.* 1844, p. 213.)

Potter's Liquid Guano.—I cannot speak of this in any adequate terms of praise. I tried its powers on Hyacinths, Narcissus, Crocuses, Snowdrops, &c., both in pots and in glasses, and I may with truth say that the effect was magical. Not only were my flowers the finest, the healthiest, and the most luxuriant that I ever beheld, but they preserved their beauty nearly double their usual time, and gave forth a fragrance of surpassing sweetness. (*Gard. Chron.* 1844, p. 261.)

Syrian Fruits.—Our readers will learn with pleasure that John Barker, Esq., lately H. M.'s Consul at Aleppo, after a residence of more than 40

years in the East, has returned to this country with trees of many new and valuable fruits. Among them are several Peaches, Nectarines, and Apricots with sweet kernels. These, when grown in Syria side by side with the finest of the varieties known in Europe, are said to have proved as superior to the latter as they are to the worst sorts of which we have any knowledge. Mr. Barker also possesses a White Mulberry from Armenia, so sweet that its fruit is dried like raisins, and so juicy that when pressed it produces the syrup in which the delicious butter of Armenia is brought to Aleppo. We shall watch with great interest the period when these fruit trees yield their first crop in this country. (*Gard. Chron.* 1844, p. 263.)

Asparagus.—It appears to be a general opinion that new plantations of Asparagus, to have a reasonable chance of success, must be made early in the spring,—not later than the end of March. I have reason to think that nothing is lost, if there is not a positive advantage gained, by deferring it to a much later period. In the spring of 1842, having occasion to make a new plantation of Asparagus, the ground was prepared by trenching it to the depth of two feet, and raising the whole surface one foot, with turfy loam, burnt clay, farm-yard manure and the refuse of charcoal pits. The beds were then formed three feet and a half wide, with the same space between them, allowing for two rows of plants on each bed. The plants were got up and planted with the greatest care about the middle of March; but, as I have frequently seen in other gardens, a great many of the roots perished. Now, there is nothing that I dislike more to see than gaps in a bed of vegetables of any kind; and in the case of so valuable a vegetable as Asparagus, it is not only an eye-sore, but also a serious loss. It was, however, June before I could take any decided step to remedy the evil. I then procured several thousands of two-year-old plants, took up those that had not died, and, beginning entirely anew, had the ground dug over again, and re-planted with the fresh plants; and although they had tops eight or ten inches high, scarcely one failed. Many of the tops, indeed, withered and turned brown, but were in all cases succeeded by a fresh growth. The plants were taken up carefully, the roots were immediately covered with moss, and were kept moist until the moment before planting. In the course of the season the beds received several copious waterings with salt water. In the spring of 1843, before the shoots made their appearance, the beds were sprinkled with salt sufficiently thick to make them appear white, and the waterings with salt water were repeated several times through the summer season, and by September the shoots were five feet high. Since the 15th of this month, (April, 1844,) we have gathered daily a good supply of fine Asparagus from these beds. I should mention, that when the beds were planted the second time, the plants which were taken out (the remnant of the first planting,) were put into two beds by themselves, where they grew very well, but not so strong as the others. It may appear that Asparagus planted in March, and having the whole season to grow in, must have a better chance of doing well than that which is transplanted in the middle of its growth; but I conceive that whatever advantages may arise from early planting, are counterbalanced by the ground being cold and wet, and the roots of the plants being so tender that many of them perish before the vegetative principle is excited; while at a later period the case is different, as the juices of the plant are in motion at the time, and the

soil being in a warm and genial state, is prepared to encourage immediate growth. I planted six more beds last year, also in the beginning of June, which, under the same treatment as the others, seem likely to do as well. (*Gard. Chron.* 1844, p. 276.)

The Hollyhock.—The way I cultivate them is from seed, cuttings and offsets; I have my gardener sow the seeds in drills twelve inches apart, and half an inch deep, in a well prepared rich soil, in June and July, and keep them clear from weeds; in November I plant them where they are to flower.

From Cuttings of the Stalks.—Cut in pieces twelve inches long; place them six inches deep in the soil as before recommended; they will soon take root.

The Offsets from the parent plant, broken off and pared clean with a knife, will also, if placed in the soil, soon make roots. My taste, in the disposing of the plants, is to place them in alternate lines, with purple and white Fox Glove, varying the colors both of the Fox Glove and Hollyhock. I also plant them in evergreen shrubberies, and when they raise their graceful and bold flower stems above the latter, they give me great satisfaction. (*Gard. Gazette.*)

Grafting Fuchsias.—Your readers may exercise their taste in combining very opposite groups of blossoms, if they take the present opportunity of grafting or inarching the strong young growing shoots of the Fuchsia. For this purpose a warm moist atmosphere is necessary. I find the readiest mode is to select two plants, and within three inches of the heads to cut away half the thickness of the shoots, extending about $1\frac{1}{2}$ inch; the two mutilated heads are firmly bound with soft bast, and the intended scion is then nearly severed just below the junction; within three days the scion may be cut clean through, and no check to its growth will be perceived; the head of the stock is now removed, the scion takes the lead, surrounded by laterals of the other variety. The best stocks are the strong growing kinds, as Fulgens, Cormackii, &c.; this latter, in combination with *Couspicua arborea*, is very effective. (*Gard. Chron.* 1844, p. 295.)

Early Peas.—In these improving times, when every man is expected to render his assistance in giving his mite of information, I beg to state the result of early peas as they have proved with me this season, hoping that it may be the means of eliciting from others the result of their experience, so that no one may be tempted in any way to be biassed by what I have myself proved to my satisfaction. In last November, having a south border of late cauliflowers cleared off, and put into a place of protection for winter purposes, the border was trenched and formed into banks, which were left rough and open to sweeten for early peas; having great faith in the Early Warwick pea for some years, a portion of the banks was sown on the 14th of December; the peas were above ground on the 28th; in bloom, April 6th; stopped, that is, had their tops pinched off, on the 12th; and were gathered from, on May 18th. The height was 4 feet 6 inches; the crop was heavy, and the pods well filled. They were mulched soon after the dry weather set in, which was the means of their continuing to produce good peas for about thirty days. The banks were five feet apart. Cormack's Prince Albert was sown on banks on the same border on the 4th of January, 1844; they were up on the 14th; in bloom on the 1st April; and were gathered entirely on May 14th. I could have gathered

a small dish on the 10th of May from them. This is a very prolific and fine-flavored pea. On the same day, and on the same border, another portion of the Warwick was sown. These, although having exactly the same treatment as the two above sowings, with regard to banks, hoeings, earthing, sheltering, sticking and watering, stopping or topping, &c., no favor being shown either to one or the other, were in bloom on the 13th of April, and gathered on the 28th of May. Although thus fairly treated, my old favorite pea was fourteen days behind the Albert. About thirteen years ago, I compared the Warwick, on a long south border, with several others; of these early peas, the Warwick proving itself then superior to the others, retained my favor ever since. Next year, should the Albert prove the same as it has done this year, I can only call the Warwick a pea for a second crop. Last year I sowed the two above peas on the same day, under the same preparation and management; the winter, however, was so mild that they got too "gay," and were very much cut and crippled in the spring, but enough was left to fully prove the superior earliness of the Albert over the Warwick that time. (*Gard. Chron.* 1844, p. 476.)

Grape Vines.—Last season I renewed the vines in one of my vineries, and in doing this I adopted a plan which I have not seen practised elsewhere. A hole was made in the parapet wall under each sash, and a rod of the previous season's growth was passed out at one hole and in at another. The border was prepared as follows:—About a foot of the surface of the old border was removed, a small quantity of ashes was thrown in for drainage, and the bottom was then flagged with stones to the width of two feet from the wall; at the outside of this, a barrier of flags was put up, and the space between this and the wall was divided into as many compartments as there were plants (or layers) in the house; these compartments were then filled in to the depth of 18 inches with prepared soil, the layers being covered about 8 inches; the border was then mulched over, and this finished the operation for the first two years. The two feet of soil I consider sufficient for the first two years; on the third, (*i. e.* next season,) I shall remove the barrier, and, with a fork, take off part of the soil, to enable me to prune, examine, and arrange the roots, as may appear necessary; having done this, I shall place the barrier about a foot and a half further out, and fill the space up with fresh soil, in the same way as at first; this operation I intend to repeat annually. The advantages are—1st. I will not lose the use of the old vines until the young ones are quite ready to take their place; 2d. I divide the labor of making the border, which is usually done in one year, over a number of years; 3d. I have a perfect command of the roots of my vines, and can manage them with as much regularity as I can do the branches; 4th. Should it become necessary from any cause to remove an old vine, or introduce a new one, it can be done without in the slightest degree interfering with its neighbor; and 5th. They have a fresh supply of soil to produce every crop, and should I wish to feed with liquid manure, I know exactly where to apply it effectually. This system might also be applied with advantage to wall trees. It might be improved upon, in the case of forming a new house for early forcing, by leaving the compartments larger, and making a trench for fermenting materials, with pigeon-holed brick work between the compartments, which would enable a temperature to be kept at the roots in some degree corresponding to that in the inside of the

house. The connection between the layers and the old vines was cut off a considerable time before the growing season was over, and the former were so well rooted that they never hung a leaf. They are now growing beautifully, and making as good wood as I could wish. (*Gard. Chron.* 1844, p. 477.)

ART. II. *Domestic Notices.*

American Institute of the City of New York.—The seventeenth Annual Fair of the American Institute of the City of New York will be held at Niblo's Garden, commencing Monday, October 7th, 1844. It is expected that there will be an immense gathering, greatly exceeding the number at any previous Fair of the Institute. It will be noticed, that, during the Fair, a National Convention of Farmers and Gardeners will take place, and addresses from many distinguished gentlemen are expected, and evening lectures will also be delivered as usual. From the address of the managers, we copy the following programme:

First Week of the Exhibition.

Monday, Oct. 7th, at 12 o'clock, M., the Garden will be opened to the public. At half past 7 o'clock, P. M., an address will be delivered in the great Saloon by a distinguished citizen. The evening will close by a splendid display of fireworks.

Tuesday, Oct. 8th.—The exhibition will commence at 9 o'clock, A. M., and close at 10, P. M., which will be the hours of opening and closing during the Fair. A short address at half past 7 o'clock, P. M.

Wednesday, Oct. 9th.—The second annual convention of Silk Culturists and Manufacturers will be held at the Repository of the American Institute, in the Park, at half past 10 o'clock, A. M. An address on Silk will be delivered in Niblo's Saloon, at half past 7 o'clock, P. M.

Thursday, Oct. 10th.—Silk convention continued.

Friday, Oct. 11th.—A National Convention of Farmers and Gardeners will be held at the Repository of the Institute, in the Park, at half past 10 o'clock, A. M. An address on Agriculture at half past 7 o'clock, P. M.

Saturday, Oct. 12th.—Convention of Farmers and Gardeners continued. Address in Niblo's Saloon at half past 7 o'clock, P. M. Fireworks at half past 9 o'clock.

Second Week of the Exhibition—Cattle Show at Vauxhall Garden, &c.

Monday, Oct. 14th.—List of horses, cattle and other live stock must be in possession of the managers at Vauxhall Garden, to insure their being placed on the catalogue. If previously forwarded to the Corresponding Secretary of the Institute they will be attended to. Pedigrees, signed by owners, required.

Tuesday, Oct. 15th.—Making catalogue of cattle, &c. Also, ninth annual Ploughing Match and testing of ploughs, in the vicinity of New York. An address will be delivered in the field.

Wednesday, Oct. 16th.—The exhibition of horses, cattle, &c. will open at Vauxhall Garden. Cattle must be on the ground by 9 o'clock, A. M.

Thursday, Oct. 17th.—Last day of cattle exhibition. Address on Agriculture, in Niblo's Saloon, at half past 7 o'clock, P. M.

Friday, Oct. 18th.—Sale of cattle and other live stock at half past 9 o'clock, A. M. Anniversary address by the Hon. A. H. H. Stuart, of Virginia, at half past 7 o'clock, P. M.

Horticultural Exhibition.—The committee would again earnestly solicit the friends of agriculture, horticulture, and of rural economy, to participate with the managers of the American Institute in the promotion of American interests, by an exhibition of the fruits of their industry and skill at their seventeenth Annual Show, next October.

A spacious room will be provided for the reception of flowers, fruits, vegetables, agricultural and dairy productions, garden implements, ornaments, paintings, and such other articles in connection with the several branches, as may be forwarded for exhibition or competition.

The managers have been again induced to offer agricultural and horticultural books as premiums for superior specimens of garden and field productions, because they consider mental acquirements the most enduring memorials; and as a beautifully embellished diploma will accompany each volume, it is presumed that competitors will prefer them to other premiums.

As it is expected, from the lateness of the season in which the show is unavoidably held, that there will be a deficiency of some kinds of garden products for which premiums are offered, the committee are authorized to announce, that, although the managers feel at liberty to withhold premiums when the articles exhibited are deemed inferior in their kinds by the judges, they have nevertheless determined to award all the book premiums offered, should sufficient articles be found to merit such premiums, and they have resolved further, to give discretionary premiums for extra supplies of flowers, or such other articles in the horticultural room as may be deemed by the judges as entitled to special distinction.

All articles intended to be exhibited, should be delivered as early as possible on Monday, the 7th of October, in order to have them properly arranged by 9 o'clock on Tuesday morning, at which time the room will be opened to the public.

Cultivators of flowers are respectfully invited to furnish fresh supplies on the morning of each day, which will be duly appreciated, and recorded on the annals of the Institute.

Valuable American Seedlings of Fruit and Culinary Vegetables will command the attention of the managers. Also, the exhibition of American Madder, Woad and Indigo, with their modes of culture. Also, American water-rotted and manufactured Hemp.

For the purpose of examining standing crops in fields, orchards, vineyards, gardens, &c., a Travelling Committee of the Fair will be appointed, who will make examinations within convenient distances, and report. Seasonable notices should be left with the Corresponding Secretary of the Institute, by those desirous of being visited.

A cordial invitation is hereby respectfully extended to every friend of industry and improvement in the United States—to the sages, patriots and statesmen of every State, that each and all may come and participate, and swell the sublime gathering, and make it what it should be, the grand AMERICAN Jubilee of Industry and the Arts.

Repository of the American Institute, New York, July, 1844.

Seedling Plum.—I send you for exhibition a few plums, taken from a seedling tree in the garden of Reuben Langdon, Esq. of this city, and called "Langdon's Seedling." It appears to be a valuable variety; and the fruit which I now send you is the last upon the tree, and by no means as large as the average. I also send you a few scions from the same tree.
Very respectfully, John A. Tainter, Hartford, Aug. 30.

We received the specimens of seedling plums safely, but not in season to exhibit them at the rooms of the Horticultural Society on the 31st. They are certainly a very handsome fruit, very large and of good flavor, much better than the majority of blue plums, and worthy of cultivation.
P. B. H. Jr.

Seedling Chrysanthemums and Cactæ.—I have raised a number of chrysanthemums from seed, and had some forty or fifty plants in flower last fall, of various colors and forms, some good and some indifferent, but none very superior. I have likewise, after many unsuccessful attempts, this year succeeded in impregnating the May fly cactus and the Aurantiacum with the pollen of the Night-blooming cereus, one bud on each plant. They are now swelling finely, and I hope to raise something extra from these seeds.—*Yours, &c. J. B. Garber, Columbia, Pa., July, 1844.*

Hovey's Seedling Strawberry.—There are many fine qualities about this variety which recommend it for general cultivation. The stem is tall and stiff, raising its trusses of large fruit above its luxuriant foliage, and it is also an abundant bearer. This variety has put in the back ground every other exhibited in our Horticultural rooms, this or any previous season. The berries are very large and richly colored, and if it has not so exquisite a flavor as some of the newly imported or other fancy sorts, it will require an experienced connoisseur to detect any essential inferiority.—*(N. E. Farmer.)*

Grapes.—We have been favored, by the politeness of J. S. Skinner, Esq., with specimens of grapes grown in the garden of Mrs. George Law, of Baltimore. The vine, from which they were gathered, was brought from Madeira, and now flourishes and bears profusely in the open air, exposed to the weather at all seasons. The specimens were fully ripe and excellent; in appearance and taste they very much resembled the Catawba, possessing the same musky flavor which is so agreeable in that variety. We are not aware that it ripens earlier in Baltimore than the Catawba, and if not, we should be strongly inclined to suspect they were identical.—*P. B. H. Jr., Ed. pro tem.*

The Queen's County Horticultural Society held an exhibition of Fruits and Flowers, at Flushing, L. I., on the evening of the 14th of August, which was numerously attended by strangers and visitors. Among the articles presented for exhibition, was a plant of *Gloriosa superba*, in flower, and *Achimenes longiflora*, *rosea*, *coccinea*, and *grandiflora*, from the garden of T. R. Valk. Also, a specimen of the Baltimore White Core Watermelon, from the garden of G. G. Howland, and pronounced superior to any variety cultivated in that vicinity. The Society propose holding a great Fruit and Dahlia exhibition in September next. (*Flushing Journal, Aug. 24th.*)

The Season in Pennsylvania.—We have a fine prospect for fruit this season; apple and peach trees are bending under the weight. We have had no apples of any consequence since the cold winter of 1835, many trees being killed, and all injured more or less, the city papers attributing

the failure of the fruit crop to the carelessness of the farmers! Wheat, rye and oats turned out well, but corn and potatoes are suffering very much, if not past recovery, owing to the dry spell, having had no rain for five or six weeks past, and the thermometer from 80° to 99° at noon in the shade. Dahlias and other garden flowers are very much injured, as well as all garden vegetables.—*Respectfully, yours, &c. J. B. Garber, July, 1844.*

Mildew on Grapes.—A correspondent of your paper requests information respecting mildew on grapes. It has been prevented by me by the following process: Early in the spring the main stems are peeled or scraped quite clean, then are whitewashed with a mixture of lime and sulphur, as much of the latter as to make a very strong smell. Since using the above, my grapes have been perfectly free from mildew.

As my pen is in hand, permit me to mention, that last autumn I observed the effects of the peach-tree worm on my trees. I took family-made soft soap, and gave the tree a good hard rubbing with the clear soap, to about two feet from the ground. In the course of an hour I had the pleasure of seeing, as I believe, all the worms crawling out of the trees; some trees furnished five or six, of all ages and sizes. Also, my peach trees have invariably turned yellow, and the leaves been curled, until this season. This spring, I put a large quantity of common Western salt around the roots, say two or three quarts to each tree. The trees have been more healthy and grown more thrifty than ever before, and no curl or yellow has taken place. (*N. E. Farmer.*)

ART. III. Massachusetts Horticultural Society.

Saturday, July 20—Exhibited. Flowers: From the President of the Society, very fine specimen plants of the following new varieties of Fuchsias, viz., *Enchantress*, *Frostii*, *Williamsonii*, *Gem*, *Eximia*, *Laneii* and *Meteor*,—all well grown and beautiful plants. This tribe of plants is now attracting a great deal of attention in England, where the plants remain in the open ground uninjured through the winter, thereby promoting a strong growth of vigorous shoots, which, when covered by their rich, pendent blossoms, form one of the most beautiful objects in the flower garden.

Joseph Breck & Co. exhibited a variety of cut flowers; among them were twelve varieties of *Ferbenas*, *Didiscus cæruleus*, *Cleome grandiflora*, *Phlox pyramidalis alba*, *decussata alba*, *Carter's white*, *rosea*, *Wilderi*, *Wheeleri* and *Drummondii*, double stocks, picotee poppies, *Schizanthus*, *Elichrysium* of sorts, *Aconitum variegatum*, *Achillea plena alba*, &c. Specimens of *Orehis grandiflora* and *fimbriata*, gathered in the town of Hope, Me., by Mr. J. Breck. From J. L. L. F. Warren, *Phlox grandiflora*, *Aconitum variegatum*, Geums, carnations and picotees, *Gladiolus floribundus*, water lilies, small choice bouquets, and one large one, composed entirely of dahlias; also, several fine dahlias—among them a new white, called *Lady Washington*, form good, but not so pure white as *Vir-*

gin Queen. From J. Hovey, handsome bouquets. From S. R. Johnson, fine blooms of the double flowering pomegranate and double balsams, picotee pinks and carnations, and a fine display of perpetual roses,—among them, Madam Desprez, Monthly Cabbage, &c. From William Meller, beautiful double yellow hollyhocks, Chinese horsechestnut and bouquets. M. P. Sawyer exhibited a very large and splendid plant of *Nerium splendens*, covered with its beautiful rose colored double flowers. From Samuel Walker, several specimens of seedling phloxes, some with variegated flowers, very unique; one of a rich crimson, and one rosy purple, with a bright eye;—also, *Phlox decussata alba* and other fine unnamed varieties, a new seedling *Delphinium grandiflorum*, *Lythrum*, *Veronica spicata*, bouquets and cut flowers. From William Kenrick, seven fine large bouquets and a basket of flowers, arranged by Miss Russell with much taste; also, very double black hollyhocks.

From Hovey & Co., four bouquets—Miss Sumner, two bouquets—Mr. Tucker, a plant of *Hydrangea hortensis* in bloom—John Kenrick, six bouquets.

Fruit: From A. D. Weld, Sopsavine and Early Harvest apples, and Citron des Carnes pears. From M. W. Brown, Drap d'Or plums. From S. Phipps, very handsome Early Scarlet Cherry plums. From Messrs. Winships, Early Scarlet Cherry plums. From Aaron D. Williams, very large white and red Dutch currants, Early Harvest and Williams's Favorite apples. From Joseph S. Cabot, very large and fine Citron des Carnes pears. From Mr. Glover, fine large gooseberries. From B. V. French, Citron des Carnes pears and Heath's Early Nonsuch apples. From H. Vandine, handsome apricots. S. J. Gustin, of Norristown, N. J. exhibited specimens of plums, which were no doubt the Nectarine plum. From Cheever Newhall, striped John apples, very handsome; also, Citron des Carnes pears. From A. F. Brown, very fine large gooseberries. From John Hovey, extra large and superior gooseberries, and excellent Early Harvest apples. From Samuel Walker, very fine Early Harvest apples. From S. K. Bailey, fine gooseberries. From Kendall Bailey, Franconia raspberries. From George Walsh, fine gooseberries, (Red Lion.) From G. A. Simmons, very fine Citron des Carnes pears. From J. L. L. F. Warren, Warren's seedling, Franconia, and red and white Antwerp raspberries, very large and fine; Black Hamburg grapes,—four bunches weighed eleven pounds and ten ounces. From J. F. Allen, Black figs of St. Michael's, large and fine; Franconia raspberries and Sweet Montmorency cherries. The President of the Society sent specimens of Rivers's No. 1 plum, apricots, Sweet Bough and Early Harvest apples, and Citron des Carnes pears, all very handsome.

Vegetables: Aaron D. Williams presented remarkably large Chenango potatoes, and William Mackintosh, monstrous heads of the large Drum-head cabbage.

August 3d.—The Society held an adjourned meeting,—V. P. C. Newhall occupied the chair.

The chairman of the committee of arrangements reported, that the committee had selected Wednesday, Thursday and Friday, the 18th, 19th and 20th September next, as the days for the Annual Exhibition. Accepted.

F. W. Macondry was chosen to fill a vacancy in the committee of arrangements.

Voted, that the Recording Secretary publish the list of the committee of arrangements, as revised.

Hazen Hazeltine and J. S. Sleeper, Boston, were admitted as members. Edward Allen, proposed for membership.

Adjourned to first Saturday in September, (7th.)

Exhibited.—Flowers: From Joseph Breck & Co. a variety of phloxes, rudbeckias, eight varieties double balsams, verbenas, asters, and other cut flowers. From S. R. Johnson, a fine show of double balsams, roses, double flowering pomegranate, lychness, &c. From Mr. Warren, dahlias in variety, *Gladiolus floribundus*, *carnæa* and *ramosus*, *Lobelia*, *cardinalis*, phloxes of sorts, and bouquets. From Mr. Nichols, very fine double balsams. From John Hovey, a large number of bouquets. From Parker Barnes, balsams, nasturtiums, sweet sultans, marigolds, and other annuals; a variety of dahlias, and a fine plant of *Fuchsia exoniensis*. From Miss Sumner, fine bouquets. From Wm. E. Carter, beautiful seedling phloxes, two variegated varieties and one new white; *Lobelia cardinalis alba*, *Rudbeckia purpurea* var and *grandiflora*, *Convólulus panduratus plena*, and specimens of *Pterocaulon pycnostachym*, a handsome native plant. From Capt. Macondry, a large display of verbenas, including many new varieties. From Samuel Walker, seven varieties of seedling phloxes; also, *Phlox tardiflora* and Carter's New white, and other varieties. From William Kenrick, three very large bouquets and two baskets of flowers.

Fruits: A large variety of fruits were presented for exhibition, and the specimens were generally very fine. From Cyrus Alger, plums called the Louis Philippe plum,—is probably identical with the Nectarine plum; also, two varieties of apricots and cherries. From the farm of E. G. Tucker, Milton, a dish of large apples, without name. From James Munroe, Early Bough and River apples, and Moor Park apricots. From S. G. Whiting, Moor Park apricots. From J. S. Sleeper, Italian plums and apricots. From Samuel Pond, three varieties of plums, viz., Blue Mogul, Italian Damask and Apricot. From John Hovey, Williams's Favorite apples, and specimens of the Roxbury Russet, of last year's growth, in good preservation. From A. D. Williams, Early Bough, Benoni, Williams's Favorite apples, varieties of plums and apricots, and fine red and white currants. From J. F. Allen, a dish of very fine figs: also, fine large Franconia raspberries and green fleshed melons. From James Nugent, Black Hamburg grapes. From D. Chace, Lynn, good Citron des Carmes pears. From Hovey & Co., good specimens of the Moor Park apricot. From J. Trask, plums, supposed the Catalonian, very fine. Apricot, Bolmar's Washington and Italian Damask plums, from Wm. Thomas. From L. M. Withington, Red Astrachan apples. River and Sopsavine apples, fine Black Hamburg grapes, and Warren's seedling raspberries, from Warren's gardens. From H. Vandine, apricots and Yellow Gage plums. From Parker Barnes, Apricot plums. From Wm. Richardson, beautiful peaches and Green Gage plums. Hovey & Co. presented apples, received from Mr. G. R. Garretson, of Flushing, L. I., called "John Garretson's Early Apple." They were received by Mr. Garretson from his brother in New Jersey, and the variety probably originated in that vicinity, as they were not recognized by any of our pomologists who examined them; the specimens sent were very large and fair, flesh tender and juicy, flavor and appearance resembling the Rhode Island greening.

Samuel J. Gustin, of Norristown, N. J., sent specimens of the Nectarine plum.

August 10th.—Exhibited. Flowers: From William Kenrick, a variety of Chinese roses, gladiolus, dahlias, verbenas, bignonia, altheas, and large showy bouquets; also, a basket of flowers, containing a great variety of annuals and perennials. W. E. Carter sent a collection of seedling phloxes, containing several new and beautiful varieties, viz., “*Harisonia*,” raised a few years since, called by some Carter’s New White; “*Lawrenceia*,” a superb white variety, growing two and a half feet high, the stems very thickly set with numerous lateral spikes of flowers, forming a pyramid of flowers of snowy whiteness; “*Trifoliata striata*,” the petals of which are finely variegated with white and crimson; “*Frelinghuysen*,” a beautiful and unique variety,—the flowers are white, mottled and striped with lilac, presenting a variegated appearance altogether new in this class of plants; “*Alata alba*,” white, with very thick heads or spikes of flowers; “*Henry Clay*,” another dark, variegated variety, very fine;—much credit is due to Mr. Carter for his success in producing these new and beautiful varieties, which far surpass most of the older sorts, and should be found in every collection of this showy flower, which contributes so much, in its numerous varieties, to beautify and enliven the garden from early spring till autumn. Mr. Carter also exhibited *Erythrina Crista galli*, a greenhouse plant, with large spikes of deep velvety crimson flowers; *Euphorbia corollata* and variegata, *Canna flaccida*, and many other cut flowers and bouquets.

From Parker Barnes, a variety of dahlias. From John Hovey, eight large bouquets of showy flowers. John A. Kenrick exhibited bouquets and a finely decorated basket of flowers. From Joseph Breck & Co., dahlias, roses, twelve sorts verbenas, ten do. balsams, Tiger flowers, phloxes in variety, *Aconitum japonicum*, with a large collection of annuals and perennials. From S. R. Johnson, a fine variety of double balsams, roses, verbenas, &c. H. W. Dutton sent fifteen varieties of dahlias, many of them good specimens. From Miss Sumner, handsome bouquets. Hovey & Co. exhibited *Portulaca splendens* and *Thellusonii*, bouquets composed of roses, also other cut flowers. From J. L. L. F. Warren, fine roses, dahlias of sorts, gladiolus, fine varieties verbenas, a large bouquet of dahlias, and fifteen small bouquets. A fine collection of phloxes was exhibited by Sam’l Walker, embracing a number of fine seedlings not before shown; among them was a very desirable new variety, with rich, crimson purple flowers; another with large shaded lilac flowers, and close habit, called “*Walker’s Estella*.” Mr. Walker also exhibited a large variety of other fine flowers, as usual.

The premiums for the best phloxes were awarded to-day,—only two stands were presented for premium, each of which contained very fine specimens, and most of them were new varieties, raised from seed by the contributors. The report of the judges was as follows:

To William E. Carter, the first premium of	- - -	\$3 00
To Samuel Walker, the second premium of	- - -	2 00

Also, a gratuity to W. E. Carter of two dollars, for his seedling, named “*Frelinghuysen*,” and to Samuel Walker, a gratuity of two dollars for his seedling, “*Walker’s Estella*.”

Messrs. J. Breck, P. B. Hovey, Jr. and P. Barnes, judges.

Fruits: From E. M. Richards, ten varieties of summer apples, viz.—Early Spice, Sopsavine, Webb apple, Benoni, Summer Rose, Red Juneating, Sugarloaf Pippin, Red Astrachan, Early Bough, and River. From Parker Barnes, Jargonelle pears. From L. P. Grosvenor, fine Williams's Favorite apples. From Wm. Mackintosh, Williams's Favorite and Sopsavine apples, Sugartop and Jargonelle pears. From H. W. Dutton, apricots. From W. Hewins, specimens of the Nectarine plum. Aaron D. Williams exhibited apricots, three varieties of plums, and six varieties of apples. From S. Pond, three varieties of plums. Joseph Ballister, River apples. From J. F. Allen, very large and well colored Black Hamburg grapes; also, White Chasselas grapes, peaches, melons, Jargonelle and August Muscat pears. From Otis Johnson, Red Astrachan and Early Bough apples, excellent specimens. From John A. Kenrick, Royal de Tours plums and River apples. From S. & G. Hyde, apples—Williams's Favorite, Summer Gilliflower, Red Calville, Wart's Early, Seck no Further, and Flanders Pippin; and Mrs. Gisbourne and Bolmar's Washington plums. From J. Macomber, Early Bough and Sopsavine apples. From W. G. Lewis, fine Moor Park apricots. From Wm. Thomas, Washington and Italian Damask plums, and apricots. From J. L. Sleeper, apricots and Drap d'Or plums. From J. S. Cabot, Fondante d'Ete and Jargonelle pears. From W. Richardson, fine peaches and nectarines raised under glass. From Mr. Warren, River and Curtis striped apples, Washington plums, and two boxes fine raspberries. From H. Vandine, Early Black,? Washington, Yellow Gage, and Duane's Purple plums. Dr. J. C. Warren sent specimens of plums, called by him, the "Louis Philippe;" is no doubt the Nectarine. The specimens were very handsome.

August 17th.—Exhibited. Flowers: From Miss Sumner, bouquets. Mr. Warren exhibited a variety of dahlias, verbenas, gladiolus, and other cut flowers. From John Hovey, dahlias and bouquets. From Parker Barnes, several varieties of gladiolus, dahlias, and other cut flowers; also, *Tigridia conchiflora*. Samuel A. Walker sent twelve large bouquets, besides dahlias, asters, balsams, &c. Samuel Sweetser exhibited *Fuchsia*, *Buist's splendens*, six varieties of Tea roses, and dahlias. From H. W. Dutton, a fine display of dahlias. From S. R. Johnson, immense clusters of Madame Desprez and other fine roses. From J. M. Earle, Worcester, a fine seedling phlox and dahlias. William Kenrick sent for exhibition a fine plant of *Achimenes longiflora*, covered with its large beautiful blue flowers;—we should think this plant was well adapted for parlor cultivation in summer, requiring only a plenty of heat and moisture, and will continue in flower two or three months. Mr. Kenrick also exhibited a fine variety of Altheas, Noisette, Bengal, and other perpetual roses, baskets of flowers, &c. From Joseph Breck & Co., phloxes, veronicas, German asters, fine double balsams, *Schizanthus Grahamii*, very handsome, *Ipomopsis elegans*, and a great variety of annuals.

From Hovey & Co., nine varieties of Double German Ten Weeks Stocks, *Gladiolus floribundus*, bouquets of roses and other cut flowers. From John Arnold, a great number of varieties of Chinese roses. Wm. E. Carter exhibited as follows—*Magnolia tripetala cordata* and *obovata purpurea*, *Silene stellata*, *Lobelia syphilitica canadensis* and *canadensis alba*, *Clematis viorna*, *Geranium pratense flore pleno*, *Potentilla Hopwoodiana*, *Campanula carpatica*, *Coreopsis senifolia*, *Mandevilla Melittis* *Melissophyllum*, dahlias and bouquets.

Fruit: The display was better than usual at this season of the year, and attracted a numerous company of visitors. The plums, which are uncommonly fine and abundant this year, were exhibited in great variety, and the specimens were generally excellent. The curculio has not attacked the fruit in this vicinity so much this season as usual, and the trees are bending under their weight of fruit. J. S. Sleeper exhibited Smith's Orleans, Duane's Purple, and Prince's Imperial Gage plums; James Whitton, Moor Park apricots; Isaac White, Washington plums; O. Pierce, very fine apples; Francis L. Capen, Williams's apples; P. Barnes, good Washington plums; Samuel Walker, Washington, Duane's Purple, and Bingham? plums, and Jargonelle of the French pears. S. R. Johnson exhibited fine Green Gage and Bolmar's Washington plums; the latter were very superior specimens and very large.

From Milton Earl, Worcester, specimens of the Nectarine and Prince's Imperial Gage plums; B. V. French, fine specimens of the Devonshire Quarrenden apple. Washington and other varieties of plums from S. Pond. Washington and Pond's seedling plums from James Nugent. Josiah Lovett exhibited very large and beautiful Sweet Bough and Red Astrachan apples; also, some of his fine large seedling currants. From John A. Kenrick, good Washington plums. Washington and Duane's Purple, from Wm. F. Harnden. Washington and Prince's Imperial Gage, by S. A. Walker. Mr. Warren exhibited Petit Blanquet and Jargonelle of the French pears, River apples, Washington plums, and fine Black Hamburg grapes. From E. E. Bradshaw, handsome specimens of Red Queen and Washington plums; also, Moor Park apricots, fine. A variety of plums was exhibited by H. Vandine. Rambau Franc apples and Rareripe peaches from F. R. Bigelow.

August 24th.—Exhibited. Flowers: From Hovey & Co., ten varieties of Double German Stocks, *Dracocéphalum Americanum*,? *Commelinà cœlestis*, German asters, &c. Parker Barnes exhibited dahlias, gladiolus of sorts, zinnias, *Thunbergia*, and other cut flowers. A fine variety of verbenas, from Capt. Macondry. Bouquets from Messrs. Winship, John Hovey, S. A. Walker, and Miss Sumner. From H. W. Dutton, a large variety of dahlias, among which a number of flowers of Oakley's Surprise were very conspicuous. Edward Allen exhibited some new varieties of dahlias,—Lady Autrobus, deep rose color; Ploughboy, rosy purple; Lady St. Maur, white, tinged with pale rose; Hero of Stonchenge, Mulberry, and Essex Triumph, were first rate specimens. William Kenrick contributed very large and beautiful bouquets; S. R. Johnson, half-hardy roses; John Arnold, Jr., Chinese and other roses; J. L. L. F. Warren, bouquets and dahlias; S. A. Walker, dahlias and ten bouquets; James Nugent, fine dahlias; Joseph Breck & Co., twenty-five varieties of verbenas, balsams, asters, fine dahlias, roses, phloxes, &c.; Alexander McLennan, a collection of dahlias. A very fine specimen of *Ròchea fal-càta*, from an amateur.

Fruits: From Capt. Lovett, fine Washington and Long Blue plums, Benoni apples, Cabot, Jargonelle of the English, Passans du Portugal and Sugar of Hoyerswerde pears. From C. Newhall, Bingham plums. From S. Phipps, Green Gage, Washington, Duane's Purple, Yellow Egg and Prince's Imperial plums. From Geo. Johnson, Washington plums. John Arnold, fine Black Hamburg grapes. J. F. Allen, uncommonly large and fine Elruge nectarines. N. Coolidge, Sweetwater grapes.

Geo. Merriam, large Rareripe peaches. From the Pomological Garden, Salem, Early York peaches, Washington, Kirke's, Bingham, English Wheat, and Isabella plums, all fine specimens; also, Passans du Portugal, Green Sugar of Hoyerswerder, Rostiezer, (a first rate fruit,) Simon, (Van Mons,) and Elizabeth pears,—and the following varieties of apples: Putnam's Harvey, High Top Sweet, Devonshire Quarrenden, Beau, Charlonski, (handsome,) Hiller's Grande, Orne, and Irish Peach apple. From A. D. Williams, Bartlett pears, and Williams's Favorite apples. From D. Roberts, Salem, Goliah? plums. Chief Justice Shaw sent very superior specimens of the Washington plum. Mrs. Bigelow, some large and handsome peaches. William Quant, gardener to Col. Perkins, exhibited extraordinary large Heath peaches. J. D. White, Washington plums, and Broomfield nectarines. S. R. Johnson, very fine Green Gage and splendid specimens of the Washington plums. L. P. Bartlett, Pumpkin sweet and Bartlett's sweet apples. J. W. Sever, Monsieur? and White Gage plums, and Summer Franc Réal pears. From Messrs. Winship, Hessel, and Winship's seedling pears. S. Pond, a variety of plums. C. Sumner, unnamed apples. A. D. Adams, Washington plums. James Nugent, Washington, Smith's Orleans, Duane's Purple, and Pond's Seedling plums, all fine. A. D. Weld, a variety of apples and peaches.

From Geo. Newhall, fine sweet apples, good Washington plums, and Pomegranates brought from Charleston, S. C. From E. T. Andrews, Washington plums and Sweet Bough apples, both handsome. From Mr. Warren, Washington and Bingham plums, Dearborn's Seedling, Julienne, and Petit Blanquet pears, Porter and Grand Sachem apples, and Black Hamburg grapes. H. Vandine, eight varieties of plums, and specimens of the Moor Fowl Egg pears. E. E. Bradshaw, good Moor Park apricots, Washington and Red Queen plums. S. Walker, Belle et Bonne, Franc Réal, Belle de Bruxelles, Fondante d'Etè, Summer Rose, and Andrews pears; also, good Washington plums. Sam'l A. Walker, peaches and fine Washington plums.

August 31st.—Exhibited. Flowers: From the President of the Society, a collection of fine dahlias—among them were the following new sorts: Lady St. Maur, beautiful; Great Western, large and fine; Mrs. Shelly, and Caleb Cope. S. Sweetser exhibited roses, asters and dahlias. John Gordon, fine balsams, asters, dahlias, &c. Parker Barnes, a variety of cut flowers. Miss Sumner, bouquets. Messrs. Winship, bouquets. William Meller, cut flowers. John Hovey, a variety of cut flowers, bouquets, &c. Jos. Breck, dahlias, zinnias, verbenas, and a large variety of annual flowers. John Parker, dahlias and balsams. John Arnold, a display of Chinese roses and dahlias. William Kenrick exhibited Noisette, Tea, China and other roses, Ætheas, *Bignonia*, gladiolus, also baskets and bouquets of flowers. From E. Allen, fine specimens of several new dahlias, viz.: Hero of Stonehenge, Lady St. Maur, Great Western, Beauty of Sussex, Ploughboy, and Oakley's Surprise. From Josiah Stickney, a great variety of German asters and dahlias. Mr. Warren, fine bouquets. Hovey & Co., bouquets composed of roses, verbenas, &c. S. A. Walker, a beautiful wreath of flowers, bouquets, &c. From Sam'l Walker, large bouquets.

Fruit: The varieties exhibited were more numerous than last week. Plums were shown in great abundance, and, for size, beauty and excellence, have not, to our recollection, been surpassed. The President of

the Society sent beautiful specimens of the Washington, Bingham, Bleeker's Scarlet, and Long Blue plums. Hon. E. Vose exhibited Lady Haley's Nonsuch apples, clear and beautiful. From Capt. J. Lovett, Early Bough and Benoni apples, Long Blue and Huling's Superb plums, very fine; specimens of pears, (Empress of Sumner,) taken from scions engrafted 5th Sept. 1843, by the method described by Capt. Lovett, page 163 of the present volume. From J. F. Allen, the variegated Newington, Nectarine, handsome, Passans du Portugal, and Summer Franc R al pears. Dearborn's Seedling and Julienne pears, from Otis Johnson. Hon. J. S. Cabot, Belle et Bonne, fine, Hessel, Honey, and Forme de D lices pears. E. E. Bradshaw, large and splendid specimens of Bolmar's Washington plums, some of which weighed two to three ounces each; also fine Green Gage and Prince's Imperial plums. Samuel A. Walker, fine Washington and White Gage plums, and Bartlett pears. Cyrus Smith, Washington plums. Solomon Lincoln, apples, name unknown. J. L. L. F. Warren, pears, viz., Passans du Portugal, Hessel, Washington, Rushmore's Bon Chr tien, Julienne, and Dearborn's Seedling; Black Hamburg grapes, Green Gage, Washington, Duane's Purple, and Bingham plums; peaches, and Grand Sachem apples. Chas. Smith, Waltham, fine seedling peaches. H. J. How exhibited some seedling plums, which were of medium size and very good flavor. From the Pomological Garden, Salem, plums, viz., Washington, Victoria, Scarlet Gage, Lucombe's Nonsuch, Long Blue, Brevoort's Purple, Meig's Purple, Goliath and Kirke's; Duchess of Oldenburg apples, and Walter's Early peaches. Winship's Seedling pears, by Mrs. Winship. From S. Pond, Bartlett, Julienne, and Andrews pears; Green Gage, Imperial, White Gage, Lombard, Bingham, and Isabella plums. From W. Thomas, fine Washington, Green Gage and Victoria? plums; Jargonelle of the French and Bartlett pears. A. D. Williams, plums of different sorts. Smith's Orleans plums, from Wm. Meller. Very fine peaches, from Mr. Merriam, Newton. Very handsome Bartlett pears, from Seth E. Hardy. Fine peaches, from Col. Bigelow. From J. W. Sever, Imperial Gage and White Gage plums, Summer Rose and Bartlett pears.

