THE MAGAZINE

OF

HORTICULTURE,

BOTANY,

AND ALL USEFUL DISCOVERIES AND IMPROVEMENTS IN

RURAL AFFAIRS.

"Je voudrais échauffer tout l'univers de mon goût 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. Péres de famille, inspirez la jardinomanie à vos enfans."—*Prince De Ligne.*

VOL. V.

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PREFACE.

In the Fifth Volume of the Magazine, will be found a greater amount of original information than has yet appeared in any of the previous volumes. One principal object of the Magazine was to offer a medium through which amateurs and practical gardeners might communicate their ideas to each other; and the excellent articles which have appeared in this volume, show how far this purpose has been accomplished.

The Fifth Volume contains a larger number of engravings than any of the preceding; one or more having appeared in nearly every number; embracing also a variety of subjects. Our own article, entitled a Retrospective View of Horticulture for the last year, has been continued, and contains a full record of the principal improvements for 1833. Several of our subsequent articles we have devoted to the subject of Ornamental Gardening, which is now, we are happy to state, attracting more attention. Our Notices of New Fruits and Vegetables have been continued, and we have enumerated nearly every thing new, of importance. The Floricultural Notices, though not so lengthy as in some of our previous volumes, have embraced all the interesting plants introduced or grown in this country. The Miscellaneous Intelligence—of a more varied character than heretofore—has been collected with considerable labor, and much of it will be found important to the practical, as well as the amateur, Horticulturalist.

Notwithstanding such an amount of valuable matter has appeared in the five volumes now completed, it is our intention to render the sixth as replete with useful information, in each and every department, as either of those which have preceded it. The subject is by no means exhausted. The objects of the garden are too numerous to be so quickly passed over. Improved methods of culture will be sought out—old systems exploded—and while new kinds of flowers, fruits, shrubs, and vegetables are so rapidly increasing, that the most zealous cultivators can scarcely keep pace with them, there is no fear that there will not be

sufficient to fill our pages, to render the study of Horticulture always fresh and interesting. Ornamental gardening will receive more attention. Engravings will be more frequently introduced, including plans of gardens, green-houses, &c., with descriptive notices, and other information that may furnish ideas for laying out grounds.

These are our intentions, which we trust will be fulfilled, for increasing the value of the Magazine; and we believe that we have only to appeal to those who feel interested in Horticulture, and who fully appreciate our zeal, to induce them to come forward and give their aid to secure for the Magazine that support, which alone will enable us to accomplish all we desire. The taste for rural pursuits and enjoyments is rapidly increasing; but there are a great portion of those who have engaged in such pleasures, who believe that there is no necessity of consulting a work, so general in its character, as our Magazine; that a cheaper, smaller, and less comprehensive volume, contains sufficient information for all who have not acres under cultivation. We regret that such an opinion—the bane of all improvement—is entertained by so many, and though it is gratifying to see new gardens springing up in all parts of the country, it is a source of regret that the simple cost of a Magazine, like this, should prevent the proprietors from procuring that knowledge which will enable them to reap double the amount of pleasure from a more judicious cultivation of their grounds.

We have watched the progress of Horticultural improvement with some interest, and none can feel a greater desire to promote its advancement than ourselves; but we cannot do so to the sacrifice of too much time and labor. If our friends have not flattered us, the Magazine is worthy of a more generous support than it has yet obtained; and we trust, that, in the course of the Sixth volume, we shall receive such evidence that they have a desire assist us, as will enable us to continue our labors beyond the close of that volume.

C. M. H.

Boston, Nov. 24th, 1839.

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THE MAGAZINE

OF

HORTICULTURE.

JANUARY, 1839.

ORIGINAL COMMUNICATIONS.

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

HORTICULTURE is in a much more flourishing condition, and has made more rapid advances the past year, than in the preceding one. The return to a more settled state in commercial affairs, and the excitement naturally resulting from an embarrassed state of affairs, both nationally and individually, involving the interests of the whole community, having considerably subsided, things have begun to assume their usual tone, and a large class of the people, whose minds and attention have been diverted from their usual channel, to the all important topics of the day, have, with a return of more prosperous times, again been allured from the anxious and engrossing cares of business, to the pursuit of those avocations, which have, heretofore, been the sources of pleasure and gratification.

Horticulture claims to be among the most innocent, pure, and delightful pursuits to which mankind have ever been devoted. From its practice spring all that contribute to the necessities, as well as the luxuries, of life. From an active participation in its light and cheerful labors, grateful exercise and health are afforded to the body; and from a contemplation of the varied objects which necessarily come within its precincts,

the mind acquires vigor and strength. Whether, indeed, we view horticulture as a means of affording gratification to the senses, of storing the mind with useful knowledge, or of ministering to our desires and comforts, it merits our especial attention and care. To foster and encourage a love for an art, so manifestly useful and important, and to diffuse information which shall lead to its successful practice, has been, and will continue to be, our only desire and aim.

The climate of the United States embraces the range of temperature of every nation on earth; nor is the variety of its soils surpassed, in number or fertility, by any other country. The products of every soil and clime may be perfected within our own borders, and the wants of the country made dependent upon no other; not that we would be considered as saying this should be done—as that would be quite fallacious: but with the industry, enterprise, and perseverance of the American people, and the vast extent of country, climate, and soils, this could be easily accomplished. We have noticed, in our last volume, the letter of Dr. Perrine to Congress, wherein he has stated the perfect practicability of cultivating *all* the tropical plants, including the banana and the cocoa palm, which are universally pronounced to be the "greatest blessings of Providence to man." The rearing of silk worms, and the manufacture of silk, which is attracting unusual attention, is destined to become as great, and, we believe, far more productive a species of husbandry, than any thing which has yet attracted the attention of the agriculturists of this country. The best results will grow out of the excitement which now exists on this subject. There is no obstacle to prevent our producing all the staple products of every other nation, and we doubt not the accomplishment of these objects in due time. It may not be out of place here to state, what we believe we have not done previously, that Dr. Perrine succeeded in procuring a grant of land agreeably to his petition, for the purpose of acclimatizing the products of tropical climes, and he will, we presume, immediately attempt the objects which he has been so zealous to secure.