S. R. Johnson exhibited very superior specimens of the Washington plum. From John Stearns, Bartlett pears. Dr. S. A. Shurtleff, Grand Sachem, Ribstone Pippin, Pumpkin Sweet, Spice, and Kean's Sweeting apples; also, seedling plums. H. Vandine, a variety of plums; among them were Huling's Superb, Early Yellow Gage, Duane's Purple, &c. From S. W. Holbrook, apples, name unknown. Wm. Kenrick, Newton, exhibited specimens of the Golden or Orange Sweeting, and Ammidon Winter Pound Sweet, apples. John Arnold, Black Hamburg grapes. Wm. Buckminster exhibited a specimen of an apple grown in Lunenburg, Mass., very large size, red color, flavor sweet, and well adapted for baking. James Nugent, Summer Rose pears, Duane's Purple, Smith's Orleans, and White Gage plums. Specimens of the Watson pear were sent from Plymouth for exhibition, by E. Warren. From Parker Barnes, Washington plums. Green Gage, White Gage, Duane's Purple and Orleans plums, from Capt. Macondry. Very fine Green Gage plums, by G. Walsh. A variety of pears, &c. by S. Walker.

Vegetables: Six very large fruit of the Purple Egg Plant, from T. Wade. Minorca and Persian melons, fine, from J. Nugent, Woodlands.

ART. IV. Faneuil Hall Market.

	From	To		From	To
	§ cts.	§ cts.		§ cts.	§ cts.
<i>Roots, Tubers, &c.</i>			<i>Squashes and Pumpkins.</i>		
Potatoes, new:			Autumnal Marrow, per lb. . .	1	2
Chenangoes, { per barrel,	1 00	1 25	Canada Crookneck, per lb. . .	1	2
{ per bushel,	45	50	West India, per cwt.	—	—
Common, { per barrel,	1 00	—			
{ per bushel,	40	—			
Sweet, { per barrel,	2 00	2 50			
{ per bushel,	1 00	1 25			
Turnips, new:			<i>Fruits.</i>		
Per bushel,	75	—	Apples, dessert and cooking:		
Per bunch,	4	6	Porter's, per barrel,	2 00	2 50
Onions:			per bushel,	1 00	—
Red, per bunch,	3	4	Williams's, per bushel,	1 00	1 50
Yellow, per bunch,	3	4	Pumpkin Sweet, per bush.	75	1 00
New White, per bunch,	3	4	Connect. Sweet, per bar.	2 00	—
Beets, per bunch,	4	6	Common, per barrel,	1 50	1 75
Carrots, per bunch,	4	6	Pears, per peck:		
Parsnips, per bushel,	—	—	Bartlett,	75	87½
Radishes, per bunch,	—	—	Andrews,	62	75
Horseradish, per lb.	8	10	Capiaumont,	75	—
Garlic, per lb.	8	10	Harvard,	50	—
			Seckel, from the South,	1 00	—
			Common,	25	37
			Baking, per bush.	1 00	—
<i>Cabbages, Salads, &c.</i>			Peaches, per basket,	1 50	1 75
Cabbages, per doz.:			Common, per half peck.	25	37
Drumhead,	62	75	Extra, per doz.	25	—
Savoy,	50	62	Plums, per quart:		
Brocolis, each,	10	20	Washington,	20	25
Cauliflowers, each,	10	20	Green Gage,	25	—
Celery, per root,	6	8	White Gage,	12	20
Lettuce, per head,	6	—	Blue,	10	12
Rhubarb, per lb.	—	—	Damsons, per half peck,	25	37½
Beans:			Grapes, per lb.:		
String, per bushel,	75	1 00	Black Hamburg,	50	75
Shell, per quart:			White Sweet Water,	50	—
Common,	10	12	Watermelons, each,	15	20
Sieva,	12	17	Muskmelons, each,	10	20
Lima,	17	20	Green fleshed, small,	8	10
Sweet Corn, per doz.	6	8	Purple Egg Plant, each,	8	12½
Cucumbers, (pickled) pr gal.	25	—	Cucumb. (pickling) per bun.	12	15
Peppers, (pickled) per gal.	37½	—	Peppers, (pickling) per lb.	3	4
			Tomatoes, per half peck,	8	10
			Cranberries, new, per bush.	1 00	1 25
<i>Pot and Sweet Herbs.</i>			Pine-apples, each,	12	25
Parsley, per half peck,	12½	—	Lemons, per doz.	17	20
Sage, per pound,	17	20	Oranges, per doz.:		
Marjorum, per bunch,	6	12½	Sicily,	20	25
Savory, per bunch,	6	12	Havana,	37½	50
Spearmint, per bunch,	3	—			

REMARKS.—The refreshing rains which we noticed in our last report, and which came so seasonable as to prevent any serious injury to the crops from drought, have since been followed by successive showers and fine growing weather.

Vegetation has rapidly advanced, and the markets are now supplied in abundance with all the varieties of fruits and vegetables usual at this season.

Vegetables.—Potatoes have been much benefited by the late rains, and have become very plenty, and are sold at low prices. Sweet potatoes have also arrived in larger quantities than is usual so early in the season, and prices are low. Turnips are getting plentier. Onions are brought in, now, large and good, and sell readily at fair prices. Beets and carrots are remarkably large and good this season, but do not yet come in in large quantities. Cabbages are becoming better and more abundant since the rains; the early sorts are now gone, and the market is supplied with the Savoy and Drumheads. Brocolis and cauliflowers are not yet plenty, but the season is very favorable for them, and they will probably be large and good. Lettuce has become scarcer, and now sells at our quotations. Shelled beans and sweet corn are now very plenty. Pickling cucumbers and peppers are now brought into market in large quantities. Squashes are uncommonly plenty and dull; the principal part now offered for sale are Marrows, and appear to be more generally grown this season than later sorts.

Fruit, of almost every kind of the season, in great abundance, and the markets loaded; the season is one of the most productive that has occurred for many years, and from all parts of the country we hear accounts of great crops. Apples are plenty and in great variety; great quantities are daily brought from Connecticut, generally very large and fair;—the best kinds now brought to market from this vicinity are the Porter's and Williams's Favorite, which are now becoming plenty. Of pears, the Bartlett, Andrews, Harvard, and Capiaumont, are tolerably plenty; Bartletts are not so large as usual this year; some Seckel pears have been received from New York. Of peaches, the market is fully supplied from New Jersey, and great quantities arrive daily and sell readily at good prices; the trees in this vicinity were so much injured by the severe cold of last winter, that very few good peaches may be expected from this vicinity. Plums are very abundant, the curculio having attacked the fruit much less than usual; the trees are generally loaded with fruit, which sells very low. Whortleberries, &c. are gone. Grapes are becoming more plenty. Watermelons are good and plenty. Green-fleshed melons, brought from New York, are plentiful and cheap. Tomatoes, very plenty and cheap. Cranberries have been received in small quantities and sell low; it is said that the cranberry crop will be very large this year. Pine apples rather out of season. In oranges and lemons, not much doing.—*M. T., Boston, August 31st, 1844.*

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape Vines will now be ripening their wood, and particular attention should be given to this part of their management. Give as much air as possible early in the day, and thin out all useless, and stop all lateral shoots; it will be impossible to produce a good crop of fruit next year, unless the wood of the present year is well matured. Grape vines in the open garden, such as Isabellas, Catawbas, and other hardy sorts, will be

much benefited by now pruning out all the small useless wood and laterals, which have been stopped from time to time through the summer; and all such shoots as are intended to produce fruit next year, should be regularly secured to the trellises.

Strawberry Plantations may be made during the whole of the month with good success.

Peach Trees may be budded yet.

Currants and *Gooseberries* may be transplanted this month.

FLOWER DEPARTMENT.

Dahlias should be frequently looked over and kept well secured to the stakes. The late rains have given them a vigorous start, and the branches consequently are very tender and are liable to be broken in windy weather; continue to trim out the small useless shoots and those that have been injured by insects; a good watering with guano water we find makes them grow and bloom finely; this is prepared by dissolving five or six pounds of guano in a barrel of water.

Greenhouse Plants should be attended to this month and be prepared for their winter quarters, by tyeing up, cleaning the pots, &c.; if any plants were neglected to be potted last month, it should now be done immediately; many of the varieties it will be necessary to put into the house or be sheltered from the cold by the last of the month.

Camellias.—Cuttings of the present year's wood may now be put in, and any seed which are ripe should be sown.

Verbenas.—Young plants may now be taken up and potted, or the pots may be sunk in the ground and the shoots laid in the pots; they will soon root, and may then be cut from the parent plant. Pots may also be filled with cuttings to stand through the winter, which will make fine plants for turning into the borders next spring.

Petunias may be preserved by cuttings in the same manner.

Cuttings of Roses, struck in July, should be potted off and placed in a frame; a little bottom heat will be found of great service at this season. All the older plants should be potted, if not done last month.

Chrysanthemums, if not in pots of sufficient size, should be immediately shifted. Keep them well trained and water freely, and occasionally with liquid manure.

Icias, *Sparaxis*, *Oxalis*, &c. may be potted the latter part of the month. *Heliotropes*, *Chinese Primroses*, *Stocks*, and all the varieties of annuals intended for winter flowering, should be potted and put in order.

Carnations, *Picotees*, &c.—Layers which are rooted may now be potted or planted in beds, to be protected during winter.

THE MAGAZINE
OF
HORTICULTURE.

OCTOBER, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Agricultural and Horticultural Chemistry.* By ROBERT CARMICHAEL, Newton, Mass.

(Continued from page 326.)

LAYERS of the different materials, mentioned at page 325, being collected into heaps, should, after laying for several weeks, be carefully worked up and moistened, if necessary, with urine, dung water, lye obtained from the soap manufacturers, or gas water; and care must always be taken to preserve the ammonia disengaged by those substances.

This frequent stirring and working the heaps has the advantage of bringing the substances better together and mixing them more thoroughly; it has likewise the additional advantage of facilitating decomposition by contact of the materials with atmospheric air, and, what is also very important, keeps the heap loose, permitting a free access to oxygen, by which means nitric acid is formed by the organic remains, containing nitrogen. When thoroughly well prepared compost is made, it can at once be applied without injury to the roots of plants, and speedily improves vegetable nourishment, in consequence of its comprehending all the materials of manure in a small compass. Those substances upon which plants feed are thus brought, without difficulty, into that condition which is most advantageous to plants.

If then all the advantages of compost are considered, it will become obvious that they are so important that no opportunity of preparing it should be omitted. It is a common practice amongst some, to expose their manure heaps too much to the action of the air, at the certain sacrifice of

some of its most valuable products; some think that, by exposing it a length of time previous to applying it to the soil, they get rid of the sulphuretted hydrogen evolved during its decay, which they consider poisonous to plants, and many chemists, in preparing artificial manures, have been very careful to exclude that substance, regarding it as a poison; but Mr. Solly has proved without doubt, by his experiments, that its presence is desirable rather than otherwise, when applied in limited quantity and with caution; and in connection with this, Mr. Solly says:—

“It is the custom in most parts of England to form the manure intended to be used for the land into a heap, and leave it exposed to the air for some time; in certain counties in England and more particularly in the southwest, it is a common practice to plant such manure heaps with cabbages. These plants then grow in a soil rich in sulphuretted hydrogen and its compounds, and they are generally very large and of a fine deep green color. They have, it is said, a bad taste, and are only used for feeding cattle; this bad taste has, however, nothing to do with the health and vigor of the plant and involves another question. The economy of such a system may be questionable, but it is certain that the cabbages must absorb a large quantity of ammonia and carbonic acid, and probably also of sulphuretted hydrogen, which, under the ordinary system of exposing manure to the air, would be lost.”

“One of the substances of the greatest interest in vegetable chemistry is sulphur. It occurs in the soil, the air, in many vegetables, and in several of the best manures. There are two compounds of sulphur with which we have to deal in considering the influence it has on growing plants, namely, that which it forms with oxygen, the sulphuric acid, and that which it forms with hydrogen, viz., sulphuretted hydrogen or hydrosulphuric acid. The former exists in the soil in combination with various bases constituting sulphates; the latter is generated during the decay or putrefaction of many organic substances, and is, consequently, present in manure; it is also present, in very minute quantity, in the air. The formation of this gas in manures, &c. depends on the fact that sulphates or salts of sulphuric acid are liable to be decomposed by decaying organic matters, and hence those animal and vegetable substances which contain sulphates frequently evolve sul-

phuretted hydrogen when they decay. In such cases the presence of this gas is known by its exceedingly offensive odor, and we are therefore warned of its presence and enabled to guard against the bad effects which it might produce, for it is one of the most poisonous gases known, a very small quantity of it in the air producing bad effects on those who respire it, and in larger quantities proving fatal. The influence exerted by this gas on the animal economy is tolerably well known from the experiments of Thenard and Dupuytren, who exposed different animals to atmospheres contaminated with various proportions of this gas; and the effect produced by a small quantity in the air on the human frame is very well known to chemists and physiologists.

“It is commonly believed from the few experiments which have been published on this subject, such as those of Christison and Turner, that sulphuretted hydrogen gas possesses as poisonous properties with regard to plants as it does with respect to animals. I will not now bring forward the written opinions published on this subject, but merely quote a passage from the writings of Liebig. Speaking of the refuse ammoniacal liquor of the gas works, a fluid which always contains a small quantity of sulphuretted hydrogen, he says: ‘Now the ammoniacal liquor of the gas works contains the ammonia in the form of carbonate and hydrosulphate, (sulphuret of ammonium.) The latter compound is a deadly poison to vegetables, nor can we conceive that, by dilution, its properties can be changed.’ This statement of Liebig is probably in part founded on the known effects of the gas upon animals, and partly on the fact that farmers, in the preparation of manures, always expose it in a heap for some time, until the greater part of the sulphuretted hydrogen is dissipated.

“In the course of experiments I was led to make trial of the action of some of the compounds of this gas on growing vegetables, and the results I obtained were very different from what I had expected. I made use of the hydrosulphuret of ammonia, the very compound described by Liebig as being a ‘deadly poison;’ but in place of killing plants, I found that, in small quantity, it produced decidedly beneficial effects. In some cases, when it was applied to plants in an unhealthy state from the action of other substances, it had the effect of invigorating them and of restoring their

leaves to a healthy green and crisp condition. The plants with which these effects were best observed were the garden lettuce and the common Windsor bean. The solution of the hydrosulphuret of ammonia employed, was prepared by mixing a saturated solution of the compound with fifty times its bulk of water; such a solution had a most nauseous, disgusting smell, and contained of course a large quantity of sulphuretted hydrogen. The plants under experiment were selected from many, and were of the same age and size, and, as far as possible, in the same healthy state of growth. Some were watered with common water, others with a diluted solution of hydrosulphuret of ammonia. At first, only a few drops of the solution were given; but finding that this produced little or no effect, the dose was increased, and as much as half an ounce a day and sometimes even more, was given to each plant; it was found that those thus treated became stronger and sturdier; their leaves were of a bright, deep green; the space between the nodes or the distance from leaf to leaf was shorter, and the stems were stronger, and the whole plant more flourishing than in those watered in the ordinary way, although all other circumstances were alike, and care was taken to place all under the same condition by exposing them equally to air and light and giving them the same quantity of water every day. Plants in a languid state from over doses of nitrate of potash or soda, or other saline manures, if not too much injured by their previous treatment, appeared to recover more rapidly when watered with the solution of hydrosulphuret of ammonia, than when merely treated with common water. In some of these latter cases a much stronger solution was employed than that already mentioned, containing two drachms of the saturated solution of hydrosulphuret of ammonia in fifty of water, and of this, eight drachms were given daily. For some time after watering the plants, the earth retained a strong smell of sulphuretted hydrogen, and the water which drained through, when tested by a salt of lead, evidently contained a large quantity of that gas."

These and similar experiments naturally make us believe, that sulphur, and more particularly sulphate of ammonia, exercise great influence on the growth of vegetables, and are valuable to plants as sources of nourishment. It is a beautiful provision in the order of the creation that

plants, in decaying, give rise to the formation of those very substances requisite for the support and growth of fresh plants.

We know that plants, in decaying, evolve ammonia, carbonic acid, and other substances which constitute the principal food of plants; but we know also that, in decaying, they evolve sulphuretted hydrogen; it is reasonable, therefore, to expect that that substance, like the other products of vegetable decay, should have some influence on the growth of plants. Its presence in manures is well known and readily proved; but its presence in the air, in which it exists in exceedingly minute quantity, is less readily shown. We know, however, that it is constantly being formed on the surface of the earth, and we have evidence of its presence in the air by several effects,—such as the tarnishing of some metals and the blacking of white paint; these effects, which take place gradually and slowly, are principally occasioned by the presence of sulphuretted hydrogen and its compounds, particularly the hydrosulphuret of ammonia in the air.

Lastly, if the vegetable kingdom is the great means of purifying the air and retaining it in a fit state for the respiration of men and animals, the absorption and decomposition of sulphuretted hydrogen by plants must constitute not the least important of their functions. It must be obvious that, if the inferences to be drawn from such experiments as those just described are correct, sulphuretted hydrogen is not the poisonous substance to plants which it is commonly supposed to be; that is to say, that even though in large quantity it may be, and no doubt is, hurtful to vegetation, yet in small quantity it may produce most beneficial effects. However advantageous the preparation of manures may be, and however unquestionably important in practical horticulture and agriculture the application of chemistry in preparing and ascertaining the probable value of manure, there will nevertheless be found some who assert that its advantages are doubtful, and that the preparation of manure and the application of chemistry in the way spoken of, occasions unnecessary labor and too much trouble, without producing any essential benefit. This is one great reason why cultivators of the soil are unwilling to enter upon speculations of this kind, until they are assured of their results by ocular demonstration; es-

pecially if their chance of remuneration depend upon that fickle despot public opinion. The many examples now given by enterprising horticulturists and agriculturists prove that they fully appreciate the benefits to be derived from chemistry, in connection with the cultivation of the soil, and great merit is due to them for having entered upon speculations which, at the time they commenced them, probably may have been hazardous to undertake. Such examples cannot fail to be highly essential to those who wish to take advantage of their benefits.

In concluding this paper, I may mention an experiment by Mr. Solly to show the influence exerted by the soil on the color of flowers. Two perfectly similar plants of the hydrangea were taken and placed under the same general conditions with respect to light and air, and watered with dilute solutions, the one of carbonate of soda, the other of muriatic acid, commencing with very small quantities and gradually increasing the doses. At the beginning of the experiment it was difficult to distinguish the one from the other; they had both the same number of leaves, were nearly of the same size, and alike in color and general vigor, being both remarkably healthy plants. The solutions taken consisted of one drachm of concentrated muriatic acid and one drachm of carbonate of soda, each dissolved in fifty drachms of water; of these, at first one drachm diluted with two ounces of water was given to each plant daily, but the dose was gradually increased to twelve drachms of each solution, so that in a month the one had received nearly five drachms of concentrated muriatic acid, and the other plant more than half an ounce of carbonate of soda. Under this mode of treatment both plants continued to thrive and flourish, and the blossoms were large and perfect, those formed by the plant treated with muriatic acid being rather the most forward of the two; they were, however, both of the same color, nearly blue, although it was believed that had they been left untouched the blossoms would have been pink. It is evident that the acid would have a tendency to render certain matters in the soil more soluble than others, whilst the carbonate of soda would have an opposite effect; the acid would render lime, magnesia bases and metallic oxides more soluble, whilst the carbonate of soda would facilitate the solution of silica, acids, and organic substances in the soil. The

results of these experiments is rather against those views which have been formed respecting the blue and pink flowers of the hydrangea, in which it is supposed that the absorption of iron or lime was essential to the change. The circumstances, however, which influence the formation of coloring and odorous matters in flowers, are as yet very little understood; and equally enveloped in uncertainty, the connection which exists between the assimilation of carbon, oxygen and hydrogen, and the formation of organized structures. Although the sources whence plants derive their food are now well known, yet the precise mode in which the assimilation of the elements of organized matter is carried on, is as yet very little understood, and the chemical laws which govern many of the more simple changes in the formation of the various proximate vegetable principles, have scarcely been investigated, and till this is supplied, some parts of the chemistry of vegetation must remain incomplete. The recent writings of Liebig, however, have done much towards explaining these processes; writings which no one engaged in the cultivation of the soil ought to be without. He argues on known facts, and explains, in a clear and scientific manner, the chemical processes of vegetation. The talent and energy now employed in the investigation of this subject, in Europe and this country, prove the importance it demands, and cannot fail ultimately to be of universal benefit.

R. CARMICHAEL.

Nonantum Hill, Newton, Sept. 16, 1844.

ART. II. *On the Cultivation of Pelargoniums, without the aid of hotbeds or the greenhouse.* By J. E. TESCHEMACHER, Boston.

I WAS much pleased with Mr. Russell's communication in your last number, on the cultivation of the Pelargonium—a flower which, in its present improved state, cannot fail to increase in favor with the horticulturist. Having sent two plants of this flower to the Horticultural exhibi-

tion this year, which, at twenty-two months old, measured two feet six inches across, and were only sixteen to eighteen inches high, grown entirely at my study windows, with a south aspect, I prepared some notes during the progress of their cultivation, from which I have drawn up the following account.

The cuttings were made precisely as Mr. Russell states, of strong, short-jointed pieces placed under a glass shade, but without bottom heat; to those who possess this convenience it is an excellent assistance, but with the pelargonium, by no means necessary for striking cuttings. They were potted off in the last week in September, in a mixture of sandy loam, with one table spoonful of charcoal, and, after a few days' shading, when I thought they were well settled, they were watered once a week with a solution of guano water, formed by putting one tea spoonful of guano in a quart bottle of water, which was refilled three or four times before fresh guano was added, and generally during the winter once a week besides with plain water. In the latter part of February they were again repotted as before, but in larger pots; the shoots, which were several inches long and the wood pretty well ripened, were shortened, leaving about three joints on each shoot. From these, new shoots grew vigorously and flowered well during the summer—guano water twice a week. In June, when the blooms had withered, the plants were cut down to about six inches height, leaving as many joints as possible—the earth was changed as before, the roots well examined, and all decayed pieces cut out. After remaining five or six days in the shade, well watered, they were exposed to the full glare of the sun the rest of the season, receiving water generally twice, and in very hot weather three times a day—guano water three times a week; by this means the shoots and old wood grew thoroughly ripened, and were rendered thick, short and stumpy, that is, with joints very close to each other.

At this period of the operation and before the shoots became too much ripened, it was necessary to tie them down as much in a horizontal position as possible; to this, great attention must be paid, as the guano, in shortening the joints, acts by shortening the cells and vessels, and thus renders the plant much more brittle than when they are long and attenuated. For this purpose I cut sticks in this



shape, putting the broad part into the earth close to the rim of the pot, with about five or six inches of the thin part above the surface; the resistance of the broad part against the earth renders it so firm in position that these shoots can be gradually drawn down as desired; and this is best effected by fastening one end of the string to the stick, passing the other round the shoot; then, with the assistance of the left hand, it may be carefully effected. Pelargoniums are better for a free circulation of atmosphere; whenever the weather permitted, therefore, the windows were left open.

In the latter end of February, these well ripened shoots were shortened to four or five eyes, the plants again repotted, and, after a lapse of ten days, were watered twice a week with guano water. In the spring they grew vigorously to the state in which they were exhibited, and, for more than a month, were quite a mass of bloom, extending two and a half feet in width and only two feet high, forming a magnificent sight. These two plants are now undergoing their summer culture; the shoots are full seven inches long, thick and turning red, which is a sign of ripening. If I have leisure enough to attend to them, I do not the least doubt that they will be, next spring, from four to five feet in diameter, exactly resembling those exhibited at the horticultural shows near London.

In all these processes the complete drainage of the pots with potsherds is essential—occasional smoking, with tobacco, is also necessary to keep the plants free from the green aphid. Whenever the weather permitted, that is, on bright, warm days in early spring, I took them into the yard and syringed thoroughly with water of a temperature of about 45° ; this seemed to refresh them and to vivify the green color of the leaves; but they were always taken into the room to dry, for fear of the cold produced by evaporation.

I believe that the use of guano water and charcoal will exceedingly assist the cultivation of all plants in the parlor—for two of the greatest impediments, the want of green color in the leaves and the spindling up of the branches, are very much counteracted by these two ingredients in the soil.

This method of working the pelargonium exhibits the value of a large accumulation of healthy axillary action in

a small space; it is, in fact, the only means of producing excessive luxuriance of bloom in many tribes of plants, and this healthy axillary action can only be induced by cutting back *well ripened* shoots. I have tried this thoroughly. By cutting back shoots before they are fully ripe, nothing but weak and puny growth is obtained; not all the guano in the world can change this position.

There is one great difficulty in growing plants well in greenhouses here—it is, that the anxiety to save room causes the plants to be crowded as close to each other as they can possibly stand; this prevents a proper circulation of air amongst them, and is particularly injurious to the pelargonium. Such plants, therefore, as are intended for exhibition, should be raised much higher than the rest, by placing them on a tall, inverted pot; this would bring them nearer the glass, which is also a great advantage.

With the exception of the dahlia, there is perhaps no florist's flower which has so well rewarded the care and ingenuity of the growers of seedlings in Europe, as the pelargonium; the form of the flowers and the brilliancy of their colors have improved beyond all expectation; it is easy of propagation, retains its beautiful verdure throughout the winter, is easily grown and managed in the parlor, (thanks to guano,) and never fails in rewarding attention by a splendid display of bloom.

That this climate possesses many advantages over that of England, for the purpose of raising improved seedlings of florists' flowers, is confirmed by experience with the pelargonium. Several, raised by Mr. Meller, of Roxbury, are eminently beautiful; and it is to be hoped that the patronage of the public will remunerate him sufficiently to encourage him in the pursuit; but he must not expect too much at once. Horticulture has already made more rapid strides here than its most sanguine followers could have possibly expected ten years ago, and there is no doubt that it will continue to increase its number of votaries every year, until it shall diffuse an immense mass of innocent enjoyment and pleasure throughout the community, and amply repay the industrious and persevering gardener.

J. E. T.

Boston, Sept. 17th, 1844.

ART. III. *Remarks on the Cultivation of the Grape in Pots. A page from my Note Book, for the Magazine of Horticulture, &c.* By R. BUIST, Philadelphia.

MUCH has been said and written on the culture of grape vines in pots. Many systems have been adopted and various soils recommended, for the purpose of bringing the fruit to perfection. Some growers have been partially successful, while others have entirely failed.

Grape culture under glass, in the vicinity of Philadelphia, has within these few years made amazing progress. Many graperies have been erected, and are producing heavy crops of fruit. There are about fifty sorts cultivated, several proving entirely worthless, while others are of very superior character. In the hands of some cultivators it is astonishing to see how soon the merits of the grape are proved.

A. W. Mitchell, Esq. erected on his country place, about six miles north of this city, a grapery, about eighty or ninety feet long, in the autumn of 1842 and winter of 1843. He planted it with vines of one and two years old, on which he has this season seven hundred fine bunches of fruit, which is certainly doing well in so short a period; but the following, if not in advance of the age, is equal to any record of grape growing.

A plant of the *Black Prince*, growing in a pot from an eye planted in March, 1843, has now on it five bunches of fruit, which will weigh about seven pounds, the plant being only eighteen months old, and in a pot about fourteen inches in diameter. A *Black Hamburgh*, of the same age and under the same culture, has the astonishing number of eleven bunches, that will average one pound each—one bunch is nine inches long and sixteen in circumference.

There are many others in pots almost equal to these. A Chasselas, three and a half years old, had seven bunches last year, and was then pronounced by some to be killed with overbearing; but it has eighteen this season, fifteen of them large and handsomely formed. A two-year old vine of the *VICTORIA Hamburgh*, in the ground, has nine beautiful bunches of fruit upon it, one of which is ten

inches long and eighteen in circumference. This variety of the grape is entirely different from the *Hamburgh*, although some have considered it the same; the bunches are more tapering, the fruit perfectly round, jet black, are set closer, and are better flavored than the *Hamburgh*—the foliage is also more lobed and can be instantly detected among any *Hamburghs*.

These results are not obtained by any pretended nostrum, but are the produce of a rich sandy loam, the plants being liberally supplied with liquid manure when in a growing state. Mr. Mitchell and his excellent gardener are both greatly devoted to horticulture. They have done and are doing much in the culinary, fruit and floral departments of our profession, and we hope they may be prevailed upon to fill up a corner of your useful Magazine.

Yours, R. BUIST.

Philadelphia, Sept. 13th, 1844.

The above communication from our correspondent exhibits another instance of the success which has attended the cultivation of the grape in pots; a method which is not only highly gratifying to the eye, but will reward the cultivator with an ample supply of the finest fruit for a long period. The cultivation is simple, and may be easily carried into execution by any one who possesses a vinery or greenhouse. There is not any variety of fruit with which we are acquainted, that can be produced in so short a period from the time of commencing; and so much have we been impressed with the advantages which this mode of cultivation presents, that we have given in our pages, from time to time, all the information which we could collect on the subject.

In our first volume we gave an account of a successful trial we made of growing and fruiting grapes in pots, in which it will be seen, that we produced, on vines only eighteen months from the cuttings, from six to twenty bunches each. We also copied into our last No. an excellent article on this subject, from the *Gardener's Chronicle*, which should be read attentively by those who wish to cultivate them in this manner.

The advantages of this system are many. If a house is devoted exclusively to this purpose, ripe fruit may be pro-

duced almost throughout the year, by having ready a sufficient number of established vines, and introducing them into the house in succession. For this purpose it would be necessary to have different sets of vines, so that those which are started at any particular season of the year should be brought in at the same time the next year; which may be readily done by numbering the pots, and keeping an account of those numbers introduced at any particular season. In most vineries there seems to be much waste room on the floor of the house, which might be occupied to advantage with vines in pots, at the same time with those on the rafters, by arranging them on low stages, which would produce a beautiful effect when loaded with their rich clusters of fruit. Any new varieties may be speedily tested in pots, and should any prove of inferior value, the room they occupy can be readily filled by keeping a few extra pots of well known good varieties. Particular care must be taken not to overload the vines with fruit by leaving on too many. We found that where over six or eight bunches of the large sorts, such as the Ham-burgh, were permitted to grow on a vine, they were of inferior flavor and badly colored. The Sweetwater, Muscadine, and such smaller varieties, may be allowed to ripen ten or twelve bunches. During their growth, liquid manure should be frequently supplied, and, towards the period of ripening, watering should be gradually diminished, until only enough is given to prevent the leaves from drooping. The grapes will then acquire a flavor and sweetness which we have rarely found in fruit grown on vines planted in the borders of graperies.

ART. IV. *On the pruning and general management of Prize Pelargoniums the second year from the cuttings.*
By JAMES W. RUSSELL.

SUPPOSING the plant to have received the attention and treatment recommended in my former article, (page 328,) it may be grown the second year to an enormous size.

About the second week in June, cut down the plant to three or four eyes, and shift it into a pot two sizes larger

than the one it flowered in; remember to take away the earth from the roots sufficient to allow of a good drainage, and about two or three inches of fresh earth between the pot and the roots. This done, place the plant under a partial shade from the sun, there to remain until it begins to grow, at which time it should be removed to a more exposed situation. When the young shoots have grown six inches, stop them by cutting off the top of each; this will be the means of furnishing the plant with an abundance of wood. Cut out all superfluous growths close to the old wood, being mindful to preserve the strongest, leaving them at regular distances. The lower growths should be trained in a horizontal line from the pot, and all the intermediate ones should follow at proper distances; the strong and robust growing kinds, of course, will need a greater space between each shoot than those of weaker habits. By following this method, the plant may be brought into the shape of a perfect cone or sugar loaf.

The third year, a similar process may be pursued, and the plant may be grown to any shape or size the cultivator's fancy or taste may wish for. The second year however from the cuttings, they will probably make the best specimen plants; therefore I leave it altogether to the decision of the cultivator, whether he should or should not prolong its duration.

The pelargonium is well known by all persons who have any taste for plants; and whoever pays the attention necessary for its cultivation will succeed in a greater or less degree. A good soil, judgment in watering the plant, plenty of drainage, (an important item,) stopping the growth if a large plant is desired, plenty of air to keep the plant from drawing or making a weak growth, destroying the insects at their first appearance on the plant, and, if grown under glass, eighteen inches or two feet would be found to be a suitable distance for the growth and well doing of the plant. This is the minutia, which must not be overlooked if a prize plant is the object in view.

Yours, &c.

JAS. W. RUSSELL.

Brighton, Sept. 25, 1844.

ART. V. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates; with additional miscellaneous information, relative to new plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural Notices.—Since our arrival in England, but little opportunity has as yet been afforded us, to inspect many collections of plants; the very opposite direction in which many of the best nurseries and gardens are situated from each other, renders it no easy task to give them each a visit. No time has, however, been lost upon our hands; we have already seen enough to fill several of our pages; but as our object is now to add only a few notes upon new and interesting plants, we shall have less to say than at a future time, when we have seen all that the metropolis offers worthy of notice. There is, just now, a dearth of novelty in the floricultural world; excepting the Orchidaceæ, in which there is always some new species developing itself, very few interesting objects are to be found. The seeds sent home by Mr. Fortune, from China, have proved trashy. In a collection which he forwarded last spring, and which were all planted by Mr. Gordon with much care, and the young seedlings brought forward in frames and the hothouse, the greater part have proved the commonest annuals; in fact, some of them, with us, mere weeds. Mr. Gordon showed us a whole row of yellow and red

coxcombs, all grown in pots. We presume, however, that Mr. Fortune thought it would be expected he should send home something for distribution, and for want of time to make a collection himself, he trusted to some of the natives who duped him, as they have others, and sent a parcel of little China jars, filled with useless seeds. It is to be hoped, that some valuable acquisitions will be the result of his tour. If he has half of the success which attended Mr. Hartweg's travels in Central America, the society may congratulate itself on the expedition.

Lilium lancifolium and its varieties.—Of all the objects which have as yet attracted our attention, none have compared with the display of *Lilium lancifolium*, in the collection of Mr. Groom of Clapham. We have on several occasions noticed these lilies, and at least three of them have been described in our pages, from the journals where they have been figured, and each of these have flowered in the collections in our vicinity; not, however, in any thing like the splendor in which they are to be seen around London at this moment. What an expedition was that of Siebold to Japan! If the question were to be asked us, what we consider the greatest acquisition, within the last twenty years, we should say, the Japan lilies. Indeed, we would almost say, that nothing but the Camellia, during the last century, has been greater. But the lilies were not all; the camellias, the clematises, *Sedum Sieboldii*, and many other things, will long perpetuate the name of Dr. Siebold, and render it familiar to all lovers of plants. The very sale of the Japan plants, which he brought home, has been a commerce of itself, and has produced an intercourse with the Belgian and English nurserymen, which, under ordinary circumstances, would not have been effected in many years.

There are now *four* varieties, called by Mr. Groom as follows:—*L. lancifolium album*, *punctatum*, *roseum*, and *rubrum*; the latter, perhaps, better known as the *L. speciosum*. They may be classed, in regard to their beauty, the reverse of the above, viz., *rubrum* the most, and *album* the least, splendid; but each of them of surpassing beauty: *album* and *punctatum* are the most common, and *roseum*, the rarest, having been recently received from Ghent. Good strong flowering bulbs of each, command very high prices. Mr. Groom has been highly successful in his cultivation of this tribe, and has undoubtedly the best stock.

We saw in full bloom upwards of one hundred plants, some of them *eight feet* high; in one pot we counted eight stems, each having ten or twelve expanded blooms or buds, making in all about one hundred flowers on one plant. In the open ground, in front of one of the houses, Mr. Groom has a bed of the *álbum* containing *three* rows of roots, *sixty* in each row; over these he is now erecting an awning, and the whole will be splendidly in flower in two weeks, when, on our return from the continent, we anticipate such a treat as we have not yet had. They have proved perfectly hardy here. *L. lancifòlium ròseum* is intermediate between *rùbrum* and *punctàtum*, being prettily spotted with deep red. But of the *rùbrum* we can scarcely find words to express its magnificence: if we say the flower has the appearance of a large brilliant, studded with rubies, we do it no more than justice. It is, without exception, the most striking flower we ever saw. Less robust in its habit than the *punctàtum*, it is more desirable on that account.

Mr. Groom is now raising seedlings between the Japan lilies and the common hardy species, and anticipates very good results. We have no doubt but that, with impregnation with our splendid *L. supérbum*, some noble hybrids would be produced. We shall have more to say in relation to the cultivation of these lilies when we notice Mr. Groom's entire collection.

New Petunias.—The new varieties of petunias are really wonderful improvements on the *phœnicea* and *nyctagini-flòra*. At Mr. Groom's, we saw six very splendid kinds, viz.,—*rosea alba*, a white one, not a very large flower, but with a distinct rose edge: *Lady Hope*, a pale rosy purple, delicately veined, with a purple eye: *formosissima*, purplish and veined, with a very dark eye: *purpurea grandiflora*, a very dark crimson purple flower, of great size: *lilacina striata*, a pretty lilac one, striped: *ornothissima*, exceedingly fine, with distinct stripes. *Petunia picta*, of which so much was said, and which was let out last spring at *7s. 6d.* per plant, is quite inferior to some of the above; it generally flowers purple, and, as the bloom gets older, it shows an irregular kind of stripe, which gives it the appearance of a faded flower. These new kinds would be great acquisitions to our gardens, and we hope to be able to obtain all the best.

Phlòx Drummondii álba.—This is a new variety of the

beautiful *Drummóndii*, a large bed of which we observed in flower with Mr. Groom; it is of a pure white, and does not even show any tinge when the flowers are dying off. It is an accidental variety, which sprung up in some garden around London, and is perpetuated by seeds. Patches of it, planted out with the crimson and scarlet kinds, would have a fine effect. It is quite invaluable in this respect, as we have but few dwarf annuals, with pure white flowers, suitable for bedding out.

Achimenes picta.—Another pretty species has been added to the list of *Achimenes* already introduced: it is called *picta*, and is now in flower in the Horticultural Society's Garden, where we saw it a day or two ago. In general appearance it resembles *pedunculata*, but with this difference—the lower half of the corolla is yellow and the upper scarlet, which gives a painted and pretty effect: the size of the flower is a little larger, the throat more open and the limb broader; add to this that its habit is not so tall, being intermediate between *pedunculata* and *longiflora*, and a good idea may be formed of its beauty. It is figured in the *Floricultural Cabinet*, after the style of that work, but it will soon appear in the *Bot. Register*. All the species of *Achimenes* are every where cultivated: we saw plants of *longiflora* at Eton Hall, the seat of the Marquis of Westminster, and at the Duke of Devonshire's, at Chatsworth, with from *one to two hundred* flowers expanded at once; the plants growing in pots about ten inches in diameter. A *multiflora* we have not yet seen.

Magnificent specimens of Fuchsia corymbiflora and fulgens.—Our cultivators have no conception of the splendor of these two fuchsias; we do not recollect of ever seeing a plant more than two or three feet high, among our collections; we have known some cultivators to throw aside these two sorts altogether, as too coarse to deserve attention. This very fact shows that, in our eagerness to get new things, we often throw aside those which are far superior in beauty, merely because we have not bestowed upon them sufficient care and time to bring them to perfection. The following are the dimensions of two plants, one of each species, which we saw at Chatsworth: *corymbiflora*, ten feet high, trained to a single stem to the height of four feet; diameter of the head six feet; corymbs of flowers expanded, *sixty*; some of these drooped half way

to the ground: fulgens, eight feet high, diameter of the head six feet, and trained to a single stem; number of corymbs expanded, *thirty*. These two plants are as richly worth seeing, as one of our entire annual exhibitions; we only hope that, with some hints on their cultivation which we shall give hereafter, similar specimens may be found in the collections of our own country. These specimens, it will be understood, are only *two*, out of at least *fifty*, that we have seen, nearly or quite as large.

New Roses.—We had a fine treat, yesterday, inspecting the collection of roses of Mr. Rivers, of Sawbridgeworth. They are grown here in large quantities, and whole beds of the hybrid perpetuals were radiant with bloom: Madam Laffay, Louis Bonaparte, Lady Fordwich, the old crimson perpetual, together with many new ones of this class, and the Bourbons, Bengals, Teas and Noisettes, were in full flower. The weather for the last several days has been delightful, and favorable to an abundant bloom: for an entire week there has been a cloudless sky and a bright sun. We shall not now occupy space to enumerate any of the new roses, as we shall, we doubt not, be better able to do so, after we have seen the collections of the Parisian rose-fanciers. Queen of the Prairies has flowered very well in Mr. Rivers's collection, and is considered by him a great acquisition, as it undoubtedly is. It is, however, as yet quite unknown, as only a small number of plants have yet been distributed around London: when the plants have become strong, and show their real beauty, it will have a more extensive sale than any other rose of late years. The Persian yellow rose has flowered finely this year, and far eclipses all other yellow roses; it has a better habit than the *Harrisonii* and is equally as free a bloomer, and as double as the cabbage rose. Noisette Cloth of Gold has not yet flowered at Sawbridgeworth, as the rapid propagation prevents; but Mr. Rivers saw it again this season, in France, and states that it is a most superb variety. But of roses, more in our next paper.

Double white and purple Chinese Primroses.—We have noticed at times, in the Gardening periodicals, some account of double Chinese primroses, but no plants have, we believe, ever reached our collections. The first we saw here were at Chatsworth, where large specimens of both the white and purple were in fine bloom. The white is more beautiful than the purple, though both are desirable plants:

for bouquets in the winter season, the white is well worth possession.