But we come more immediately to the subject of our remarks. We have stated that the attention given to horticulture has been considerably greater than in 1837; and it will, next, be our endeavor to show in what manner, and to what extent, the advancement has been made. To do this, we shall divide the subject into two heads, viz: The advancement of Horticulture as an art; and the Statistics, or actual state of Horticulture.

THE ADVANCEMENT OF HORTICULTURE AS AN ART.

Horticulture and gardening are somewhat synonymous terms, and are often used in the same sense. We have, however, now, as we have generally done, chosen the former term from its more general adoption. Horticulture, in its broad sense, embraces the entire cultivation of gardens, whether it is filled with fruits, flowers, or vegetables. Prof. Lindley defines Horticulture as the "application of the art of cultivation, multiplication, and domestication, to the vegetable kingdom." And that "agriculture, arboriculture, and floriculture are branches of horticulture." But horticulture is, however, more commonly used where the growth of fruits and vegetables only, is treated of, and the term floriculture applied to the cultivation of flowers. We shall not deviate from the usual mode, and shall therefore divide this part of our subject into landscape gardening, arboriculture, horticulture and floriculture.

Landscape Gardening.—We do not mention this with the expectation of pointing out any specimens where the principles of the art exist in any perfection, or to record much improvement in its practice; but to direct attention to its importance, and the effect it would have, if carried into practice, even upon a limited scale, upon the appearance of the country generally; and particularly to the finish and cultivated aspect it would throw around villa residences, of which there are great numbers springing up in all the principal villages and towns throughout the country. The principles of the art are scarcely known, and the modern, or gardenesque style, as it is called, has been mistaken for a rude imitation of nature, without any appearance of art, while, on the contrary, the prevailing feature of a garden, laid out in the modern style, should be the cognizance of art in every part. We hope to see some attempts to produce this style, and we shall endeavor, hereafter, to devote a portion of our room to its elucidation, with the hope that it will be put in practice.

Arboriculture, like landscape gardening, has received little or no attention, at the hands of American gardeners. It is true that, so far as planting trees by the sides of public roads, and in the principal streets of many of our large country towns and villages, may be considered arboriculturally, much more attention has been given to the subject than heretofore.

This manifest taste, on the part of the inhabitants, augers well for a spirit of improvement, and shows conclusively that there is a latent desire, in a portion of the community, for that which is ornamental and rural in nature; and, though only now displayed in the beautifying of the public streets and roads, may, here-

after, seek its enjoyment in something more than the mere planting of single rows of trees, but rather in grouping and arranging, in a natural mode, the trees of every clime and soil, and in nurturing and cultivating the less gigantic, though not less interesting and elegant, handiworks of nature,—the ornamental shrub, the splendid border flower, or the tender exotic.

The planting of trees, for the purpose of raising timber, has been somewhat agitated the past year, and, we believe, a petition has been drawn up by Mr. D. J. Brown, with a view of memorializing Congress upon its importance in a national point of view. We think the subject one of much importance, and one which we hope will receive attention. The planting of hedges is attracting more notice than heretofore, and some splendid specimens will probably be seen in a few years. The Maclùra, the Shephérdia, the buckthorn, and the Newcastle thorn, appear to be those plants which are recommended the highest. Some good articles have appeared in our last volume, upon the subject of planting and managing hedges, and we hope to add more information in reference to the same, in the present one. Our correspondent, Mr. Downing, of Newburgh, will probably publish, in the ensuing spring, a work upon the forest trees and shrubs of America and Europe, with observations upon their arrangement in both the picturesque and gardenesque styles, &c. Such a work is greatly called for, and no one is more able to execute the task than Mr. Downing.

Horticulture.—In this department, which embraces, according to the general use of the term, every thing in relation to fruits and vegetables, there has been a decided improvement. Throughout the country there seems to exist an earnest desire to add to our stock of fruits and vegetables, and to select such only as are valuable, to take the place of those which already encumber the ground, producing miserable and worthless fruit, or gross and tasteless vegetables. In both there is room for improvement, particularly in the interior of the country, where it is a long time before fine fruits and vegetables, from a prevailing prejudice, find their way into the gardens. We shall take a slight view of the principal places, where there has appeared to have been any thing done.

In Bangor, an exhibition of horticultural and other garden products has been made the past fall, for the first time, and much good will arise from this. A condensed account of the show will appear in this or the succeeding number. Some good gardens exist in the vicinity of this city, and we have no doubt that the advancement of the art of horticulture,

here, will be fast and steady. In Portsmouth, N. H., there are some fine gardens belonging to the wealthy gentlemen of the town; but not much has been done, we believe, to increase the number the past year. With the ample means and taste of many of its citizens, we shall look for greater results another season. In Salem, and vicinity, about the usual interest taken here has been continued without any remarkable increase of taste. Mr. Manning continues to increase his stock of trees, and prove the correctness of the different varieties of pears and other fruits. Of pears, he fruited a large number of new ones the past season, some description of which we expect to lay before our readers from his pen.

Boston and vicinity, with the same activity which has always characterized most of the amateur practitioners, is gradually rising in the scale, and will, undoubtedly, maintain that eminence in pomology, and the higher branches of the art, for which she has been heretofore so well known, both at home and abroad. The late exhibition of the Massachusetts Horticultural Society, in September last, was, as respects its display of fruits, one of the most remarkable ever made in the country. After the lengthy and accurate report which has appeared in our pages, it is unnecessary for us to particularize here. Many of the celebrated new pears of Van Mons were seen in perfection, and the specimens of fruits, forced grapes, and particularly pine-apples, evince the high state that this branch of gardening has attained. The list of premiums offered by the Society has had a good tendency, and we doubt not that another year will find the competitions so numerous, that there will not be a single article on the prize list, but for which specimens will be presented with the hope of carrying off the prize. The cultivation of the pine-apple is perfectly carried out at Mr. Cushing's, where we saw an abundance of beautiful ripe fruits, many of various fine kinds, a few weeks since. The new system of retarding the grape has been successfully tried, and we anticipate the pleasure of presenting our readers with an article upon the subject, from Mr. Haggerston.

The adverse state of commercial affairs has pressed more heavily upon New York than any other city, and after the long relapse, there is now every prospect of a rapid improvement and a rise to a higher state, than, perhaps, the common course of events would have carried her. Aroused to action by the success of her sister cities, a new horticultural association has been formed by the enterprise and influence of many of the citizens, who are devoted to the art, which embraces the whole extent of the great and fertile valley of the Hudson. It has

commenced favorably, and we see no obstacle to its future success; we know the talents and industry of those who were the most active in its formation, and we are much mistaken if they do not make it attain a stand of usefulness inferior to no other in the country. In the western part of the state, where, till within a few years, a garden did not exist, attention to the subject is awakened. Our friend and correspondent, Mr. Bateham, of Rochester, has communicated to us, for incorporation into this article, some account of the state of horticulture in western New York; but we find it so interesting, that we have given it entire, in an article by itself, and refer to that for information upon this portion of the empire state.

Disputing the palm with Boston,we find Philadelphia rapidly advancing in the forcing department, and in growing fruits and vegetables under glass. The culture of the grape is exciting great attention. Since the result of Mr. Biddle's successful attempts has been made known, a new impulse has been created, and many new graperies are about being erected. The nurserymen are cultivating grapes, in order to be prepared for the demand, with all haste, and we learnt, during our late visit, that the number of vines sold the past year has been large. Until this season, we believe grapes from under glass have never been seen in the Philadelphia market. What were produced commanded prices which will pay the cultivator a handsome profit.

The reports of the Pennsylvania Horticultural Society have regularly appeared in our pages the past year, and the state of horticulture may be perceived from a perusal of these reports. The Society is in a very flourishing condition. Many ladies have been admitted members, and their presence at the meetings has given a life and degree of interest to the proceedings, which had in vain been previously attempted. Our correspondent, Dr. Watson, we believe, was the first to propose the introduction of ladies as members of the Society. We could wish that the ladies of other cities would manifest the same zeal in gardening pursuits, and we would by no means exclude them from membership to any horticultural society in the country. We hope every society will emulate the example of the Pennsylvania Horticultural Society. Besides the admission of ladies as members, an efficiency has been given to the Society, which it never before possessed, by the election, to the presidency, of Horace Binney, Esq., a gentleman of cultivated talents and high forensic attainments.

Baltimore, Washington, and other southern cities, so far as we can get information, have not done much to record the past

year. The societies in each of these cities have held exhibitions, but we have seen no regular reports of them. At Cincinnati, St. Louis, and other cities in the west, we know not how much has been done; but the amount of plants, seeds, &c. which have gone from New England alone, will in a few years, if properly managed, add greatly to the aspect of the country.

Some of the more important additions to our gardens are the Rohan potato, of which a great deal has been said, in the agricultural papers, and some notice of which will be found in another page, and an article on their growth will be given in our next number. If all that has been stated in regard to their productiveness is true, (and we cannot doubt it,) they will be an invaluable addition to our husbandry. The Chinese corn is a new kind brought into notice the past fall; but of its merits we have no personal knowledge. The Cuba tomato Mr. Lowell speaks highly of, and recommends its growth in the place of the common kind. Some new seedling fruits have been exhibited the past year. Messrs. Downing, of Newburgh, N. Y., have raised a fine gage plum; and Mr. Roe, of the same place, four or five excellent varieties of the same fruit. Gov. Edwards, and Dr. Ives, of New-Haven, have raised some fine seedling pears. Under our pomological notices, and notices of new vegetables, in the early part of the last volume, will be found all that is new respecting fruits and vegetables.

Floriculture.—If we were to judge of the advancement of this branch of the art, by the number of new plants annually introduced, we could not say that the past year had been so much an improvement upon that of 1837, as the latter year was upon that of 1836. But setting aside this, as no criterion to judge by, we find that the general desire to possess and cultivate flowers has greatly increased. The rage for novelties is not so great as it has been, and, with the exception of a few zealous amateurs, the attention of cultivators is turned, as we are glad to see it, to the better treatment of those kinds which we have already admitted into our collections, and been upon the point of discarding, without ever giving them a fair trial. The taste for geraniums has increased considerably, and some fine seedlings have been raised by Mr. Hogg, and others. The season has been so unpropitious to the blooming of the dahlia. that, although all the best varieties in England were imported at immense cost, very few of them were seen in perfection the past autumn: the disappointment has been great, as cultivators will be under the necessity of growing the whole of their collections again, in order to prove those that are fine. Some seedling camellias have been raised of much merit. The

tulip has become a more fashionable flower since the grand display of Mr. Walker has taken place annually; and the pansy is fast finding favor with the lovers of all delicate and beautiful flowers, so much merit have those possessed which Mr. Walker has been at great pains to raise. The plant which has been the most extensively cultivated and greatly admired, the past year, is the *Verbèna Tweedieàna.*

Around Boston there has been a considerable increase of taste, and several gardens have been improved, and some green-houses and other garden structures added. The finest dahlias were introduced into its vicinity, but from the excess of heat and an unusual dry summer, the blooming failed completely. Mr. Sweetser has been forming a fine collection of cactuses, of which we have previously spoken, (Vol. IV, p. 401.) The most remarkable movement in floriculture has been the formation of the association for the purpose of establishing a public garden, on the lands belonging to the city, at the bottom of the Common. The subscribers have purchased the entire collection of Mr. Wilder, which will be removed to a building now in preparation, as soon as possible. Should the principle upon which the garden is got up, be a good one, the land laid out with some taste, and the conservatory or green-house well adapted to the plants, and arranged for good effect, it will be the means of rapidly diffusing a taste, throughout the whole community, for beautiful plants and flowers. We are glad to see Boston taking the lead in so noble a cause, and we trust that no efforts will be spared to render the garden creditable to the taste and spirit of her citizens.