Céstrum aurantiacum is the name of a new plant now beautifully in flower in the large conservatory, in the garden of the Horticultural Society, planted out in the central bed. It was introduced from Guatemala, by Mr. Skinner, and is a most desirable plant, blooming as it does at this season. It has a shrubby appearance, attains the height of three feet, and is profusely covered with clusters of fine orange-colored, tubular flowers, which spring from the axil of nearly every leaf. It will no doubt succeed well in the greenhouse, where its orange-colored flowers, together with the several kinds of *Achímenes*, will contribute greatly to keep up a good display during the month of August. It will soon be figured in the *Bot. Reg.*

Some of the newer plants which are now in demand are *Centradènia ròsea*, *Habrothámnus cyàneus*, *Angelònia Gardneriàna*, *Státice pseudo-armèria*, *Tetranèma mexicàna*, *Gloxinia tubiflòra*, *Chorizema vàrium nàna*, (much more beautiful than the old *vàrium*,) *Rigidèlia flámmea*, (a fine bulbous plant,) *Pentlandica miniàta*, *Corræa Cavendishii*, *Ceanòthus divaricàtus*, *Achímenes picta*, *Pimelèa arenària*, (white,) *Fúchsia Chevalierii*, *Gloxinia variegàta*, *Brachysèma platiptera*, *Abùtilon Bedfordiànum*, *Nuttàlia grandiflòra*, *Fúchsia Stanwelliàna*, with many others. Many new pelargoniums have also come out this year, but as the season for their blooming is past, we have not given much attention to the varieties. In verbenas, we have as yet seen none that would compare with our American seedlings.—*Ed. London, Aug. 29th, 1844.*

Asphodèlece.

BULBINE

semi barbata. Half bearded Bulbine. Stamens just beneath the anther, furnished with a pencil of elongated club-shaped filaments.

A rapid growing, fibrous rooted plant, with profuse, linear, succulent foliage, and spikes of small golden flowers, of not much beauty; but would make some show if grown together in patches. Raised from seed sent by Prof. Fischer to the Mass. Hort. Society. Sown in March and flowered June, 1844. Under the microscope, the stamens are singularly unique and elegant, a condition arising from the beautiful pencil which invests the top of the filament, but which, from the smallness of the blossom, almost es-

capable observation. Its succulent character renders it susceptible of much vital energy; some plants, being subjected to pressure, as specimens for an herbarium, were found still growing, after two or three weeks, between the drying sheets. Native country and duration not known to me.—*J. L. R.*

Plantaginæ.

PLANTAGO

Duvallii.

A strong, weedy plantain, with long lanceolate leaves, and brown colored, anthered flowers. Raised from a collection of seeds, sent to the Mass. Hort. Society by Prof. Fischer, St. Petersburg. Sown in March, flowered June, 1844. Of no beauty or special recommendation to the florist.—*J. L. R.*

Caryophyllæ.

DIANTHUS

cyrus. (From Prof. Fischer, Imperial Botanic Gardens, St. Petersburg.)

A small, dull blossomed pink, growing about a foot high, somewhat in the style of the Sweet William, (*D. barbatus*.) Interesting rather to the botanist than florist. Annual?—*J. L. R.*

Malvæcæ.

HIBISCUS

hispidus. Mill.

A rather showy flower, which might be mistaken for *H. triònum*, or bladder ketmia of the gardens; but differs in form of foliage, calyx, and more hispid stem. Native of Cape Good Hope, and apparently intermediate between *H. triònum* and *H. Africànus*. Seeds sown in March, flowered in July, and gave abundance of flowers with prospect of a succession—similar to the habits of the other two species mentioned. From Prof. Fischer to Mass. Hort. Society.—*J. L. R.*

Leguminosæ.

PHASEOLUS

Hispanicus (?)

A fine, showy, running bean, with profuse clusters of flowers, the banner of which is scarlet, and the alæ or wings are of a pale rosy hue. Raised from seed received from Italy, under the specific name above.—*South Hingham, Aug. 1844. J. L. R.*

Scrophularineæ.

PENTSTEMON

erianthera. *Nuttall*. Gen. Pl. II. p. 52.

Syn. *Pentstemon glabra*. *Penst.* Woolly-stemmed Pentstemon.

Leaves very smooth, almost glaucous, margin a little undulating; stem about two feet high, bearing, in the axils of the leaves, numerous purplish and showy flowers; and said to be remarkable for its "pubescent anthers, which distinguish it from every other known species." Raised from seed gathered on the Yellow Stone River, Missouri. Sown in May, flowered in August, 1844. A beautiful perennial plant.—*J. L. R.*

*Leguminosæ.*HOSACKIA, *Douglas*.

Pulshiana. *Torrey & Gray*, N. A. H. I. p. 327.

Syn. *Trigonella Americana*, *Nutt.* Gen. Pl. II. p. 120.

A small, rather decumbent, branching annual, with minute, whitish flowers, and numerous cylindrical pods, from the dry soils in Missouri. Raised from seed gathered on the banks of the Yellow Stone River, in 1843, and flowered August, 1844.—*J. L. R.*

Sticta aurata, *Ach.* In examining some "curiosities," brought from New Zealand, I was so fortunate as to discover this fine lichen, gathered fortuitously as a specimen of the bark of a tree. Though without fruit or shields, it was very interesting as extending the knowledge of the geographical distribution of a species well known and always admired by the lichenist; while its deep red thallus distinguished it, in point of beauty, from the duller tints, which it assumes in our northern latitudes.—*J. L. R.*, *Salem, Mass., August, 1844.*

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

New York State Agricultural Society.—The fourth exhibition of this society took place on the 17th, 18th and 19th September, at Poughkeepsie. We learn from those who were present, that the display in all departments was truly grand, and plainly evinced that a deep interest is felt in favor of these annual shows. The following description of the department devoted to Horticulture, we extract from the Albany Cultivator:—

"The ground selected for the occasion was an elevated plain, commanding extensive views of the surrounding country, to which the mountains

in the west, and the blue ranges of the distant Highlands, gave a varied outline and interest scarcely to be surpassed. A large field of ten acres was enclosed by a high fence, within which all the objects of the fair were collected. The number of people admitted to the grounds on the two days of the exhibition, is supposed to be not less than from twenty-five to thirty thousand.

"A line of large buildings, erected for the purpose, extended for several hundred feet through the centre of the grounds, and formed a leading feature of attraction. The first, which was 36 feet wide and more than 100 feet long, was inscribed over the entrance, 'FLORAL HALL,' in rich letters of evergreen on a white ground. The whole interior of the building, as well as the entrances, was richly ornamented overhead with beautiful and massive wreaths and festoons of evergreen. In the centre of the building was a splendid outline Temple, 'Dedicated to Agriculture and the Arts,' consisting of a high evergreen arch in the middle, interwoven with flowers, flanked with square wings, equally tasteful, on the sides. In the centre, and surmounting the whole, was the inscription, 'AGRICULTURE,' and the numerous articles arranged within this arch, were the appropriate details of the great leading subject, among which were the tall lance-like stalks of corn crossing the middle, the suspended heads of wheat and other grain, the paintings of domestic animals, and a large assemblage of other articles, beneath the whole of which was a beautifully ornamented miniature plough, the origin and foundation of the whole. Under the chaplet inscribed 'HORTICULTURE,' was a most interesting exhibition of rich fruits and brilliant flowers. Numerous tasteful emblems and inscriptions were interspersed through the whole, and with some fine ornamental figures, decorated the base.

"A double line of tables extended through the centre of this building, densely loaded with a magnificent display of fruits on either side, and a long range of flowers arranged in wreaths, temples and pyramids in the centre. Among some of the best collections of fruits, were handsomely arranged specimens of a hundred fine varieties of apples, eighty of pears, and many of other fine fruits, from A. J. Downing & Co. of Newburgh, extending compactly for forty feet along one side of the table; also extensive collections of apples from R. L. Pell of Ulster, J. R. Comstock of Dutchess, J. F. Osborn of Cayuga, Alex. Walsh of Lansingburg, from his Hoosick farms, and large and fine collections of pears from James G. King, Highwood, N. J., J. R. Comstock, and Wm. Reid of Murray Hill, N. Y., and also excellent specimens of grapes, from R. Donaldson, J. Merritt, S. Van Rensselaer, and many others. The whole display of fruits, though defective in a few particulars, exceeded in variety and extent that of any previous exhibition of the State Society.

"The vegetables, suspended from the sides of the tables and beneath, presented a very fine array; among which was a superb lot from the garden of R. L. Pell, of Pelham, Ulster county, consisting of very large mangel wurtzels, true blood beets, carrots, parsnips, sugar beets, Patagonian gourds, 5 feet 8 inches long, squashes weighing 152 and 200 lbs., monkey bread, very curious, ten varieties of table squashes, cabbages weighing 30 lbs. Mr. P. also presented forty varieties of seedling and twenty-seven of grafted apples, Catawba and Isabella grapes grown under glass, very large gooseberries, three kinds of currants, a floral ornament seventeen feet high, &c.

"Among the agricultural and horticultural products, we observed an enormous pumpkin of the *seven years* variety, weighing 126 pounds—some heads of millet a foot in length—and some Washington peaches ten inches in circumference and weighing eleven ounces, all presented by Mrs. M. Vasser, of Poughkeepsie."

ART. II. *Massachusetts Horticultural Society.*

Sept. 7. The Society held an adjourned meeting, the President in the chair.

Voted, that the Recording Secretary give notice to the lessor of the hall now occupied by the Society, that they will vacate the same on or before the 5th day of December next.

A letter was read from the New Haven Horticultural Society, inviting this Society to be present, by delegation, at their annual exhibition on the 25th of September.

A. J. Downing, of Newburgh, N. Y., was elected a corresponding member.

Edward Allen, of Roxbury, and Josiah Richardson, of Cambridge, were admitted members.

Adjourned to Saturday, Sept. 14th.

Exhibited.—Flowers: The President of the Society sent a collection of dahlias, embracing several new and beautiful sorts; among them was Bragg's Antagonist, the most perfect white variety we have seen; also Lady St. Maur, Fleur de Grand, Competitor, Henry Clay, &c. From Joseph Breck & Co., dahlias, verbenas, asters, roses, &c. From S. A. Walker, a wreath of flowers, a very large bouquet, German asters, coxcombs, and a variety of other cut flowers. From S. Sweetser, dahlias, &c. From Edward Allen, fine specimens of dahlias, including Lady St. Maur, Hero of Stonehenge, (fine,) Ploughboy, Lady Ann Murray, Lady Antrobus, (very fine,) and other sorts; also, a plant of the Hydrangea in flower, treated with guano. From J. Stickney, a great variety of beautiful German asters and dahlias. From H. W. Dutton, a variety of dahlias, among them some fine specimens of Dodd's Prince of Wales, the best yellow we have yet noticed. John Arnold exhibited a large quantity of Chinese and Tea roses. Messrs. Winships sent a large variety of cut flowers, dahlias, &c. From Wm. Meller, fine bouquets, dahlias and asters. Messrs. Hovey & Co. exhibited fine specimens of Bourbon, Bengal, Tea and Noisette roses, fine German asters, &c. John Hovey and Misses Sumner, fine bouquets. J. L. L. F. Warren, dahlias, a variety of cut flowers, and specimens of *Spiræa Ulmaria* and *digitata*. From William Kenrick, roses, dahlias, bouquets, &c. From the Botanic Garden, Cambridge, by Mr. Carter, *Fuchsia corymbosa*, *Chelone Lyoni*, *Uniola latifolia*, *Phlox Lawrenceia*, *Solidago*, dahlias and many cut flowers.

Fruits: The President exhibited specimens of pears and apples, received from Mr. Ernst, of Cincinnati; the varieties of pears were Roi de Wurtemberg, Duchesse d'Angouleme, Louise bonne de Jersey, Beurré Diel, and Bartlett; of apples, the Snow, Brabant Bellflower, and one un-

named variety. Mr. Wiswall, of Cincinnati, also exhibited a beautiful apple, variety unknown in this vicinity. The President also presented fine specimens of pears from his garden, viz: Bartlett, Julienne, Golden Burre of Bilboa, Wilbur, and Burre d'Amalis, (fine); also Gravenstein apples, and the following plums: Corse's Admiral, Lombard, Diamond. From N. Coolidge, Boston, Sweetwater grapes. From Wm. Meller, fine peaches. From W. McFarland, Framingham, very large peaches. From N. Sanderson, Waltham, large seedling peaches. From Cheever Newhall, plums, Purple Gage; pears, Surpasse Virgoulouse, Cushing, and Washington; apples, Hawthornden and Ribston Pippin. A. D. Williams exhibited his seedling pear, called Williams's Seedling; also Chelmsford and Bartlett pears, Coe's Golden Drop and Corse's Admiral plums. From J. W. Sever, Reine Claude Violet, White Magnum Bonum, and seedling plums. From O. Johnson, Dearborn's seedling pears. From Joseph Balch, fine Bartlett pears, and white Magnum Bonum plums. From Elijah Vose, St. Ghislain, Julienne, and Dearborn's seedling pears; Lady Haley's and Nonsuch apples, very handsome. From S. Pond, pears, Bartlett, Julienne, Surpasse Virgoulouse, St. Ghislain, Fondante d'Automne; plums, Long Blue, Isabella, Lombard, Diamond, and Bingham. From N. G. Day, Lunenburg, the Red and Green Sweeting apple. From William Kenrick, specimens of the Early Crawford peach. Green Gage plums and Bartlett pears, from Samuel A. Walker. Black Frontignac, Black Prince and Black Hamburg grapes, from Thomas Mason. John Arnold exhibited excellent Black Hamburg grapes, finely colored, and with a rich bloom on the berries, which were of extra size. The Green Gage and Imperial Gage plums, by George Walsh, were good. H. Vandine also exhibited excellent specimens of the following plums, viz: Huling's Superb, Yellow Gage, Coe's Golden Drop, (fine;) Duane's Purple, Smith's Orleans, Lombard, Magnum Bonum, and Imperial Gage; Porter apples, and peaches. From Messrs. Winship, Rushmore's Bon Chrétien, Washington and St. Ghislain pears, and Coe's Golden Drop plums. Large and handsome Bartlett pears, from J. N. Sanderson. Very fine Bartlett and Cabot pears, from J. F. Allen. The following pears, from Parker Barnes, viz: Ronville, Bartlett, Harvard and Chelmsford. From J. L. L. F. Warren, the following: Black Hamburg grapes, Duane Purple and Magnum Bonum plums, Bartlett and Julienne pears, Porter, Grand Sachem and Blue Pearmain apples, and Lemon Clingstone peaches. From Samuel Walker, Fondante d'Automne, Flemish Beauty, Fondante Van Mons, Cushing, and some other varieties of pears. From E. Wight, Pumpkin Sweet apples, Bartlett pears, and Coe's Golden Drop plums. Extraordinary large peaches were sent by Mr. Merriam of Newton,—and from the farm of Mr. Tudor, of Cambridge, were twelve very fine Baldwin apples, on a small branch about the same number of inches long. Victoria plums from D. Roberts. Large and beautiful peaches from F. T. Bigelow. Superior specimens of Bartlett pears from William B. Kingsbury. From the Pomological Garden, Salem, the following fruits, viz: peaches, Watson's Early, Early Rose, and Emperor of Russia; pears, Bartlett, Hampden, Bergamot, Elizabeth, Stevens's Genesee, Van Assene, Shenks, St. Ghislain, and No. 1103 of Van Mons; plums, Jefferson, Yellow Gage, Rogers, Bruyn Gage, Dominic Dull, and Long Blue. From Mr. Washburn, Plymouth, Greening apples, Flemish Beauty and Pitts Maria pears. Ohio Everbearing Raspberries, from L. S.

Russell. Very large apples from Prof. Farrar, Cambridge. William Oliver exhibited specimens of the Tyson pear, which has proved to be an excellent pear, and may be classed among the best varieties. Mr. Warren exhibited a number of varieties of apples, which were received by him from Rhode Island, many of them fine specimens. There was also a great number of peaches and apples exhibited by different individuals, some for a name, and many of them seedlings. Every year brings with it a multitude of seedlings, and fruits unnamed, very few of which possess sufficient merit to entitle them to a place among named varieties.

September 14th.—The Society held an adjourned meeting, the President in the chair. Messrs. B. V. French, C. Newhall and S. Walker were chosen delegates to visit the New Haven Horticultural Society's annual exhibition. The Chairman, in behalf of the Building Committee, placed at the disposal of the Society a silver plate, to be placed under the corner stone of the Society's new hall, with certain documents and transactions of the Society. Whereupon it was *Resolved*, That the Society adjourn this meeting to the site of their new building in School Street, and that the President, M. P. WILDER, Esq. be requested to perform the duty of laying the corner stone, depositing the plate, documents, &c. and to offer such remarks as he may deem suitable to the occasion.

The plate was of silver, 8 by 6 inches, and bore the following inscription :

[ON THE OBVERSE.]

MASSACHUSETT'S HORTICULTURAL SOCIETY.

INCORPORATED THE 12TH DAY OF JUNE, A. D. 1829.

Present number of Members,—Four Hundred and Twenty.

President—MARSHALL P. WILDER.

Vice Presidents—B. V. French, Jona. Winship, Cheever Newhall, E. M. Richards.

Treasurer—Samuel Walker.

Corresponding Secretary—J. E. Teschemacher.

Recording Secretary—Ebenezer Wight.

Professor of Botany and Vegetable Physiology—John Lewis Russell, A. M.

Professor of Entomology—T. W. Harris, M. D.

Professor of Horticultural Chemistry—S. L. Dana, M. D.

Committee on Fruits.—Samuel Walker, Chairman: P. B. Hovey, Jr., O. Johnson, S. Pond, J. Lovett, 2d., L. P. Grosvenor, Jona. Winship, D. Haggerston, J. L. L. F. Warren, J. F. Allen, A. D. Williams.

Committee on Flowers.—Joseph Breck, Chairman: H. W. Dutton, S. Sweetser, S. R. Johnson, J. Stickney, W. E. Carter, P. Barnes.

Committee on Vegetables.—J. A. Kenrick, Chairman: W. B. Kingsbury, J. H. Billings, S. C. Mann, J. C. Howard, A. Bowditch, John Hill.

Committee on the Library.—C. M. Hovey, Chairman: C. K. Dillaway, F. G. Shaw, J. E. Teschemacher, E. Wight, R. M. Copeland.

Committee on Synonyms of Fruit.—M. P. Wilder, Chairman: S. Downer, W. Kenrick, B. V. French.

Executive Committee.—M. P. Wilder, Chairman: Enoch Bartlett, A. Aspinwall, F. W. Macondry, J. J. Low.

Finance Committee.—E. Vose, Chairman: Cheever Newhall, E. M. Richards.

[ON THE REVERSE.]

THIS EDIFICE IS ERECTED BY THE
MASSACHUSETTS HORTICULTURAL SOCIETY,

For the purpose of encouraging and improving the Science and
Practice of Horticulture.

This Corner Stone laid on the 14th day of September, 1844.

BUILDING COMMITTEE.

Marshall P. Wilder, Samuel Walker, J. E. Teschemacher, Josiah Stick-
ney, John J. Low, Benj. V. French, E. M. Richards, Samuel R.
Johnson, C. M. Hovey, Cheever Newhall, Joseph Breck,
Henry W. Dutton, Fred. W. Macondry.
Richard Bond, *Architect.*

BUILDERS.

Gardner Greenleaf, Nathaniel Adams, C. W. Cushing, Willard Sears and
Jonas Fitch.

To this Society the Community are indebted for the foundation and Con-
secration of

MOUNT AUBURN CEMETERY.

The documents alluded to were the transactions, addresses, &c. of the Society, various horticultural, agricultural and political papers of the day, (including the August number of this magazine for the present year,) together with a variety of coins of the United States, and a phial containing a great variety of flower, fruit and vegetable seeds, packed in pulverized charcoal and hermetically sealed. The whole were sealed up in a leaden box, and deposited in the stone at the north west corner of the building, and the large column, designed to stand upon it, lowered to its place. The stone being firmly secured, the President of the Society, M. P. WILDER, Esq., delivered the following Address:

Gentlemen of the Society:—In conformity with your resolve I have deposited beneath this stone certain documents and memorials. These are for the purpose of transmitting to future generations some knowledge of this Society, as it exists at the present day, and of the science it has sought to promote.

The rise and successful progress of the Society, from its infancy—from the day when, literally, but “two or three were gathered together,” to its present mature and honorable standing, is matter of great congratulation.

Its act of incorporation bears date June 12th, A. D. 1829, and I rejoice to recognise among those present, gentlemen whose names are borne on its charter—who have been its fast and firm friends—have had an important part in the management of its affairs, and have ever evinced a sincere and heartfelt interest in its welfare and prosperity.

To you, gentlemen, and to the members of the institution generally, it must be a source of great gratification, that in your day the flourishing condition of the Society admits of erecting an edifice for the promotion and encouragement of a science which stands preëminently among the most popular and refined studies of the age.

I may with propriety advert to the approbation and favor so liberally extended to the Society by an enlightened public—to the signal success that has attended its almost every effort—to its influence in creating and disseminating a taste for horticultural pursuits and rural life—to the introduction of new and valuable varieties, unprecedented increase and im-

proved character of Fruits and Flowers, since its organization—to the universal desire diffused by the zeal and labors of its members, for gardening and ornamental cultivation—to the competition and laudable emulation excited by its Exhibitions and Premiums—all of which have greatly surpassed the highest expectations of its warmest friends.

I congratulate you on this central and favored location, memorable in the cause of education for more than a century past, and from whence have gone out to bless the world some of the most distinguished scholars of the age, and brightest ornaments of society—and that to those halls of learning is now to succeed a temple dedicated to a science which has been honored by the great and good from Solomon to Washington, and in our own time by Knight and Van Mons, Buell and Lowell.

I cannot conclude my remarks without alluding to an act which should never be forgotten, a meritorious one—and be it ever remembered, that to this Society the community are indebted for the foundation and consecration of Mount Auburn Cemetery—that hallowed resting place for the dead—that “Garden of Graves.” Mark the language of the orator* on the occasion:

“We are met to consecrate this spot by these solemn ceremonies to such a purpose. The Legislature of this Commonwealth, with a parental foresight, has clothed the Horticultural Society with authority to make a perpetual dedication of it as a Rural Cemetery, or Burying Ground, and to plant and embellish it with shrubbery, and flowers, and trees, and walks, and other rural ornaments. And I stand here by order and in behalf of this Society, to declare that by these services it is to be deemed henceforth and forever so dedicated.”

Noble act—glorious deed—a measure calculated to reflect honor on any institution, and I doubt not it will redound to the credit of this, and will be gratefully remembered while this corner stone endures, and when we and the members of this institution shall be quietly reposing in its “Field of Peace,” or sleeping beneath the sods of the valley.

Immediately after the ceremonies were performed, the Society adjourned to their Rooms, and passed the following vote: That the thanks of the Society be presented to the President for the appropriate remarks made by him this day at the laying of the corner stone of the Society’s new hall in School Street.

Adjourned to Saturday, 20th September.

September 18th, 19th and 20th.—The *Sixteenth Annual Exhibition* of the Society took place on Wednesday, Thursday and Friday, the 18th, 19th and 20th of September, at the Society’s Room in Boston.

The exhibition was one of the most interesting ever made by the Society, and was highly creditable to the contributors, and also to the committee who superintended the arrangement. Although the floral decorations were not so extensive, and the plants few in number compared with some former years, the fruits far surpassed in abundance and beauty any previous display; indeed, so great was the quantity offered for exhibition, that room for all could not be found on the tables. The yearly increase of fine specimens is very large, and the inconvenience of a limited space to display them to advantage will, we are happy to say, be obviated before another annual exhibition takes place. The new Hall, now rapidly pro-

* Judge Story.

gressing towards completion, will, we trust, furnish ample accommodations for all contributors.

Notwithstanding the long continued drought which prevailed previous to the exhibition, and which had the effect greatly to diminish the usual variety of flowers, there was a fine display of dahlias, roses, and German asters. The dahlias, which were the most prominent feature in the floral department and which are so essential, by their rich and varied colors, to add splendor to an exhibition, were very numerous and unusually fine. Among the different contributions of this flower, we noticed many excellent blooms of new varieties, and were particularly struck with the additional number of white-tipped varieties which have been introduced this season. These, though many of them are not sufficiently perfect in form to entitle them to a place among show-flowers, possess an advantage in the garden over many self-colored sorts by their novel and distinct colors, producing a striking and beautiful effect. Of this class, we noticed in the collection of the President of the Society, the following varieties:—Flambeau, La Lione, Oakley's Surprise, Madame de Schaunenfeld, Miss Watson, Nihil, and Alba purpurea.

Among the plants, we would more particularly notice the following:—From the President, *Fuchsia*, var. *Fröstii*, *Exoniensis* and *Meteor*; *Achimenes longiflora* and *rosea*, very fine. In the collection of plants sent by Mr. William Carter, of the Botanic Garden, were the coffee tree, *Laurus camphora*, or camphor tree, *Chelone speciosa*, the *Alpinia nutans*, with its long erect leaves, and elegantly painted drooping flowers—with many other rare plants.

Five varieties of the *Achimenes*, viz., *longiflora*, *grandiflora*, *pedunculata*, *rosea*, and *coccinea*, from Messrs. Hovey & Co., were in fine flower and very attractive. Two of the largest plants we ever noticed of the *Lechenaultia formosa*, were sent by Mr. Thomas Willot, and were covered with flowers. *Arundo striata*, a curious plant, with many others, from Messrs. Winship, and a fine plant of *Fuchsia exoniensis*, from Mr. Parker Barnes.

The Society this season offered premiums for the most appropriate and beautiful ornamental devices in flowers for decorating the Hall, at the annual exhibition; for which there were a number of competitors. Mr. John Kenrick exhibited one of the most beautiful—it was the American Eagle, ingeniously wrought with flowers of the German aster. No device could have been more appropriate, and it attracted much attention. Mr. William Kenrick also sent an Eagle displaying his wide-spread wings, and a beautiful Star, both formed of aster flowers; also, a rustic Vase, wreathed and filled with a great variety of flowers. Some devices, designed to represent the Bunker Hill Monument, were very showy. Mammoth bouquets, composed entirely of dahlias, were furnished by Messrs. S. A. Walker, J. Nugent, and J. L. L. F. Warren.

Among the cut flowers, the German asters, from Messrs. Stickney, Johnson, Gordon, and S. A. Walker, were excellent specimens. Messrs. Hovey & Co. contributed sixty varieties of Bengal, Tea, Noisette, and Bourbon roses, and a beautiful collection of German asters. A large collection of dahlias was contributed by W. R. Prince, of Flushing, L. I., some of them fine blooms; also, by the same, a variety of very large and handsome coxcombs and German stocks.

The pomological department was the great centre of attraction; the

collection of various fruits, taken as a whole, was magnificent, and the specimens generally more select than on any former occasion. Our limits will not allow us to notice half of the fruits which were worthy of special mention. The President of the Society exhibited one hundred and three varieties of pears, including a specimen of the famous Leon le Clerc pear, which was tasted by the committee and pronounced to be a first rate, although it was a premature fruit; also, very large and beautiful specimens of the Columbia Virgoulouse, Beurré d'Aremberg, Golden Beurré of Bilboa, Beurré Diel and Fondante d'Automne, and numerous other remarkably large and fine specimens. This collection received the first premium offered by the Society for the greatest number and the best grown kinds.

The large collection from the Pomological Garden, Salem, contained one hundred and fifty-nine varieties of pears, fifty-three of apples, eleven of peaches, and nine of plums. This collection of pears obtained the second premium for the greatest number of kinds and best grown—many of them were large and handsome, and excelled in quality the collection of the previous year.

The largest collection of apples ever placed on the Society's tables was presented by the Vice President of the Society, Hon. B. V. French; it numbered *ninety varieties*, and was a superb collection, for which the first premium, for the largest number and best, was awarded.

A choice collection of apples from Hon. E. Vose, ex-president of the Society, consisted of remarkably fair and beautiful specimens. The premium for the best dish of apples was awarded for a dish of the Hawthorn-den, in this collection, which also received the second premium, for the greatest number and best grown.

A splendid basket of fruit was contributed by Mr. Haggerston, from the garden of J. P. Cushing, Esq., containing a great variety of pears, peaches, nectarines, grapes, &c. of the richest description, for which the committee awarded Mr. Haggerston the first premium.

The fruits from Mr. J. F. Allen, of Salem, were very fine and select, and among them were the largest and finest Bartlett pears exhibited. The grapes were also excellent and received the premium for the greatest number of kinds.

Superior specimens of pears were presented by Capt. Jos. Lovett. For his dish of Flemish Beauty, he was awarded the Society's premium. Many fine and remarkably handsome specimens of the Louise bonne de Jersey, Passe Colmar, Duchesse d'Angouleme, Flemish Beauty, Belle et Bonne, &c., were contributed from the gardens of J. S. Cabot and Otis Johnson, Esqrs. The Black Hamburgh grapes of Mr. John Arnold, obtained for him the premium of five dollars, and Mr. S. R. Johnson received the premium for the best grapes grown in the open air. The peaches exhibited by Mr. John Hill were truly splendid, both in size and coloring. Coe's Golden Drop plums, by Mr. Vandine; Porter, and an apple called the Detroit, by Mr. Owen; and Monstrous pippins, by Dr. Shurtleff, were all extraordinary fruits. Among the fruits presented by C. Newhall, were many superior pears, Ribston pippins, and Gravenstein apples—the latter were in many collections, and were uniformly beautiful; it is also one of the best apples of the season in which it ripens.

Besides the above mentioned fruits, which particularly attracted our attention, there were many others we would wish to mention more par-

ticularly had we sufficient space to do so. So large a number of varieties, and so fine specimens, we do not hesitate to say, has never before been exhibited in our country.

PLANTS.—From the President of the Society, *Fuchsia*, *Exoniensis*, Meteor, and *Frostii*; *Achimenes longiflora*, and rosea. From W. E. Carter, *Cineraria lobata*, *Laurus camphora*, *Hækea saligna*, *Alpinia nutans*, *Coffea arabica*, *Ardisia crenulata*, *Brunsvigia multiflora*, *Magnolia grandiflora*, *Abutilon virgata*, and a variety of other plants. From Hovey & Co., *Achimenes longiflora*, *grandiflora*, *pedunculata*, *rosea*, and *coccinea*, *Oxalis*, *Bowiei*, and *petunias*. From J. L. L. F. Warren, a variety of cactuses. S. Sweetser, *ericas*. Messrs. Winship, three plants *Fuchsia globosa*, *Arundo striata*. From T. Willott, two plants *Lechenaultia formosa*. From R. M. Copeland, *begonias*, *colchicums*, and *Eugenia myrtifolia*.

CUT FLOWERS, BOUQUETS AND DAHLIAS.—From the President, a great variety of dahlias, embracing the following new sorts: Lady St. Maur, white, shaded with lilac, fine form; Blanche Shelley, Mrs. Shelley; Beauty of Sussex, pink, edged with cherry, a large and showy flower; Antagonist, (*Bragg's*), cupped petals, the best white we have yet noticed; Hero of Stonehenge, mulberry, very fine form; Great Western, very large; Caleb Cope, fine rose; Lady Antrobus, fine form; Lady Ann Murray, Washington Irving, and the following white tipped sorts—Flambeau, La Lionne, Oakley's Surprise, Madame de Schauenfeld, Miss Watson, and Nihil. Hovey & Co. exhibited sixty varieties of roses, consisting of Teas, Bengals, Noisettes, and Bourbons; also, twelve varieties of German asters, and a large quantity of dahlias, containing a large number of the newest varieties. From Josiah Stickney, a great variety of dahlias—among them, fine blooms of Essex Triumph, Dodd's Prince of Wales, Burnham Hero, Pickwick, Miranda, Oakley's Surprise, &c.; also, a fine collection of German asters. H. W. Dutton, a large variety of dahlias, embracing fine flowers of Oakley's Surprise, Bridesmaid, Constantia, Widnall's Queen, Princess Royal, &c. From Joseph Breck & Co., a numerous variety of dahlias, embracing Antagonist, Lady St. Maur, Competitor, Charles XII., Caleb Cope, Miranda, Widnall's Queen, &c.; also, a great variety of verbenas, zinnias, centaurias, and asters. From Parker Barnes, a collection of dahlias, including Great Western, Caleb Cope, Henry Clay, Bridesmaid, Lady Washington, Bedford Surprise, Essex Triumph, &c. From Samuel Sweetser, cut flowers in variety, and numerous dahlias. John Gordon exhibited German asters and bouquets. J. L. L. F. Warren, pansies, asters, bouquets, and other cut flowers. Edward Allen contributed some very fine dahlias; the best twelve, which took the first premium, were as follows—Mrs. Shelley, Oakley's Surprise, Victor, Catleugh's Eclipse, Lady Antrobus, Essex Triumph, Lady St. Maur, Eleane de Beaucour, Henry Clay, Antagonist, Catleugh's Tournament, and Ploughboy. From W. E. Carter, bouquets and dahlias. John Hovey, dahlias, bouquets and other flowers. Messrs. Winship, bouquets of roses; one of *Lagerstrœmia indica* and *Azalea indica alba*, and dahlias; among them, Admiral Stopford, a fine dark variety—Pickwick, Queen of Beauties, Argo, Bridesmaid, and four seedlings. From R. M. Copeland, fine dahlias, including good blooms of Widnall's Queen, Pickwick, Ansell's Unique, &c. From Samuel A. Walker, two very large specimens of the Prince's Feather, coxcombs, German asters, and a fine display of

dahlias and bouquets. From S. R. Johnson, a beautiful show of German asters and roses; also, a variety of other cut flowers. From William Meller, bouquets and dahlias, some of them excellent blooms. Wm. R. Prince, of Flushing, L. I. exhibited a variety of dahlias from his nursery, some of them fine flowers, considering the great distance they were brought; also, some very large and handsome coxcombs, and a variety of Double German stocks and asters.

FRUITS.—The following list of fruits, presented at the exhibition, we copy from the Society's records:

By M. P. Wilder, President of the Society. Pears:—Van Mons Leon le Clerc, Duchesse d'Angouleme, Long Green, Franc Real d'Hiver, Fortunée, Ah! Mon Dieu, Cabot, Green Sugar, Ambrette, Thompson, Alpha, Belmont, Queen Caroline, Beurré d'Amalis, Comprette, Easter Bergamot, Green Catharine, Louise bonne de Jersey, Wilkinson, Marie Louise, Dix, Napoleon, Beurré d'Angleterre, Beurré Rance, Heathcote, Pope's Quaker, Fondante d'Automne, Vicar of Winkfield, Famenga,? Belle et Bonne, Buffum, Urbaniste, Beurré Diel, Ananas of Manning, Ananas of the French, Beurré d'Aremberg, Bon Chrétien Fondante, Fulton, Golden Beurré of Bilboa, Glout Morceau, Prince's St. Germain, Columbian, Doyenné Blanc, Cumberland, Capiaumont, Uvedale's St. Germain, Bezi Vact, Williams's Bon Chrétien, De Tonneau, Beurré Bronze, Doyenné Dore, Hacon's Incomparable, Paquency, Beurré Gris, Brown Beurré, Chaumontel, Ridelle, Beurré d'Hiver, Compte de Lamy, Bon Chrétien d'Espagne, Crassane, Winter Crassane, De Swede, Green Pear of Yair, Ne plus Meuris, Autumn Superb, Beurré Royal, Gilgil, King Edward, Passe Colmar, Jaminette, Poire de Livre, Verte Longue d'Automne, St. Germain, Fondante du Bois,? Lewis, Catillac, Cushing, Black Worcester, Duchesse de Mars, Beurré d'Angou, Bergamot,? Figue, Bon Chrétien d'Hiver, Sieulle, Louise bonne de Boulogne, Belle de Brisac,? Colmar Nelis, Angélique de Rome, Belle Angevine, Seckel, Rouse Lench, Cuvellier, Striped St. Germain, Petit Roussellet, and seven unnamed sorts. Plums:—Coe's Golden Drop, Corse's Admiral, St. Catharine, Blue Imperatrice, and a variety unknown. Apples:—Minister, Porter, Gravenstein, Fall Harvey, and a var. unknown.

From Elijah Vose, Dorchester. Apples:—Gravenstein, Hawthornden, Boxford, Old Nonsuch, Lady Haley's Nonsuch, Hubbardston Nonsuch, King of the Pippins, Ortleyp Pippin, Pickman's Pippin, Ribston Pippin, Bellflower, Marigold, Gilliflower, Baldwin, St. Lawrence, Rhode Island Greening, Spitzenberg, Roxbury Russet, Autumn Harvey, Old Pearmain, Summer Pearmain, Wales, Spice, Williams's Favorite, Howe's Seedling Sweeting, Corlie's Sweeting, Mackay's Sweeting, Pumpkin Sweeting, Danvers Winter Sweeting, Tolman's Sweeting. Pears:—Napoleon, Belle de Flanders, Buffum, Fulton, Pope's Quaker.

From B. V. French, Braintree. Apples:—Flushing Seek-no-further, Black Apple (of Cox), Wine, Fameuse, Canada Reinette, Baltimore, Fall Sopsavine, Conway, Red Calville, Pearmain, Gloria Mundi, Sweeting, Spice, Lyscom, Rock, Ribston Pippin, Pomme d'Api, Long Nonsuch, Burrassé, Gilliflower, Yellow Newton Pippin, Seaver Winter Sweet, Garden Striped, Danvers Winter Sweet, Newark King, Porter, Beauty of Kent, Garden Royal, Hawthornden, Sweeting, Hingham Seek-no-further, French's Sweet, Pomme Gris, Mela Carle, Baldwin, Sugar Sweet, Greening, Dutch Codlin, True Nonsuch, Long Russet, Yellow

Bellflower, and eleven varieties names unknown. The above were on the tables, and about forty sorts not on the tables, for want of room.

From Cheever Newhall, Dorchester. Apples:—Spitzemberg, Tolman's Sweet, Hightop Sweet, Golden Russet, R. I. Greening, Ribston Pippin, Williams's Early, Gravenstein, Jersey Pippin, Lady, Maryland Pippin, Chataignier, Minister, Snow, Siberian Crab, five var. ; Hawthornden, Fall Pippin, Marigold. Pears:—Roi de Wurtemberg, Harrison's Fall Baking, Urbaniste, Orange, Beurré d'Amalis, Naumkeag, Beurré Blanc, Warden, Belle et Bonne, Beurré Rance, Angleterre, Heathcote, Chaumontel, D'Arenberg, Catillac, and Cumberland. Grapes:—Isabella, Catawba.

From J. P. Cushing, Watertown. Grapes:—Black Hamburgh, Muscat of Alexandria, White Sweetwater, White Frontignac, Syrian, Poonah, Saint Peter's. Peaches:—Noblesse, Bellegarde, Mountain of Snow, New York Mignonne. Pears:—Brown Beurré, Seckel, Flemish Beauty.

From J. S. Cabot, Salem. Pears:—Urbaniste, Columbian, Fulton, Capsheaf, Princess of Orange, Alpha, Smith's Pennsylvania, Surpasse Virgoulouse, Long Green, Marie Louise novo, Brown Beurré, Surpasse St. Germain, Fortunée, Jalousie, Chaumontel, Henri Quatre, Vicar of Winkfield, Bon Chrétien Fondante, Winter Nelis, Capiaumont, Louise bonne de Jersey, Wilkinson, Seckel, Gendersheim, Wilbur, Green Pear of Yair, Van Assene, St. Ghislain, Flemish Beauty, Washington, Hericart, Hanna's, Brande's St. Germain, Bezi de la Motte, Thompson, Easter Beurré, Fig Extra, (Van Mons,) Williams's Bon Chrétien, Golden Beurré of Bilboa, Marie Louise, Belle Lucrative, and Cabot's Seedling.

From J. Lovett, 2d, Beverly. Pears:—Flemish Beauty, King Edward, Williams's Bon Chrétien, Hessel, Bezi de la Motte, Seckel, Beurré Capiaumont, Easter Beurré, Bal Armuda, Wurmskale, (new,) Winter Nelis, Washington, Verte Longue, Marie Louise, Harvard, Petre. Plums:—Coe's Golden Drop, Long Blue, Goliah, Reine Claude Violet. Apples:—Gravenstein, Minister, Dutch Codlin.