From a personal notice of the state of floriculture in New York, we should not judge that the past year had placed her far ahead of her standing in 1837. The shows of dahlias, which have always been good here, were rather slim the past autumn, and, had not the frosts held off later than around Boston, there would have been a scanty display. But the heavy and continued rains of October gave renewed vigor to the plants, and when the frost overtook them, they were covered with buds and blossoms. In Brooklyn, Mr. Becar and Mr. Perry have added greatly to their collections. We have already noticed Mr. Hogg's visit to London, but he did not bring out a large number of plants, his journey having been made, principally, for his health. His seedling verbenas we have already noticed. Prof. Jackson, of Schenectady, has one of the finest flower gardens in the country.

Philadelphia, with its enterprising florists, has been the place from whence has been disseminated many fine plants the past

year. Mr. Buist is continually adding to his stock. J. B. Smith, Esq., has raised some fine camellias. Messrs. Mackenzie & Buchanan have a good stock; and Mrs. Hibbert, Messrs. Dryburgh, Sherwood and others have improved their respective establishments. One of the greatest novelties has been the production of nearly one hundred seedling chrysanthemums, the first which have ever been raised from seeds in this country, and which, until within a year or two, have never been grown in England; all the attempts to produce seed having proved useless. Some seedling verbenas have been raised by Mr. Buist, which are fine additions to this beautiful genus. The grafting of the Cactàceæ, particularly the Epiphyllum truncàtum, upon the Cèreus triangulàris, has been carried on with great success, and some splendid specimens may be seen in both the public and private gardens of this city. The palms of Mr. Smith are objects worthy the inspection of every lover of oriental scenery.

In Baltimore, the Messrs. Feasts have very good collections, and have grown some seedling plants of various kinds, particularly camellias and cereuses, which possess merit. Mr. Hack, an amateur, has raised a number of seedling camellias, and we saw a few promising looking buds, on several of the plants, as we walked through his small house. The Exhibitions of the Maryland Horticultural Society have been less interesting the past year than in 1837, and we suspect that there has not been a great deal accomplished within the last year.

In Washington, Charleston, and other cities at the south, there has been, so far as we can learn, the usual attention given to floriculture. Mr. Buist, of the former city, has introduced many fine things. Dr. Wray, of Augusta, cultivates a fine collection of succulent plants. At Athens, Ga., Dr. Ward has made several additions of beautiful plants to the Botanic Garden there. From the western cities we have no accurate knowledge of the advancement of Floriculture.

For particular information respecting new plants, the reader is referred to our floricultural and botanical notices, and our notes on gardens and nurseries.

STATISTICS, OR ACTUAL STATE OF HORTICULTURE.

This part of our subject relates to the formation and laying out of gardens, the additions of green-houses, &c. to private gardens: commercial gardening, &c.

Cemeteries.—Several cemeteries have been laid out in different parts of the country the past year. At Bangor, Me., one has been consecrated, and is called Mount Hope. In

Taunton and Worcester, Mass., the grounds have been put in order, and many trees planted. New York, aware of the importance of cemeteries to large and populous cities, has moved in the cause, and a large piece of ground has been taken for the purpose. At Rochester, N. Y., one is projected, and a most delightful piece of ground, finely undulated, and covered with wood, has been selected.

Public Gardens, which may, in reality, claim that appellation, can scarcely be said to exist in this country; but in the one projected in Boston we hope to see something worthy the name. The University of Michigan contemplate the formation of a Botanical Garden, with Dr. Gray at its head.

Private Gardens.—In Boston, W. P. Winchester, Esq. has enlarged his house to more than three times its former size, and it is now an elegant structure. He has also filled it with a fine collection of camellias and other plants. Mr. Warren, of Brighton, has erected a house about one hundred feet long, for the purpose of forcing vegetables and fruit for the market. Mr. Wilder intends to devote one of the houses, heretofore filled with plants, to the cultivation of the grape, and to confine his collection of plants to what is now the stove. Mr. Lowell has enlarged and otherwise improved his hot-house and green-house. In Brooklyn, N. Y., Mr. Perry has added a fine green-house and hot-house, eighty feet long, to his garden. In Philadelphia some new green-houses have been erected; but our friends have not given us the names of the gentlemen who have made these improvements. The only one we know of, personally, is that of William Lloyd, Esq., Turners Lane.

Commercial or Nursery Gardens.—The state of commercial gardening is more favorable to the nurseryman than for the two or three years previous to the last. The demand for ornamental trees and shrubs, as well as fruits, has been large. In the *Mòrus* multicaúlis an immense trade has been carried on, and some fortunes made by the fortunate growers of an abundance of trees. The agitation, which has taken place in the country respecting the rearing of silk-worms from the leaves of this tree, and its superior advantages over all others, has given it a value which the most sanguine could not have supposed they would have ever attained. On account of the immense demand for the trees, and from the supposition that they will command at least half the price which they are now worth, almost every nurseryman in the Union is converting his grounds into a mulberry plantation. Nor is the cultivation of the tree confined to nurserymen alone; hundreds of individuals, stimulated by the money which has been made in these trees, will

commence their growth. In Philadelphia, on a late visit, we found the hot-houses of the florists converted into mulberry beds, and the attention of many of the florists turned altogether to this tree. The more trees that are raised, the better; but we hope that the trees will not alone be grown, to the neglect of the usual stock of the nurseryman.

At East Boston, Messrs. Mason, of the Charlestown Vineyard, have taken a large spot of ground for a vegetable and fruit garden, and we have understood it was their intention to erect a green-house upon the ground. Messrs. Mason have produced some fine crops of grapes at their vineyard.

The trade in New York is reviving. Mr. Hogg will have to remove his nursery farther out of town, as one of the streets which are to be graded, the coming season, runs directly through the garden, and will cut it all up. Messrs. Downing, of Newburgh, are extending their nurseries, and one of the finest collections of fruit in the country is to be found here.

We have mentioned that Messrs. Mackenzie and Buchanan have commenced the trade in Philadelphia. They have erected two fine houses, which we saw nearly full of plants, last November; they are enterprising young men, and, we have no doubt, will do a good business. Mr. Buist has added a new span-roof house to his grounds, upwards of eighty feet long and thirty-two wide, with a partition between. It is a fine building. Mr. Sherwood has just got his place, near Laurel Hill, into good condition. Mr. Carr's grounds have been most destroyed by the running of the Philadelphia and Baltimore railroad through them: it is, we believe, Col. Carr's intention to sell out, if possible. The trade between the southern states and Philadelphia is very large, and there is a fine field for the enterprising nurserymen of this city.

From this some knowledge may be gleaned of the actual state of commercial gardening in the country. It is rapidly on the increase, and the stock of fruit trees, and, we might add, ornamental trees and shrubs, is not near adequate to the demand. Prices for the former are remarkably high, especially around Boston, and prevent many from purchasing, who would buy at moderate prices. It should be the object of nurserymen to cheapen as much as possible: it is for their interest, as well as for the convenience of the public, to do so: hundreds will plant trees and cultivate flowers when they can purchase them reasonably, who would not look at them at the high prices which are too often demanded. As the knowledge of propa-

gation extends, this may be expected; as long as we have to rely upon importations, it cannot be done.

It would give us pleasure to add some observations upon the progress and state of agriculture, but we have exceeded our limits already; and, offering these remarks to our readers, with the hope that they may be found interesting, we must take leave of the subject.

ART. II. *Horticulture in Western New York.* By M. B. BATEHAM, Rochester.

WESTERN New York, or, as it is sometimes called, the "Genesee Country," is proverbial for the excellence of its soil and the salubrity of its climate, as well as for the enterprise and public spirit of its intelligent inhabitants. With such unrivalled advantages, it might naturally be expected that the sister arts of agriculture and horticulture would here make the most rapid progress, in the march of improvement, and soon attain a high degree of perfection. But, it must be remembered that this country was, but a few years since, a wilderness; its inhabitants, besides paying for their lands, and providing the necessaries of life, have had a dense forest to subdue; dwellings, villages and cities to erect; roads and canals to construct; and the commercial and political affairs of a rapidly increasing population to engage their attention. Under such circumstances, there has been but little chance for an accumulation of superabundant wealth; and, although there exists a great degree of general taste for horticulture, but few individuals can be found who possess sufficient means, combined with the requisite taste and disposition, to devote much time or money to rural embellishments, or the delightful luxuries of floriculture.

About ten years ago, a few individuals began to manifest a desire for the advancement of agriculture and horticulture in western New York; and in two or three years several associations were formed for the purpose, which were highly beneficial to the community. A horticultural society was formed at Geneva in 1828. Its meetings and exhibitions have been held alternately at Geneva, Lyons and Canandaigua, and the taste for horticulture and rural embellishment, which is so conspicuous-

ly displayed in those beautiful villages, affords ample evidence of the usefulness of the society.

The Monroe County Horticultural Society was organized at Rochester, in the fall of 1830. Its meetings were, for several years, attended with a good degree of interest, and some of the exhibitions of fine fruits and vegetables would not have been discreditable, even to the halls of old Boston.

The well known *Genesee Farmer* and Gardener's Journal was commenced January 1st, 1831. This, together with the two horticultural, and several agricultural societies, created a universal excitement and spirit of inquiry on the subject of improvement. The knowledge and discoveries, together with the choice productions of older countries, were rapidly introduced and disseminated; competition and laudable emulation were encouraged by awarding premiums; old errors and prejudices were abandoned, and new objects, as well as new modes of cultivation, adopted. By these means, the cultivators of western New York began to see and appreciate the blessings which a bountiful Providence had placed within their reach; and the rich valley of the Genesee bid fair to become, by art and cultivation, what it was evidently designed to be by nature,—the garden spot of the west.

Owing however to unpropitious seasons and the failure of several fruit crops, the societies and exhibitions lost their interest; while the commercial embarrassments and political excitements so absorbed the minds of the community, that all associated efforts for the improvement of domestic affairs were neglected; and horticulture being so peculiarly a social art, but very little has been effected by solitary individuals.

The present condition of horticulture, in this section, may be mostly inferred from what has been said of its past history. Gardening here is seldom studied as a science, and practised as an art. The majority of families possess gardens of greater or less extent, and many of them are well supplied with fine fruit and vegetables; but very few individuals are willing to devote any considerable attention or *expense* to their cultivation, especially in the department of floriculture. Above all, it is surprising that so small a number, even of those who possess sufficient means and good taste, do not oftener prove that

> "He who loves a garden, loves a *green-house* too:
> Unconscious of a less propitious clime,
> *There* blooms exotic beauty, warm and snug,
> While the winds whistle, and the snows descend."

There are a few private residences, with gardens and greenhouses attached; and also several thriving nursery establish-

ments, which deserve more particular notice than my present limits will allow, and some account of which I may hereafter furnish you.

It is gratifying to observe that the spirit of improvement is again beginning to revive in this section, some evidence of which has been quite perceptible the past season. A number of influential citizens have suggested a plan for an extensive association, to be called "the Genesee Valley Horticultural Society:" to include the counties of Monroe, Livingston and Genesee, together with such individuals from the adjacent counties as choose to unite. This district will include many individuals of wealth and taste, who are ardent friends of horticulture; and whose united efforts for its promotion could not fail of proving eminently successful.

Yours, truly, M. B. Bateham.

Rochester Seed-Store, Dec. 10th, 1838.

Art. III. *Thoughts on Pruning.* By Judge Buel, Conductor of the *Cultivator.*

We apprehend that the common practices in this branch of rural labor are not altogether based upon a sound philosophy. The animal structure, we all know, is admirably adapted to its wants, to its habits, and to its uses. There is no surplusage —no useless incumbrance—all is necessary to fulfil the designs of nature. From analogy, as well as from the system and order which every where pervade the visible creation, is it not reasonable to infer, that every part of the vegetable structure is alike essential to its well-being? Are not the branches and leaves as essential to the tree, as the limbs and lungs are to the animal? Who will say otherwise? Nature produces nothing in vain. Although we may assist in carrying out her designs, we cannot cross her purposes without suffering the penalty imposed for a violation of her laws.