From the Pomological Garden, Salem. Pears:—Bartlett, Beurré d'Amalis, Belle et Bonne, Dix, Brown Beurré, Alpha, Hawthorne's Seedling, Louise bonne de Jersey, Long Green (of Coxé,) Pope's Russet, Citron of Bohemia, Rousselet de Rheims, Hanna's, Frederic of Wurtemberg, Cabot, Fulton, Bergamotte Sylvange, Doyenné Mons, Belmont, Louis of Bologne, Figue Extra, Angers, Sovereign du Princein, ? Sous-reine, Excellentissima, ? Beauty of Winter, Beurré Witzcomb, Downton, Las Canas, Hampden's Bergamot, Bergamotte d'Automne, Jalousie, Easter Beurré, Capiaumont, Turkish Bon Chrétien, Pailleau, Mabile, Beurré d'Arenberg, Meuris d'Hiver, Surpasse, Marie Louise, Wilkinson, Pennsylvania, Glout Morceau, Beurré Bronze, Napoleon, Rousselet de Meester, Colmar Epine, Henry IV., Andrews, Paradise d'Automne, Long Green of Dubamel, Chelmsford, Black Pear of Worcester, Surpasse Maurice, Hays, Green Pear of Yair, Whitfield, Stevens's Genesee, Reine des Poires, Doyenné Nouvelle Bossuck, Bezi de Heri, Duchess of Mars, Bouquia, Thompson's, Rouse Lench, Charles of Bologne, Bon Chrétien Fondante, Beurré Beaumont, Bezi de la Motte, Duchesse d'Angouleme, Ronville, Huguenot, Marie Louise, Forme de Urbaniste, Cushing, Quilletette, Emerald, Hericart, Beurré Diel, Bergamotte de Parthenay, French Iron, Bleeker's Meadow, Washington, Belle of Flanders, Tucker's Seedling, Horticulture, Phillips, Michaux, Pitford, Styrian, Fortunée, Vicar of Winkfield, Bonne Louise, Jalousie de Fontenay, Vendée, Cuvellier,

Shenk's, Winter Nelis, Croft Castle, Muscadine, Yutte, Prince's St. Germain, Duquesne, Passe Colmar, Seckel, Urbaniste, Capsheaf, Pound, Surpasse Virgoulouse, Beurré Bosc, Hacon's Incomparable, King Edward, Caen du France, Sieulle, Chaumontel, Johannot, Charles of Austria, Beurré Delbecq, Foster's St. Michael, Princess of Orange, Comte de Lamy, Althorp Crassane, Chat Brule, St. Michael's, Clara, Grey Doyenné, Moccas, Bonne Louise Royal, Beurré Beauchamps, Commodore, Locke, Beurré Van Mons, Ambrosia, Josephine, Seedling, Dundas, Alexander of Russia, Belle Lucrative, Bezi de Montigny, Paternoster, Dumortier, Queen of the Low Countries, Catillac, Éfian Prodige, Harvard, Golden Beurré of Bilboa, St. Ghislain, Heathcote, Summer Thorn, Lewis, Buffum, Nos. 1590, 177, 51, 858, 1406, 108, 1028, 707, 432, of Van Mons. Apples:—Porter, Murphy, Snow Apple, Pear Tree Lot, Canadian Reinette, Pennock's, Minister, Ortleyp Pippin, Pound, Black Apple, Grey French Reinette, Fall Harvey, Winter Pearmain, Pigeonette, Green Sweet, Kilham Hill, Tewksbury Blush, Rawle's Janet, Smokehouse, Æsopus Spitzemberg, Cambunethan, Rose of Sharon, Sam Young, Monstrous Pippin, Yellow Bellflower, Gravenstein, Boxford, Triangle, Lyscom, Rambour d'Ete, Seek-no-further, Longueville's Kernel, Ribston Pippin, Hoary Morning, King of the Pippins, Ice Apple, Kirk's Lord Nelson, Ananas, Downton Pippin, Winesap, Cathead, Cornish Aromatic, Cass or Coss, Enfield Pearmain, Dyer, Lovett Sweet, Dutch Codlin, Pownal Spitzemberg, Golden Sweet, Reddick, Black Coal, Mank's Codlin, Haskell Sweet. Plums:—Nota Bena, Bruyn Gage, Coe's Golden Drop, Rogers's, St. Catharine, Dominic Dull, Blue Imperatrice, Wilkinson, Purple Gage. Peaches:—Hasting's Rareripe, Jacques, Bonaparte, Yellow Rareripe, Robinson Crusoe, Crawford's Early, Yellow Alberge, Nivette, Columbia, Clinton, Seedling.

From John Arnold, Jr., of Milton. Grapes:—Black Hamburgh. From Otis Johnson, Lynn. Pears:—Passe Colmar, Louise bonne de Jersey, Calebasse, Jalousie, Washington, Uvedale's St. Germain, Belle et Bonne, Roi de Wurtemberg, Duchesse d'Angouleme, Princess d'Orange, Williams's Bon Chrétien, Rousset de Rheims, St. Ghislain, Harvard, Easter Beurré, Dix, White Doyenné, Gilogil, Glout Morceau, Catillac, Vicar of Winkfield, Pope's Quaker, and two var. unknown. From J. W. Sever, Dorchester. Pears:—Vicar of Winkfield, Rousset de Rheims, Fondante de Automne, Bartlett. Plums:—White Magnum Bonum. Seedling peaches. From Capt. Macondry. Pears:—Bartlett, Poire d'Hiver, Seedling, Washington, Capsheaf, Passe Colmar, Queen of the Low Countries, Fall Sugar. Apples:—Dutch Codlin, Spice, Baldwin, Reinette, Gravenstein, Ribston Pippin, Golden Sweet, Gardner's Sweet, and other varieties without name.

From Madam Bigelow, Medford. Apples:—Rambour Franc, Monstrous Pippin, Russet Sweeting. Pears:—Bon Chrétien,? Dore,? Peaches:—Heath. From Madam Howard, Brookline, (by Jas. Nugent.) Pears:—Duchesse d'Angouleme, Williams's Bon Chrétien, St. Germain, St. Michael, Beurré Diel, Pound, and a pear unknown. Grapes:—White Sweetwater, open culture. Plums:—Blue Imperatrice. From J. S. Sleeper, Roxbury. Peaches. From S. Phipps, Dorchester. Pears:—Easter Bergamot, Dix, Glout Morceau, Easter Beurré, Urbaniste, Autumn Superb, Prince's St. Germain, Marie Louise, Duchesse d'Angouleme, Columbian, Beurré Spence,? Heathcote, St. Germain, Napoleon, Virgou-

louse. From John Howland, New Bedford. Grapes:—Sweetwater and Black Hamburg. Peaches:—President, Yellow Rareripe, and Old Newington. From Joseph Balch, Roxbury. Pears:—Williams's Bon Chrétien, Rousselet de Rheims, Summer Thorn, Williams's Seedling, Doyenne Gris.

From L. P. Grosvenor. Apples:—Roxbury Russet, Summer Pearmain, Danvers Winter Sweet, Fall Pippin, Hubbardston Nonsuch, Baldwin, Nonsuch, R. I. Greening, Spitzemberg, Clara, Porter, Hull's Sweeting, Black, Squash, Quince, Gilliflower, Chandler, Tolman's Sweeting, Golden Russet, Yellow Stripe, Harvey, Lewis's Favorite, Ebenezzer, and Coat. Pears:—St. Michael, Seckel, Duchesse d'Angouleme, Urbaniste, Autumn Superb, Easter Beurré, Bonne Louise, Heathcote, St. Germain, Hunt, St. Ghislain, Hardenpont, Passe Colmar, Napoleon, Bon Chrétien, Beurré Diel, Wilkinson, Belle Lucrative, Jehonnot.

From Hazen Hasseltine, Haverhill. Grapes:—Black Hamburg, Zinfindel, Constantia, Frontignac, Sweetwater. From George Newhall, Dorchester. Pears:—Beurré Bosc, Urbaniste, Dix, Cumberland, Fulton, Seckel, Louise bonne de Jersey, Gansel's Bergamot, Bartlett, St. Ghislain. Apples:—Æsopus Spitzemberg, Gravenstein, Ribston Pippin. From Professor Farrar, Cambridge. Apples:—Porter, Long Red and Green Sweet. From E. Edes Bradshaw, Charlestown. Sweetwater grapes, Bartlett pears, seedling peach. From Dr. Ebenezer Wight, Dedham. Pears:—Napoleon, Long Green, Cushing, Passe Colmar, Easter Beurré. Plums:—Coe's Golden Drop. From Dr. J. Burnett, Southborough. Lyscom apples.

From Wm. Stearns, Salem. Pears:—Seckel, Brown Beurré, Chaulmontel, St. Michael, Platt's Bergamot, Broca's Bergamot, Duchesse d'Angouleme, Winter Nelis, Summer Thorn, Napoleon, Long Green, Virgoulouse, Surpasse Virgoulouse, Rousselet de Rheims, Wilkinson, Endicott.

From Messrs. Winship, Brighton. Pears:—Cushing, Andrews, Cumberland, Belle Lucrative, Glout Morceau, Easter Beurré, Passe Colmar, Poire d'Ananas, Blecker's Meadow, St. Ghislain, Brown Beurré, Winter Nelis, Beurré Rance, Doyenné Blanc, Pound, Fulton, Marquise, Beurré de Capiaumont, Seckel, Duchesse d'Angouleme, Beurré d'Aremberg, Surpasse St. Germain, Napoleon, Massachusetts, Golden Beurré, Moor Fowl Egg, Rushmore's Bon Chrétien, Bezi Vaet, Sylvange, Rouse Lench, Kenrick, Vicar of Winkfield, Prince's St. Germain, Verte Loügue Panachée, Beurré Diel, Wilkinson, Catillac, Beurré d'Ete, Bartlett, Imperiale a Feuilles de Chine, Beurré d'Amalis, Belle et Bonne, Grosse de Bruxelles, Beurré Moair, Bergamotte, Bernard, Vallee Franche, Crasane, Bezi de la Motte. Nectarines:—Red Roman.

From Aaron D. Williams, Roxbury. Pears:—Andrews, St. Michael, Seckel, Bon Chrétien, Chelmsford. Apples:—Porter, Rams-horn, Daniel Wise, Doll, Nonsuch, Gilliflower, Harvey, Yellow Nonsuch, Spice, Thinskin, and two var. not named.

From William Kenrick, Newton. Apples:—Ammidon's Late Pound Sweet, Ammidon's Fall Sweet, Danvers Winter Sweet, Orange Sweet, Sudbury Sweet, Garden Sweet. Pears:—Louise borne de Jersey, Capiaumont, Fulton, Buffum, Duchesse d'Angouleme, Glout Morceau, Striped Swiss, Grosse Moule Bouche, Urbaniste.

From J. L. L. F. Warren, Brighton. Apples:—Baldwin, Roxbury Russet, Greening, Fall Pearmain, Blue Pearmain, Hubbardston Nonsuch,

Ribston Pippin, Wine, New York Greening, Grand Sachem, Porter, Golden Russet, River, Bellflower, Lancaster, Fall Bough, Danvers Sweet, Minister, Dutch Codlin, Red and Green Stripe Sweet, or Mammoth, Pumpkin Sweet, Spice, Hawthornden, Fall Sopsavine, or Owen's Red, Red Siberian Crab, and four other varieties. Pears:—Bartlett, Duchesse d'Angouleme, Beurré Gris, Napoleon, Easter Beurré, St. Michael, Stevens's Genesee, Rousselet de Rheims, Seckel, Summer Thorn, Martin Sec, Striped St. Germain, Bishop's Thumb, Autumn Bergamot, Buffum, Louise bonne de Jersey, Pear of Austria, Beurré d'Amalis, Doyenné d'Hiver, and four var. unknown. Plums:—Semianna, Magnum Bonum. Peaches:—Late Malacatune, Red and Yellow Rareripe, and a seedling clingstone. Quinces:—Pear and Portugal. Schuylkill grapes.

From J. F. Allen, Salem. Pears:—Louise bonne de Jersey, Long Green of Autumn, Seckel, Passe Colmar, Napoleon, St. Michael, Bartlett, Glout Morceau, Gansell's Bergamot, Beurré Capiaumont, Marie Louise, Ronville, Cabot. Grapes:—Black Hamburg, Black Prince, Zinfindal, Esperione, Muscat of Alexandria, Chasselas de Fontainebleau, Chasselas de Bar-sur-aube. Jaques's Rareripe peach.

From S. Pond, Cambridgeport. Pears:—Williams's Bon Chrétien, Bartlett, Dix, Capiaumont, Belle Lucrative, Surpasse Virgoulouse, Beurré Diel, Easter Beurré, Duchesse d'Angouleme, Heathcote, Andrews, Seckel, St. Ghislain, Marie Louise, Napoleon. Plums:—Coe's Golden Drop. Quinces:—*Pyrus Japonica*, or Japan Quince. From S. & G. Hyde, Newton. Pears:—Bartlett, Andrews, Tucker's Bon Chrétien. Peaches: Old Mixon, Malacatune, Royal Kensington, Heath. Apples:—Newton Pippin, Pæony Apple, Detroit, French Nonpareil, Bough Harvest, Shop Apple, Ribston Pippin, Roxbury Russet, Blue Pearmain, Gardner's Sweet, Long Nonsuch, York Russet, R. I. Greening, Bellflower, Spice, Baldwin, Hubbardston Nonsuch, Hightop Sweet, Spitzemberg, Williams's Gravenstein, Andover Harvest, Yellow Apple, Seek-no-further, Porter, Fall Sopsavine, Striped Sweet, French, Dutch Codlin, Gilliflower. From Wm. Meller, Roxbury. Peaches:—two varieties, three dishes. Pears: variety, two dishes. By John Gordon, Brighton. Apples:—unnamed, from Mr. Fagan, Porter do. Pears:—Duchesse d'Angouleme, Napoleon, Williams's Bon Chrétien, Moor Fowl Egg. Peaches:—two varieties. Grapes: Isabella. From S. H. Colton, Worcester. Plums, of variety not named. Pears:—St. Ghislain, Napoleon, Beurré d'Aremberg, Bon Chrétien Fondante, Marie Louise, Seckel, Buffum, Belle Lucrative, Capiaumont, Flemish Beauty. Apples.—Pommé Royal, Golden Russet of Worcester County, Peck's Pleasant, Pommé Water, Lyscom. Danvers Winter Sweet, Blue Pearmain, Nonsuch, Telft's Sweeting, Tolman's Sweeting. Wine Sap, Honey Greening, Porter, Baldwin. From W. R. Prince, Flushing. Pears:—Comstock's Seedling, native of Washington county, N. Y., Rip Van Winkle, native of Orange county. Warren Grape, native of Georgia. Pawpaw or Custard Apple.

From Henry Vandine, Cambridgeport. Apples:—Gravenstein, Porter. Pears:—New Long Rosewater, Hardenpont, Seckel, Marie Louise, Turkish Bon Chrétien, St. Michael, Spanish Bon Chrétien, Duchesse d'Angouleme, Prince's St. Germain, Beurré d'Aremberg, Passe Colmar, Sucre de Hoyerswerda. Plums:—Coe's Golden Drop, White Gage, Large Yellow Gage, Duane's Purple, Blue Imperatrice, Smith's Orleans, Cloth of Gold, Italian Prune, Magnum Bonum, Nectarine, Seedling. From John Owen,

Cambridge. Apples:—Porter, Blue Pearmain, Baldwin, Greening, Large Red. Pears:—Frederick of Wurtemberg, Bergamot, Baking. Peaches: Lemon Rareripe, Red and Yellow Rareripe. Plums:—Green Gage. Grapes:—Isabella, Native Purple, Small Sweetwater,? From Thomas Morey, Hingham. Apples:—York Russet,? From J. Macomber, Roxbury. Apples:—Pumpkin, Sweet and Porter. By S. Walker, from a member of the Society. Rousselet d'Rheims Pears. From Geo. Walsh, Charlestown. Plums:—Green Gage, White Gage. Pears:—Williams's Bon Chrétien, from grafts put in in May, 1843, Golden Beurré of Bilboa. Apples:—eight varieties. Grapes:—Red Hamburg, White Sweetwater, (open culture,) and Isabella. From R. M. Copeland, Boston. Grapes: Sweetwater. From James Peabody, Georgetown. Apples:—Gravenstein. From Kendall Bailey, Charlestown. Nine clusters White Sweetwater Grapes, (open culture.) From John Rice, Portsmouth, N. H., by Major Henry Sheafe, Bon Chrétien Pears. From Richard Ward, Roxbury. Pears:—Musk, Seckel, Williams's Bon Chrétien, Andrews and Cushing. From Mrs. S. W. Holbrook, Brighton. Crab Apples. From Wm. G. Lewis, Roxbury. Seedling Peaches. From Peter Corbett, Milford. Mammoth Peaches. From Dr. S. A. Shurtleff, Brookline. Apples:—Blue Pearmain and Monstrous Pippin. Joseph Prince, Jr., Hanover, N. H. Several specimens of Apples. From Wm. H. Smith, Brighton. Seedling Peaches. From Ibrahim Bartlett, Quincy. Pears:—Bartlett. Quince:—Orange. From S. D. Hayden, Braintree. Apples: Blue Pearmain and Squash. From J. W. Boutelle, Fitchburg. Grapes: Native, Seedling.

VEGETABLES.—From the President of the Society, two very large squashes. John Marland, of Andover, sent an enormous squash, weighing 133 pounds; this was one of five which grew on the same vine, all averaging about the same weight. From John A. Kenrick, fine large fruit of the purple egg plant. Capt. Josiah Lovett, who is noted for raising fine vegetables as well as fruits, contributed ten varieties of melons, viz.: Mountain Sprout, Imperial, Rock, Improved Maryland and Bird's Eye watermelons; Christiana, Smyrna, Malta, Minorca and Pennsylvania Prize muskmelons; also Smyrna, Malaga, South American, Indiana, Marrow, Buffalo, Canada and Crookneck squashes; fine brocoli, and large and fine Caldwell and Snowball potatoes. From Mrs. Howard, a fine Crookneck squash, the growth of 1843. Very large beets, from J. Macomber. From the garden of Mrs. Bigelow, Medford, the Massachusetts squash, and a variety of very small handsomely striped melons, sometimes called mandrakes. From J. L. L. F. Warren, three Crookneck squashes, growth of 1843. From John Howland, New Bedford, fruit of the purple egg plant. From George Walsh, striped pear gourds. Wm. B. Kingsbury contributed some extra large Drumhead cabbages. Rev. J. O. Choules, some South American squashes. From Wm. Curtis, fine and very large Myatt's Victoria Rhubarb. John Gordon sent a variety of handsome melons, squashes and cucumbers. A. D. Weld, extra large beets. B. V. French, two very large squashes, weighing 73 and 94 pounds. From Wm. Mackintosh, Roxbury, monstrous Drumhead cabbages, also Savoy cabbages and fine squashes. From Hovey & Co., fruit of the white and purple egg plant, Marrow squashes, Bassano beets; a mammoth squash, weighing 97 pounds, muskmelons and Giant tomatoes.

ART. III. Faneuil Hall Market.

	From	To		From	To
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
<i>Roots, Tubers, &c.</i>			<i>Squashes and Pumpkins.</i>		
Potatoes, new:			Autumnal Marrow, per lb. .	1	—
Chenangoes, { per barrel,	1 00	1 25	Canada Crookneck, per lb. .	1	2
Common,.... { per bushel,	45	50	Winter Crookneck, per lb. .	1	—
Eastport,..... { per barrel,	1 00	—			
Sweet,..... { per bushel,	40	—			
Turnips, per bushel :	1 50	—	<i>Fruits.</i>		
Common flat,	2 00	2 50	Apples, dessert and cooking:		
Ruta Baga,	75	—	Porter's, per barrel,	2 50	3 00
Onions :	1 00	1 25	per bushel,	1 25	1 50
Red, per bunch,	3	4	Pumpkin Sweet, per bush. .	75	1 00
Yellow,..... { per bunch,	3	4	Connect. Sweet, per bar. .	2 00	—
New White, per bunch, . . .	62½	—	Common, per barrel,	1 00	1 25
Beets, per bushel,	3	4	Baldwins, per barrel,	1 50	—
Carrots, per bushel,	50	75	per bushel,	75	—
Parsnips, per bushel,	50	75	Bellflower, per barrel,	1 50	2 00
Horseradish, per lb.	75	—	Greenings, per barrel,	1 00	1 25
Garlic, per lb.	8	10	Russets, per barrel,	1 00	1 25
	8	10	Pears, per half peck :		
			Capiaumont,	75	—
<i>Cabbages, Salads, &c.</i>			Seckel,	75	—
Cabbages, per doz. :			Urbaniste,	50	62½
Drumhead,	62	75	St. Michael,	50	62½
Savoy,	50	62	Brocas Bergamot,	50	75
Red,	75	—	Common, per bush.	1 00	1 50
Brocolis, each,	10	20	Baking, per bush.	1 00	—
Cauliflowers, each,	10	20	Quinces, per bushel,	1 50	2 00
Celery, per root,	6	8	Peaches :		
Lettuce, per head,	6	—	Common, per half peck.	25	37
Beans : Shell, per quart :			Extra, per doz.	50	75
Common,	10	12	Plums, per quart :		
Sieva,	12	17	Green Gage,	25	37
Lima,	17	20	Damsons, per half peck,	50	—
Sweet Corn, per doz.	6	8	Grapes, per lb. :		
Cucumbers, (pickled) pr gal. .	25	—	Black Hamburgh,	50	75
Peppers, (pickled) per gal. . .	37½	—	White Sweetwater,	25	37½
Mangoes, per doz.	17	20	Isabella,	12½	—
			Catawba,	12½	—
			Barberries, per bush.	75	1 00
<i>Pot and Sweet Herbs.</i>			Watermelons, each,	15	20
Parsley, per half peck,	12½	—	Muskmelons, each,	10	20
Sage, per pound,	17	20	Green fleshed, small,	6	8
Marjorum, per bunch,	6	12½	Purple Egg Plant, each,	8	12½
Savory, per bunch,	6	12	Cucumb. (pickling) per hun. .	12	15
Spearmint, per bunch,	3	—	Peppers, (pickling) per lb. . .	3	4
			Tomatoes, per half peck,	12	15
			Cranberries, per bushel,	1 50	2 00
			Chesnuts, per bushel,	3 50	4 00

REMARKS.—The weather during the most of September has been extremely dry, but the season being so far advanced, and crops of most descriptions near maturity, that no injury, that we are aware of, has resulted. On the morning of the 28th there was an unusually severe frost, which cut down all tender plants, and put a stop generally to vegetation. Within the last week there have been copious rains, filling the streams and

springs, which had become very low, and the weather has become quite cold for the season.

Vegetables.—Of all descriptions there is an ample supply, and generally of excellent quality. Potatoes have produced abundantly, and are better this year than usual. In some parts of the country, however, they have been destroyed by a disease, the cause of which has not yet been ascertained. When attacked, the vines immediately die, and on digging the potatoes they are found to be rotten and worthless. In the State of Maine they have not been affected, and the crop is said to be unusually large; the rumors, in consequence of the disease prevailing so extensively in some places, has had the effect to advance the price some, and they are now selling quick at our quotations. Sweet potatoes are plenty and of good quality. Turnips are good, but not yet very abundant. Onions are large and very fine, and the crop this year very heavy. Beets and carrots are plenty and large. Cabbages are not so plenty and good as usual at this season, owing to so much dry weather, but the late crops will no doubt come in well; they have been benefitted by the late rains and have some time yet to fill up. Good brocoli and cauliflowers are not yet very plenty,—the season has been too dry for them. Beans and sweet corn are now scarce, as the season for them has passed. Celery is not yet very large, but enough is brought to supply the market at low prices. The frost has cut off peppers and pickling cucumbers, and they are done for the season. Of squashes the market is overloaded. The season has been so favorable for them that great crops have been produced, and they sell at extremely low prices; they are generally of excellent quality this year.

Fruit.—Apples are very plenty and sell at low prices; the fall and winter sorts have ripened very early, and are large and fair. Porters are nearly gone. A good supply of the Bellflower is brought from New York. Pears, of the common baking sorts, are abundant, but the fine kinds command good prices. Quinces are plenty and good. The season for peaches and plums is about over; a few yet remain, and sell readily at quotations. Grapes of the forced kinds sell low now, as the market is so well supplied with Isabellas, of which great quantities are now sold at our quotations, for the best. Of cranberries there is a good supply; prices are somewhat higher than last year at this time. Lemons have become very scarce, and sell at high prices. No oranges in the market. A few chesnuts have been brought in, and sell readily at quotations.—*Yours, M. T., Boston, Sept. 30th, 1844.*

HORTICULTURAL MEMORANDA

FOR OCTOBER.

FRUIT DEPARTMENT.

Grape Vines, in greenhouses and vineries, where the wood is matured, will need but little attention; as soon as the leaves drop they may be pruned and thoroughly cleaned. Guard against dampness in houses where the fruit is not yet gathered; and when it is wished to preserve the fruit to a late period, the bunches should be occasionally looked over

and any defective berries removed; bags made of tissue paper, and drawn up over the bunches, is an excellent plan to protect the fruit from dust, insects, &c. Vines in the open ground should be pruned and trained as soon as the leaves drop.

Pears and Apples should now be gathered as fast as they ripen; choose a dry day for the purpose, and handle them carefully. Choice late winter pears will need considerable attention to ripen them perfectly without shrivelling, packing them in wheat bran, and placing them in a warm cellar is recommended, or they may be wrapped in papers separately, and packed in close buckets, which should be kept in a cool place, and when any are wanted for use, put such into a warm room, of the temperature of from 60 to 70 degrees, a week or ten days, and they will ripen well.

Fruit and Ornamental Trees may now be transplanted. By doing this now, much time is saved in the spring, when there is so much other work to be done; they will also start earlier in the spring than trees planted at that time, and will not be so liable to suffer when dry weather occurs; to prevent rocking by the wind they may be secured on Capt. Lovett's plan, detailed in the present volume.

Seeds of Fruit Trees should be sown this month. In all cases the ground must be made very rich, and be well pulverized to be successful. The stones of peaches and plums had better be placed in a body, and covered with a few inches of earth, and in the spring crack them and sow the kernels.

Currants, Gooseberries and Raspberries continue to plant; it is absolutely necessary to set them in rich ground if good fruit is the object. Cut out all the shoots of raspberries which bore the present year. Thin out the oldest wood of currants, and shorten the new shoots. Gooseberries must be kept thin of wood, and the shoots be well cut in, to guard against mildew.

FLOWER DEPARTMENT.

*Dahlia*s.—Wherever they have been cut down by frost, which has been the case in many places, they may be immediately taken up, and housed for the winter. Nothing is gained by leaving the roots in the ground long after the tops are destroyed.

Greenhouse Plants, now that they are in their winter quarters, should have plenty of air and be watered sparingly. Keep them clean and free from insects, and excite them little as possible at this season.

Chrysanthemums must now be brought into the parlor or greenhouse, and kept well supplied with water, and once or twice a week with a solution of guano. This will make them grow strong and give them a deep green foliage and fine flowers.

*Ixia*s and *Sparaxis* must now be potted in rich light soil.

Hyacinths, and other bulbous flower roots required for the parlor during winter, should now be potted or put into glasses. A sandy soil, moderately rich, suits them best; water very little until the leaves have grown an inch or two—then supply liberally. The latter part of the month, the beds and borders should be prepared for planting such kinds as are wanted to ornament the garden in the spring; when these are required they should be selected in season, that good bulbs may be secured. A few good ones are preferable to a bushel of the trash that is so frequently sold at auction, and bought because they are sold cheap.

THE MAGAZINE
OF
HORTICULTURE.

NOVEMBER, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *The Monthly Alpine or Four-Seasons Strawberry.*
By the EDITOR.

NOTHING has attracted our attention more, during our visit to Paris, than the great quantities of the Alpine or four-seasons strawberry offered for sale in the markets. Passing through the *Marché St. Honoré*, we noticed hundreds of baskets of them; and indeed at all the fruit shops, and in the windows of the principal *Cafés* and *Restaurants*, quantities of them were to be seen. The price in the market, where we occasionally inquired, was fifteen sous (fifteen cents) or thereabouts, according to their size and freshness, the basket containing a quart or more. Some of them were remarkably large and fine, exceeding in size the best common Wood strawberry. Anxious to learn the best method of cultivating this strawberry, so desirable from its continued productiveness, we made inquiry of M. Jamin and other eminent cultivators, in whose gardens we saw it bearing abundantly, and picked many superior specimens of the fruit.

In the last volumes of Loudon's *Magazine*, some excellent articles appeared on the cultivation of this variety from seed, and extracts from these will be found in our last two volumes. It is easily grown in this manner, and great quantities are thus raised every year, the production of the seed being quite an object to supply the seedsmen. It is however as easily and rapidly increased by the runners, when once there is a stock to commence with.

As a reference to the volumes we have named will give the desired information relative to the growth of the plants

from seed, we shall only now notice their cultivation by runners. September is considered the best month to plant out new beds. As the plants are not of so vigorous a habit as the large varieties, perhaps earlier planting, in our warm climate, might not be attended with favorable results. The ground being prepared, the best and strongest runners are selected and planted out in rows, about six inches apart, the rows about one foot from each other. In our climate we think it would be necessary to select a cool and *half shady situation*, where they would undoubtedly do better than if fully exposed; under a north fence or wall would be a good place, or even in the shade of trees, though not immediately under them, would be better than fully exposed. In the garden of M. Jamin, we found them bearing abundantly thus situated, under the partial shade of pear trees trained *en quenouille*, on the borders of the walks. In the gardens of the Luxembourg we saw nearly quarter of an acre, planted out in rows, three feet apart, and a row of dahlias between every other row, the alternate spaces answering for walks. The dahlias afforded some shade, though it is less needed in the climate of Paris, and the vines were loaded with fruit. The vines commence bearing at the usual season, and continue uninterruptedly in fruit till October.

It would be an object to introduce this strawberry into cultivation for the supply of our market in the autumn, and we believe it would afford a good profit to the enterprising marketman. We trust, at least, that it will prove to be worthy the attention of all who are fond of this wholesome fruit, coming in as it does between the common varieties of the garden, and the forced ones of the vinery or hothouse, and thus keeping up a succession of fruit nearly the entire year. It should be recollected that a good rich soil will be certain to produce the best crop; occasional waterings would also be requisite in our climate; using, at times, liquid *guano*.

To the zealous cultivator, the Alpine strawberry offers the chance of great improvement: perhaps, by impregnation with the large sorts, greater size may be obtained and its successive bearing retained: the experiment could be tried, even if success should not attend it. A small parcel of seed would produce quite a number of plants.

Paris, Sept. 20, 1844.

ART. II. *Remarks on the Ribston Pippin Apple, location, &c.*

By J. W. RUSSELL, Newton, Mass.

THE Ribston pippin apple is one of the best for either eating or baking, and continues in use from October to April. The first tree of this much esteemed fruit was found in a wild state in a deer park, and was cultivated and grown to perfection at Ribston Hall, near Knaresborough, Yorkshire, England. Shape, globular; a little streaked towards the sun, and yellow on the other side, sometimes a little russeted at the crown; flesh, pale, firm and sugary, agreeably acid, with a rich, aromatic flavor. It is said that there are two varieties of this apple in some of the gardens in this vicinity—one of an oblong shape and larger than the one I have described. The apple that sometimes resembles the true Ribston pippin is probably the Blenheim pippin.

This choice fruit, which is so highly esteemed in England for its good qualities, is not much sought after in this country. The Baldwin apple, that is so universally cultivated, is undoubtedly an inferior fruit to the Ribston pippin; but it may be said that the Baldwin is a great bearer and the other a shy one. I have seen for several years, at the estate of the late John Prince, Esq., Jamaica Plain, Roxbury, trees heavily laden with fruit of this fine variety.

The location is worthy of notice, and the fault in the one last mentioned was, that the trees grew on a flat, level plain, and the fruit ripened about three weeks too early—therefore did not keep so well through the winter as those that were not so early matured. In fact, the situation that is not unfrequently supposed to be the most eligible one, experience finds to be the reverse. A southern aspect is often preferred, which is decidedly the most unfavorable one that can be selected for this particular apple. I believe we have much to learn in the choice of the most favorable localities, before we shall be successful in the cultivation of some of the most superior varieties of apples not natives of America. A northwest slope I should prefer to any other for reasons thus: the tree would not start to grow so early in the spring; the roots would not suffer so much with the

summer drought; and last, but not least, the fruit would be larger and finer, and would not ripen so early by a fortnight or three weeks.

A rich deep soil, rather wet than dry, is best adapted for the apple tree; land half covered with rocks, that cannot be well cultivated with the plough, would be a desirable locality, especially in a dry season, as the trees would not suffer so much with drought.

As almost every farmer professes to be well acquainted with the taking up and transplanting of an apple tree, it appears to be altogether superfluous to say any thing on this part of the business; nevertheless, I will venture to make a few remarks. It would be very much for the interest of the purchaser of trees to have some person to superintend the drawing of them from the ground,—for this important operation is often performed as the name imports, that is, drawing the roots out of the ground regardless of consequences, mangling, twisting, bruising and breaking them. From such rash treatment what more can be reasonably expected than a weak puny growth after the tree is set out, for it often is set more like a post than a living tree, cramped up with its mutilated roots, and the earth pressed down upon them quite solid; there the tree remains, for it is firmly *set*, and if it does not die about midsummer, it may linger along in a feeble state—for to grow, it cannot be for a moment expected, after such unmerciful treatment. In order to be successful in the transplanting of trees, as many of the roots as possible should be taken up with it uninjured; and if holes are dug out, they ought to be three times as large as the roots will extend at the time of planting. It is a bad practice to dig deep into the subsoil, for it must be remembered that the nearer the roots are to the surface, the better for the future health and well doing of the tree. When the ground is well dug up and broken and all is in readiness for commencing the operation of planting, set the tree in its place, hold it firm in its proper position, and have the earth put on the roots as you arrange them in regular order, leading them out to their full length, and at regular distances, tier above tier, until you come to the surface, pressing the earth down with your hand, as you go on, amongst the roots; there will be no need of stamping the earth down with your feet, but if the trees are large, a gentle pressure with the foot may be necessary.

Fruit trees, or in fact any other kinds that are transplanted in the spring, would be very much assisted in their growth by mulching them through the summer months.

Yours, &c. J. W. RUSSELL.

Newton, Oct. 26, 1844.

ART. III. *Some Remarks on the Botany, &c. of Eastport, Me., and its vicinity.* By X.

A VISIT of a few weeks to this extreme border of the United States enabled me to investigate the autumnal flora, not only of the island on which Eastport is situated, but also of the adjoining shores of the main land. An area so contracted could not be expected to offer much for observation; and at a season, when nature was about arraying herself with the garlands of September, the peculiar character of its plants could not be so well perceived.

Eastport itself is pleasantly, I may say, delightfully, situated on a bold and picturesque island of comparatively small dimensions, and forms one of the interesting group of islets scattered in that portion of the Bay of Fundy. Its soil is rich and its crops are exuberant, affording to the enterprising farmer not only the comforts but some of the luxuries of life. Beneath its deep blue waters are innumerable fishes of various species; and on its rocky shores delight in astonishing luxuriance several species of Fuci (*rock weeds*) and kelp, which, applied to the earth in form of compost with peat mud or muck, or spread without any mixture, fertilize to a remarkable extent. The fame of its potatoes, in the White blue nose variety, has extended beyond its boundaries, and commercial speculation has transported it to the palm-waving and spice-breathing islands of the West Indies, realizing a more solid and substantial gratification to the eastern farmers than some other kinds of speculative transactions.

I was sorry to find, that, despite the rich soil and facilities for making it yet more productive, there was so little attention being paid to horticulture. Scarcely any fruit was to be seen in the gardens, and but few of the finer

vegetables, to say nothing of flowers. I was told that it were vain to attempt fruit growing on the island, and that even the apple, which flourishes on the main land only a few miles back from the immediate contiguity of the sea, was so exceedingly difficult of growth as to be nearly valueless. This failure was attributed to the fogs, a supposed peculiar feature of the east, but for which, the southern and southwestern winds, blowing thus from our own more auspicious climes, are duly honored with their origin and prevalence. An eastern fog is a serious matter, however. I had heard of such a phenomenon, but one must see it to realize its full extent. Yet, for ten days or more, finer or more delicious sunny, clear, mild, salubrious weather never gladdened the hearts of mortals, than rendered attractive this little spot. But as horticultural science and skilful practice have wrought such wonders with us, in overcoming obstacles in the way of climate and of atmospheric conditions, I am inclined still to imagine, that a series of well conducted experiments might do much in the way of introducing superior sorts of fruit where none are now known. A very low degree of cold in winter has been proved not to be prejudicial to many sorts of trees—else, instead of the very fair crops of peaches, for instance, in the vicinity of Boston, during the past summer, we should have expected an universal failure, after the unexampled freezings of the last winter, and the continued long range of the depression of the mercury below zero of Fahrenheit's scale. And although the grape is not found growing indigenous in the vicinity, yet I saw in one garden not only the fox grape (*Vitis Labrusca*) of Massachusetts, of vigorous growth, but young vines also of the Isabella, a more southern variety, which is sometimes too tender for the neighborhood of Boston. We have seen what care will do in the production of most superior fruit on the rocky, ocean-lashed promontory of Nahant; and every year gives new encouragement to try and keep on trying in the way of experiment. The plum, I was told, used to succeed very well; and judging from a single tree of the Damson variety, laden with fruit, I should have supposed that nothing but a little more trial and enterprise would repay all cost and trouble. This however, after all, may be theorizing, and a few stubborn facts may overthrow all such pretensions. It certainly will not be denied, however, that with such a

market as Eastport affords, there might be some very plausible excuse for repeated experiments in raising the better kinds of vegetables and hardier fruits. I believe the soil capable of any thing of the kind. Experiment alone is wanting to ascertain how much more productive a farm or a market garden could become.

It is generally conceded by strangers that the annual growth of forest trees and of cultivated shrubs is more luxuriant and vigorous than we see about us here. Even in the annuals, both indigenous and foreign, I noticed the same fact. Shrubs, such as viburnums and vines, as the Virginian creeper, (*Ampelopsis hederacea*), clematis, &c., produced most superb sized foliage. The beginning of a considerable taste is observable about the houses of the citizens, and the American mountain ash (*Pyrus americana*, D. C.) seems to be a decidedly universal favorite. Certainly they were great ornaments, and at this season their rich scarlet berries contrasted finely with the dark green and spreading foliage. It is rather surprising that so conspicuous a tree should not be more cultivated about Boston, and that the European co-species, (*Pyrus aucuparia*), growing, to be sure, much larger, and forming a longer lived and more regular shaped plant, should be almost exclusively cultivated. Beside the mountain ash, in many instances growing on the very streets and embowering the houses, I noticed the elegant cranberry bush, (*Viburnum oxycoccos*), whose rather acerb berries are not overlooked in culinary operations. Occasionally the striped maple, (*Acer striatum*), was to be seen, and some other smaller trees, interspersed with the Balm of Gilead poplar, (*Populus canadicans*), and the Horse Chestnut, (*Æsculus hippocastanum*.)

This general taste for ornamental shrubbery was also, in many instances, accompanied with some attention to the culture of flowers; and some very good varieties of dahlias were displaying a most exuberant bloom. The plants are generally set out rather late, and the rich, stiff, clayey soil soon produces stout, large-leaved and dwarf-sized plants, the envy of many an amateur of this kind of flowers, who has to contend, as I have the past summer, with drought, the vile spindle worms, and other plagues too well known and too much felt. Besides these, I saw elegant plants of *Clarkia pulchella*, *Chryseis californica*, sweet sultans, variegated poppies, candytuft, snapdragons, balsams, lark-

spurs, asters, &c. The cool temperature of the past summer, with recent rains, was favorable to a late development of such pretty annuals, and though only occasionally seen, gave promise of future success when such pursuits were better known and more estimated.

In a neat garden, tended with assiduous care in the few leisure hours of a very industrious merchant of Lubeck, I observed most excellent cauliflowers, growing without any extraordinary care or culture. Many pretty annuals and plants were here attended to, and a showy garden made quite attractive the premises of his house. The strawberry and red currant were also raised, but the same insect which strips the latter of its foliage and produces a premature coloring of the fruit with us, nearly discourages every trial to its successful cultivation. The larger kinds of gooseberry thrive well, however, and are free from mildew or blight on the berry; a circumstance of importance, in growing that sort of fruit. I noticed none of the larger varieties of foreign raspberries, the abundant crops of the native raspberry, (*Rubus strigosus*), satisfying every want, in the absence of so much more superior sorts. Every grain field is bordered with wild raspberry bushes, and large tracts of burnt land covered with this growth. These, with some species of blue berry, with a small black berry, (*Rubus trivialis*?) with the cranberry, (*Oxycoccus macrocarpus*), the cowberry, (*Vaccinium Vitis Idæa*), constitute the principal fruits. Other kinds, the steamboats direct from Boston furnish; amply supplying every deficiency produced by whatever causes deter their cultivation.

A section of country thus humid and cool might be expected to furnish to the botanist many interesting cryptogamic plants. On the denuded and barren hills may be seen, in the greatest abundance, the *Chenille* lichen, (*Stereocaulon paschale*;) while the reindeer lichen, (*Cladonia vangiferina*), is comparatively scarce. That beautiful variety, forming a dense thrysiiform spike, (*C. galpestris*), may be seen occasionally on the more shady hill sides—while *Evérnia vulpina*, in close proximity with an *Usnea*, occupies the ground, and even grows among the loose stones. *Bæomyces roseus*, and many interesting species of *Lecidea*, are abundant; while almost every twig of spruce and fir is covered with *Parmelia enteromorpha*(?) or an

allied species, generally barren. I however detected a single specimen with fruit, by which I was enabled to determine it accurately as having a habitat: and in the dense woods, on decaying trees, I found abundance of *Sticta crocàta* among the more common species. The precipitous faces of the beetling cliffs, lining the shores of Eastport, were shaggy with *Gyrophòra véllea*, and rendered in spots black, with a closely adherent foliaceous *Lecanòra*, and with species of a *Grimmia*, but destitute of capsules. Many of the rocks, just rising above high water mark, were brilliant with *Lecanòra candelària*; and in the wet crevices of those higher up and under the shade of trees, another species of *Grimmia*, (*G. marítima*,) was just protruding its fruit. Beneath the close growth of the spruce, may be seen that beautiful feather moss, (*Hypnum crista castrensis*;) while *Hypnum mollúscum*, *H. Schrebèri*, *spléndens*, *prolíferum*, &c., were abundant. Very large specimens of *Polytrichum commúne*, with a *Dicranum*, formed dense cushions on the wooded promontories; while that universal and ubiquitous pigmy, with its sensitive peduncle, (*Funària hygrométrica*,) was to be seen every where around. Beside the fuci and kelp from the deeper waters—the tide throws up some more delicate forms of sea weeds—such as *Enteromórpha intestinalis*, on which parasitically grows *E. clathràta*; while *Ulva lactuca*, *Porphyria laciniàta* and *Gigantina plicàta* may also be found.

The indications of a cooler region and of a more backward flora may be perceived in the lingering blossoms of the strawberry, the dwarf cornel, and that gem of flowers the *Linnæa boreàlis*, with occasionally the irony bell of the checkerberry. The earth, especially in the deep woods on the main land, for instance at Dennysville, was rendered resplendent with the scarlet berries of the little cornel, just alluded to, (*Córnus canadénsis*;) while over decaying logs *Gualthèria hispídula*, the *Linnæa*, and the Wolf's claw, (*Lycopòdium*,) were trailing their diversified stems. The beauty of the *Vaccinium vitis idæa* is best seen on rugged, rocky slopes, and to a stranger, its crimson acid berries, contrasting with its dark, oval leaves, are peculiarly attractive. Tall stems of *Trillium pictum*, surmounted with their dark red fruit, mingle with *Gyrònia* and the blue berried *Dracæna boreàlis*; and amid such repasts of wild

seeds, the rarer species of birds find ample occupation in pursuit of food.