No part of a plant can be affected without affecting the other parts. Roots and branches reciprocally produce and nour-

ish each other. If a tree has part of its roots destroyed, the branches which these supplied decay; and when some of the branches are destroyed, some of the roots perish also. The extent and form of the one, will, in a measure, ever correspond with the extent and form of the other. If a young tree is kept close pruned, divested of its limbs and foliage, it is soon stunted in its growth, the wood becomes carious and diseased, and the plant is short-lived. If, therefore, we destroy the equilibrium which nature has established, between roots and branches, by greatly diminishing the one or the other, we thwart her designs and mistake our interest. Every branch has its roots—its mouths—in the soil, to supply it with the elements of its food; and every root has its branch and its leaves—its lungs—in the air, to convert these elements into food, for the joint benefit of them both and of the stem. One cannot attain growth without the co-operation of the other. Without the roots, the plant cannot obtain the elements of food; without the leaves, those elements, if taken into the system, are of no benefit; but, on the contrary, like the undigested food upon the animal stomach, generate disease, rather than promote health and vigor. Every leaf performs its office in the process of nutrition and growth; and, other circumstances being alike, the increase in the growth of the plant, will be in the proportion to the number of healthy leaves: if one half of these be destroyed, the growth will be but one half as great as if the whole had remained—if complete defoliation takes place, the growth will entirely cease. Hence pruning decreases growth, in proportion to the extent or severity with which it is practised.

"Whenever a tree has a live spray cut from it, an injury is inflicted on that tree that can never entirely be repaired. Every wound received is stored up; and if wounds be constantly added, they will accumulate to a degree too great to be borne, and the tree will sink under its infirmities. It is useless to attempt to transfer the timber of the boughs to the stem, or to confine the growth of timber entirely to the stem. However desirable it may be to the pruner, to have all the growth diverted to the increase of the stem, he never will be able to effect it. He may, like the dog, snap at the shadow, and lose the substance; but never will he be able, by pruning off the boughs, to increase the growth of the stem one jot. No; the size of the stem will be in proportion to the head it has to support. The stem is not, as he may imagine, a production formed merely for the use of man; it is the canal, or passage, in which the juices pass between the roots and branches; and the size of

this passage is always in proportion to the offices it has to perform. If the number of branches [meaning to include leaves] be increased, the quantity of sap passing between them and the roots will be increased; a greater space is necessary for the increased quantity of sap, and consequently the stem is increased. Let the head of the tree increase, and, depend upon it, there will be a corresponding increase of the stem.

"It is said to be right to cut away a small proportion of the weaker branches, and turn the current of the descending sap more abundantly into the stem. It is hard to understand what is meant by this explanation of the effects of pruning. Does the sap descend down the stem till it arrives at the weaker branches, and then ascend up them and increase their size, instead of that of the stem? If so, the weaker branches would soon become the stronger; or rather, if trees have the property of sending the sap from the strong branches to the weaker, all the branches would be equally strong. The descending sap, on reaching the weaker branches, would become ascending sap. And if the small branches be considered obstructions preventing the descent of the sap, the large branches must be greater obstructions. But where does the sap descend from? Pruners forget that they cannot cut a live spray from a tree without lessening the quantity of its leaves. Their theory is founded in error, and all their reasoning is false."—*Ballard, in Farm. Mag.*

This explains what often seems enigmatical to superficial observers in vegetable economy, viz. that moderate sized trees from a nursery have, ordinarily, a much thriftier and healthier growth, and arrive sooner to a good bearing state, when transplanted, than trees that are very large. In the former, the natural proportion between the roots and the branches is preserved,—the former being taken up nearly entire—the sap vessels are filled, and the growth is but partially retarded. While in taking up very large trees, whose roots have greatly extended, the mouths of the plant are seriously diminished, the sap vessels contract and become indurated, in consequence of the diminished supply of sap—and the tree must acquire new roots, and a new sap-wood, by a slow process of growth, ere it can flourish with its accustomed vigor. The same evil results from cutting off the entire top of a tree. It is deprived of its elaborating organs; and, although the root may send up the elements of food, it cannot benefit the plant for want of leaves to convert it into vegetable blood. It is no argument against this position, that deciduous trees spontaneously develop foliage and flowers in the spring. There is a store of elaborated sap

laid up in autumn to effect this. Strip a tree in June, when this store is exhausted, entirely of its leaves, and the tree will not grow, and will probably die. The stem, at least, will sustain serious injury. The nurseryman knows, that after an apple, pear, or plum stock has been cut down and grafted upon, the heart-wood becomes unsound if the graft fails to grow, and the whole stock dozy, and, in a manner, worthless for a future scion, and that it will not grow a particle above where it sends off suckers.

The tendency of pruning to generate disease, and to shorten the life of trees, is illustrated in the appearance of old orchards, which have been injudiciously pruned. Wherever a limb is split off by winds or accident, it exposes a diseased heart-wood; and this disease at the heart spreads to the roots and branches, and induces premature death. The natural duration of the apple tree is believed to be more than one hundred years; and yet how few are found in a healthy state at fifty years. Mark the contrast, in soundness of wood, in vigor of growth, and in duration of life, between the apple and other frequently pruned trees, and those trees, whether fruit or forest, which are left to luxuriate naturally, without the artificial aid of the pruning knife.

If pruning be prejudicial to growth and longevity, why, then, we may be asked, why prune at all? We answer, for utility, to give beauty, and to improve and increase the fruit.

In natural forest growth, trees attain height, and a straight clear timber form, from their crowded situation; and as the lower branches become useless, they die and fall off. But in cultivated grounds, or where there is ample room for roots and branches to spread, this does not take place; and hence the propriety of pruning here to obtain a good stem for timber, or a handsome top for shade and ornament. Often there are two or more leading shoots striving for the mastery, and, unless they are shortened, or taken off, there will be two or more stems, of diminutive size, instead of one stem, of larger size. We may therefore prune shade trees to improve their form, or to please the fancy, and timber trees to improve the bole; but in neither case do we either increase the growth, or prolong the life of the tree.