I observed but a few species of aster and solidago. One, (*S. lanceolata*,) has spread within a few years to a troublous extent over the cultivated fields, and seems likely to prove a considerable inconvenience on account of its strong, tenacious and tough roots. Several smaller flowers were yet lingering, and blossoms, as if unwilling to relinquish their claims on the admiration of the beholder—conspicuous among which, with fearless daring, nodded the harebell over dangerous cliffs near the sea, on the horizontal shelves of which was also *Arenaria stricta* and some species of *Arabis*. The prickly but beautiful *Galeopsis tetrahit* made itself familiar even in gardens as an intruder; and in one instance I found a specimen with white blossoms, in the place of the usual rosy color. In the pastures, in rich spots, I saw *Anthémis arvensis*. *Sagina procumbens*, also, was very common.

Two species of alder were abundant, neither of which is thus distributed in such abundance in our section of country. *Alnus glutinosa*, with glutinous, terminal leaf-buds, grows down to the very water's edge, and is found among rocky ledges on high hills; while the glaucous alder, (*A. glauca*,) is substituted in wet swampy places for our *Alnus serrulata*, found in similar situations. Other interesting shrubs, such as *Lèdum palustre*, *Kálmia glauca*, *Nemopánthes canadensis*, several of the cornus, viburnum, &c., may be found; while species of birch, maple, fir, spruce, hemlock, cedar, larch, pine, and occasionally oak, afford sufficient study and subject of admiration at any season of the year—either when spring waves their catkins in the breeze or expands their cautious buds to the returning sun, or summer develops their glories in dense showy foliage, or autumn tints them with its rich and varied dyes. To him who would seek to pass a few days or weeks in a section of country where nature has done so much to beautify and render grand; to the seeker, therefore, for the beautiful or the picturesque; to the naturalist or to the idler, scarcely a more charming place can be found than in these extreme limits of Down East.

South Hingham, Sept. 30, 1844.

ART. IV. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals ; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates ; with additional miscellaneous information, relative to new plants. In monthly numbers ; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural Intelligence. New Roses.—Since our last article under this head, we have had the gratification of visiting some of the extensive rose cultivators of Paris, where we saw many varieties in greater perfection than in England. The climate of France is better adapted to the rose and they flower much more freely, and the foliage retains a better color. Of all the kinds we have seen, none excel M. Laffay's *La Reine*. Several plants were in bloom in his collection, and their flowers were easily discerned from all others at some distance, owing to their peculiar color, great size, and beautiful cupped form. It is a free and abundant bloomer all the autumn, and certainly must stand at the head of all the roses of this class which have yet been produced. In the collection of M. Verdier, who has raised some fine seedlings, we saw more roses in flower than with M. Laffay, who confines himself more to his own seedlings. Tea Soprano we saw here in great beauty ; it is a yellow and buff variety of good size, a free bloomer and a strong habit. Of the perpetuals, we saw Paul Joseph, Comte de Paris, Comte d'Eu, Doctor Marx, Lady Alice Peel, Lane, Prince des Galles, Ebene, the darkest of

the hybrids, and many others. Cloth of Gold has been so cut up for propagation that we did not see it in bloom. It still maintains its reputation and commands a good price.

Gesneria zebrina.—The beautiful tribe of gesnerias is scarcely known among our collections of plants; this arises probably from the fact that nearly or quite all of them are stove plants, and will not do well in the greenhouse. This is an error; their general season of blooming is in the autumn, and our summers are quite warm enough to grow them well, while, in the climate of England, they need the aid of the hothouse. Among the many new kinds lately introduced, *G. zebrina* is particularly beautiful, not only in the flowers but in the foliage, and withal it is much hardier than the others. It has even withstood greenhouse treatment the year round; and as to its great elegance we can say that we have seen it in many collections beautifully in bloom. This species, as well as several others, should be found in all good collections of plants.

Veronica speciosa.—The tribe of veronics is well known from the many species which are hardy herbaceous plants of our gardens. *V. speciosa* is a half shrubby evergreen species, with thick stems and bright green leaves, throwing up dense spikes of deep purplish flowers at the axils of the leaves, near the ends of the shoots. It is a most desirable greenhouse plant, blooming freely, and forming a compact and pretty object. A description of it has already been given in our current volume, but we have not the copy at hand to quote the page. It is a most valuable addition to greenhouse collections.

Passiflora fragrans.—In the collection of Messrs Rollicsons, of Tooting, we saw this species in flower; it is a very fragrant and handsome kind. It only requires the temperature of the greenhouse, and possesses a strong habit, and a good foliage, covering in a short time a column or pillar, or running up the rafters of the house. For a bouquet it is very desirable, from its delicate order.

The genus *Echites* has received a beautiful addition in the *E. carassa*, a superb specimen of which was exhibited at the last meeting of the London Hort. Soc. It is fully equal in beauty to the others. The flowers are of a deep rich rose, with a stripe of yellow in the throat. The foliage is neat, and the habit good. *E. splendens* is still commanding the high price of two guineas.

Gloxinias.—Mr. Glendenning, of the Chiswick Nursery, formerly a partner of Messrs. Lucombe & Co., of Exeter, has succeeded in raising some very beautiful gloxinias, between *Sinningia* and *Gloxinia*. Four of them are figured in the *Botanical Register* for September, and are decidedly fine additions. Gloxinias are not sufficiently appreciated by our amateurs; they are most desirable plants, easy of cultivation, and flower in the months of August and September, at the same time of the *Achimenes*, when plants of such showy character are greatly needed to ornament the greenhouse. *G. variegata* is also an exquisite kind, with rich, deep blue flowers and neat foliage. Its cultivation cannot be too highly recommended.

Corræas.—Strange as it may seem, the beautiful tribe of *corræas* are scarcely known in our collections of plants: late improvements have been made in the varieties which have quite altered the character of the group. The rough foliage and stunted habit of the old species have given way to a neater and more elongated growth, and the flowers have also been greatly improved in beauty. *C. Goóðii*, *Harrisii* and *Cavendishii* are three of the most showy and desirable, and should be considered indispensable in the collection of every amateur.

A double pansy was shown to us to-day, by Mr. Glendenning; it was an accidental variety in the collection of a fancier, and has been propagated to some extent, and is now selling to the trade. It is a very singular and pretty plant; perhaps, speaking floriculturally, not so splendid as a single flower, but like all such productions, desirable for its departure from the original state. The color is a deep purplish violet, and the flower has upwards of twenty petals.

Mr. Fortune, in China.—Letters lately received from Mr. Fortune state that he had penetrated as far as the Tea country, and had met with some valuable plants, particularly azaleas, some of the plants of which have already been received by the Horticultural Society. He has also sent home some new *pæonies*, &c. The portion of the country which he has now reached promises many rich productions.—*London, Oct. 1, 1844.*

Sapindææ.

NEPHELIUM

longaras Hooker.

“One of the many fruits of China which one often reads of, and ranking with the *Litchi* among the best fruits of the celestial empire.” The flavor is said to be of a sweet sub-acid character, and of a pleasant taste when dried; but delicious when fresh. In the *Transactions of the London Horticultural Society*, Vol. II. t. 28, is represented a fine cluster, ripened at Lee Castle, Kidderminster, in 1816. It flowered and fruited at the Botanic Garden, Edinburgh, in 1841; and also at the Royal Bot. Garden, in May and June, 1841, but dropped its fruit immature. (*Curtis's Bot. Mag.*, July 1, 1844.)

Tropædææ.

TROPÆOLUM

Lobbia'num Hooker. Mr. Lobb's Indian Cress. A desirable new species of *Tropæolum*, with handsome, bright, orange colored flowers.

Detected in Columbia by Mr. Lobb, collector of plants to Mr. Veitch, of the Nursery, Exeter. Trained upon vine trellises used in garden pots, it makes a charming appearance. (*Ib.* 26.)

Orchidææ.

LÆLIA

pedunculâris Lindl. Bot. Reg. 1842, Misc. p. 9.

A delicate and pretty epiphyte from Guatemala, with rather small rose colored flowers. (*Ib.* No. 4099.)

EPIDE'NDRUM

vitellinum Lindl. A beautiful species with orange colored flowers, on a scape of about a foot long.

From Oaxaca, Mexico, and blossoming at Kew, in November, 1843; also previously gathered in the same country by Karwinski and Hartweg; by the latter on the Cumbre of Tetontepeque, at an elevation of 9000 feet above sea level. (*Ib.* No. 4107.)

MIEWSTY'LIS

hisionántha Link, &c.

“A very remarkable terrestrial *orchideous* plant, purchased at a sale of Columbian plants in London, in 1842;” with brownish green flowers, singularly umbelled, so as to form a concave head. (*Ib.* No. 4103.)

SACCOLABIUM (named by Blume, from *saccus*, a bag, and *labium*, a lip.)

guttatum Lindl. Spotted Saccolabium. A native of the East Indies; blossoming at the Kew gardens for the first time in Europe in 1840. Flowers delicate white, spotted with purple.

“Nothing can excel the delicacy and texture of the flowers,” says Dr. Lindley; and Dr. Roxburgh observes, “that they are not inferior in beauty to any in the whole tribe of Orchideæ.” (*Curtis’s Bot. Mag.*, No. 4108.)

MILTONIA

Clowesii Lindl. (*Lert. Orchid.*) A very beautiful orchidaceous plant, with spreading, lanceolate petals and sepals of an orange color, with broad, red-brown, transverse bands.

Detected by Mr. Gardner in the Organ Nitus, and blossomed at the Kew Gardens, in October, 1843. (*Ib.* No. 4109.)

LEPANTHES (named by Swartz, from *lepis*, a scale, and *anthos*, a flower.?)

sanguinea Blood-colored Scaleflower.

A native of the high mountains of Jamaica, very small, and covering the bark of trees like little scales: a botanical curiosity rather than of floricultural interest. (*Ib.* No. 4112.)

Begoniæcæ.

BEGONIA

Meyerii Mr. Meyer’s Begonia.

A handsome, tall growing species, with almost woody stems and rather large white flowers, but of the origin of which, nothing more is known except that it was received from the Berlin garden, and quoted in Stendel’s “*Nomenclature*,” ed. 2, as of the “*Hort. Berol.*” (*Ib.* New Series, No. 4100.)

Rutæcæ.

ERIOSTEMON

buxifolium *Syn.* Boxleaved Eriostemon. A handsome shrub with leaves somewhat like those of box, and large, showy flowers, blossoming early in the spring.

“Deserves a place in every greenhouse.” A native of New Holland and extremely handsome. (*Ib.* No. 4101.)

Proteæcæ.

DRYANDRA

formosa Splendid Dryandra. A tree about fourteen feet high, raised from seeds; native of Southwest Australia.

A splendid species, deemed worthy of a figure from the pencil of Mr. Bauer, and published in the *Linneæan Transactions*, Vol. X. t. 3, (*Curtis’s Bot. Mag.* Aug. 1844.) The *Proteæcæ* constitute some of the most striking ornaments of our greenhouses, and this under consideration, judging from the figure, is greatly desirable.

Lobeliàcæ.

SIPHOCAMPYLUS

lantaniifolius Lantana-leaved Siphocampylus. (*De Cand. Prod.*) A good looking stove plant, flowering in the early spring months, and readily increased by cuttings.

A rather weak but erect shrub, with a peculiar inflorescence constituted of a many-flowered corymbose raceme, and, according to the figure, bearing crimson blossoms. (*Curtis's Bot. Mag.*, New Series, No. 4105.)

Asclepiàdæ.

ASCLEPIAS

vestita Hooker. Hairy-stemmed Asclepias. An herbaceous perennial, with yellow-greenish flowers.

Reared from seeds received ("we believe") from the Southern States of North America, and flowered by Mr. Veitch, in the greenhouse, in October, 1843. A new and well marked species, distinguished by "the thick and very hairy stems and peduncles, by the peculiar form of the cuculli or baflets of the staminal crown, and by the absence of the hornlike processes so common within the cucullus in other species of the genus." (*ib.* New Series, No. 4106.)

Bythneriàcæ.

THOMASIA (named after THOMAS, father and two sons, of Bex; Swiss Botanists.

stipulàcea Lindl. A small bushy shrub, raised from New Holland seeds; sent by Mr. Drummond to the Kew gardens.

A fine species, with large purple flowers, and rather large petiolated, cordate, rigid, sinuato-dentate leaves. (*ib.* New Series, No. 4101.)

Berberidàcæ.

BERBERIS

umbellàta Wall. Umbellate Berberry. A hardy (?) sub-evergreen shrub; growing three feet high; with yellow flowers; appearing in June; increased by seeds or layers; grown in common soil; a native of East India. Bot. Reg. t. 44, 1844.

A very showy and pretty species of the berberry, with obovate oblong foliage, and short, dense racemes of beautiful bright yellow flowers. It is a native of the East Indies, and has been raised from seeds received from the East India Company, under the name *B. Wallichiana* and *floribunda*. In the garden of the London Horticultural Society it has proved hardy, but probably in our climate, it would require the protection of a cold frame. It is easily increased by seeds or layers, and grows freely in any good garden soil. (*Bot. Reg.*, Aug.)

*Cinchonàcæ.**HINDSIA* Benth.

violàcea Benth. A greenhouse plant; growing three feet high; with blue flowers; appearing in April and May; increased by cuttings; a native of South Brazil. Bot. Reg. t. 40, 1841.

“*Hìndsia violàcea* is one of the finest things of recent importation. The genus is nearly allied to *Rondelètia*, having a similar foliage and habit of flowering. This species forms a small shrub, with large, slightly pubescent foliage, and terminal heads or corymbs of large flowers, unsurpassed in beauty by blue flowering shrubs.” Messrs. Veitch received it from Brazil, and first exhibited the plant at the exhibition of the Horticultural Society in May last, when it was awarded a large silver medal. It is a most desirable greenhouse plant. Mr. Bentham has referred *Rondelètia longiflòra* to the genus *Hìndsia*, and it is now called *H. longiflòra*. (*Bot. Reg.*, Aug.)

PE'NTAS (“From *pentas*, ‘a number five,’ in allusion to the parts of the flower being in fives instead of fours.”) Bentham.

càrnea Benth. Flesh colored Pentas. A greenhouse plant; growing two feet high; with flesh colored flowers; appearing in September; increased by cuttings; a native of Africa. Bot. Reg. 1844, t. 32.

A rather neat and pretty soft wooded shrub, with strongly furrowed leaves, and terminal cymes of delicate flesh colored flowers. Several specimens of it were exhibited by Mr. Glendenning and other nurserymen at the early exhibitions, last spring, of the Horticultural Society, but the drawing was taken from a plant in the possession of Messrs. Rolli-son. The foliage is not very ornamental, but the dense heads of pale, rosy colored flowers render it a good acquisition. It will grow in any good soil, and is readily increased by cuttings. (*Bot. Reg.*, June.)

Cestràcæ.

HABROTIIA' MNUS (so named from *gay* and *shoot*, in allusion to the beauty of the species.)

élegans Lindl. Elegant *Habrothamnus*. A greenhouse plant; growing two feet high; with crimson flowers; appearing in January and February; increased by cuttings; a native of Mexico. Bot. Reg. t. 43, 1841.

“The beauty of *Habrothámnus fasciculátus* is so striking, that attention is strongly drawn to the discovery of other species in Mexico; and the Belgians have succeeded in adding the present species. The drawing was made from specimens received from Mr. Van Houtte, of Ghent, in January last, in whose collection of new plants it first flowered. It forms a neat shrub, with ovate, lanceolate, acuminate foliage, the branches terminated by a head or

cyme of tubular corols, of a crimson or bright carmine shade. It is a soft-wooded plant, probably of easy cultivation, treated in the manner of a pelargonium." (*Bot. Reg.*, Aug.)

Amaryllidaceæ.

STENOME'SSON *Herbert.*

Hartwegii *Lindl.* Mr. Hartweg's Stenomesson. A greenhouse bulb; growing a foot high; with orange colored flowers; appearing in March and April; grown in sandy loam and peat; increased by offsets; a native of South America. *Bot. Reg.* t. 42, 1844.

A pretty little bulbous plant, growing a foot high, with gay, orange colored, nodding flowers; growing in pairs. It flowered in the garden of the Horticultural Society in March last, but as bulbs had been previously distributed it is now found in several collections; though not a large and showy plant, its nodding and rich orange flowers render it desirable in a collection of bulbs. It requires the temperature of the greenhouse, and should be treated like other bulbs,—watered freely while growing in summer, but dried off in autumn. Increased by offsets. (*Bot. Reg.*, Aug.)

Cactaceæ.

CEREUS

crenatus *Link.* Crenated Torch Thistle. A greenhouse plant; growing two feet high; with white flowers; appearing in May; increased by cuttings; a native of Honduras. *Bot. Reg.* 1844, t. 31.

"The finest thing yet known of its class, with white flowers, which rival the night blooming cereus, but open in the day time." This very remarkable species belongs to the winged section of torch thistles." The plant grows about two feet high, with large spreading branches, some of which, in their young state, are round and angular, with bristly hairs at the joints, resembling the young shoots of *Cereus speciosissimus*; the most usual form, however, is flat and broad, tapering a little to the base where they are round, hard and woody." The flowers are very large and spreading, the sepals tinged with brown, and the petals, consisting of two rows and eighteen in number, white or pale cream color; its habit is beautiful, and the flowers, which rival the night blooming cereus, open in the day time, and continue expanded for nearly a week; they are also deliciously fragrant.

This species was forwarded from Honduras in 1839, by Mr. Skinner, and presented to Sir C. Lemon, Bart., in whose collection it flowered in May, 1843. It is of easy cultiva-

tion, growing freely in a rich loamy soil, mixed with bits of charcoal instead of sand: it is increased by cuttings, and requires to be grown in a warm greenhouse well exposed to the light.

The *C. crenatus* must at once appear, to the amateur of this tribe, a most desirable acquisition; not only on account of its own real beauty, but for its invaluable character as a parent of numerous hybrids. "Let us," says Dr. Lindley, "only imagine a cross between it and *C. speciosissimus* or *Ackermánii*!" It received the highest medal at the May exhibition of the London Horticultural Society, and its introduction to our own collections must be looked for with much interest. (*Bot. Reg.*, June.)

Caprifoliaceæ.

LONICERA

diversifolia Wall. Various-leaved Fly Honeysuckle. A hardy shrub; growing four feet high; with yellow flowers in May and June; a native of Himalaya; increased by cuttings; grown in common soil. *Bot. Reg.* 1844, t. 33.

In the climate of Britain, "a hardy, middle sized shrub, much like the common Fly Honeysuckle, thriving in any good garden soil, and blooming freely in May and June." The foliage is ovate, cordate, pubescent; and the flowers, which are orange and yellow, appear in pairs at the axils of the leaves. It was raised from seeds received from Dr. Royle, from the north of India, and flowered in the garden of the London Horticultural Society, where the drawing was made. If hardy in our climate it will prove a desirable acquisition.

Another Indian species of this genus, "very distinct from any thing hitherto described," has also been raised. It is a slender plant, with deep purple branches, quite smooth leaves, and very long stalked pale yellow flowers, stained with purple. It is called *L. (isica) discolor*. (*Bot. Reg.*, June.)

Crassulæcæ.

ÆONIUM

Youngianum Webb. Mr. Young's Houseleek. A greenhouse plant; growing two feet (?) high; with yellow flowers; appearing in June; a native of the Canaries; increased by cuttings. *Bot. Reg.* 1844, t. 35.

Nearly allied to the *Sempervivum arboreum*, throwing up a large stem of yellowish flowers. It flowered in the nursery of Mr. Young, of Goldaming, in June, 1843.—(*Bot. Reg.*, July.)

Ericàcææ.

ANDROMEDA

phylliræfolia Hook. Phillirea-leaved Andromeda. A greenhouse shrub; growing two feet high; with white flowers; appearing in May and June; a native of Florida; growing in peat soil; increased by layers. Bot. Reg. 1844, t. 36.

“A very neat greenhouse shrub,” growing about two feet high, with white flowers appearing in dense racemes at the axils of the leaves, near the ends of all the branches; the foliage is peculiarly dark, forming a striking contrast, and setting off the corols to great advantage. “They look like pearls on a negro’s back.” The late Mr. Drummond discovered this species in Apalachicola, Florida, but it was introduced to England by Messrs. Loddiges, in whose collection it first flowered in January last. It is a dwarf evergreen in its habit; requiring the same treatment as the pretty *A. floribunda*, and like that species should be propagated by layering, which operation should be done in autumn, after the plant has finished its growth. Peg down the shoots, and let them remain two years before they are separated from the mother plant. A light sandy peat is the soil best suited to all the andromedas. (*Bot. Reg.*, July.)

Rhamnàcææ.

CEANOTHUS

thyrsofolius Eschscholtz. Thyrsé-bearing Ceanothus. A hardy shrub; growing ten feet high; with blue flowers; appearing in May; a native of California; grown in common soil; increased by cuttings. Bot. Reg. 1844, t. 38.

Syn. C. divaricatus Hort.

This new ceanothus is considered one of the most valuable things that has been introduced of late years. “A perfectly hardy shrub, as this is with evergreen foliage of the most beautiful glossy green, and dense panicles of bright blue flowers, is indeed an acquisition to our gardens.” Seeds were sent home by R. B. Hinds, surgeon to the Sulphur surveying ship, and plants raised in the gardens of the Horticultural Society, where it flowered in May last under a south wall. The stems are erect, the foliage small ovate oblong, and the flowers, which are light blue, appear in dense racemes near the ends of the branches.

The species was at first supposed to be the *C. divaricatus* of Nuttall, and several plants were distributed under that name; but when it flowered, it proved to be the *C. thyrsofolius*, and the name was changed. Messrs. Torrey & Gray, in their *Flora*, state that this species forms a small tree. Douglas gathered wild specimens in California. The plant grows freely in any good soil, and is readily increased by cuttings of the half ripe wood. (*Ib.* July.)

REVIEWS.

ART. I. *European Agriculture and Rural Economy, from personal observation.* By HENRY COLMAN. Vol I. Part II. pp. 81 to 188. Boston, 1844.

THE second number of Mr. Colman's Report has been issued, and contains a variety of information practical as well as general. The first number was noticed in our July number, p. 270, and the third and fourth parts will probably be issued by April or May, though no time is at present promised.

The preface to this report explains the cause of the delay in the publication of the report. We quote the author's own words :

"It seems hardly necessary to give any other reason why my Second Report has not sooner made its appearance, than the absolute impossibility of doing in this case what I could wish. The great difficulty of procuring the information which I seek, in an exact and authentic form, the peculiar embarrassment and inconveniences which surround a stranger in a country where the habits and manners are wholly different from those to which he has been accustomed, innumerable engagements connected with the objects of his pursuit, travelling and a necessary and frequent change of residence, the obvious inconveniences of reporting upon a subject before its examination is completed, and various other circumstances combine to prevent the rapid progress of the work, and present the strongest claims upon the indulgence and candor of my readers. I commit it now to the public with extreme diffidence, a diffidence greatly increased by the kind manner in which my countrymen have received my first number. They may be assured that nothing can separate my affection from the land of my birth; and while my highest ambition will be more than satisfied by their good will, I shall find an ample compensation for my labor and a long and painful separation from my friends, in the consciousness of having conferred some, though it may be a very humble, benefit upon my country."

The contents and their arrangement are:—XIII. Allotment system, (continued): XIV. Quantity of seed: XV. Steeping seeds: XVI. Spade husbandry: XVII. Condition of the laborers: XVIII. Progress of agriculture compared with other pursuits: XIX. Actual improvements in English agriculture: XX. Relation of landlord and tenant: XXI. Game and the game laws: XXII. The Royal Agricultural Society of Ireland: XXIII. Model Farm and Ag-

ricultural School: XXIV. Dublin Botanical Garden. A fine engraving of the first prize short-horned Durham Bull, accompanies this number.

The Allotment System is continued in this number. As the subject is perhaps scarcely understood by our own farmers, Mr. Colman proceeds to explain:—

“The agricultural laborers, or, as they are here termed, *the farm-servants*, are seldom or never owners of land. They receive their wages in money or produce, as I have already described; and some of them, living in compact villages, have not even a small piece of ground for a garden, though, in many parts of the country, the cottages have small gardens attached to them. The unmarried laborers sometimes live in the houses of their employers; but this is not now a general nor a frequent practice. The married laborers live in cottages on the estate, or in a neighboring village.

It is obvious how great advantages a poor family in the country may derive from a small piece of land, and how much produce may be obtained from it for their support and comfort by the application of even a small amount of labor, which otherwise, without such opportunity of applying it, would be lost, or rather would not be exerted. Many persons, therefore, have leased to their laborers small portions of land, varying in size from a quarter of an acre, or even less, to an acre, and in some cases more than this, to be cultivated in such crops as the laborer may select, or as may be prescribed by the proprietor. One condition is usually made absolute in these cases,—that the land should be cultivated with a spade, and not with a plough. The results, therefore, become the more interesting.”

The author concludes the discussion of the Allotment System, after giving examples of the many instances of domestic economy which have resulted from it, as follows:—

“I submit these facts to my American friends as exceedingly curious. With us the land is not locked up by patents, entail, or mortmain. With us land is every where attainable, and at prices which bring it within the reach of every industrious and frugal man. But it will, I think, be interesting to look at these humble instances of domestic economy; and they must stimulate the most useful inquiry into the productive capacities of the land, which seem as yet to be very imperfectly developed. We are, likewise, not without our poor in the United States; and the vast influx of destitute emigrants is constantly augmenting the number. For idleness and profligacy there is no just claim upon public compassion; but I am convinced that a considerable portion of the poor would be glad to earn their own living if they could be put in the way of doing it. Whatever contributes to this object confers a public benefit.

It would be wrong for me to quit this topic without adding, that, since my First Report, I have visited portions of the country where, on the estates of some very large proprietors, (to one of whom the United States and Great Britain are under the highest obligations for adjusting their

conflicting claims, and through whose beautiful grounds I rode eight continuous miles,) the cottages of the laborers were of the very best description; and their establishments, both within and without doors, indicated the greatest neatness and comfort. Gardens for fruit, vegetables, and flowers, were attached to all of them; and they were charming pictures of rural taste and embellishment. Many of these persons had likewise small allotments of land. The wages paid to the men were from 10s. to 12s. per week, and to the women 8d. per day while at work. This, of course, however, with the current expenses of living, did not allow them to accumulate any thing for sickness or old age. During the four weeks of harvest, by working by the piece, the laborer would sometimes earn more than 20s. per week; and the women and children, by gleaning the scattered heads of wheat after the field is cleared of the crop, or, as it is here called, by *leesing*, not infrequently collect four or five bushels of grain. I have met with instances where even more has been collected. Such are the fruits of the most exact frugality."

No question has been more disputed among farmers than the quantity of seed which should be sown to the acre, and the author has devoted a chapter to this subject. The testimony of a practical farmer, who has more than seven hundred acres of highly rented land, is given in his own words, and from which we quote:—

"The practice throughout England is to sow two and a half and three bushels per acre, and the yield is seldom forty bushels, and more commonly only twenty bushels; and one tenth, at least, of the crop grown, is consumed in seed. These facts, and the knowledge that a single grain of wheat, planted where it has room to tiller out, will readily produce four hundred fold, and often very much more, have induced me, in the course of the last eleven years, to make a variety of experiments, the results of which have shown me, that, independent of the waste, *a positive and serious injury is done to the crop from so much seed*; and the result is perfectly analogous to attempting to feed four animals upon a pasture sufficient only for one; and, in consequence, I have gradually reduced my proportion of seed-wheat from three bushels per acre, which was my practice, down to about three pecks, which reduction I have accomplished to the evident improvement of my crops.

My practice is to drill every thing, (clover seed alone excepted;) to carefully horse-hoe, hand-hoe, and weed, so that the land may be kept perfectly free from weeds, and the soil between the rows may be stirred, and receive the benefit of fine tilth and cultivation, of which gardeners are sensible; but by farmers this is lost sight of, or not sufficiently attended to. My rye and tares for green feeding are sown in rows at nine-inch intervals; all my white corn at twelve inches; my pulse at twenty-seven inches; and my root crops, on the ridge, at twenty-seven inches.

My proportion of seed per acre are as follows:

Of rye, 1½ bushel;	Of oats, 8 pecks;
“ tares, 1½ do.;	“ barley, 7 do.;
“ mangel-wurzel, 6 lbs.;	“ wheat, 3 do.;
“ swedes, 1 quart;	“ peas, 8 do.;
“ turnips, 1 do.;	“ beans, 8 do.’”
“ cabbages, 1 every three feet;	

This extract we commend to the attention of all our readers who cultivate any portion of farm lands.

The subject of steeping seeds in peculiar solutions, in order to dispense with manure, has for two or three years been before the agricultural public, and has attracted much attention among practical and scientific agriculturists. Mr. Campbell, of Dundee, was the first to try this experiment in Great Britain, and, according to the accounts given, he has been very successful in attaining his object. Mr. Colman, to whom Mr. Campbell has disclosed an account of the processes which he has used, sums up the experiments he has witnessed as follows:—

“I cannot say that I am sanguine as to those extraordinary results to which, from the quotations which I have made, some persons look forward, when there will be no longer a necessity for a rotation of crops, and even the application of manure to the soil will be dispensed with. But I cannot help thinking that much remains to be achieved, and that much may be hoped for. We are not to be surprised that failures occur; but one well-authenticated experiment, conducted in an exact manner, and in which the extraordinary results may be directly traced to the application, is sufficient to outweigh a hundred failures. The exhibition at Dundee, supposing Mr. Campbell’s statement to be true,—and I know no reason to doubt, but, from his manly conduct, the best reason to believe them,—satisfied me that something important had been effected. I rely little upon mere opinion and conjecture, even of parties above suspicion of dishonesty. The mortification of failure, the desire of success, the ambition of notoriety, and especially any degree of personal or private interest,—all may serve to color the vision, to bias the judgment, and present grounds of hesitation, if not of distrust. With a full share of confidence in the virtue of men, I have been too often disappointed not to require the most ample evidence in all cases of moment. I was not a little amused in visiting, with several gentlemen, the farm of an excellent cultivator, the past summer, that, when he showed us in his field of swedes, with an air of the most confident triumph, the surprisingly beneficial effects of a certain application upon some marked rows, every one of the party except himself was satisfied that the rows in question had no other distinction than that of absolute inferiority to all the rest. It would have been as useless as it would have been uncivil to avow our convictions to him, for men are seldom convinced against their will, and assaults upon an unduly-excited organ of self-esteem, if they do not arouse combativeness, inflict only needless pain. In agriculture, being eminently a practical art, and as yet, I believe, claiming not a single theoretical principle as established, excepting as first deduced from long-continued practice, experiments are of the highest moment. The careless and slovenly manner in which they are commonly conducted, the haste with which men jump to their conclusions, the variety of circumstances which belong to every case of importance, and the imperfect manner in which these circumstances are observed and detailed, are the just opprobrium of the agricultural profession. A most intelligent and agreeable friend, in speaking of the best modes of

fattening poultry, and in expressing her distrust of some which were recommended, said that her venerable grandmother always fed and fattened her poultry in a very different way. But upon being asked whether her grandmother's fowls were the best layers, brought up the most chickens, and produced the best poultry for the table of any to be found, she was compelled to answer that on this point she had no information. A learned naturalist, who, in many respects, was justly celebrated for his acquirements, was once asked why black-wooled sheep consumed more food than white, and proceeded gravely to give half a dozen philosophical reasons for it, without having once inquired whether the fact were so.

It is strongly hoped, that, under an enlightened system of agricultural education, for which the auspices now are most encouraging, and by the establishment of experimental farms, many important suggestions in relation to agricultural practice, as yet only conjectured, may be determined, and much actual progress made in agricultural science, by the only infallible teacher—exact and enlightened experiment.”

The chapter on the condition of laborers is one of the most interesting in this report, and is deserving of a thorough and careful perusal by every individual who appreciates the welfare of his fellow beings.

We pass over the other subjects, and conclude our notice of this number with the account of the Dublin Botanical Garden, one of the best conducted in Great Britain, under the care of Mr. Niven:—

“In the neighborhood of Dublin is a Botanical Garden, comprehending twenty-seven acres, enclosed by a high stone wall, with a beautiful rivulet running through it, with ample and elegant conservatories and green-houses, and in the highest state of cultivation and embellishment. It is supported partly by private subscription, and partly by donations from the government. It is a beautiful retreat, and open to all persons two days in a week, with intelligent and courteous superintendents to show and explain every thing. To my inquiry of the superintendent whether he suffered any injury from the visitors plucking the flowers or breaking the plants, he replied, very little, if any; none whatever from the highest classes in society, and none whatever from the lowest classes, who visited it in great numbers; and who, coming out of their damp cellars, and their confined streets, and their dark and offensive holes, and fastnesses, and common sewers, no doubt found in it, with their children, almost a transition from earth to heaven; and here breathed the perfumes of the divine beneficence, and contemplated, with a felicity which even princes might envy, the exuberant tokens of God's goodness in the flowers and fruits of the earth, radiant with a celestial beauty. There were other persons, whom he chose to denominate the *vulgar rich*, who were not so abstemious, and who required to be watched. It is to be hoped, as education advances, a higher tone of moral sentiment will prevail, and that every thing of taste or art, designed for general gratification, will be secure against injury or defacement, so that the odious notices and cautions, which are now so constantly seen in such places against depredation, may themselves be deemed a public insult, and the very idea of violating an

honorable confidence, and abusing the public beneficence, may so trouble a man's conscience, that he shall desire to run away from himself.

This garden and grounds, and its conservatories, are designed to furnish specimens of all the most valuable and curious native and exotic plants and fruits; and, in addition to their present erections, the proprietors are now about to build a conservatory four hundred feet long and seventy feet wide, with a height proportioned. The grounds are always open to the studious and scientific, and a course of botanical lectures is given, with the illustrations to be found here.

Botany may here be studied to great advantage, as portions of the ground are allotted to the perfect arrangement of the plants, according to the classification and orders of Linnæus, and in another part, according to the natural order; and for the benefit of agricultural students and farmers, specimens are cultivated and neatly arranged of all the useful vegetables and grasses, with their botanical and their vulgar names affixed to them, with specimens likewise of the most pernicious weeds, that the farmer may see what to choose and what to avoid. The collection is already extensive, and is constantly becoming enlarged. It is difficult to overrate the value of such establishments, both for use and for pleasure, for their pecuniary, their intellectual, and their moral benefit.

While penning this account, I hear, with extreme regret, that the Botanical Garden in Boston, a city so eminent for its public spirit and beneficence, is to be strangled in its infancy and abandoned; and that the ground is likely to be appropriated to buildings, so that the rich prospect of the charming environs of the city is to be shut out, and the fresh and salubrious breezes from the verdant fields and hills of the surrounding country are to be debarred an entrance for the refreshment of the inhabitants of this busy and crowded mart; and even the sight of the glorious western sky, which, with its gilded, and glowing, and gorgeous drapery, I have made, at evening, a pilgrimage, many hundreds of times, to contemplate and adore, is to be excluded by high walls of brick and stone. Should this be done? and how can such an injury, if once committed, be repaired? Surely they will forgive one of their own children, whom no distance of place and no length of absence can estrange from his honored and revered birthplace, in saying that even one half of the expense thrown away upon public dinners and parade, would secure to them permanent provisions for health, instruction, comfort, and delight, whose value no pecuniary standard can measure, and which can never be duly appreciated, but by those who have enjoyed and have been deprived of them."

ART. II. *Boston Journal of Natural History, containing papers and communications read before the Boston Society of Natural History, and published by their direction.*
Vol. IV., Part IV., p. 377 to 512. Boston, 1814.

THE present number of this *Journal*, concluding the fourth volume of the transactions of the Society, is filled

with papers upon Entomology, Conchology, Mineralogy, &c., and does not contain its usual portion of Botanical information. Our correspondent, Dr. Harris, has an interesting paper describing an African beetle, with remarks on other insects of the same group.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

French Method of Grafting Roses.—We procure early in autumn stocks that are at least two years old, those of one year old being too thinly wooded, and liable to injury from frost; and we plant them and support them by stakes. In the beginning of February, the cuttings for grafting are cut from those sorts which we wish to multiply, and stuck into the ground, numbered, and opposite the north, in order to retard their budding.

In March and April we take them up, and graft them on the Dog-Rose briars; and it is important that this operation should be performed when the sap of the stock brier is in circulation, (which is ascertained by the shooting of the buds.) The operation of grafting, *en fente* (by cleft,) as we term it, is too well known to require explanation. I shall merely remark that the stocks which, from the smallness of their diameter, can only bear one graft, should only be split at one side, and that opposite the bud nearest the upper surface of the stock, where it has been cut evenly across. This bud is designed to draw the sap into the upper part where the scion is, and to impart life to it. Two grafts may be placed opposite each other, on stocks of sufficient diameter. Two buds are sufficient to have in any graft, and when this is cut in the proper wedge-form, it should be inserted in such a sloping direction as will bring the lower part of the wedge into contact with the second bark of the stock; and the lower bud of the graft should evidently be kept on the outside of the slit. Unless the graft be the termination of a branch, its upper part, to which the knife has been applied, will require to be protected by a little cement; and, if the stocks be not sufficiently large to receive the grafts completely and firmly, these ought to be tied and covered at the point of union with cement. Our composition for cement is made of rosin and pitch in equal quantities, with half as much of white wax as of the other ingredients, properly melted and mixed together.

Grafts thus placed on strong and healthy plants cannot fail, and will form a superb head in autumn, if care is taken to pinch them off to the height of from four to six inches, to make them branch. It is also necessary not to leave too many buds at the lower part, but those on the top cannot be too numerous. By this kind of grafting, a rose tree in full flower may be obtained in six weeks or two months.

Dog roses, if planted as stocks in pots, should be taken into a green-

house early in the season; and, as vegetation soon begins there, the stocks will be fit to be grafted in a month or six weeks, and flowers will be obtained from them much sooner than from rose trees in the open air. (*Gard. Chron.*, 1844, p. 316.)

Hybrid Rhododendrons.—Much remains to be accomplished by the growers of this most exquisite tribe, as, notwithstanding the beauty of numberless hybrids, a fresh race is required, which would unite the glowing tints of the Indian species with the hardness and freedom in flowering that characterize both *R. Maximum* and *Ponticum*. At Highclere this has been done; as by crossing the finest varieties of *Altaclarensis* with a variety of *Ponticum*, known as Lee's Late Purple, a collection of perfectly hardy sorts has been raised, on which no severity of the winter has any effect, and which adorn the grounds of that noble seat with flowers of a most beautiful description. These rhododendrons combine every requisite quality, being abundant bloomers, and productive of immense trusses of large flowers, of every shade of pink and rose, crimson and dazzling scarlet, and purple, in some instances dark as the fruit of the vine; with the additional recommendation of being in perfection from the middle of May to the beginning of June. I believe that these fine varieties are not in the possession of the trade, which is to be regretted; and the object of this paragraph is to stimulate both nurserymen and amateurs to embrace the present season, and cross such varieties as may, by an intermixture of habit, color, and size of their flowers, render their progeny equal to those I have been describing. It cannot be doubted that the union of some fine, high-colored hybrid, with such kinds as Lee's Late Purple, *Ponticum*, Lee's *Grandiflorum*, (a very large flower,) a rose colored or purple *Maximum*, would produce such shrubs and flowers as would not only be suited to our uncertain climate, but be the admiration of all who saw them. (*Ib.* p. 317.)

Grafted Currants.—Standard currants have a pretty appearance, and this is increased if they are grafted with opposite colors, such as black and white, white and red, or red and white. Allow the stock to reach four feet in height, then let it break two shoots, one of which is to be grafted with the desired variety; when this shoot has grown about six inches let both be stopped, so as to make a bushy compact head. For standards or espaliers, train either horizontally, or by the fan method, about six shoots or more, according to the space you wish to cover, on either side, leaving one for the centre to be grafted. Train the same number of shoots of the worked variety. Each leading shoot, if kept well spurred in, will bear abundantly, and the fruit will also be of finer quality and of a sweeter flavor, by being fully exposed to the sun and air, which is better attained by this method than if the plants were grown in the usual way. (*Ib.* p. 390.)

Strawberries.—My practice in the cultivation of the strawberry is neither novel nor peculiarly valuable, but it certainly has been abundantly successful and might possibly, as far as it goes, assist in settling the question of the annual renewal of this valuable and highly esteemed fruit. My plan then is as follows:—I peg down the runners as early as possible, taking care to cut off all the superfluous ones as they appear. By the first week in July, at the latest, I plant them out at eighteen inches between the rows, and only one foot from plant to plant. I prepare my bed by deep trenching, and manure it abundantly with good frame dung,

mixed with the rakings of the borders, mowing of the lawns, refuse vegetables, in short, with litter of all sorts; and then well saturate the heap with gas water. The result of this practice this year was, and continues still to be, as follows:—My bed was under a southeast wall, and divided equally between Keen's Seedlings and the British Queen; the length is one hundred feet, the breadth nine feet. I begun to gather most excellent fruit on the 23d of May, and on that day picked a quart of Keen's Seedlings, and from that time to this, (June 26,) I have gathered more than two and a half bushels, the Seedlings being nearly exhausted, but the Queens promising a more lengthy duration. I have to add, that they have, notwithstanding the dryness of the season, been watered but three times, but *then* they were deluged; and that every week I regularly took off the runners. The fruit of both sorts was the finest I ever saw, and that not by culled samples, but universally over the beds. These were planted runners last year, and put in, the first week in July. (*Ib.* p. 429.)

The Deodar, or Himalayan Cedar, (Cèdus Deoda'ra.)—Its botanical range extends from seven thousand to twelve thousand feet above the level of the sea; and in its most congenial locality attains a great height, and a circumference of above thirty feet. When young it closely resembles the real cedar, but never sends forth spreading branches. The cone resembles that of the cedar, and is preceded by a catkin of a bright yellow color; so that the tree, when in full blossom, appears covered with a rich mantle of gold. These catkins are loaded with a golden dust, which the wind shakes from the branches in such quantities, that the ground for a considerable distance about the tree, becomes, as it were, sheeted with gold. So durable is its timber, that some used in the building of one of the wooden bridges over the Jailum, was found little decayed after exposure to the weather for above four hundred years.—(*Thornton's Gazetteer of India.*)

Rose Budding.—I strongly recommend all amateurs who are desirous of avoiding disappointment in budding roses, to leave a small piece of the wood, as a protection to the bud when cut from the branch. By adopting this plan, I have succeeded in propagating all descriptions of roses, even in the driest weather, both late and early in the season. I always use white worsted, instead of bass, for tying up, which I find answers much better; it keeps the parts more closely together, and they unite in a shorter time. A very small portion of the wood is sufficient to preserve the root of the buds. My stock on which I operate is the *Bengalensis*, free and rapid in its growth. The common Boursault also makes a good stock and is easily struck. (*Gard. Chron.* 1844.)