"As the twig is bent, so will the tree incline," is literally true in regard to pruning. We may give almost any form to trees which fancy may conceive, by beginning early, and persevering with the pruning knife or shears, as is witnessed in clipped hedges, and often in ornamental and garden grounds. We may make them dwarfs or standards, or give them a thin or

dense foliage, at our pleasure. They may be trained or cut into the shape of animals, into geometrical forms, or architectural or sculptural compositions.

We prune fruit trees to improve the fruit, and to induce a bearing habit. The roots of trees take up from the soil a certain quantity of vegetable food, call it geine, or humus, or organic remains, or what you please—it has constituted parts of vegetable structure, and is convertible, by natural processes, into wood, or fruit, or both. If the tendency of the plant is to wood, as is generally the case with all healthy young trees, the fruit will be sparse and inferior, at least till the tree has attained to mature size. On the other hand, if the tendency to growth is checked, by poverty of soil, disease, or injudicious pruning, the tree will be brought into a precocious state of bearing, and, in the case of judicious pruning, produce more and better fruit.

In pruning, or training to induce a fruit-bearing habit, the object is to check the uninterrupted, and, we may say, natural, descent of the elaborated sap to the root, by encouraging a horizontal, instead of an upright, growth of the branches, when the tree approaches the bearing age. This causes a stricture in the descending sap vessels, at the bifurcation or junction of the branches with the stem, and a consequent accumulation of elaborated sap in the branches, to generate fruit buds, and to swell the fruit. The same object is sometimes, though injudiciously, effected, by taking out a narrow circle of bark, or by ligatures, to prevent the descent of the elaborated sap. Hence the upright shoot is often cut out, particularly in the apple tree, and the branches are trained horizontally, diagonally, or in a half inverted position, as on walls, espaliers, and in the *en quenelle*, or distaff form of training. These operations have also a tendency to improve the quality of the fruit, by giving it a better exposure to the kind influences of the sun, air and light, all essential to its due maturity and high flavor. Nature provides for the propagation of the species, by producing perfect seed, leaving to art the labor and contrivance of enlarging and enriching the pulp or fruit. All fruits may be improved from their natural state, by artificial culture, though nothing may be added thereby to the intrinsic value of the seed, or natural duration of the tree. The seeds of the wild crab, or wild pear, are as good to sow for stocks, to graft or bud upon, as the seeds of the cultivated varieties of these fruits; and indeed, according to Dr. Van Mons' theory, which his practice seems to have confirmed, they are the best from which to start new varieties.

Prune, therefore, when necessary, to improve timber; prune for ornament; prune to improve the fruit: but do not prune in the hope of accelerating growth or of prolonging life. And in all your prunings, cut while the wood is small, and spare to the tree all the foliage you can consistent with the object you have in view. By pruning when the tree is young, and pruning often, we may secure a handsome stem and well formed head, and we cause no wounds that do not speedily heal.

The common practice is, to prune in autumn or spring, when the tree is divested of foliage. To this practice we make two objections. In the first place, the wounds are exposed (unless covered with a suitable composition) to the searching and corroding influence of the sun, wind and rain, there being no leaves to shield, nor circulating pulp to heal them. In the second place, it causes the multiplication of suckers, and often increases the evil which it is designed to cure. The sap, arrested in the spring, when its flow is greatest, in its natural course to the amputated branches, oozes out and corrodes the bark and wood, or exhausts itself in the production of a prolific growth of suckers, more detrimental than the parts that have been lopped off. If pruning is performed the last of June, when the exuberant flow of sap has abated, the wounds are in a measure protected, by the foliage, from the weather; much unelaborated has became elaborated sap, and transformed into cambium, or pulp, whose healing qualities soon cover the edges of the wound; few or no suckers are generated, and the heart of the tree is in a measure preserved from canker and decay. These opinions, as to the propriety of summer pruning fruit trees, have been confirmed, in our mind, by three years' practice and observation.

Another common error in pruning, is the practice of cutting off all lateral shoots from a young tree, except a few at the apex; and to cut young, vigorous wood from the tops of old trees, leaving long extended naked branches, which are often broken by the winds. In the first case, we obtain long spindling stems, incapable of supporting, when transplanted to an open situation, a respectable top. The same evil occurs in the nursery, or the forest, when the young trees stand in a crowded position. In the second case, we produce unsightly and comparatively unproductive tops. Since the offices and importance of leaves in vegetable economy have been better understood, a manifest improvement in pruning has succeeded.

It is now contended, and we think upon correct principles, that none, or but very few, of the lateral branches should be cut entirely from young trees, until the tree is tall enough to

form a head; but that the pruner should be content with shortening those which interfere with the main stem, and such as are of unreasonable length. By this means, we obtain a tapering and straight stem, and retain the aid of a large portion of the leaves towards its enlargement. Every leaf contributes to the growth of the stem below the point of connection. When the tree has attained a proper height to form the top, it is advisable, particularly with the apple, to cut out the upright shoot, leaving three, or, at most, four, laterals, or branches, upon different sides, to form the top. If a little attention is given annually to cutting out the small limbs, which are likely to cross or interfere with each other, the necessity of cutting off large branches will, for a long time, be superseded. In old trees, the old branches frequently become cankered and diseased, and young thrifty wood is thrown out at or near their base. In this case it is always preferable to cut the diseased wood, leaving the healthy shoots to fill their places. When transplanting trees, the knife should be used sparingly. If the roots are greatly diminished, in digging up the tree, the top may be lightened by thinning its branches; or, if none of these can be spared, without marring the form, the longer branches may be shortened, or cut in, at a bud; but we do not advise, in any case, the cutting off the entire top.

J. Buel.

Albany, Dec. 1838.

Art. IV. *On the propagation, training, and pruning of Fig trees under glass.* By J. W. Russell, Superintendent at Mount Auburn.

The fig tree is raised from suckers, layers, and cuttings, and will thrive in almost any soil, provided it has a dry bottom. But they produce more fruit in a strong loamy soil, than in a light dry one. Layers or cuttings are preferable to suckers. If figs are grown in large pots or boxes, a drainage of potsherds three or four inches deep, laid at the bottom of the box or pot, is indispensably necessary to carry off the superfluous water. The top sod of an old pasture field, two or three inches thick, broken well to pieces with a spade, is probably

the best compost that can be easily obtained. A riddle ought never to be used, for the most nutritive part of the compost will not pass through it, therefore it is evidently a bad practice to make use of it.