The third flowering of the Paulownia Imperialis.—The father of all the Paulownias, which have now been distributed in such numbers through the gardens of Europe, has just flowered, for the third time, in the Garden of Plants, at Paris; one hundred and fifty terminal bunches, bearing each twenty to thirty flowers, make the tree appear like a single bouquet of a light blue color, having the most charming effect. The peduncles are from fifteen to sixteen inches long. (*Revue Horticole.*)

Note upon a way of Grafting so as to accelerate Bearing, by M. Lecoq, Gardener to the Royal Society of Horticulture.—People are surprised that fruit trees are not so frequently raised from seeds as they ought to be. There is no doubt that the scarcity of attempts of this kind is to be attributed to the great lapse of time that is required to judge of the result.

Indeed, for an amateur or gardener to wait for ten or fifteen years, is enough to discourage them. Nevertheless, I think I have found a way of shortening this long space of time, and I wish to communicate the means that I have employed for the purpose. I received, in the spring of 1833, a branch of a pear tree, without a name, the fruit of which I was assured was excellent, being much like the St. Germain. I was a nurseryman then, and I would not send out a tree without being quite sure of its fruit; so I then made three scions (in the manner of cleft grafting,) with this branch of the pear tree. I chose for the stock three principal branches upon a Quenouille which had been planted about eight years; I shortened these branches to eleven inches from the trunk; I fixed to each branch a graft provided with two eyes, which pushed very well, and each made two shoots, 23 to 26 inches long. The next year I pruned my Quenouille as usual, except the branches proceeding from my grafts, which I preserved at full length. I bent them by drawing towards the ground, and brought them as close as possible to the trunk of the tree, where I fixed them. They remained in this state all the year. Each bud, instead of growing into a branch, formed a fruit spur. The third year I detached my branches, straightened them a little, which permitted the sap to circulate more freely, and that same year I gathered from my three grafts 36 pears, which I found to be the Pastorale. At the same time that I tried the above experiment, I inserted four other cleft grafts, upon some young quinces; I cut them to one bud the following August; they produced me 32 buds, which I worked with a dormant eye; 29 succeeded, which I sold the year that I was able to judge of the fruit. Cleft grafting, then, can be employed with success to prove a tree raised from seeds,—only there is the disadvantage of sacrificing a good tree, to gain, perhaps, a bad fruit; but those who have old Quenouilles, can employ this kind of grafting, without making a great sacrifice. Plantations of apple, or pear, or quince stocks, may be prepared in Quenouilles for this purpose. The same branch may be grafted several times. Thus, a branch which has been grafted for the first time, eleven inches from the trunk, can be grafted six times, by cutting an inch and a half off each time that a new graft is placed on. It is to be observed, however, that the stock on which these experiments are made is not intended for a perfect tree, but merely a stock from which one must draw what advantage he can. (*Revue Horticole.*)

Potter's Liquid Guano.—About two months ago I communicated some practical and important results, from the use of Potter's Liquid Guano, which, during the spring, I applied to a large variety of flowers, plants, and bulbs, in pots and in glasses. My remarks were quoted by Mr. Potter, in his advertisements, and thereby they have obtained a wide publicity. In reference thereto, I have been asked to state further, "What was the effects produced by the guano on the plants after the very beautiful flowers they had borne had done blooming?" Some are of opinion, that the roots were of necessity enervated, and unfit for further bearing. At all events, they imagine that the productive powers of the roots were very considerably impaired. This, as far as my own observation extends, (and I have severely tested the matter by oft repeated experiments,) is totally at variance with the fact. The roots and leaves improve wonderfully, both in substance and health,—so much so, that the fertilizing nature of the guano is apparent to every observer. It is not the quantity used that effects this, but the regular and moderate application of it in

weak solution. My strawberry plants, in particular, confirm what I have now stated, and next season I expect to be fully rewarded for the pains I have taken with them, by a rich harvest of fruit. As for my roses and flowers generally, their colors, fragrance and beauty speak far more eloquently for the liquid guano than any set terms of praise. (*Gard. Chron.* p. 430.)

ART. II. *Domestic Notices.*

Rust on Corn.—The stems and leaves of Indian corn (*Zea Mays*,) have been observed, this summer, liable to the ravages of the *Puccinia Gráminis*,—a minute fungus, which causes rust in several of the grains and on the stems of grasses.—*R.*

Sphæria Robértsii.—I have lately seen some very curious specimens of a fungus, produced from the head of a species of caterpillar found at the roots of trees in New Zealand. It is the *Sphæria Robértsii* Hooker *Icones Pl: Rar: tab. XI.*; also figured in the *London Journal of Botany*, Vol. III. p. 77, plate 1. This singular vegetable was brought to Salem, Mass. by Capt. John Williams, and presented to the Herbarium of the Essex County Natural History Society. For many years such productions were deemed almost inestimable,—and their actual existence was even for a long time doubted. But further research has satisfied even the most incredulous, that several genera and species of fungi vegetate on the living bodies of insects, and in some cases are found in and on the higher animals. From the heads of the caterpillar or larva, a straight tough stem, about seven inches long, rises perpendicularly, and forces itself out of the earth, beneath which the larva had buried itself to undergo its metamorphosis. This stem is surmounted with a series of closely set black, claviform bodies, extending to a considerable extent downward; and in these minute bodies, which are capsules, the still minuter seeds (*sporidæ*,) reside. The same gentleman also presented fine specimens of *Sticta aurata*, a lichen widely extended throughout the globe.—*J. L. R.* Oct. 1844.

ART. III. *Retrospective Criticism.*

Staminate and Pistillate Strawberry Plants.—As there has been a great deal said about staminate and pistillate strawberry plants, I thought I would give you my experience on the subject. I have cultivated strawberries for the Cincinnati market for nearly eighteen years; the sorts mostly grown here are the Hudson, and what is here called the Pine or Neck strawberry, a great bearer, but rather soft for market.

The most illiterate of our market gardeners in this vicinity have long been aware of the existence of staminate and pistillate plants, or, as they are called by our market gardeners, male and female plants, and to this knowledge I account for the fact that we have the strawberry in greater perfection and abundance, and cheaper than any other city in the Union. If I did not pay strict attention to this, my beds would not yield one quarter they do now. It is a knowledge and practice on this principle that enables one of our market gardeners to bring one hundred bushels a day to our market.

The first that I planted of Hovey's Seedling I put no male plants with

them. They grew and blossomed very fine, and I thought I should have some mammoth fruit; but there was not a perfect berry on them, and very few imperfect. The next year I put male plants among them, and they bore beyond my expectation,—and I now think Hovey's Seedling is the best market strawberry that we have; it is a free grower, a great bearer, and the berries very large,—but they would not be worth growing here without the male plants among them.

Last spring I had about one hundred Hovey's Seedling in a border, without any male plants near them. They flowered as fine as could be wished, but there was only three perfect fruit on them, and those three I impregnated.

There are many varieties that are perfect in the same flower, but I never saw one that was worth cultivating for its fruit. I do not think that an acre of ground, planted with Hovey's Seedling, Keen's Seedling, Hudson, and Elton, without male plants among them, would produce one bushel of fruit. I one year picked thirty bushels of the Hudson strawberry from thirty square rods of ground; they were about one tenth male plants.

I have grown strawberries from the seed, and in all cases they came about one half male plants. Now what are these male plants intended for? they never change. The male plant that I use for my beds I have had for eighteen years, and I do not see the least alteration in it.—*Yours, Respectfully, S. S. Jackson, near Cincinnati, Sept. 24, 1844.*

ART. IV. *Massachusetts Horticultural Society.*

September 21. An adjourned meeting was held, the President in the chair.

Francis L. Capen, of South Boston, and A. B. Muzzey, of Cambridge, were admitted members.

Adjourned to Saturday, Sept. 28th.

Sept. 28. The Society held an adjourned meeting.

Voted, that a committee of three be chosen, to nominate a list of candidates for officers of the Society for the ensuing year; and Messrs. E. M. Richards, C. Newhall, and E. Wight, were appointed.

Voted, that the thanks of the Society be presented to Mr. M. B. Clark, of Boston, for his liberal donation of the Silver Plate, which was deposited under the corner stone of the Society's new Hall in School street.

Voted, that the thanks of the Society be presented to the Chairman and members of the Committee of Arrangements, for the very acceptable manner in which they discharged their duty at the late annual exhibition.

Meeting dissolved.

Exhibited.—Flowers: A variety of fine dahlias, from the garden of the President of the Society—among them, Antagonist, Lady Antrobus, Hero of Stonehenge, Miranda, Great Western, Beauty of Sussex, and Blanche Shelley, were extra flowers.

J. Stickney exhibited, among others, very fine blooms of Essex Triumph, Dodd's Prince of Wales, Pickwick, Argo, Miranda, Oakley's Surprise, Sir F. Johnson, and Bridesmaid.

From H. W. Dutton, a great variety—Henry Clay, Burnham Hero, Princess Royal, Queen, Admiral Stopford and Essex Triumph were very

perfect flowers; eight fine blooms of Dodd's Prince of Wales, a fine yellow variety, cut from one plant, were also exhibited by Mr. Dutton.

Joseph Breck & Co., fine blooms of Competitor, Bianca, Nihil, Bedford Surprise, Grace Darling, and Oakley's Surprise.

Edward Allen—fine flowers of Beauty of Sussex, Grace Darling, Twyford Perfection, Queen of Trumps, Col. Baker, and Unique.

Messrs. Winship—Widnall's Queen, Unique, and many others, were very fine.

Bouquets: Dahlias, phlox and cactus flowers, from J. L. L. F. Warren. Bouquets from Miss Sumner.

The display of dahlias to-day was one of the best of the season, and many fine flowers, besides those mentioned, were exhibited.

Fruits: Very excellent specimens of Brown Beurré pears, from Hon. E. Vose. Vicar of Winkfield, Chelmsford, and Beurré d'Or pears, from J. W. Sever. Twelve quinces, weighing 8 lbs. 12 oz. and grown in the garden of Mrs. Tappan, of Roxbury, were exhibited by S. Walker. Large quinces, by Albert Hague, of Lincoln. Six varieties of seedling apples were exhibited by Mr. George Harvey, of Hastings, N. Y. Twelve quinces from John Hovey, weighed 7 lbs. 3 oz. Extra large Baldwin apples, from Reuben Farrington, Brighton. J. F. Allen, specimen of a seedling peach, very rich flavor. A. H. Haven, Portsmouth, N. H., Seckel and Gansel's Bergamot pears, excellent; also, Cuisse Madame pears. Seedling peaches, of superior flavor, from Cheever Newhall. Isabella and Catawba grapes, from Josiah Richardson, Cambridge. S. W. Cole exhibited very large seedling apples and peaches. John Owen, green gage plums. Dr. Shurtleff, Monstrous pippin apples. Geo. Walsh, St. Michael pears. H. Vandine, St. Michael, Marie Louise, Vicar of Winkfield and Brown Beurré pears, and Coe's Golden Drop plums.

October 5. The annual meeting of the Society for the choice of officers was held to-day. The nominating committee, chosen at the last meeting, reported a printed list of the candidates for the several offices and committees for the year ensuing. A committee was appointed to collect and count the votes for officers, &c., who reported that the following gentlemen were elected. Their term of office commences on the first Saturday in April, 1845, and terminates on the first Saturday in January, 1846.

President—MARSHALL P. WILDER.

Vice Presidents.—B. V. French, Jona. Winship, Cheever Newhall, E. M. Richards.

Treasurer.—Samuel Walker.

Corresponding Secretary.—J. E. Teschemacher.

Recording Secretary.—Ebenezer Wight.

Professor of Botany and Vegetable Physiology.—John Lewis Russell, A. M.

Professor of Entomology.—T. W. Harris, M. D.

Professor of Horticultural Chemistry.—S. L. Dana, M. D.

Committee on Fruits.—Samuel Walker, Chairman: P. B. Hovey, Jr., O. Johnson, J. Lovett, 2d., Jona. Winship, D. Haggerston, J. F. Allen, George Newhall, A. D. Williams, F. W. Macondry, William Thomas.

Committee on Flowers.—Joseph Breck, Chairman: H. W. Dutton, S. Sweetser, S. R. Johnson, J. Stickney, W. E. Carter, P. Barnes.

Committee on Vegetables.—W. B. Kingsbury, Chairman: J. A. Ken-

rick, A. Bowditch, John Hill, J. H. Billings, Samuel C. Mann, Josiah Newhall.

Committee on the Library.—C. M. Hovey, Chairman: C. K. Dillaway, J. E. Teschemacher, E. Wight, R. M. Copeland, Francis G. Shaw.

Committee on Synonymes of Fruit.—M. P. Wilder, Chairman: B. V. French, S. Downer, W. Kenrick.

Executive Committee.—M. P. Wilder, Chairman: Enoch Bartlett, A. Aspinwall, J. J. Low, Joseph Balch.

Finance Committee.—Cheever Newhall, Chairman: E. M. Richards, George Hallett.

A letter from the New York Institute was read, inviting the Society to be present, by delegation, at the approaching fair of that institution; and it was

Voted, that the following gentlemen compose the delegation, viz.: the President, M. P. Wilder; Josiah Newhall, Samuel Walker, David Haggerston, J. F. Allen, E. Wight.

The following persons were admitted members of the Society: Edmund Bartlett, Newburyport; John H. Jenks, Boston; Tho's Barrows, Dedham; Orr N. Towne, Boston.

The following premiums were awarded at the annual exhibition of the Society, which were not at that time reported by the several committees.

The premiums on *Dahlias*, as declared by the judges, were as follows:

DIVISION A.

Open to all cultivators (members.)

PREMIER PRIZE.

Best 12 dissimilar Blooms:—A premium of \$4 to Edward Allen, Jr.

SPECIMEN BLOOM.

Best Bloom of any color:—A premium of \$2 to W. E. Carter, for Admiral Stopford.

DIVISION B.

Open to all cultivators of more than 200 plants.

A premium of \$4 to P. Barnes, for the best eighteen dissimilar blooms.

A premium of \$2 50 to Joseph Breck, for the best twelve dissimilar blooms.

A premium of \$1 50 to Edward Allen, for the best six dissimilar blooms.

DIVISION C.

Open to all cultivators of less than 200 plants.

A premium of \$1 50 to Wm. Meller, for the best six dissimilar blooms.

A premium of \$1 to H. W. Dutton, for the second best six dissimilar blooms.

GRATUITIES.

A gratuity of \$5 to M. P. Wilder, President of the Society, for a superb collection of *Dahlias*.

A gratuity of \$3 to Edward Allen, for a collection of *Dahlias*.

ROSES.—The following premiums were awarded:—

For the best display of Bengal, Tea and Noisette Roses, a premium of \$3 to Messrs. Hovey & Co.

A gratuity of \$3 was also awarded to John Arnold, for a collection of Bengal, Tea and Noisette Roses.

GERMAN ASTERS.—The following premiums were awarded:—

For the best display of Asters, a premium of \$2 to Hovey & Co.

For the second best display of Asters, a premium of \$1 to S. R. Johnson. Adjourned two weeks.

Exhibited.—Flowers: The President sent a fine plant of the *Lilium speciosum*, one of the new varieties of the splendid Japan lilies, recently introduced. H. W. Dutton and J. Stickney exhibited a great variety of dahlias. They were the only contributors of this flower, most of the plants in the vicinity of the city being cut off by the recent severe frost.

Fruits: By A. D. Weld, Brown Beurré, Pope's Russet, Marie Louise, Passe Colmar and Easter Beurré pears. Josiah Lovett, Flemish Beauty, very fine; Belle Angevine, and Duchesse d'Angouleme pears. B. J. Newhall, a variety of apples, including Danvers Winter Sweet, Hubbardston Nonsuch, Baldwin, Fall Harvey, Golden Pippin, and Kilham Hill; Lewis and Bezi Vaet pears, and Spanish filberts. Ralph Crocker, very splendid specimens of the following pears—Fortunée, Duchesse d'Angouleme, Easter Beurré, Belle et Bonne, Beurré Diel, Brown Beurré, Napoleon, Louise Bonne de Jersey; also, Sweetwater grapes. Wm. Buckminster, Pound Sweet apples and Orange quinces, grown by W. Puffer, Monson; they were remarkably large specimens. Minot pears, from Mrs. Russell, Milton Hill. J. S. Sleeper, Dix and Belle et Bonne pears, and Rhode Island Greening apples. Fine quinces from W. G. Lewis. John A. Kenrick exhibited twelve Orange quinces, which weighed 8 lbs. 9 oz. and were beautiful. Charles White, Northbridge, sent nine dishes of seedling apples. John Owen, Green Gage plums. St. Michael pears, from George Walsh. H. Vandine, very large and fine Coe's Golden Drop plums, Marie Louise and St. Michael pears. S. Walker, Flemish Beauty, very handsome, Louise Bonne de Jersey, and St. Michael pears. Pomegranates, from T. Motley.

Vegetables: Sweet potatoes, very fine brocoli, cauliflowers and Lizard beans, grown by J. Lovett. Good Lizard beans, by John Kenrick.

October 12th.—*Exhibited.* Flowers: The display to-day was principally made by our city amateurs, whose gardens have not suffered by the recent severe frost, which has cut off the flowers so generally in the vicinity. Mr. J. Stickney exhibited upwards of one hundred fine dahlia blooms,—among them were most excellent flowers of Essex Triumph, Oakley's Surprise and Dodd's Prince of Wales. H. W. Dutton made a fine display of about sixty-five blooms. A few bouquets only were to be seen. A good plant of Cactus Jenkinsonia, in flower, was from Mr. Warren's garden, and some bouquets from W. Kenrick.

Fruit: A collection of pears was sent for exhibition by S. G. Perkins, Esq.; the specimens were large and beautiful; the following were the kinds as marked by Mr. Perkins, viz.: Beurré Magnifique, Roi Guillaume, Beurré Incomparable, Sieulle, Beurré d'Amalis, Great Unknown, Beurré Diel, Josephine, Roi de Wurtemberg, St. Germain Panachee, Mons. le Curé, St. Germain, Chaumontel, Beurré d'Hiver, Louise Bonne of Jersey, Duchesse d'Angouleme, Marie Louise, Van Mons Leon le Clerc, Sylvanche Verte, Easter Beurré, Nouvelle Bossouk, Passe Colmar, Beurré Bronzé, Dix, St. Michael and Catillac. The specimens were very fine, but there is no doubt that five or six of those shown under different names, were the Beurré Diel. Mr. John Owen exhibited a box of Green Gage plums, being the sixty-seventh box, containing a quart each,

which has been taken from one tree the present season. H. Vandine, Coe's Golden Drop plums, excellent; Miller Burgandy, Catawba, Isabella, and Sweetwater grapes. Wm. Buckminster, extra large Baldwin and Lyscom apples—one of the former measured thirteen inches in circumference; they were grown in Marlborough, Mass.; also, a very large quince, weighing twenty-three ounces, from Leominster. Rev. A. B. Muzzey, fine Isabella grapes. Henry Plympton, St. Michael pears, uncommonly fine specimens, grown in Boston, where this old favorite variety is produced in all its original beauty and perfection. Mrs. Bigelow, St. Michael pears. Jacob Deane, Mansfield, exhibited a variety of apples—among them was Peck's Pleasant, a fine winter fruit, and the Gilliflower, Wine apple, &c.; also, a seedling pear. Mrs. J. Russell, Milton, a basket of beautiful Seek-no-Further apples.

Rev. J. L. Russell sent specimens of a pear, said to be a seedling, and originated in Hingham, Mass. James Munroe, good specimens of Vicar of Winkfield, Heathcote and St. Michael pears, and two varieties of apples. J. S. Sleeper, Hubbardston Nonsuch apples. Gardiner Brewer, Fondante d'Automne pears. Dr. S. A. Shurtleff exhibited a seedling plum,—size, appearance and flavor very much like the Green Gage; also, Blue Imperatrice plums. Dr. S. also presented for exhibition a number of seedling apples, one of them a very excellent sweet apple, called Keen's Sweet; size medium, color a fine golden yellow:—two other varieties, Ribston Sweet and Hammond Pearmain, were fine apples and worthy of cultivation. From E. W. Hayward, a beautiful striped apple, of a lively agreeable flavor; no name, probably a seedling. Otis Johnson, Blue Imperatrice and Semiana? plums; these two varieties have been confounded, but there is no doubt the true varieties are distinct fruits. S. R. Johnson, Beurré Diel and Dix pears. T. Parsons, Brown Beurré pears. Mr. Kane, large Catillac pears. John Bullard, Pepperel, two fine sorts of apples, no names given. J. Lovett, very handsome Coe's Golden Drop plums. Dr. Walton, Pepperel, a handsome apple, called the "Ames." From L. Peters, by Mr. Breck, four varieties of apples. George Richardson, a beautiful seedling apple. George Walsh, Isabella, Sweetwater, Red Chasselas and native grapes, and St. Michael pears. D. Haggerston exhibited from the garden of J. P. Cushing, Esq. four varieties of pears; also, a splendid specimen of Van Mons Leon le Clerc, very large and of fine shape.

J. L. L. F. Warren, Porter, Hubbardston Nonsuch and Blue Pearmain apples, and three varieties pears. G. W. Oliver, Lynn, fine specimens of Oliver's Russet Seedling pears, rather under medium size, but very handsome, and is an excellent fruit.

October 19th.—The Society held an adjourned meeting. M. W. Green, Jamaica Plain, Roxbury, was admitted a member. There being no other business of importance, adjourned one week.

Exhibited.—Flowers: Another fine display of dahlias was made to-day from the gardens in the city, which have, as yet, not been visited by frost, and still present a fine show of autumnal flowers. H. W. Dutton exhibited one hundred and twenty blooms; Josiah Stickney, one hundred and forty, and R. M. Copeland, forty to fifty blooms. Most of the flowers in each collection were very fine and perfect specimens.

Fruits: From William Oliver, Wilkinson and fine St. Michael pears. Mr. Rodman, New Bedford, Capiaumont, Passe Colmar, Louise Bonne de

Jersey pears, and Rhode Island Greening apples. C. W. Greene, Jamaica Plain, Monstrous Pippin apple, weighing twenty-two ounces, and fifteen inches in circumference, from the farm of Franklin Greene, Esq., R. I., the homestead of Gen. Nath'l Greene, of the Revolutionary army. S. Pond, twelve Orange quinces, weighing 11½ lbs. Josiah Robins, Plymouth, extra large apples,—the largest specimen weighed 22 ounces, name unknown. Fulton, Dix, Capiaumont and Urbaniste pears, from the President. St. Michael pears, and three varieties of grapes, from George Walsh. Good Easter Beurré and St. Michael pears, from E. Bradshaw. Weston apple, from S. W. Cole. Three varieties grapes, from C. S. Hunt. Mr. Oliver, Brookline, Dix pears. From Henry Plympton, Boston, Isabella grapes and St. Michael pears,—the latter extra fair and beautiful.

The fine specimen of Van Mons Leon le Clerc pears, exhibited last week by Mr. Haggerston, from Mr. Cushing's garden, was tasted, and was found to sustain the high character which preceded its introduction into this country.

October 26th.—The Society held an adjourned meeting. The President, with Messrs. French, Newhall and Richards, were chosen a committee, to consider the expediency of having an address delivered at the opening of the Society's new Hall.

Exhibited.—Flowers: A good show of dahlias was again made to-day, from the gardens in the city. The fine warm weather, the past week, has been very favorable for them, and many fine blooms have been produced. Mr. J. Stickney exhibited one hundred and twenty-five blooms,—among them, beautiful flowers of Oakley's Surprise, Essex Triumph, Grace Darling, Constantia, Widnall's Queen, &c.

H. W. Dutton, a large collection of dahlias, including perfect specimens of Essex Triumph, Prince of Wales, Oakley's Surprise, Queen, &c.

R. M. Copeland, fifty blooms, including a large number of fine specimens.

From E. Allen, twelve varieties of chrysanthemums. From Parker Barnes, roses, pansies, Scarlet geranium, cactus flowers, &c. Bouquets from Wm. Kenrick.

Fruits: A basket of fine specimens of pears was presented by S. G. Perkins, of Brookline; the Beurré Diel, Duchesse d'Angouleme, and some others, were very large. From J. Lovett, Duchesse d'Angouleme and Capiaumont pears; also, very fine dried plums or prunes; they were dried as perfectly as any foreign prunes we ever noticed, and were the first ever exhibited at the Society's rooms. From S. Walker, Vicar of Winkfield pears. Jonathan French, Lewis pears, and var. of apples. J. Munroe, Vicar of Winkfield pears, and beautiful Harvey apples. George Newhall, Fulton, Seckel, Cumberland, Beurré Bosc and Duchesse d'Angouleme pears, and Isabella grapes. From G. Merriam, Newton, St. Michael pears, and Portugal quinces. Dr. Warren, Duchesse d'Angouleme pears. From the President, Capiaumont, Belle et Bonne, Popc's Quaker and Urbaniste pears. Rev. A. B. Muzzey, Catawba grapes, very handsome. F. Tudor, Passe Colmar, Easter Beurré, St. Michael and Seckel pears, the latter excellent. From J. F. Allen, Black Hamburg grapes. H. Vandine, Marie Louise, Passe Colmar and Seckel pears; Coe's Golden Drop plums.

Vegetables: From F. Tudor, green peas, beans, tomatoes and lettuce.

ART. IV. Faneuil Hall Market.

	From	To		From	To
<i>Roots, Tubers, &c.</i>	\$ cts.	\$ cts.	<i>Fruits.</i>	\$ cts.	\$ cts.
Potatoes, new:			Apples, dessert and cooking:		
Chenangoes, { per barrel, 1 00	1 00	1 25	Baldwins, per barrel, . . .	1 25	1 50
{ per bushel, 45	45	50	Russets, per barrel, . . .	1 00	1 25
Common,.... { per barrel, 1 00	1 00	—	Greenings, per barrel, . . .	1 00	1 25
{ per bushel, 40	40	—	Common Sweet, per bar.	1 25	1 50
Eastport,.... { per barrel, 1 50	1 50	1 75	Danvers Win. Swt. pr bl.	1 50	—
{ per bushel, 75	75	—	Common, per barrel, . . .	1 00	1 25
Sweet,..... { per barrel, 2 25	2 25	2 50	Bellflower, per barrel, . . .	1 50	2 00
{ per bushel, 1 00	1 00	1 25	Blue Pearmain, per bbl. . .	1 50	1 75
Turnips, per bushel:			Fall Pippins, per barrel, . . .	1 50	2 00
Common flat,	50	—	Porter, per bushel,	1 25	1 50
Ruta Baga,	37	50	Pumpkin Sweet, per hush.	75	1 00
Onions: Red, per bunch, . . .	3	4	Fameuse, per bushel, . . .	1 00	—
Yellow, { per bunch,	3	4	Dried Apples, per lb.	3	4
{ per bushel,	62½	—	Pears, per half peck or doz:		
White, per bunch,	3	4	Beurré Diel, per half pk. . .	50	75
Beets, per bushel,	50	75	Lewis, per half peck,	50	—
Carrots, per bushel,	50	62½	Marié Louise, per hf. pk. . .	50	62½
Parsnips, per bushel,	75	—	Le Curé, per half peck, . . .	37½	—
Salsify, per doz. roots,	12½	25	Messire Jean, per hf. pk. . .	37½	50
Horseradish, per lb.	8	10	Common, per half peck, . . .	25	37½
Garlic, per lb.	8	10	Duchess d'Angouleme, pr		
<i>Cabbages, Salads, &c.</i>			doz.	50	—
Cabbages, per doz.:			St. Germain, per doz.	1 00	—
Drumhead,	50	62½	Catillac, per bushel,	2 00	—
Savoy,	50	62	Baking, per bush.	1 00	1 50
Red,	75	—	Quinces, per bushel,	2 50	3 00
Brocolis, each,	10	20	Grapes, per lb.:		
Cauliflowers, each,	10	20	Black Hamburgh,	50	75
Celery, per root,	6	8	White Sweetwater,	25	37½
Lettuce, per head,	6	—	Isabella,	12½	—
Cucumbers, (pickled) pr gal. . .	25	—	Malaga,	20	25
Peppers, (pickled) pr gal.	37½	—	Catawba,	12½	—
<i>Pot and Sweet Herbs.</i>			Berberries, per bush.	1 25	—
Parsley, per half peck,	25	—	Watermelons, each,	15	20
Sage, per pound,	17	20	Muskmelons:		
Marjorum, per bunch,	6	12½	American Citron, each,	10	—
Savory, per bunch,	6	12	Purple Egg Plant, each,	—	—
Spearmint, per bunch,	3	—	Tomatoes, per half peck, . . .	37½	50
<i>Squashes and Pumpkins.</i>			Cranberries, per bushel,	2 00	2 25
Autumnal Marrow, per cwt.	1 00	—	Oranges, per doz.	37½	50
Canada Crookneck, per cwt. . . .	1 00	2 00	Lemons, per doz.	25	—
Winter Crookneck, per cwt.	1 00	—	Pine Apples, each,	25	—
Pumpkins, each,	10	15	Cocoanuts, per hundred,	3 50	4 00
			Chesnuts, per bushel,	3 00	3 50
			Walnuts, per bushel,	1 50	—

REMARKS.—A continuation of cool and moist weather, since the date of our last, has been of essential benefit to late crops. At that time rains had just set in, after a spell of dry weather, and there have been several heavy showers during the month.

Vegetables.—Potatoes, which, at the date of our last, were in good request at advanced rates, have since come in so abundantly that prices

have receded. Several cargoes of Chenangoes, from the east, have afforded a good supply; Eastports are in good demand, and at a slight advance upon our previous quotations; sweet are yet well supplied, and of good quality. Turnips are now abundant, owing to the more favorable weather of the month. Onions remain the same, with fair supply. Carrots have come in more abundantly and prices are lower. Salsafy has been brought in, and of good quality. A good supply of horseradish. Of cabbages the stock is ample: previous to the rains of the early part of the month there was some fear of a limited stock; Drumheads have headed finely. Brocolis and cauliflowers are now more abundant. Beans have all been gone since the early part of the month. Squashes are very plentiful, as our quotations show; the best Marrows commanding only \$1 per hundred. A dry fall has been favorable to the ripening of the crop, and no doubt they will keep much better this season than the last.

Fruit.—There is a continued and abundant supply of apples, particularly of Baldwins and Russets, and prices are unusually low; Baldwins, of the very finest quality, command only one dollar and fifty cents the barrel; some Porters yet remain, which sell at quotations; of other sorts there is a good supply, including some good specimens of the Famense or Snow apple. Pears are not so abundant as last month, but there is a fair supply of eight or ten sorts and of fair quality; the Lewis are excellent this season, and the St. Germaines are better than usual; baking are well supplied, including some of the Catillac of very large size. Quinces are scarce and prices have advanced; last season they were quite a drug; the usual supply from Rhode Island has not been brought in this year. Peaches and plums are all gone. Grapes are yet brought in, but the stock is quite small, with the exception of Malagas. Berberries have become scarce. A few watermelons yet remain; and of the American citron there is a good stock. Oranges and lemons are more plentiful. Chestnuts are lower, with an increasing stock. Walnuts now come to hand of good quality.—*Yours, M. T., Boston, Oct. 30th, 1844.*

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape Vines will still need some attention. In the early forced houses the wood will now be quite ripe and ready for pruning. In late or cold houses, the grapes will perhaps not yet have been all cut, or the leaves fallen. Care should therefore be taken that all the decaying leaves be picked up as they fall, and that ventilation be thoroughly effected in all fine weather. Vines in the open air may be pruned now, and the Sweet-water and other foreign kinds protected by being covered with leaves or litter. Vines in pots, for early forcing next spring, may be placed in the cellar, or in frames, from whence they can be taken at any time.

Beds of Strawberries, planted this fall, should have a very slight covering of old manure, leaves or tan, especially if the situation is wet, and the plants would be likely to be thrown out by the frost.

Raspberry plantations, especially of the White and Red Antwerp, should be protected from the winter by a slight covering of earth. The Franconia is said to be quite hardy.

Fruit Trees may yet be planted if the weather continues favorable, and the situation is not too wet. Much valuable time may be saved by transplanting in autumn.

Seeds of Fruit Trees may yet be sown with good success. Pears and apples in small beds, with the rows about fifteen inches apart, and peaches at a greater distance.

FLOWER DEPARTMENT.

Bulbs will now be objects of attention, and they should all be planted as soon as possible.

Tulips should be got into the ground without delay, selecting a favorable time when the soil is rather dry.

Hyacinths, Narcissus, Crown Imperials, Crocuses, and similar bulbs, should be set out this month.

Oxalises, if not yet planted, should be attended to.

Icias, Sparaxis, Gladioluses, &c. should be potted this month.

Lilium lancifolium and its varieties may be potted this month, and placed in a frame or the greenhouse.

Ranunculuses may be planted this month; or, if not planted, the beds should be put in readiness to plant in March.

Gloxinias, Gesnerias and *Achimenes* should be put away on a dry shelf, in a warm situation, until the period for potting in the spring.

Dahlias, not yet put away for the winter, should be attended to; see that they are not packed away with too much moist earth about the roots.

Callas should now be repotted, if not done before.

Rocket Larkspur, Coreopsis, Chryseis, Clarkias, and similar hardy annuals, may be sown this month in beds or in the open border. Larkspurs look neat in small beds, the rows about a foot apart.

Mignonette and *Sweet Allysum*, in pots, should now be sparingly watered.

Roses, taken up and potted in September, should now be taken into the greenhouse, and the branches headed in.

Stocks, of various kinds, should be protected in frames until they are removed to the greenhouse.

Cactuses will now need but little water.

Chrysanthemums will now be in full bloom, and should have plenty of water.

Azaleas should be carefully watered at this season.

Camellias will now need more care; the plants should be neatly tied up to stakes, and in choice collections all the leaves should be washed with the sponge.

Cinerarias may now be repotted, unless already done.

Chinese Primroses may be repotted this month.

Greenhouse plants, of all kinds, will now need attention; repot all that need it, and look carefully after insects.

Herbaceous plants may be transplanted this month, protecting them slightly afterwards with leaves or coarse litter.

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DECEMBER, 1844.

ORIGINAL COMMUNICATIONS.

ART. I. *The Blight in the Pear Tree; its cause and a remedy for it.* By Rev. H. W. BEECHER. Read before the Indiana Horticultural Society, and communicated by Mr. Beecher.

THE year 1844 will long be remembered for the extensive ravages of that disease hitherto denominated *fire-blight*. Beginning at the Atlantic coast, we have heard of it in Pennsylvania, Maryland, Virginia, Ohio, Kentucky, Indiana, and as far as Tennessee; and it is probable that it has been felt in every fruit-growing State in the Union where the season of 1843 was the same as that west of the Alleghany range, namely, cold in spring, dry throughout the summer, and a wet and warm fall, with early and sudden winter.

In Indiana and Ohio the *blight* has prevailed to such an extent as to spread dismay among cultivators; destroying entire collections,—taking half the trees in large orchards,—affecting both young and old trees, whether grafted or seedlings, in soils of every kind. Many have seen the labor and fond hope of years cut off, in one season, by an invisible destroyer, against which none could guard; because, in the conflicting opinions, none were certain whether the disease was atmospheric, insect or chemical.

I shall now proceed to describe that blight known in the western States, (without pretending to identify it with the blight known in New York and New England,) to examine the theories proposed for its causation, and to present what now seems to me the true cause.

4. Others have attributed the disease to over stimulation by high manuring, or constant tillage ; and it has been said that covering the roots with stones and rubbish, or laying the orchard down to grass, would prevent the evil. Facts warrant no such conclusions. Pear trees in Gibson county, Indiana, on a clay soil, with blue slaty subsoil, were affected this year more severely than any of which we have heard. Pears in southern parts of this State, on red clay, where the ground had long been neglected, suffered as much as along the rich bottom lands of the Wabash about Vincennes. If there was any difference it was in favor of the richest land. About Mooresville, Morgan county, Indiana, pears have been generally affected, and those in grass lands *as much* as those in open soils. Aside from these facts, it is well known that pear trees do not blight in those seasons when they make the rankest growth more than in others. They will thrive rampantly for years, no evil arising from their luxuriance, and then suddenly die of blight.

5. It has been supposed by a few to be the effect of *age*, the disease beginning on old varieties, and propagated upon new varieties by contagion. Were this the true cause, we should expect it to be most frequently developed in those pear regions where old varieties most abound. But this disease seems to be so little known in England, that Loudon, in his elaborate *Encyclopedia of Gardening*, does not even mention it. Mr. Manning's statement will be given farther on, to the same purport.

6. Insect theory: The confidence with which eastern cultivators pronounce the cause to be an *insect*, has in part served to cover up singular discrepancies in the separate statements in respect to the ravages, and even the species of this destroyer. The *Genesee Farmer* of July, 1843, says, "the cause of the disease was for many years a matter of dispute, and is so still by some persons ; but the majority are now fully convinced that it is the work of an insect, (*Scolytus pyri*.) T. W. Harris, in his work on insects, speaks of the minuteness and obscure habits of this insect, as "reasons why it has eluded the researches of those persons who disbelieve in its existence as the cause of the blasting of the limbs of the *pear tree*." Dr. Harris evidently supposed, until so late as 1843, that this insect infested only the *pear tree* ; for he says, "the discovery of

the blight-beetle in the limbs of the apple tree is a new fact in natural history ; but it is easily accounted for, because this tree belongs not only to the same natural group, but also to the same genus as the pear tree. It is not, therefore, surprising, that both the pear and the apple tree should occasionally be attacked by the same insect." [See an article in the *Massachusetts Ploughman*, summer of 1843, quoted in *Genesee Farmer*, July, 1843.]

This insect is said to eat through the *alburnum*, the hard wood, and even a part of the pith, and to destroy the branch by separation of part from part, as a saw would. On these facts, which there is no room to question, we make two remarks.

1st. That the blight thus produced is *limited*, and probably sectional or local. No account has met my eye which leads me to suppose that any considerable injury has been done by it. Mr. Manning, of Salem, Mass., in the second edition of his *Book of Fruits*, states that he has never "*had any trees affected by it*"—the blight. Yet his garden and nursery has existed for twenty years, and contained immense numbers of trees.

2d. It is very plain that neither Mr. Lowell, originally, nor Dr. Harris, nor any who describe the blight as caused by the blight-beetle, had any notion of that disease which passes by the same name in the middle and western States. The blight of the *Scolytus pyri* is a mere *girdling* of the branches,—a mechanical separation of parts; and no mention is made of the most striking facts incident to the great blight—the viscid unctuous sap; the bursting of the bark, through which it issues; and its poisonous effects on the young shoots upon which it drops.

I do not doubt the insect-blight; but I am sure that it is not *our* blight. I feel very confident, also, that this blight, which from its devastations may be called the great blight, has been felt in New England, in connection with the insect-blight, and confounded with it, and the effects of two different causes happening to appear in conjunction, have been attributed to one, and the least influential, cause. The writer in Fessenden's *American Gardener*, (Mr. Lowell?) says of the blight, "it is sometimes so rapid in its progress, that in a few hours from its first appearance the whole tree will appear to be mortally diseased." This is not insect-blight; for did the blight-beetle eat so *suddenly*

around the whole trunk? Now here is a striking appearance of the great blight, confounded with the minor blight, as I think will appear in the sequel.

This theory has stood in the way of a discovery of the true cause of the great blight; for every cultivator has gone in search of insects; they have been found in great plenty, and in great variety of species, and their harmless presence accused with all the mischief of the season. A writer in the *Farmer's Advocate*, Jamestown, N. C., discerned the fire-blight, and traced it to "small, red, pellucid insects, briskly moving from place to place on the branches." This is not the *Scolytus pyri* of Prof. Peck and Dr. Harris.

Dr. Mosher, of Cincinnati, in a letter published in the *Farmer and Gardener* for June, 1844, describes a third insect,—“very minute brown-colored aphides, snugly secreted in the axilla of every leaf on several small branches; * * most of them were busily engaged with their proboscis inserted through the tender cuticle of this part of the *petiole* of the leaf, feasting upon the *vital juices* of the tree. The leaves being thus deprived of the necessary sap for nourishment and elaboration, soon perished, * * while all that part of the branch and trunk below, dependent upon the elaborated sap of the deadened leaves above, shrunk, turned black, and dried up.”—p. 261.

Lindley, in his work on *Horticulture*, p. 42-46, has detailed experiments illustrating vegetable *perspiration*, from which we may form an idea of the amount of fluid which these “very minute brown-colored aphides” would have to drink. A sunflower, three and a half feet high, perspired in a very warm day thirty ounces—nearly two pounds; on another day, twenty ounces. Taking the old rule, “a pint a pound,” nearly a quart of fluid was exhaled by a sunflower in twelve hours; and the vessels were still inflated with a fresh supply drawn from the roots. Admitting that the leaves of a fruit tree have a less current of sap than a sunflower or a grape vine, yet in the months of May and June, the amount of sap to be exhausted by these very minute brown aphides, would be so great, that if they drank it so suddenly as to cause a tree to die in a day, they would surely augment in bulk enough to be discovered without a lens. If some one had accounted for the low water in the Mississippi, in the summer of 1843, by saying

that buffaloes had drunk up all the upper Missouri, and cut off the supply, we should be at a loss which most to pity, the faith of the narrator, or the probable condition of the buffaloes after their feat of imbibition.

But the most curious results *follow* these feats of suction. The limbs and trunk *below* shrink and turn black, for want of that elaborated sap extracted by the aphides. And yet every year we perform artificially this very operation in *ringing* or *decortication* of branches, for the purpose of accelerating maturation, or improving the fruit. Every year the *saw* takes off a third, a half, and sometimes more, of a living tree; and the effect is to produce new shoots, not death. Is an operation which can be safely performed by man, *deadly* when performed by an insect? Dr. Mosher did not detect the insects without extreme search, and then only in colonies, on healthy branches. Do whole trees wither in a day by the mere suction of such insects? Had they been supposed to *poison* the fluids, the theory would be less exceptionable, since poisons in minute quantities may be very malignant.

While we admit a limited mischief of insects, they can never be the cause of the prevalent blight of the middle and western States,—such a blight as prevailed in and around Cincinnati in the summer of 1844,—nor of that blight which prevailed in 1832. The *blight-beetle*, after most careful search and dissection, has not been found, nor any trace or passage of it. Dr. Mosher's insect may be set aside without further remark.

I think that farther observation will confirm the following conclusions:—

1. Insects are frequently found feeding in various ways upon blighted trees, or on trees which afterwards become so.

2. Trees are fatally blighted on which no insects are discerned feeding,—neither aphides nor *Scolytus pyri*.

3. Multitudes of trees have such insects on them as are in other cases supposed to cause the blight, without a sign of blight following. This has been the case in my own garden.

III. *Cause of the blight.*—The Indiana Horticultural Society, early in the summer of 1844, appointed a committee to collect and investigate facts on the Fire-Blight. While serving on this committee, and inquiring in all the pear-growing regions, I learned that Reuben Reagan, of Putnam

county, Ind., was in possession of much information, and supposed himself to have discovered the cause of this evil; and to him I am indebted for a first suggestion of the cause. Mr. Reagan has for more than twelve years past suspected that this disease originated in the fall previous to the summer on which it declares itself. During the last winter Mr. Reagan predicted the blight, as will be remembered by some of his acquaintance in Wayne county, and in his pear orchards he marked the trees that would suffer, and pointed to the spot which would be the seat of the disease; and his prognostications were strictly verified. After gathering from him all the information which a limited time would allow, I obtained from Aaron Alldredge, of this place, a nursery-man of great skill, and possessed of careful, cautious habits of observation, much corroborative information; and particularly a tabular account of the blight for nine years past in his nursery and orchard.

The spring of 1843 opened early, but cold and wet, until the last of May. The summer was both dry and cool, and trees made very little growth of new wood. Toward autumn, however, the drought ceased, copious rains saturated the ground, and warm weather started all trees into vigorous, though late, growth. At this time, while we hoped for a long fall and a late winter, on the contrary we were surprised by an early and sudden winter, and with unusual severity at the very beginning. In this region, much corn was ruined and more damaged; and hundreds of bushels of apples were caught on the trees and spoiled,—one cultivator alone losing five hundred bushels. Caught in this early winter, what was the condition of fruit trees? They were making rapid growth, every part in a state of excitement, the wood unripe, the passages of ascent and descent impleted with sap. In this condition, the fluids were suddenly frozen,—the growth instantly checked; and the whole tree, from a state of great excitability, was, by one shock, rudely forced into a state of rest. Warm suns, for a time, followed severe nights. What would be the effect of this freezing and sudden thawing upon the fluids and their vessels? I have been able to find so little written upon vegetable morbid anatomy, (probably from the want of access to books,) that I can give but an imperfect account of the derangement produced upon the circulating fluids by congelation. We cannot state the specific changes

produced by cold upon the ascending sap, or on the cambium, nor upon the elaborated descending current. There is reason to suppose that the two latter only suffer, and probably only the last. That freezing and thawing decomposes the coloring matter of plants is known; but what other decomposition, if any, is effected, I know not. The effect of congelation upon the descending sap of pear and apple trees, is to turn it to a viscid, unctuous state. It assumes a reddish, brown color; becomes black by exposure to the air; is poisonous to vegetables even when applied upon the leaf. Whether in some measure this follows all degrees of congelation, or only under certain conditions, I have no means of knowing.

The effect of freezing and thawing upon the tissues and sap vessels, is better known. Congelation is accompanied with expansion; the tender vessels are either burst or lacerated; the excitability of the parts is impaired or destroyed; the air is expelled from the æriferous cavities, and forced into the passages for fluids; and lastly, the tubes for the conveyance of fluids are obstructed by a thickening of their sides.* The fruit trees, in the fall of 1843, were, then, brought into a morbid state,—the sap thickened and diseased; the passages lacerated, obstructed, and probably, in many instances, burst. The sap elaborated, and now passing down in an injured state, would descend slowly, by reason of its inspissation, the torpidity of the parts, and the injured condition of the vessels. The grosser parts, naturally the most sluggish, would tend to lodge and gradually collect at the junction of fruit spurs, the forks of branches, or wherever the condition of the sap vessels favored a lodgment. In some cases the passages are wholly obstructed; in others, only in part.

At length the spring approaches. In early pruning, the cultivator will find, in those trees which will ere long develop blight, that the knife is followed by an unctuous sap, and that the liber is of a greenish yellow color. These will be the first signs, and the practised eye may detect them long before a leaf is put forth.

When the season is advanced sufficiently to excite the tree to action, the sap will, as usual, ascend by the albur-

* Lindley's Horticulture, 81, 82.

num, which has probably been but little injured ; the leaf puts out, and no outward sign of disease appears ; nor will it appear until the leaf prepares the downward current. May, June and July are the months when the growth is most rapid, and when the tree requires the most elaborate sap ; and in these months the blight is fully developed. When the descending fluid reaches the point where, in the previous fall, a total obstruction had taken place, it is as effectually stopped as if the branch were girdled. For the sap which had lodged there would, by the winds and sun, be entirely dried. This would not be the case if the sap was good and the vitality of the wood unimpaired ; but were the sap and vessels are both diseased, the sun affects the branch on the tree just as it would if severed and lying on the ground. There will, therefore, be found on the tree, branches with spots where the bark is dead and shrunk away below the level of the surrounding bark ; and at these points the current downward is wholly stopped. Only the *outward* part, however, is dead, while the *alburnum*, or sap wood, is but partially injured. Through the alburnum, then, the sap from the roots passes up, enters the leaf, and men are astonished to see a branch, seemingly dead in the middle, growing thriftily at its extremity. No insect-theory can account for this case ; yet it is perfectly plain and simple when we consider that there are two currents of sap, one of which may be destroyed, and the other, for a *limited time*, go on. The blight, under this aspect, is nothing but *ringing* or *decortication*, effected by diseased sap, destroying the parts in which it lodges, and then itself drying up. The branch will grow, fruit will set, and frequently become larger and finer flavored than usual.

But in a second class of cases, the downward current comes to a point where the diseased sap had affected only a partial lodgment. The vitality of the neighboring parts was preserved, and the diseased fluids have been undried by wind or sun, and remain more or less inspissated. The descending current meets and takes up more or less of this diseased matter, according to the particular condition of the sap. Wherever the elaborated sap passes, after touching this diseased region, it will carry its poison along with it, down the trunk, and, by the lateral vessels, in toward the pith. We may suppose that a violence which would destroy the health of the outer parts, would, to some degree,

rupture the inner sap-vessels. By this, or by some unknown way, the diseased sap is taken into the inner, upward current, and goes into the general circulation. If it be in a diluted state, or in small quantities, languor and decline will be the result; if in large quantities, and concentrated, the branch will die suddenly, and the odor of it will be that of frost-bitten vegetation. All the different degrees of mortality result from the quantity and quality of the diseased sap which is taken into circulation. In conclusion, then, where, in one class of cases, the feculent matter was, in the fall, so virulent as to destroy the parts where it lodged, and was then dried by exposure to wind and sun, the branch above will live, even through the summer, but perish the next winter; and the spring afterwards, standing bare amid green branches, the cultivator may suppose the branch to have blighted that spring, although the cause of death was seated eighteen months before. When, in the other class of cases, the diseased sap is less virulent in the fall, but probably growing worse through the spring, a worse blight ensues, and a more sudden mortality.

I will mention some proofs of the truth of this explanation.

1. The two great blight years throughout this region, 1832 and 1844, were preceded by a summer and fall such as I have described. In the autumn of both 1831 and 1843, the orchards were overtaken by a sudden freeze while in a fresh-growing state; and in both cases the consequence was excessive destruction the ensuing spring and summer.

2. In consequence of this diagnosis, it has been found practicable to predict the blight six months before its development. The statement of this fact, on paper, may seem a small measure of proof; but it would weigh much with any candid man to be told, by an experienced nurseryman, this is such a fall as will make blight; to be taken, during the winter, into the orchard, and told, this tree has been struck at the junction of these branches; that tree is not at all affected; this tree will die entirely the next season; this tree will go first on this side, &c., and to find, afterwards, the prediction verified.

3. This leads me to state separately, the fact, that, after such a fall, blighted trees may be ascertained during the process of late winter or early spring pruning.

In pruning before the sap begins to rise freely, no sap should follow the knife in a healthy tree. But in trees which have been affected with blight, a sticky, viscid sap exudes from the wound.

4. Trees which ripen their wood and leaves early, are seldom affected. This ought to elicit careful observation; for, if found true, it will be an important element in determining the value of varieties of the pear in the middle and western States, where the late and warm autumns render orchards more liable to winter blight than N. England orchards. An Orange Bergamot, grafted upon an apple stock, had about run out; it made a small and feeble growth, and cast its leaves in the summer of 1843, long before frost. It escaped the blight entirely; while young trees, and of the same kind, (I believe,) standing about it, and growing vigorously till the freeze, perished the next season. I have before me a list of more than fifty varieties, growing in the orchard of Aaron Alldredge, of this place, and their history since 1836; and so far as it can be ascertained, late-growing varieties are the ones, in every case, subject to blight; and of those which have always escaped, the most part are known to ripen leaf and wood early.

5. Wherever artificial causes have either *produced* or *prevented* a growth so late as to be overtaken by a freeze, blight has, respectively, been *felt* or *avoided*. Out of 200 pear trees, only four escaped, in 1832, in the orchard of Mr. Reagan. These four had, the previous spring, been *transplanted*, and had made little or no growth during summer or fall. If, however, they had recovered themselves, during the summer, so as to grow in the autumn, transplanting would have had just the other effect; as was the case in a row of pear trees, transplanted by Mr. Alldredge in 1843. They stood still through the summer and made growth in the fall,—were frozen,—and in 1844 manifested severe blight. Mr. Alldredge's orchard affords another instructive fact. Having a row of the St. Michael pear (of which any cultivator might have been proud,) standing close by his stable, he was accustomed, in the summer of 1843, to throw out, now and then, manure about them, to force their growth. Under this stimulus they were making excessive growth when winter-struck. Of all his orchard, they suffered, the ensuing summer, the most severely. Of twenty-two trees, *twelve* were affected by the blight, and

eight entirely killed. Of seventeen trees of the Bell pear, eleven suffered, but none were killed. All in this region know the vigorous habit of this tree. Of eight Crassane Bergamot, (a late grower,) five were affected and two killed. In an orchard of 325 trees of 79 varieties, one in seven blighted, 25 were totally destroyed. Although a minute observation was not made on each tree, yet, as a general fact, those which suffered were trees of a full habit and of a late growth.

6. Mr. White, a nurseryman near Mooresville, Morgan county, Indiana, in an orchard of from 150 to 200 trees, had not a single case of the blight in the year 1844, though all around him its ravages were felt. What were the facts in this case? His orchard is planted on a mound-like piece of ground; is high, of a sandy, gravelly soil: earlier by a week than nursery soils in this county; and in the summer of 1843 his trees grew through the summer; wound up and shed their leaves early in the fall, and during the warm spell made no *second growth*. The orchard, then, that escaped, was one on such a soil as ensured an *early* growth, so that the winter fell upon ripened wood.

7. It may be objected, that if the blight *began* in the new and growing wood, it would appear there; whereas the seat of the evil, i. e. the place where the bark is diseased or dead, is lower down and on old wood. Certainly, it should be; for the returning sap falls some ways down before it effects a lodgment.

8. It might be said that *spring-frosts* might produce this disease. But in the spring of 1834, in the last of May, after the forest trees were in full leaf, there came frost so severe as to cut every leaf; and to this day the dead tops of the beach attest the power of the frost. But no *blight* occurred that year in orchard, garden or nursery.

9. It may be asked why forest-trees do not suffer. To some extent they do. But usually the dense shade preserves the moisture of the soil, and favors an equal growth during the spring and summer; so that the excitability of the tree is spent before autumn, and it is going to rest when frost strikes it.

10. It may be inquired why fall-growing shrubs are not always blighted, since many kinds are invariably caught by the frost in a growing state.

I reply, first, that we are not to say that *every* tree or

shrub suffers from cold in the same manner. We assert it of fruit-trees because it has been observed; it must be asserted of other trees only when ascertained.

I reply more particularly, that a *mere frost* is not supposed to do the injury. The conditions under which blight is supposed to originate are, a growing state of the tree, a sudden *freeze*, and sudden thawing.

We would here add, that many things are yet to be ascertained before this theory can be considered as settled; as, the actual state of the sap after congelation, ascertained by experiment; the condition of sap-vessels, as ascertained by dissection; whether the congelation, or the thawing, or both, produce the mischief; whether the character of the season *following* the fall-injury may not materially modify the malignancy of the disease; seasons that are hot, moist and cloudy, propagating the evil; and others dry, and cool, restraining growth and the disease. It is to be hoped that these points will be carefully investigated, not by conjecture, but by scientific processes.

11. We have heard it objected, that trees grafted in the spring blight in the graft during the summer. If the *stock* had been affected in the fall, blight would arise from *it*; if the scion had, in common with the tree from which it was cut, been injured, blight must arise from *it*.

Blight is frequently caused in the nursery; and the cultivator, who has brought trees from a distance, and with much expense, has scarcely planted them before they show blight and die.

12. It is objected, that while only a single branch is at first affected, the evil is imparted to the whole tree: not only to the wood of the last year, but to the old branches. I reply, that if a single branch only should be affected by fall-frost, and be so severely affected as to become a repository of much malignant fluid, it might gradually enter the system of the whole tree, through the circulation. This fact shows why *cutting* is a partial remedy; every diseased branch removed, removes so much poison; it shows also why cutting from *below* the seat of the disease (as if to fall below the haunt of a supposed insect,) is beneficial. The farther the cut is made from that point where the sap has clogged the passages, the less of it will remain to enter the circulation.

13. Trees of great vigor of constitution, in whose system

but little poison exists, may succeed after a while in rejecting the evil, and recover. Where much enters the system, the tree must die; and with a suddenness proportioned to the amount of poison circulated.

14. A rich and *dry* soil would be likely to promote early growth, and the tree would finish its work in time; but a rich and *moist* soil, by forcing the growth, would prepare the tree for blight; so that rich soils may prevent or prepare for the blight, and the difference will be the difference of the respective soils in producing an early instead of a late growth.

IV. *Remedy.*—So long as the blight was belived to be of insect-origin, it appeared totally irremediable. If the foregoing reasoning be found correct, it will be plain that the scourge can only be occasional; that it may be in a degree prevented; and to some extent remedied where it exists.

1. We should begin by selecting for pear orchards a warm, light, rich, dry and early soil. This will secure an early growth and ripe wood before winter sets in.

2. So soon as observation has determined what kinds are naturally early growers and early-ripeners of wood, such should be selected; as they will be least likely to come under those conditions in which blight occurs.

3. Wherever orchards are already planted; or where a choice in soils cannot be had, the cultivator may know by the last of August or September, whether a fall-growth is to be expected. To prevent it, I suggest immediate *root-pruning*. This will benefit the tree at any rate,—and will probably, by immediately restraining growth, prevent blight.

4. Whenever blight has occurred, I know of no remedy but free and early *cutting*. In some cases it will remove all diseased matter; in some it will alleviate only; but in bad blight, there is neither in this, nor in any thing else that I am aware of, any remedy.

There are two additional subjects, with which I shall close this paper.

1. This blight is not to be confounded with *winter-killing*. In the winter of either 1837 or 1838, in March a deep snow fell, (in this region,) and was immediately followed by brilliant sun. Thousands of nursery trees perished in consequence, but without putting out leaves, or lingering. It is a familiar fact to orchardists, that severe

cold, followed by warm suns, produce a bursting of the bark along the trunk; but usually at the surface of the ground.

2. I call the attention of cultivators to the disease of the peach tree, called "The Yellows." I have not spoken of it as the same disease as the *blight* in the pear and the apple, only because I did not wish to embarrass this subject by too many issues. I will only say, that it is the opinion of the most intelligent cultivators among us, that the yellows are nothing but the development of the blight according to the peculiar habits of the peach tree. I mention it, that observation may be directed to the facts.

HENRY W. BEECHER.

Oct. 1844.

ART. II. *Floricultural and Botanical Notices of New Plants, figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates; with additional miscellaneous information, relative to new plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly, 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Curtis's Botanical Magazine, or Flower Garden Displayed, &c. &c. Conducted by Samuel Curtis, F. L. S. The descriptions by Sir Wm. Jackson Hooker, K. H. LL.D. F. R. A. and L. S., &c. &c. Vol. XVII. No. 214. New Series. October 1, 1844. London.

Curtis's Botanical Magazine.—This accurate and beautiful work offers in the present number, for October, five

figures, and corresponding descriptions, of rare and splendid plants; and, as a single number, is unusually attractive in itself, on account of the plates. First, we are presented with a gorgeous Orchidaceous—of which, it is said, “nothing can exceed the beauty and delicacy of the blossoms of this plant, as they appeared in the Orchidaceous-house of the Royal Botanic Gardens in the early spring of 1844, continuing too, in great perfection, for several weeks. Perhaps it is the most lovely of its tribe, and deficient only in foliage, which here can scarcely be distinguished from the stem, either in form or color.” From its Sanscrit name its generic title is derived, viz. : VANDA, while the character of the stem furnishes the specific,—*teres*; the Quill-leaved Vanda.—(*Lindley's Gen. and Sp. Orchid.* p. 217. *Bot. Reg.*, t. 1809.) Indeed, judging from the plate, we scarcely could conceive of a more singularly attractive blossoming production; and were we not in some little degree acquainted with the bizarre character of the epiphytes of the tropics, we might reasonably entertain some doubts regarding its described merits. The great size of the flowers, and, borne on lateral pedicels five or six of these, “of the most delicate waxy texture,” the sepals of which are nearly white, with a rosy tint: the spreading petals of deep rose color, with pale, almost white, margins; the lip spreading, three-lobed, variegated with yellow and rose color, spotted and streaked with red; its stem round, terete, and leaves terete and also elongate, obtuse, dark-green, with a depressed line on their upper side, forming a contrast at once apparent, while the tout ensemble is striking.

Native of the Burmese empires, and under culture grows well in a moist stove, suspended to a branch or piece of wood.

Next, we have a pretty Cactus, known only in the gardens and in catalogues as *Echinocactus concinnus*, and for the first time published as a distinct species, unless *Echinocactus orthocanthus* *Link* and *Otto*,—*Pfeiffer's Enumerated Cact.* p. 53, be its synonym. It is a small plant, two inches high, and three or three and a half inches diameter, globose, depressed remarkably at the top, side deeply and regularly ribbed; spines eight or ten, bristle-shaped, spreading in a stellate manner; flowers one or two, generally from the border of the depressed summit, large, handsome; petals numerous spreading, yellow, with a dark

red streak down the centre. Cultivated for several years at Kew, where it flowers in March and April.

The many species and varieties of the Cactea, increasing every day by importation from foreign habitats and from multiplication from seeds, hybridizing and the like, render the study of them more and more difficult, and nothing but good figures can assist the student in unravelling the intricacies of such a diverse group, and though diverse, yet passing from one into the other by minute characters.

A fragrant, rather large white-flowering (turning to rose color on age) herbaceous plant, with pinnatifid leaves, and a stem branched from the root, rather pretty, we should think, is depicted on the 4116 plate as *Chabræa runcinata*, named by De Candolle in compliment to Chabrey of Geneva, author of "*Omnium Stirpium Sciographia*, 1666." Dr. Hooker feels satisfied that it is *Leucheria runcinata* of Dr. Gillies, and hardly distinct from that genus, though placed in *Chabræa* by the lamented De Candolle. A native of the Andes, Chili.

On the 4117 plate is a fine herbaceous plant, tuberous rooted, native of South Africa, whose reddish-purple flowers remind us of *Lophospermum erubescens*, though totally unlike in habit and character. Its root is large, solitary and globose, from the top of which, elevated above the ground, is produced a stem, soon dividing into stout, succulent branches, bearing opposite leaves; its showy flowers in the leaf-axils. It is *Pterodiscus speciosus* Hooker: a stove plant, flowering at Knomsley in May, 1844; and certainly, we should think, very desirable.

New species of *Brugsmansia* have been known and dispersed under the names *B. parviflora* and *B. floribunda*, which in fact have nothing to do with that genus, and belong, indeed, to a showy shrub, so botanically rare, that it was known only to Ruiz and Pavon, who called it, in compliment to Don George Juan and Don Antonio Ulloa, (two distinguished Spaniards, sent in Condamine to South America, to measure a degree of the meridian,) *Juanulloa parasitica* *Flora Peruviana*, 2. p. 47, tab. 185. It is beautifully figured on the 4118 plate of this present number. Notwithstanding it is parasitic, or rather an epiphyte, growing naturally upon the trunks of trees, in woods in Peru, it flourishes freely, planted in earth and kept moist as a stove plant, flowering, at least at Kew, in the summer

months. Natural order, Solanææ. Compare also *Paxton's Magazine of Botany*, Vol. 9, with a figure.

Who does not admire the curious thunbergias—lovely twining plants, fitted for the greenhouse, parlor, or for summer, for outdoor culture? Of these, we have already *T. alata*, with pale yellow flowers; its variety *aurantiaca*, with dark orange blossoms; and that other most delicate variety *álba*, with pure and soft white flowers; all bearing a dark spot in the centre, produced by the purple throat of the corolla. [We would also name a fourth variety, *T. alata*, var. *Fryeri*, yellow with a white throat, distinct and a most desirable addition. It flowered in our collection the past summer.—*Ed.*]

But how shall we describe the splendor of a *new*, large flowered, purple-blue *species*, the throat of whose corol is golden yellow, the edge of which, spreading on the corolla, gives it the specific name of Golden-eyed—then a lighter blue tint deepening into dark purplish blue? What shall we say of this, promising to eclipse all the others, both in splendor and facility of cultivation; “readily increased by cuttings, soon flowering, and bearing a succession of blossoms, to compensate for the short duration of each individual one?”

This new species was introduced into England from Sierra Leone; and we are happy to be able to add, that, by the exertions and zeal of Mr. C. M. Hovey, a living plant, brought by himself from the collections of England, has reached this vicinity in safety. We trust to see this magnificent floral gem, in full vigor, beneath the ardent temperature of our summer, during the next season. That it will meet with a most cordial reception, we entertain no doubt, especially after seeing the figure of it on plate 4119, where it is delineated as *Thunbergia chrysops* *Hooker*.

With these two species, viz., *T. alata*, and its two varieties, *aurantiaca* and *álba*, and with the subject of the present remarks, a most elegant group of climbing plants may be formed, and the merits of all will be better known and appreciated, we are confident, through the splendor of *Thunbergia chrysops*.—J. L. R.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

English Dahlia Exhibitions for 1844.—Always desirous of giving our amateur friends and lovers of the dahlia all the information in relation to this beautiful flower, we present below a brief account of one of the greatest dahlia exhibitions held in England this year. And we are enabled to do this, not from newspapers and periodicals, but from our own notes taken on the spot. It was highly gratifying to us that we were so fortunate as to be in London when this exhibition took place. During the whole of the early part of September, we were absent on the Continent, and when we returned the dahlia season was then nearly over. We arrived just in time to be present at the grand exhibition in Baker street, the last one which took place in the vicinity of London. A few days afterwards many of the plants were destroyed by frost.

The season of 1844 in England, as well as our own country, has been unfavorable to the dahlia; dry weather throughout nearly the whole of August and September prevented the formation of strong buds, and a larger portion of the flowers were small and imperfect; owing also to the dry season the plants were in many places attacked by the thrips, and severely injured. A less number of dahlia exhibitions have been held the present year than for two or three seasons previous; this is in a degree, no doubt, owing to the breaking up of the Metropolitan Society of Florists, who were the first to bring the dahlia to the perfection which it has arrived within a few years. When this interest ceases among the principal growers around the metropolis, less zeal is felt in its cultivation in the provincial towns.

The Exhibition took place at the Bazaar in Baker street, Portman square, London. It was got up by the exertions of the principal cultivators, among whom were Messrs. Widnall, Brown, Girling, Atwell & Brown, Keynes, Harrison, Sorrel, Brag, Stein, Turner, Whale, Sparry, Hansard, Edwards, Low, Mitchell,—each one subscribing a certain sum to be awarded in prizes.

The dahlias exhibited were not very numerous, nor, as a whole, of remarkable beauty. The stands occupied three tables about forty feet long each, one being filled principally with seedlings. We did not note down all the entries. The room was to be open at one o'clock; but owing to the large number of seedlings, the judges were not then enabled to make up their awards; this occupying so much time the public were admitted, and the awards completed afterwards. After some delay the stands were all duly ticketed with the name of the grower, and the names of the flowers added, when, in company with Mr. Brown, we looked over some of the most prominent stands.

The 1st, 2d and 3d best stands of 24 blooms, nurserymen's class, were as follows:—

1st Prize to Mr. Brown, of Slough, for Indispensable, Mrs. Shelley, Springfield Rival, Phenomenon, Orange Superb, Blue Bonnett, Admiral Stopford, Duchess of Richmond, Standard of Perfection, Le Grand Baudine, Great Mogul, Essex Triumph, Nonpareil, Beauty of the Plain, Sir R. Sale, Metella, Eclipse (Widnall's), Lady Antrobus, Pickwick, President of the West, Alexander, Victory of Sussex, Competitor, Phoenix.

2d Prize to Mr. Keynes, of Salisbury, for Prince of Waterloo, Le Grand Baudine, President of the West, Maria, Mrs. Shelley, Antagonist, Essex Triumph, Nonpareil, Phenomenon, Lady Antrobus, Duchess of Richmond, Andrew Hofer, Princess Royal (Hudson's), Lady Harland, Competitor, Admiral Stopford, Emma Noke, Victory of Sussex, Standard of Perfection, Perpetual Grand, Bermondsdy Bee, Eclipse (Widnall's), Burnham Hero, Sir J. Richardson.

3d Prize to Mr. Girling, for Mrs. Shelley, Lady Harland, Admiral Stopford, Phenomenon, Jehu, Antagonist, Bermondsdy Bee, Princess Royal (Hudson's), Crimson Perfection, Standard of Perfection, Prince of Wales, Hope, Andrew Hofer, Beauty of the Plain, Nutwich, Rob Roy, Consolation, Lady Antrobus, President of the West, Eclipse (Widnall's), Rembrandt, Queen of Roses, Essex Triumph, Springfield Rival.

4th Prize to Mr. Bragg, but we had not time to complete the list of names.

The principal part of these varieties were in the stands of eighteen, twelve and six blooms. Mr. Girling exhibited a stand of twenty-four *fancy* dahlias, comprising several very showy ones, and a portion of them quite worthless; the best were, Oakley's Surprise, Alba Purpurea Superba, Purpurea Alba, Susianna, Belle du Donk, (?) Miss Watson, Mad. Milliez, Butterfly, Madam Chauviere, and Madam de Schaunenfield.

After a careful inspection of all the flowers in the prize stands, we set down the following as the best of each color:—

White, Antagonist; *yellow*, Cleopatra (new); *rose*, Mrs. Shelley; *dark red*, Essex Triumph; *purple*, Bermondsdy Bee; *scarlet*, Essex Champion; *maroon*, Raphael; *tipped*, Bridesmaid; *lilac*, Lady Harland; *crimson*, Standard of Perfection; *orange*, Orange Superb; *red*, Nonpareil; *dark shaded*, Alexander.

The stands of seedlings numbered about twenty-five, and contained many very good flowers, with others quite ordinary.

Twenty-four blooms were shown of Cleopatra, a fine deep yellow one, of good size and form, well up on the centre. Eighteen blooms of a red dahlia, similar in color to Red Rover, but of good form and petal, without name. Six blooms of Brown's Orlando, of a pale lilac, a desirable color, form good but petal too coarse. Six blooms of Duke of York, a pale yellow, similar to Primrose. Six blooms of Marchioness of Ormond, white with bold top of violet, fine form and petal, well up in the centre. Six blooms of Beeswing, a red one, form good, centre well up. Six blooms Brown's Arethusa, rich violet purple, petals too crowded, but a good flower. Six blooms of a white one by Mr. Heale, petal thin but color pure. Six blooms Dodd's Marc Antony, rich deep yellow, good form. Six blooms of Beauty of Enfield, lilac rose, good. Six blooms of a tipped one by Mr. Girling, similar to Oakley's Surprise, color deeper and richer, form excellent. Many other seedlings were shown; of some only one bloom, and of others six; but they were generally under private marks, and many will require another year's trial. The most desirable of

these seedlings are Duke of York, Orlando, Marchioness of Ormond, Cleopatra, Arethusa, Beeswing, Marc Antony, and the tipped seedling of Mr. Girling.

Though somewhat disappointed in the exhibition not being as extensive as we expected, and with a less number of fine blooms than we had supposed would have been shown, yet we were pleased at being present. The mode of showing dahlias, which we have given in a previous volume, (IV. p. 281.) is different from that adopted by our own Horticultural Societies. The flowers are there shown in stands of six, twelve, eighteen, twenty-four or more blooms; these stands are made of a single board, with holes at proper distances, (about four inches,) through which the stems of the dahlias are inserted into phials of water, and the blooms lie quite flat upon the board. To us this had a set and stiff appearance, not so pleasing as our plan of showing in bottles in stands; the back petals of the flower are often flattened, and the hemispherical form of the bloom we thought to be injured; the plan, however, is well adapted to the carriage of the flowers, as they are often brought one or two hundred miles.

At four o'clock the exhibitors, amateurs and judges sat down to a dinner, at which Mr. Glenny, the editor of the *Gardener's Gazette*, presided. The dahlia and dahlia shows were discussed, and the occasion appeared to be one of much good feeling. *Ed.*

ART. II. *Exhibitions of Horticultural Societies.*

Owing to our absence abroad, we had not the gratification of witnessing the very fine exhibitions which have taken place in Boston, Salem and New York. The Report of the Massachusetts Horticultural Society has already been given; that of the Essex County Natural History Society will be found below; but that of the American Institute we have not yet seen in print. They were, we believe, all remarkably fine, particularly in the specimens of fruit, which probably were never seen in so great quantity, or so large and beautiful. The Cincinnati Horticultural Society had a fine exhibition, of which we annex a short account.

We congratulate our friends upon the rapid spread of Horticultural Associations, of which these reports are the evidence, especially in the West, where there is such a field for improvement.

ESSEX COUNTY NATURAL HISTORY SOCIETY'S EXHIBITIONS.—Weekly exhibitions of fruits and flowers have been held, on Wednesdays, at the Hall of the Essex County Natural History Society, from May to September, inclusive; they have been well sustained, and manifest an increased taste for the cultivation of choice flowers and delicious fruits in our city and immediate vicinity.

Annexed is a brief abstract of the principal varieties of flowers and fruits exhibited; the names of the contributors, and a particular enumeration of the varieties are omitted, as the insertion would occupy too much space in the pages of your valuable Magazine.

Of the garden and greenhouse flowers, the rose stands very conspicuous. Since the introduction of the Bourbons, Perpetuals and Hybrid Perpetuals into our gardens, the period of exhibiting this favorite flower is not confined to one or two weeks in June, but is extended throughout the season, till frost, and the dreary winds of autumn, check all vegetation. Our stands, during the whole season, have been well filled with new and choice varieties of this plant, which ere long will rival the dahlia in our autumnal exhibitions. About 400 varieties have been exhibited, among which were the following new ones, viz.: Alice Leroy, D'Orleans, Hélène Mauget, Louise Colet, Unique de Provence, and twenty other varieties of the Moss. Also Emerance, New Globe Hip, Charles Duval, Coupe d'Hebe, Great Western, New Village Maid, Rubifolia Superba, Baltimore Belle, Perpetual Pink, Queen of the Prairies, and Noisette, Cloth of Gold, &c. &c.

Pæonies.—Tree or Moutan, viz.: *papaveræca*, *p. Banksiæ*, *p. rosea*, a seedling very double, large, and nearly white. About 40 varieties of the herbaceous kinds, among which were Pöttsü, Rêevesü, Richardsönü, speciösa striäta, formösa, lütea älba, Victoire Modeste, &c., with about 20 seedlings.

The flowering trees, shrubs and climbing plants were fully represented in the different varieties of honeysuckle, clematis, glycine, bignonia, euonymus, acacia, hibiscus, viburnum, shepardia, liriodendron, catalpa, magnolia, &c.; also the herbaceous plants, as the lupinus, phlox, lychnis, digitalis, delphinium, dictamnus, hypericum, &c.

Carnations, pinks, picotees, pansies, tulips, lilies, &c.,—a great variety and many fine specimens.

Dahlias.—Of these, during the latter part of the season, many choice and beautiful varieties were exhibited,—this flower forming a conspicuous part of the floral display at the annual exhibition, and nearly all the varieties shown at the weekly exhibitions were there exhibited; for a particular account we must refer the reader to the report herewith appended.

Among the flowers not otherwise enumerated under any of the foregoing heads, was a fine plant of *Lilium lancifolium punctatum*, containing several beautiful flowers; two flowers of the *Cereus grandiflorus*: they bloomed late in the evening preceding, and continued expanding during the next forenoon, until nearly the close of the exhibition. A beautiful spike of *Yucca filamentosa*, *Cereus speciosissimus*, *Ackermanni*, with several choice seedlings; *Echinocactus Eyriësi*, &c. &c.

The native plants, as usual, have held a conspicuous place at all our exhibitions. Among them were the beautiful *Polygala paucifolia* and the delicate *Linnaea borealis*, from the woods of Essex; *Kalmia latifolia* and *Magnolia glauca*, from Gloucester; *Sabbatia chloroides* and *Lilium superbum*, from Barnstable County; also *Rhodora canadensis*, *Aralea viscosa*, *Lobelia cardinalis*, *O'rchis grandiflora*, *Arethusa bulbosa*, *Calla palustris*, *Cymbidium pulchellum*, &c.

Fruits.—The display of *apples*, this season, has been uncommonly fine; the specimens were very large and fair. The following varieties have been exhibited, viz.: Early Harvest, Early Rivers, Summer Pearmain, Early Bough, Dodge's Early Red, Early Red Margaret, Williams's Summer, Red Astracan, Knowles's Early, Tetofski, Summer Queen, Red Juneating, Sopsavine, Hawthornden, Charlomoski, Irish Peach, Orne's

Early, Sweet Paradise, Newton Pippin, Putnam's Harvey, Early Golden Sweet, Striped June, Duchesse of Oldenburg, Red, Sweet (Wetherell's,) Siberian Crab, Porter, Hillar's Greening, High Top Sweeting, Red and Green Sweeting, Higginson or Jenks's Striped Green Sweeting, Jersey Sweet, Summer Rose, Benoni, Dutch Codlin, Maiden Blush, Woolman's Harvest, Spice Sweet.

Pears.—Amre Joannet, Petit Muscat, Madeleine, Muscat Robert, Catherine, (?) Jargonelle, Rousselet Hatif, Bergamotte d'Été, Bloodgood, English Red Cheek, (?) Sugar Top, Dunbarton, Fin or d'Été, Julienne, (?) Empress of Summer, Fondante d'Été, Nouvelle Mabelle, Skinless, August Muscat, Passans du Portugal, Summer Franc Réal, Rostiezer, Prospect Hill, Williams's Bon Chrétien, Limon, (Van Mons,) Vallee Franche, Summer Rose, St. Ghislain, Dearborn's Seedling, Lansac, (?) Hooper's Billboa, Washington, Elizabeth, Sugar.

Strawberries.—Early Virginia, Aberdeen Seedling, Wood, Methven Castle, (?) Duke of Kent, Roseberry, Royal Scarlet, Mulberry, Hovey's Seedling, Bishop's Orange.

Grapes.—Black Hamburg, Early Muscadine, Zinfindal, Sweetwater, White Frontignac, White Chasselas, Black Prolific, Chasselas Bar sur Aube, Black Portugal, Chasselas.

Nectarines.—Golden, Elruge.

Peaches.—Royal George Clingstone, New Jersey Grosse Mignonne, Crawford's Late, Coolidge's Favorite, Noblesse, Early York, Gilman's Early, Surpasse, Marie Louise, Grosse Mignonne, Early Crawford.

Cherries.—English Morello, Belle Magnifique, Mazzards, Richardson's Late Red, Sweet Montmorency, Ox Heart, May Duke, Seedling by Dr. Nichols, Manning's Early Black Heart, Madison Bigarreau, Roberts's Red Heart, Black Heart, Black Tartarean, Seedling by J. M. Ives, Holman's Duke, White Bigarreau, Elton, Downton, White Heart, Napoleon, Honey Heart, Plumstone Morello, Downer's Late Red, Seedling Bigarreau, Manning's Fine Red, Hyde's Red Heart, Manning's White Mazzard.

Raspberries.—Franconia, Ohio Ever-bearing.

Currants.—Champagne, White Scotch, White and Red Dutch.

Plums.—Myrobalan, Cheston or Matchless, Rivers's Seedling, Italian Damask, Violet Hatif, Caledonian or Nectarine, Lawrence's Favorite, Morocco, Early Orleans, Pond's Italian Damask, (?) Peters's Golden Yellow, Green Gage, English Wheat, Mogul, Huling's Superb, Drap d'Or, Goliah, Blue Gage, Prince's Imperial, Sharp's Emperor, Bolmar's Washington, Blue Plum, Orleans, Byfield, Brevoort's Purple, Kirke's, Lacombe's Nonsuch, Bingham, Diamond, Isabella, Magnum Bonum, Lombard, Dana's Yellow, Violet Perdrigon, Cruger's Scarlet, Scarlet Gage of Danvers, Azure Hatif, (?) Red Orleans, Pond's Seedling, Horse, Eliry, English Orleans, Royal de Tours, Columbian, Smith's Orleans. The display of plums has been uncommonly fine this season; a greater variety, and more beautiful specimens, have never perhaps been exhibited before in this city.

Gooseberries.—Seven varieties.

Melons.—Green Citron, Water, &c.

ANNUAL EXHIBITION.

The Fourth Annual Exhibition of Fruits and Flowers, at the Hall of the Essex County Natural History Society, took place on Wednesday and

Thursday, Sept. 11th and 12th, 1844. On examining the following report, we find that the whole number of contributors are 117, of which 2 are residents of South Reading, 1 of Marblehead, 2 of Lynn, 6 of Beverly, 9 of Danvers, and the remaining 97 of our city. The number of varieties of fruit exhibited are 426. Of these, 188 pears, 116 apples, 42 plums, 43 peaches, 17 grapes, 12 melons, 2 figs, 2 nectarines, 2 quinces, 1 nuts, 1 strawberries. The number of the varieties of flowers cannot be so exactly ascertained, but it is estimated to be about 400. Of these, 200 are dahlias, 100 roses, 75 other garden and greenhouse plants, and 25 natives of our fields, woods and meadows.

FLOWERS.—Oliver Thayer, bouquets of asters, stocks, dahlias, larkspurs, &c. Thorp Fisher, dahlias: Oakley's Surprise, Essex Triumph, Mrs. Percival, Widnall's Queen, Marshal Soult, Pickwick, Unique, Essex Rival, Ne Plus Ultra, &c.; also bouquets of asters, larkspurs, &c. W. P. Richardson, bouquets of dahlias, larkspurs, asters, gladiolus, coreopsis, marigolds, petunias, verbenas, &c. W. Wallis, bouquets of dahlias. B. H. Silsbee, dahlias: Widnall's Queen, Pickwick, Marshal Soult, Charles XII; also, bouquets of gladiolus, stocks, verbenas, asters, &c. Mrs. J. D. Treadwell, *Camellia japonica rubra plena*, *Hameroállis álba*, dahlias, asters, nasturtium, &c. Joseph Glidden, bouquets of dahlias. Benjamin Creamer, dahlias, several varieties, German quilled asters, stocks, marigolds, &c. J. F. Allen, bouquets of roses, geraniums, dahlias, &c. George Driver, dahlias, about 50 varieties, viz.: Widnall's Queen, Ne Plus Ultra, Pickwick, Charles XII, Mrs. Percival, Wheeler's Maria, Middlesex Rival, Primrose, Crichton, &c.; also bouquets.

W. F. Gardner, dahlias: Gaine's Primrose, Pickwick, Lady Bathurst, Charles XII, Premier, Gen. Washington, Rienzi, Mrs. Johnstone, Unique, &c.; also bouquets. Henry K. Oliver, dahlias: Lady St. Maur, Rose Superior, Yellow Victory, Essex Triumph, Catleugh's Eclipse, Girling's Prince of Wales, Miss Percival, &c.; also balsamines. James Upton, dahlias: Admiral Stopford, Yellow Victory, Madame de Schaunenfield, Dowager Lady Cooper, Mary Ann, Miss Percival, Dodd's Prince of Wales, Beauty of Bedford, Phenix, &c. John W. Downing, dahlias: Mrs. Shelley, Sir Robert Sale, Ne Plus Ultra, Widnall's Queen, Maid of Bath, Mary Ann, &c. George Masury, of Beverly, dahlias: Oakley's Surprise, Widnall's Queen, T. C. Percival, Primrose, Maid of Bath, Pickwick, Ne Plus Ultra, &c.; also bouquets. Daniel Lord, dahlias: Charles XII, Fireball, Striata, Ne Plus Ultra, Widnall's Queen, &c. James Green, dahlias: Lady Washington, Conqueror of Europe, Princess Victoria, Striata, &c.

H. F. King, dahlias: Marshal Soult, Mackenzie's Perfection, Ansel's Unique, Princess Victoria, Lady Bathurst, Bridesmaid, Suffolk Hero, Argo, &c.; also bouquets of verbenas, heliotrope and asters. F. Putnam, dahlias: Lady St. Maur, Bragg's Antagonist, Oakley's Surprise, Admiral Stopford, Sir Robert Sale, Mrs. Shelley, &c.; roses: about 70 varieties of Noisettes, Bourbons and Perpetuals, viz.: Prince de Galles, Auberon, Prince Albert, Comte d'Eu, Solfatara, Queen, Enfante d'Ajaccio, Comte de Paris, Baron Prevost, &c.: *Passiflora Loudóni*, *alata* and *Kermesina*, T. Ropes, Jr., dahlias: Lady St. Maur, Bragg's Antagonist, Henry Clay, Caleb Cope, Horace Binney, Mrs. Hibbert's, Mrs. Percival, Ne Plus Ultra, Princess Royal, T. C. Percival, Pickwick, &c. John C. Lee, dahlias: Marshal Soult, Rienzi, Striata, Charles XII, &c.; roses, several varieties

of Chinese and Bourbons, viz.: Agrippina, Doubriël, Acidalie, Bouquet de Flore, Pillepart, Marshal de Villars, &c.; also bouquets of petunias, verbenas, asters, &c.

J. A. Goldthwaite, dahlias: Dowager Lady Cooper, Widnall's Queen, Pickwick, Argo, Marshal Soult, Primrose, Bridesmaid, Andrew Hofer, Suffolk Hero, &c. J. H. Phippen, dahlias: Mrs. Johnstone, Argo, Beauty of the North, Andrew Hofer, Ansel's Unique, Lady Bathurst, and other varieties. G. D. Phippen, dahlias: Gaines's Primrose, Bridesmaid, Ansell's Unique, Rienzi, Hero of Tippecanoe, Premier, &c. Henry Fowle, of Danvers, *Passiflora cærulea*. E. Boswell, dahlias: Dowager Lady Cooper, Widnall's Queen, Rouge et Noire, Eva, Ne Plus Ultra, Constantia, Fair Maid of Clifton, Andrew Hofer, &c. F. Lamson, dahlias: Marshal Soult, Mackenzie's Perfection, Premier, Ansel's Unique, &c.; also roses, phlox, heliotrope, asters, geraniums, &c. Miss E. C. Mack, bouquets of dahlias, asters, gladiolus, verbenas, heliotrope, geraniums, &c. Mrs. J. S. Leavitt, a fine plant of *Acacia* sp. C. Lawrence, of Danvers, a large and fine plant in flower of the *Agapanthus umbellatus*. J. C. Harvey, dahlias, Mary Ann, Argo, Ne Plus Ultra, Andrew Hofer, *Sulphurea elegans*, Rienzi, &c. H. Wheatland, dahlias: Bragg's Antagonist, Argo, Ansel's Unique, Marshal Soult, Striata, &c.; also gladiolus, asters, white sultan, stocks, &c. S. C. Phillips, a fine plant of the *Belladonna* lily; also bouquets. Miss Chase, a basket of flowers beautifully arranged, containing verbenas, geraniums, &c. P. Dodge, bouquets of gladiolus, *hemerocallis*, asters, dahlias, &c. S. P. Fowler, of Danvers, European Globe Flower, *Hemerocallis alba*, *Passiflora incarnata*, &c.

NATIVE PLANTS.—Mrs. J. D. Treadwell, asters, solidago, eupatorium, &c. R. H. Wheatland and S. C. Oliver, several species of asters and solidago. George A. Brown, of Beverly, *Lobelia cardinalis*, *Chelone glabra*, *Neottia cœrnea*, &c. S. P. Fowler, of Danvers, *Aster Novæ Angliæ*, under cultivation, *Chelone glabra*, &c. F. Lamson, *Gentiana saponaria*, *Centaurea nigra*, asters, solidago, &c.

FRUIT.—Pears: Robert Manning, one hundred and twenty-eight varieties, viz.: Seedling, Napoleon, Rousselet de Rheims, Bergamotte d'Autonne, Bon Chrétien Fondante, Summer Thorn, Bergamotte Sylvange, Styrian, Ambrosia, Fulton, Monsieur Le Curé, Washington, Duchesse de Mars, Yutte, Locke, Capiaumont, Emerald, Bonne Louise Royal, Huguenot, Surpasse Virgouleuse, Glout Morcean, Passe Colmar, Reine des Poires, Foster's St. Michael's, Ronville, Surpasse Marie Louise, Sieulle, Catillac, Winter Nelis, Beurré Delbecq., St. Michael's, Alpha, Hannas, Horticulture, Chaumontelle, Beurré Diel, Fondante Van Mons, Beurré Bosc, Comte de Lamy, Beurré Beauchamp, Commodore, Bleeker's Meadow, Pater Noster, Bezi Montigny, Cuvelier, Shenks, *Enfant Prodigue*, Héricart, King Edward's, Prince's St. Germain, Bezi d'Henri, Henry IV, Browne Beurré, Queen of the Low Countries, Croft Castle, Cushing, No. 51 Van Mons, Belle Lucrative, Stevens's Genessee, Echasserie, Alexander of Russia, Princess of Orange, Beurré de Beaumont, Duchesse d'Angouleme, Cabot, Chat Grillé, Jalousie de Fontenay Vendee, Seedling, Tucker's Seedling, Beurré d'Amalis, Jalousie, Quilletette, Caen du France, Pope's Russett, Buffum, Hessell, Clara, Hacon's Incomparable, Boucquia, Hay's, French Iron, Lincoln, Forme Urbaniste, Andrews, Surpasse Maurice, Pailleau, Michaux, Marie Louise, Pitford, Citron of Bohemia, Excellentissima, Louise Bonne de Jersey, Urbaniste, Fortunée,

Phillips, Josephine, Long Green of Duhamel, Golden Beurré of Bilboa, Rousselette de Meester, Belle et Bonne, Althorp Crassane, Doyenné Boussock nouvelle, Heathcot, Flemish Beauty, Bezi de la Motte, Pound, Pennsylvania, Hampden's Bergamot, Muscadine, Belmont, Wilkinson, Turkish Bon Chrétien, Whitfield, Harvard, Iron, Frederick de Wurtemberg, Easter Beurré, Green Pear of Yair, Johonnot, Beurré Bronzé, Dix, Van Assene, Lewis, Seckel, Capsheaf, and Williams's Bon Chrétien.

John M. Ives: Belle Lucrative, Williams's Bon Chrétien, Andrews, Cushing, Long Green, Belle of Flanders, Buffum, Red Bergamotte, Autumn Bergamotte, Dearborn's Seedling, Princess of Orange, Golden Beurré of Bilboa, Seckel, Washington, Winter Nelis, Wilkinson, Capiaumont, Frederick of Wurtemberg, Beurré Romaine, (?) Swan's Egg, Bon Chrétien Fondante, Fulton, Napoleon, Striped St. Germain, Bleeker's Meadow, Dix, Julienne, Harvard, and No. 2127 of Van Mons. Ephraim Emmerton: Duchesse d'Angouleme, Frederick de Wurtemberg, Williams's Bon Chrétien, Beurré Diel, Louise Bonne de Jersey, Glout Morceau, Urbanisté, Napoleon, Marie Louise, Capiaumont, Long Green, Golden Beurré of Bilboa, Passe Colmar, Colmar, Easter Beurré, Surpasse Virgouleuse, Prince's St. Germain, Gansel's Bergamot, Washington, Capsheaf, Princess of Orange, Henry IV, Seckel, New Pear for a name. Mrs. J. H. Andrews: Bon Chrétien d'Été, Winter Nelis, Chaumontelle, Seckel, Brown Beurré, Messire Jean, St. Michael, Rousselet de Rheims, Chelmsford, Williams's Bon Chrétien, three varieties unknown.

S. C. Phillips: Long Green of Coxe, Seckel, Williams's Bon Chrétien, St. Germain, Broca's Bergamot, Brown Beurré, Buffum, Platt's Bergamot, Wilkinson, (?) Julienne of Coxe, three varieties unknown. Wm. Stearns: Platt's Bergamot, Orange, Broca's Bergamot, Ronville, Endicott, Surpasse Virgouleuse, Duchesse d'Angouleme, Rousselet de Rheims, Summer Franc Réal, Cushing, Washington, Long Green, Bon Chrétien d'Été, Napoleon, Brown Beurré, Harvard, St. Michael's, Williams's Bon Chrétien, Bishop's Thumb, Beurré Diel, Chelmsford, Winter Nelis, Belle et Bonne, Chaumontelle, Summer Thorn, Seckel, one variety unknown. William Ives: Seckel, Harvard, Lewis, Ronville, Williams's Bon Chrétien, variety unknown. E. Burley, of Beverly: St. Ghislain, Marie Louise, Williams's Bon Chrétien. Augustus Torrey, of Beverly: St. Michael, Louise Bonne de Jersey, Brown Beurré, Williams's Bon Chrétien. John H. Silsbee: Bleeker's Meadow, Rousselet de Rheims, St. Michael's, Williams's Bon Chrétien. B. H. Silsbee: Harvard, Brown Beurré, Seckel, Louise Bonne de Jersey, Bishop's Thumb, Bon Chrétien d'Été, Bon Chrétien d'Hiver, Messire Jean, Williams's Bon Chrétien, Rousselet de Rheims. James Upton: Urbaniste, Louise Bonne de Jersey, Napoleon, Messire Jean, Marie Louise, Doyenné Boussock, Julienne, Beurré Diel, Jalousie, Williams's Bon Chrétien.

C. F. Putnam: Surpasse Marie Louise, Rousselet, Van Mons Late, Deschamps, Wellington, Pope's Russet, Beurré d'Audesson. George A. Brown, of Beverly: St. Ghislain, Rousselet de Rheims, Passe Colmar, Easter Beurré, Seckel, Williams's Bon Chrétien, Cabot, Martin Sec. St. Michael, Parfum d'Hiver, Winter Nelis, two varieties unknown. Benj. W. Stone: Seedling, Williams's Bon Chrétien. Ephraim Woods: Double Amandis, Easter Beurré. Stephen B. Ives: St. Michael's, Brown Beurré, Williams's Bon Chrétien. Charles Roundy: Summer Thorn. Winthrop Sergent: Buffum, Johonnot. W. H. Foster: Brown Beurré.

W. P. Richardson: Rousselet de Rheims, St. Michael, Gansel's Bergamot, Louse Bonne de Jersey, Washington, Seckel, St. Ghislain, Long Green, Long Green of Autumn, Brown Beurré, Fulton, three varieties unknown. John B. Osgood: Coffin's Virgouleuse, Napoleon, Wilkinson, Andrews, Dix, Bleeker's Meadow. James Eustis, of South Reading: Belle et Bonne, Julienne. N. L. Rogers: Urbaniste, Williams's Bon Chrétien, Broca's Bergamot, Passe Colmar. Nathaniel Cleaves: Williams's Bon Chrétien. C. Stetson: Julienne. N. B. Mansfield: Johonnot, Capiaumont, Cushing, St. Ghislain, Beurré Duval, Wilkinson, Louise Bonne de Jersey, Bergamot Sylvange, Pope's Quaker, Marie Louise, Duchesse d'Angouleme, Harvard, Crassane, Washington, Brown Beurré, Easter Beurré, Gore's Heathcot, Franc Réal d'Été, Passe Colmar, Josephine, Beurré Diel, Henry IV, Sugar, Urbaniste, Long Green of Autumn, Belle et Bonne, Chelmsford, Messire Jean, Buffum, Glout Morceau, Raymond.

A. L. Pierson: Long Green, Marie Louise, Broca's Bergamot, St. Ghislain, Urbaniste. W. F. Gardner: Easter Beurré, Johonnot, Napoleon, Passe Colmar, Seckel, St. Ghislain, Washington, Williams's Bon Chrétien, Chaumontelle, Bezi Montigny, variety unknown. T. Ropes, Jr.: Washington, Marie Louise, Golden Beurré of Bilbao. James P. Oliver, of Lynn: Seedling. B. Creamer: Glout Morceau, Winter Nelis, Poire d'Amour, Brown Beurré, Seckel, Belle of Flanders, Surpasse Virgouleuse, Julienne, Harvard, Washington, Bon Chrétien Fondante, Bartlett, St. Ghislain, Andrews, Louise Bonne de Jersey, Monsieur le Curé, Wilkinson, Urbaniste, St. Michael's, Henry IV. George Baker, of Marblehead: Golden Beurré of Bilbao. Wm. Dean: Bleeker's Meadow, Messire Jean, Marie Louise, Surpasse Virgouleuse, Dix, Washington, Andrews, Napoleon, Cabot, Johonnot, St. Ghislain, Seckel, Wilkinson, and Pound. Wm. D. Waters: Charles of Austria, Crassane, Brown Beurré, Henry IV, Napoleon. John W. Treadwell: Paddington, Brown Beurré, Seckel, Broca's Bergamot, Johonnot, Frederick de Wurtemberg. Alfred Peabody: Williams's Bon Chrétien, Doyenné Gris. E. Mack: Winter Nelis, variety unknown. O. Thayer: Belle et Bonne, Belle Lucrative. James B. Curwen: Williams's Bon Chrétien, St. Michael, Long Green. Edward Lander, of Danvers: Catillac, Bezi de la Motte, Chaumontelle, (?) Brown Beurré, Marie Louise, Seckel, St. Michael's, St. Germain, Pound, Williams's Bon Chrétien, Chelmsford, variety unknown.

B. P. Chamberlain: Louse Bonne de Jersey, Seckel, Frederick de Wurtemberg, St. Ghislain, Washington, Wilkinson, Brown Beurré, Gardner, Jalousie, Gansel's Bergamot, Beurré Diel, Summer Thorn. St. Michael, Chaumontelle. Mrs. L. Saltonstall: Early Beurré, Chelmsford. J. S. Stickney, of Beverly: Williams's Bon Chrétien, Summer Thorn. D. P. King, of Danvers: Orange, one variety unknown. A. A. Edgarton, of Danvers: Chelmsford, Orange, St. Michael's. G. Nichols: Williams's Bon Chrétien, St. Michael's, Passe Colmar. H. Fowler, of Danvers: Orange, one variety unknown. N. Silsbee, Jr.: Williams's Bon Chrétien, Harvard. W. D. Pickman: Williams's Bon Chrétien, Seckel, St. Ghislain, Harvard, St. Michael, Belle et Bonne, Andrews, Louise Bonne de Jersey, Gore's Heathcot, Gansel's Bergamot. Wm. Prescott, of Lynn: Chelmsford. Joseph Farnum: St. Michael's. John C. Lee: fifty-eight varieties, viz.: Buffum, St. Ghislain, Lewis, Messire Jean, Harvard, Seckel, Williams's Bon Chrétien, Easter Beurré, St. Michael's, Jose-

phine, Croft Castle, Hessel, Brown Beurré, Beurré Bronzé, Gros Rousset, Bezi de la Motte, Duchesse de Mars, Urbaniste, Chaumontelle, Gendesheim, Glout Morceau, Fulton, Lodge, Girardin, Beurré d'Hiver, Louise Bonne de Jersey, Bon Chrétien, Fondante, Passe Colmar, Belle et Bonne, Bezi Vaet, Beurré Pater Noster, Wilkinson, Belle Lucrative, Cabot, Duchesse d'Angouleme, Flemish Beauty, Bleeker's Meadow, Parkinson's Warden, Winter Orange, Winter Nelis, Delices d'Hardenpont, Frederick de Wurtemberg, Heathcot, Petit Roussset, Dix, Surpasse Virgouleuse, Julienne, Andrews, Longueville, Napoleon, Long Green, Ne Plus Meuris, Calebasse, Johonnot, Phillips, Henry IV, two varieties for a name.

Miss R. S. Ives: a basket containing several varieties of pears, &c. J. F. Allen: Williams's Bon Chrétien, Capiaumont, Cabot, Ronville, St. Michael's, Sumner Franc Réal, Napoleon.

Several varieties without name were shown by various individuals.

Apples.—R. Manning: Forty-four varieties, viz.: Rambour, d'Été, Ribstone Pippin, Lyscom, Red Juneating, Monstrous Pippin, Siberian Crab, Cambuthnethan, Pownal, Spitzemburg, Seedling Crab Apples, Minister, Sam Young, Gravenstein, Williams's Favorite, Kilham Hill, Manning's Red Crab Apple, Boxford, Tewksbury Blush, Fall Harvey, Kerry Pippin, Smokehouse, Black Coal, Æsopus Spitzemburg, Triangle, Downton Pippin, King of the Pippins, Pennocks, Pound, Black, Longueville's Kernel, Dutch Codlin, Grey French Reinette, Murphy, Rose of Sharon, Haskell Sweet, Porter, Yellow Bell-flower, Lovett's Sweet, Fameuse or Snow Apple, Orley Pippin, Pear Tree Lot, Pigeonette, Seck-no-further, Wormsley Pippin, Sapson. J. M. Ives: Jersey Sweet, Gilpin No. 92 of Coxe, Michael Henry Pippin, No. 74 of Coxe, Quince No. 65 of Coxe, Cam No. 53 of Coxe, Minister, Danvers Winter Sweet, Boxford, Doctor or Dewit No. 31 of Coxe, Rambo or Romanite No. 26 of Coxe, Catline or Gregson No. 22 of Coxe, Superb Sweet, (native,) Fall or Holland Pippin No. 15 of Coxe, Pickman Pippin, Lemon Pippin of England, Mela Cala Swaar, Hubbardston Nonsuch, Hawthornden, Early Sweet Bough.

Ezra Upton: Porter, French, Rambour, Danvers Winter Sweet, Pumpkin Sweet, Mathew's Stripe, Baldwin, Minister, Mammoth Pippin, Gilliflower, Jefferson. Augustus Torrey, of Beverly: Winter Sweet, Yellow Ingestrie, Yellow Bellflower, Gravenstein, Golden Russet, Minister, Fall Harvey, Baldwin. B. H. Silsbee: Ribstone Pippin, variety unknown. John H. Silsbee: Monstrous Pippin. E. Lander, of Danvers: Cathead, Gilliflower, Thorn, Pumpkin, New York Greening, Fall Harvey, Kilham Hill, Eppe's Sweeting, Blue Pearmain, Baldwin, Sweet Baldwin, Spice, several varieties unknown. E. Emmerton: Baldwin, Striped, Drap d'Or. Wm. Ives: Rothven. Mrs. J. H. Andrews: Large Red Sweet, Pearmain, Hawthornden, Monstrous Pippin, Golden Russet, York Russet, several varieties unknown. E. Woods: Red Round, Seedling Sweeting and Seedling Greening. James Eustice, South Reading: Kilham Hill, Dutch Codlin, York Russet, Porter, Mela Carla, Hubbardston Nonsuch, Yellow Bell-flower, several varieties unknown. John Gardner, Danvers: Boxford, Bell-flower of Coxe, Large Red Sweet. John Winn: Siberian Crab, Gravenstein, variety unknown. Andrew Nichols, of Danvers: Fall Harvey, Boxford Stump. J. S. Leavitt, Jr.: Alexander, two varieties unknown. S. P. Fowler, of Danvers: Minister.

N. B. Mansfield: Star, Tolman's Sweet, Kentish Fill Basket, Eppe's Sweeting, Drap d'Or, Rhode Island Pippin, Menagerie, Orley Pippin,

Imperial Baldwin, Marquis, three varieties unknown. D. Roberts: Gilliflower. B. Creamer: Monsieur Le Coste. W. Stearns: Cloth of Gold, Siberian Crab, Jarvis, Early Juneating, Blue Pearmain, Kilham Hill, Monstrous Pippin, Rhode Island Greening. S. Whitmore, Jr.: nine varieties unknown. John Shed: Dutch Codlin, variety unknown. Daniel Harris: Cloth of Gold, Alexander. Mrs. E. Nichols, of Reading: Porter. C. F. Putnam: Catshead, Minister, Fall Harvey, Baldwin, Roxbury Russet, Danvers Winter Sweet. O. Little, of Beverly: Seedling. Chas. Roundy: Large Red Sweet. Stephen B. Ives: Osgood's Pippin. W. P. Richardson: Siberian Crab. N. L. Rogers: Kilham Hill. J. B. Osgood: Lyscomb. John Chadwick: Summer Pearmain. P. Dodge: several varieties.

J. C. Lee: Eppe's Sweeting, Russet Pearmain, Roxbury Russet, Pearmain, Glory of the West, Dutch Codlin, Rhode Island Greening, Baldwin, Bellflower, Pickman Pippin, Spice Apple, Ortle Pippin, Cornish Aromatic, Kilham Hill, Peck's Pleasant, Mela Carla, Stratt Apple, Wormsly Pippin, Aunt's Red, William's Favorite, and six varieties for a name.

A number of varieties from various contributors without name.

Quinces.—E. Emmerton: Orange. Wm. Stearns: Orange. N. L. Rogers: Orange. Stephen Osborne: Orange. W. P. Richardson: Orange. W. D. Pickman: Portugal.

Plums.—W. D. Pickman: Dana's Yellow, variety unknown. R. Manning: Purple Gage, Blue Imperatrice, Bruyn Gage, Kirke's, Corse's Nota Bene, Coe's Golden Drop, St. Catherine, Goliath, Rogers, Wilkinson. J. M. Ives: Green Gage, Reine Claude Violet, Goliath, Roe's Autumn Gage, Cruger's Scarlet, La Royale, Quetsche of Italy (Prune,) Violet Perdrigon, Red Gage, Blue Plum, Prince's Imperial, Knight's Large Green Drying? Mirabelle, Blue Imperatrice, Wine Sour, White Sweet Damson of Downing. Mrs. J. H. Andrews: Seedling from a Green Gage, two varieties unknown. E. Emmerton: Blue Imperatrice Damson. James Upton: Green Gage, Blue Gage, Prince's Imperial, Red Magnum Bonum, Goliath. C. F. Putnam: Seedling. Mrs. B. Upton: variety unknown. W. P. Richardson: Blue Imperatrice, Wheat. G. Nichols: variety unknown. H. Phippen: Seedling. Edward Putnam: Coe's Golden Drop. David Roberts: Sharp's Emperor. W. H. Foster: Prince's Imperial Gage, Yellow Gage. N. Brown, Jr.: Sharp's Emperor. N. B. Mansfield: Wilkinson's Seedling, Danvers Yellow, Egg. Joseph Ropes: Egg. Henry Fowler, of Danvers: two varieties unknown. Ezra Upton: two varieties unknown. E. Woods: Cross's Seedling, Seedling.

Peaches.—Robert Manning: Hastings's Rareripe, Cole's Early, George IV, Yellow Rareripe, Grosse Mignonne, Bonaparte, Nivette, Yellow Alberge, Oldmixon Clingstone, Apricot, English Swalsh, Jaques, Clinton, Yellow Admirable, Crawford's Early. J. M. Ives: Noblesse, Jaques's Rareripe, Early Royal George, Red and Yellow Rareripe, Cutler's Rareripe, Early Bosc, Imperial Purple, Beauty of Beaucaire, Aiton's Purple Violet, Coolidge's Favorite, Red Rareripe of Kenrick, Snow.

Wm. Prescott, of Lynn: Seedling Clingstone, Seedling Freestone. Mrs. E. Nichols, of Reading: variety unknown. Augustus Torrey, of Beverly: Grosse Mignonne. E. Burley, of Beverly: Early Royal George, President. C. F. Putnam: Kenrick's Orange, Yellow Admirable, Jaques, Emperor of Russia, Royal George, Yellow and Red Rareripe, Teton de Venus. W. P. Richardson: Grosse Mignonne, George IV, three varieties unknown.

James Eustis, of South Reading: Seedlings. William Dean: Early Red, Red and Yellow Rareripec. William D. Waters: Noblesse, Snow. Joseph Ropes: Seedling. S. Symonds: variety unknown. N. B. Mansfield: Seedling, variety unknown. Wm. Stearns: Josephine Rareripec. Charles Lawrence, of Danvers: Snow, Early Royal George, Jaques's Rareripec, Yellow Rareripec, Noblesse, Cole's Early, Royal Kensington, Coolidge's Favorite. J. F. Allen: Jaques's Rareripec, Coolidge's Favorite, New Jersey Grosse Mignonne. P. Dodge: several varieties unknown.

Nectarines.—N. L. Rogers: variety unknown. Edward Lander, of Danvers: Newington.

Figs.—P. Hildreth, of Beverly: variety unknown. J. F. Allen: Black of St. Michael's.

Nuts.—Daniel P. King, of Danvers: Chesnuts in the burr.

Grapes.—Wm. Dean: Black Hamburg, White Hamburg, White and Red Frontignan, White Muscat of Alexandria. P. Dodge: Zinfindal, Black Hamburg. N. Silsbee, Jr.: Black Hamburg, Sweetwater. J. Winn: variety raised from a raisin seed. Alfred Peabody: Isabella. W. H. Foster: Isabella. W. D. Waters: variety unknown, open culture. James Upton: White Frontignan. John C. Lee: Black Hamburg, White Chasselas, Rose Chasselas, Variegated Chasselas. J. F. Allen: Black Hamburg, Black Prince, Esperione, Chasselas de Bar Sur Anbe, Chasselas de Fontainbleau, Muscat of Alexandria.

Melons.—Samuel Webb, Jr.: several varieties, viz.: Citron, Netted Cantelopes, &c. John C. Lee: Pine-apple, Water. J. M. Ives: Mountain Sprout, Water. J. A. Goldthwaite: seven varieties, Citron, Netted Cantelope, &c. J. F. Allen: several varieties of green flesh Imperial Water.

Strawberries.—Miss M. E. Ives: Alpine, (monthly.)

VEGETABLES.—James Upton: Canada Crookneck Squash, growth of 1843. E. Emmerton: Canada Crookneck Squash, growth of 1842. J. M. Ives: Hancock's Early Potatoes. B. Averill: Fig Tomatoes. J. A. Goldthwaite: Squashes—common Crookneck, Canada Crookneck, Marrow, Acorn, new variety, (no name); Beans,—Lima and Indian Chief; Salsafy or Oyster Plant; Parsnips,—Dutch; Carrots,—White and Orange; Beets,—Turnip-blood. James Eustis, of South Reading: Beans for pickling. Augustus Torrey, of Beverly: White-spine Cucumber. J. W. Shannon: Potatoes,—Carter, French Roll, Barker. A. A. Edgerton, of Danvers: Crook-neck Squash, growth of 1843. John Gardner, of Danvers: Onions,—Silver-skin, very large; Squashes,—Marrow. David Roberts: Fig Tomatoes. Mrs. M. T. Ward: Crookneck Squash, growth of 1843. Allen Putnam: Corn, varieties of. John C. Lee: Squashes, Autumnal-marrow, Crookneck; Beets,—Mangel Wurtzel. Charles F. Putnam: Onions.

It must be gratifying to the friends of horticulture to observe the increased attention bestowed upon this favorite science, in our city and vicinity, not only in this great number of contributors, but in the almost infinite variety of fruits and flowers exhibited,—their beauty, magnitude and size far exceeding that of former exhibitions, particularly in the display of apples, which are said to be unprecedented.—W.—Salem, Nov. 13, 1844.

CINCINNATI HORTICULTURAL SOCIETY.—This delightful exhibition of Fruits, Flowers and Vegetables, came off on Wednesday and Thursday, the 11th and 12th of September, at the Washington Hall, on Third street. The rooms were crowded through the day, and the evening entertainment was enlivened with Mr. Tosso's band of music, which gave it additional eclat. On entering the room, the attention was excited by a beautiful display of objects that would satisfy the most fastidious eye, for the sides, the centre, and in fact every nook and corner exhibited an array of flowers, that reflected much credit on the Society, for their manifest wish to gratify the public. At the east end of the room was displayed in yellow flowers on evergreen ground, "Horticultural Society," over which was a "Star," emblematical of the light just beginning to dawn on horticulture in this section of the country. The room being spacious, made these devices appear to greater advantage. Under these symbols was a table, on the centre of which was a large pyramid, combining a profusion of choice flowers. On either side were two figures, the one representing a *Gardener*, reclining on his spade, as if in admiration of the art displayed in such a profusion of nature around him; and on the other, a female representing the *Goddess of Flowers*, surveying the enchanting scene. On the north side, was a fine display of plants by Mr. D. Ross, from the greenhouse of Mr. Hoffner; and the south was occupied by Mr. Jackson, with fine plants. At the west end of the room, over the door, was a *Cornucopia*, beautifully enriched with fruit of all descriptions; and on each side of the door were two of the finest *Arbor Vitæ* we have seen for some time. On the south, we observed many fine flowers from the nursery of Sayers & Heaver; the other side appeared to be occupied by different contributors. On a table, which was sixty-four feet long, were placed some of the finest fruit and flowers,—some of the apples were enormous in size; four of them were selected and sent to the Horticultural Society in Philadelphia, as a sample of what the "Far West" can produce in the fruit line. On the south side of the room were two tables; although not placed with much taste, one was set off with fine vegetables, and the other with flowers, in the centre of which we noticed Mr. T. Winter's stand of dahlias, and at the end that of Mr. Sayers. Had the table been placed so that visitors could have walked round, these persons' flowers would have shown to better advantage; in this respect the arrangement was not in such good taste. In the centre of the room was placed a large *Sago Palm*, raised by R. Morris, one of the signers of the Declaration of Independence; next to that was a very pretty figure of a *Flower Girl*, with a basket of flowers; the residue of the centre was arrayed with many fine plants, from different greenhouses, leaving a promenade on each side. The ceiling was supported by Corinthian columns, tastefully decorated with evergreens and flowers,—and the sides of the room, ornamented to correspond, made the scene quite enchanting; and when curiosity was satisfied, the eye could be regaled with viewing the beauty of Cincinnati, which of itself was a treat rarely met with, and any bachelor that could walk the room without feeling a lively sensation of admiration, must be more than mortal, and not fit for the society of social beings.

The list of articles exhibited is too long for our space. Mr. Longworth, Sayers & Heaver, Dr. Wm. H. Smith, Jas. Howarth, Dr. M. Flagg, S. S. Jackson, David Ross, R. Buchannan, and E. Brigham were the largest contributors of plants.

The report concludes as follows:—

Upon the whole, this Horticultural Fair went off well, and was gratifying to the exhibitors, the members of the society, and to the public. There certainly is no lack of interest in this subject, and it is earnestly hoped that it will continue to increase. Before the exhibition, we had great fears that in consequence of the scarcity of fruit we should not be able to make such a show in the large hall as would be creditable; but everybody contributed something, and now no one regrets that this room was used; our own room is good for all but the annual show. We want holydays, saints' days, or the like,—we want something of this kind, which will bring people together without exciting their partizan feelings, making them love their own party and hate their opponents. Can we not put our annual meeting upon the calendar, and make it a festival day? Can we not bring in (we should try to do so,) all the farmers and gardeners we know? We want not only apples and roses, but to give our society effect and usefulness, we should offer premiums for the best samples of potatoes, wheat, &c. Seeing is believing, and to bring in with us those who are interested in these, but care little for the others, will influence them. But to make one day a saint's day! Cain was the first horticulturist, and we have somehow a dislike to the name. Saint Cain would not do. We shall have to give up the *holy*, and call it a *holly*-day,—(evergreen and bright.) We trust that in another year we shall be able to make a finer show, to make the occasion a festival, to bring the members of our neighboring societies as exhibitors and friends, to join with us, and to induce our own members to reciprocate with them if they wish it. We invited their presence and assistance, but suppose that the notice was too short. To the ladies, too much thanks cannot be given; they were indefatigable this year and the last, and were disposed to do more than we would give them opportunity for doing. Let us enlarge the borders of our garments next year, and, to be Scriptural, cast out our shoe over Edom.—(*Western Farm. & Gard.*, Oct'r, 1844, p. 68, 71.)

QUEEN'S COUNTY HORTICULTURAL SOCIETY, L. I.—The first Annual exhibition of this Society was held at Flushing, Oct. 10th. From a published report just received, it appears that there was a very good exhibition of flowers and fruits. We have only room to make a few extracts from the report.

Dr. W. W. Valk exhibited a variety of plants, among which was the Fejee Island Tomato; also a variety of dahlias. Wm. R. Prince & Co. exhibited a large number of dahlias and roses, embracing several new kinds. Messrs. Parsons and Co., J. M. Thorburn & Co., Jos. Bloodgood, Jr., and other exhibitors, contributed a variety of dahlias, roses, &c.

The collection of fruits from Wm. R. Prince & Co., and Bloodgood & Co., was very large, containing a great number of apples and pears. A number of individuals exhibited small collections, among which we noticed six *Lawrence* pears from Mr. Jas. Lawrence.

This Society, which, we believe, is the union of the Queen's County and Flushing Societies, has been reorganized by the appointment of Dr. Valk as President,—and it is proposed to hold an exhibition next year, of which the schedule of premiums is already published. We shall notice it at another time. It is got up on the same plan as that of the London Horticultural Society.—(*Flushing Journal*.)

ART. III. *Massachusetts Horticultural Society.*

Saturday, Nov. 2d, 1844. Exhibited.—Fruits: From the President of the Society, fine specimens of the Duchesse d'Angouleme, Queen Caroline and Bleeker's Meadow pears. From C. Newhall, Beurré Diel pears. From D. Haggerston, from the garden of Mr. Cushing, extra fine St. Germain and Beurré Bronzé pears. From J. Washburn, Plymouth, Sieulle pears. From Mr. Oliver, fine Duchesse d'Angouleme pears. From Mr. Hayden, Brookline, Beurré Diel pears. From J. Cass, Isabella and Sweetwater grapes. From George Water, grapes and Doyenné blanc pears. From C. Harris, Worcester, four sorts of apples, viz:—White Nonsuch, poor; Yellow Green Sweet, good; Red Sweet Seedling, fair; Hooper's Large Red Cheek, fine. From H. A. Dyer, Brooklyn, Conn., three varieties of apples, one called the Coggeshall, a pearmain of considerable merit. From H. Vandine, Marie Louise, Passe Colmar, and other pears. From S. R. Johnson, Dix and Beurré Diel pears. Fine Sweetwater grapes, from Kendall Bailey. Doyenné blanc pears from Dr. Robbins, Roxbury.

Nov. 9. Exhibited.—Flowers: From Jos. Breck & Co., twenty varieties of Chrysanthemums, many of them very fine. From E. Allen, a fine collection of Chrysanthemums.

Fruit: From the President of the Society, Chaumontelle, Figue de Naples and Vicar of Winkfield pears. From S. Walker, Glout Morceau, Passe Colmar, Long Green of Autumn, Beurré d'Arenberg, Vicar of Winkfield and Figue pears; Mr. Walker also exhibited, from the garden of Mr. J. Richardson, specimens of the old Louise Bonne pear. From Mr. Manning, Caen du France pears. From Mr. Cole, Alexander and Jewett's Late Red apples. From S. & G. Hyde, fine specimens of Lyscom and Hubbardston Nonsuch apples. Pears from H. Vandine, similar to the Marie Louisa.

Nov. 16th. An adjourned meeting of the Society was held to-day, the President in the chair.

A letter was read from S. L. Goodale, of Saco, Me. The President laid before the Society several copies of impressions taken from the plate placed under the corner stone, and it was voted that one copy be bound and placed with the Society's documents at the Hamilton Bank—one copy be presented to the Antiquarian Society at Worcester—and one to the Historical Society of Boston.

A letter was read from Mr. Brookhouse, Salem, relative to the family of the late Mr. Manning. It was laid upon the table.

Adjourned to Saturday, Dec. 7, to such place as the Secretary shall give notice.

Exhibited.—Fruit: From the President of the Society, Black Apples, received from S. L. Goodale, Paris, Maine,—said to keep till July. From S. Walker, Vicar of Winkfield, Princess d'Orange, Glout Morceau, and Long Green of Autumn pears. From H. Vandine, Marie Louise pears. From Dr. Warren, Fameuse apples. From S. W. Cole, Red Cheek, Capron's Pleasant, Red Pippin, Mother Apple, and Jewett's Late Red, the two latter fine. Apples without name from Mr. Keith, Roxbury.

ART. IV. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	\$ cts.	<i>Fruits.</i>		\$ cts.	\$ cts.
Potatoes, new:				Apples, dessert and cooking:			
Chenangoes,	{ per barrel,	1 00	1 25	Baldwins, per barrel, . . .	1 25	1 50	
	{ per bushel,	45	50	Russets, per barrel, . . .	1 00	1 25	
Common,....	{ per barrel,	1 00	—	Greenings, per barrel, . . .	1 25	1 50	
	{ per bushel,	40	—	Common Sweet, per bar.	1 25	1 50	
Eastport,.....	{ per barrel,	1 75	2 00	Danvers Win. Swt. pr bl.	1 50	—	
	{ per bushel,	75	—	Common, per barrel, . . .	1 00	1 25	
Sweet,.....	{ per barrel,	2 50	2 75	Bellflower, per barrel, . . .	1 50	2 00	
	{ per bushel,	1 00	1 25	Blue Pearmain, per bbl. . .	1 50	1 75	
Turnips, per bushel:				Fall Pippins, per barrel, . . .	1 50	2 00	
Common flat,		50	—	Porter, per bushel,	—	—	
Ruta Baga,		37	50	Pumpkin Sweet, per bush.	75	1 00	
Onions: Red, per bunch, . .		3	4	Lady Apple, per bushel, . . .	2 00	—	
Yellow, { per bunch,		3	4	Dried Apples, per lb.	3	4	
	{ per bushel,	62½	—	Pears, per half peck or doz.:			
White, per bunch,		3	4	Beurré Diel, per half pk. . .	50	75	
Beets, per bushel,		50	75	Lewis, per half peck,	50	—	
Carrots, per bushel,		50	62½	Marie Louise, per hf. pk. . .	—	—	
Parsnips, per bushel,		75	—	Le Curé, per half peck, . . .	37½	—	
Salsify, per doz. roots, . . .		12½	25	Common, per half peck, . . .	25	37½	
Horseradish, per lb.		8	10	Duchess d'Angouleme, pr	—	—	
Garlic, per lb.		8	10	doz.	—	—	
				Chaumontelle, per doz.	50	62½	
<i>Cabbages, Salads, &c.</i>				Winter Doyenne, per doz. . . .	50	75	
Cabbages, per doz.:				Beurré d'Aremberg, pr doz. . .	50	75	
Drumhead,		50	62½	Glout Morceau, per doz.	50	62½	
Savoy,		50	62	St. Germain, per doz.	1 00	—	
Red,		75	—	Catillac, per bushel,	2 00	—	
Brocolis, each,		10	20	Baking, per bush.	1 00	1 50	
Cauliflowers, each,		20	25	Quinces, per bushel,	2 50	3 00	
Celery, per root,		6	12	Grapes, per lb.:			
Lettuce, per head,		8	10	Isabella,	12½	—	
Cucumbers, (pickled) pr gal.		25	—	Malaga,	20	25	
Peppers, (pickled) per gal. . .		37½	—	Catawba,	—	—	
				Berberries, per bush.	—	—	
<i>Pot and Sweet Herbs.</i>				Watermelons, each,	—	—	
Parsley, per half peck,		25	—	Muskmelons:			
Sage, per pound,		17	20	American Citron, each,	10	—	
Marjorum, per bunch,		6	12½	Purple Egg Plant, each,	—	—	
Savory, per bunch,		6	12	Tomatoes, per half peck,	—	—	
Spearmint, per bunch,		3	—	Cranberries, per bushel,	2 50	2 75	
				Oranges, per doz.	37½	50	
<i>Squashes and Pumpkins.</i>				Lemons, per doz.	25	—	
Autumnal Marrow, per cwt. . . .		75	1 00	Pine Apples, each,	25	—	
Canada Crookneck, per cwt. . . .		75	1 00	Cocoanuts, per hundred,	3 50	4 00	
Winter Crookneck, per cwt.		75	1 00	Chesnuts, per bushel,	3 50	4 00	
Pumpkins, each,		10	15	Walnuts, per bushel,	1 50	1 75	

[We are compelled to omit the remarks of our reporter this month.—
Ed.]

HORTICULTURAL MEMORANDA

FOR DECEMBER.

FRUIT DEPARTMENT.

Grape Vines will now have so far ripened their wood that they may be trimmed at any time. In cold houses this should be at once attended to, and the vines protected by laying them down and covering them with earth, litter or leaves. The cuttings may be placed in earth, preparatory to their propagation next spring, if vines are wanted. Vines in pots, for bringing forward in the greenhouse, should be placed in a cellar, or frame where they will not be much exposed to frost. *Isabella* and other hardy kinds may yet be pruned.

Strawberry Beds should be slightly protected, especially in heavy, wet soils.

FLOWER DEPARTMENT.

Camellias will now be coming into flower, and will require liberal supplies of water—occasionally using liquid guano. Stake and tie up all crooked plants, and top-dress the pots if mossy. Syringe occasionally in good weather. Seeds may be sown now. Cuttings may also be put in.

Oxalis Bowiei and *Hirta* will now be nearly out of bloom, and will require only occasional watering.

Chrysanthemums will now be nearly out of flower; cut off the tops and place the pots in a cold frame.

Lilium lancifolium and its varieties should be potted this month.

Schizanthuses should be shifted this month.

Pelargoniums may be repotted this month. See that they are kept free from the aphid.

Roses potted off in August should now be shifted into the next size. Bourbon *Roses* in the open ground should be protected with a light covering of earth or manure.

Azaleas will need but little water until they commence growing.

Verbenas in small pots may be shifted now into the next size.

Ericas will need attention. Shift such as require it, and keep the old plants in good shape by continually pinching off the tops of the shoots.

Amaryllises may be potted this month.

Ten Week, Victoria and other *Stocks*, in small pots, should be shifted into the next size.

Lechenautilias will require shifting as soon as the roots fill the pots.

Calceolarias should be repotted this month.

Cyclamens now showing their flower buds should be freely watered.

Carnations, Hydrangeas, and other plants in frames, should be looked after and protected from severe cold by mats or some other covering.

Tulip and *Hyacinth Beds* should have a thin covering of leaves or straw manure, to prevent the frost from penetrating too deep.

Herbaceous Plants of many sorts flower better by being slightly protected with leaves or straw manure.

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CORRECTIONS.

Besides the Errata enumerated at pages 107, 234, 312, and 480, and the corrections in the List of Plants, above, are the following:—

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|---|--|
| In page 21, line 13, dele the comma after Pentstemon. | In page 381, line 11, read "and flowers with brown colored anthers," instead of words as they are in the present half of the line. |
| In page 167, the engraving should be fig. 8, in the place of 7. | In page 382, line 4, for "Penst," read "Pursh;" and in line 16, for "N. A. H." read "N. A. Fl." |
| In page 330, the engravings should be fig. 16. | In page 409, line 2 from the bottom, for "Gyronia," read "Gyromia." |
| In page 369, the engraving should be fig. 17. | |