If the branches have been allowed to run up, leaving the bottom of the trees quite naked, every other branch should be cut down near to the ground about the first of May, in order to furnish the bottom of the tree with young wood, bearing in mind the necessity of stopping the ends of the shoots in June: this will cause them to throw out side shoots which will furnish the tree with good wood, and which will bear fruit the next year. By this time you will have plenty of fine wood; you may, then, if you think it best, cut off the rest of the old branches that were left the preceding year, performing this business at the same time you pruned last year. Never neglect to take off the ends of the strongest shoots, except the leading ones, as before advised, for if this is not done, you will soon have the trees in the same state you have been trying to avoid.

When you prune, never shorten the shoots, as the fruit is always produced near the ends of them; there will be a great many fine, short side, and foreright shoots, which should never be cut off but when they are decayed: these shoots will ripen much better than those of more luxuriant growths, therefore will be less liable to receive any injury from a severe winter. When the figs are about the size of a filbert nut, take off the points of the top buds with your finger and thumb, or cut them with a sharp knife. If the trees are trained to a trellis, (which is probably the best method) the branches should be laid in from eight to twelve inches apart, and trained horizontally or in a pendulous manner.

By following this system of training, you will obtain more fruit than from any other method I have any knowledge of. If no fire heat is used, the trees in November should be covered with straw and bass mats, in order to protect them from the sudden changes of the weather through the winter. About once a fortnight, through the summer, give the roots a bountiful watering with manure water.

Growing the trees in pots or tubs.—No fruit does better than the fig when grown in pots. A few trees will furnish a sufficient quantity of fruit for a small family, and they may easily be grown without the aid of a green-house, or any other protection than an ordinary cellar. The same soil as above advised should be selected, and the plants, whether from suckers, layers, or cuttings, planted in tubs, or pots, from ten to fifteen

inches in diameter at the top. Prune them as before directed, and they will produce abundantly. On the approach of cold weather, place the pots in the cellar, where the frost will not reach the trees. J. W. Russell.

Mount Auburn, Cambridge, Dec. 1838.

Mr. Russell's article on the fig we hope will attract more attention to this neglected fruit. Occasionally a fig tree is seen in our gardens, but it is oftener grown as an object of curiosity than for its fruit. We are quite partial to the fig, and believe that it would be as much esteemed as many other fruits, if good kinds were selected, and the fruit grown to a good size. The fig, we believe, may be cultivated in the open air, taking the precaution to cover the trees in the same manner that grape vines are protected, viz: by laying their branches down, and covering them with straw and leaves and garden soil. May Mr. Russell's directions induce the cultivators of other fruits, to grow the fig also.—*Ed.*

Art. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored. Edited by John Lindley, Professor of Botany in the University of London.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

Botanical and Floricultural Intelligence.—The second part of the first volume of Drs. Torrey and Gray's *Flora of North*

America, has just been issued from the press. We have had no time to look it through, but shall lay a review, of both this and the first part, before our readers in our next number. We intended to have done so before this late hour, but the closing of the volume, and the press of matter necessarily precluding the insertion of a lengthy review, we have deferred,—though, in justice to the work, it should have been done sooner,—till a later period, a full notice of the work.

We learn, with regret, that the number of subscribers to the work is not yet near sufficient to defray the expenses of its publication, and that a large number of copies will have to be disposed of before the work will afford any remuneration whatever, to the authors, for their indefatigable labors and researches in gathering materials for its publication. This should not be. A work so professedly original in its character, arranged after the natural system,—enumerating all the plants which have been heretofore described by the various botanists of the country, and spread through, as they have been, a great number of volumes,—together with a vast quantity of new and undescribed species, including those collected by that learned botanist, Mr. Nuttall, on his late tour to the Columbia river,—is sufficient to entitle it to the attention of every amateur botanist or cultivator of plants in the country. We hope that the bare announcement of this fact will be sufficient to induce the friends of science, generally, to come forward and render that aid to the authors, which will ensure the publication of the remaining parts of the work.

Dr. Gray, whose intention of visiting Europe we announced in our IV., p. 334, sailed from New York for London in November last. The principal object of his visit is to glean botanical information for the completion of the above work. He will inspect all the large herbariums around London, and visit all the principal nurseries where living specimens may be seen. On his return in the spring he will enter upon the duties of his profession in the new university of Michigan.

Mr. Nuttall has given the name Wràyia to a new genus of his California plants, in honor of his friend, Dr. Wray, of Augusta, Ga., a gentleman every way worthy of the honor. No person has been more zealous in the collection of new plants than Dr. Wray, and upwards of twenty plates have appeared in Loddiges' *Botanical Cabinet*, drawn from specimens taken from plants sent to Europe by Dr. Wray. The character of the genus will be given in Dr. Torrey's *Flora*.

Mr. Brackenridge, our correspondent, who accompanied the Exploring Expedition in the place of Dr. Gray, is a most

excellent practical botanist, as well as a first-rate propagator. He was, formerly, and for a long time, in the employ of Patrick Neill, Esq., LL. D., of Edinburgh, Secretary to the Caledonian Horticultural Society, and had the management of his select collection of plants. Since then he has visited Berlin, where he was engaged with a rich banker, who possessed a fine collection of plants. Subsequently, he came to this country, under the employ of Mr. Buist, of Philadelphia. Great inducements were held out to him by the government to secure his services; but we hope that, in his new avocation, he will render better assistance to the cause of floriculture, than he would have done to have remained behind. Our readers may have reason to regret his absence, as Mr. Brackenridge promised us many articles, which would have, undoubtedly, been of great value. When he returns, he will, probably, make the loss good by the increased contributions from his pen.

Mr. Wilder's entire collection of plants, both green-house, hot-house and hardy, with only the reservation of about a hundred different kinds, has been purchased by the subscribers to the Public Garden which has been projected for upwards of a year. The association have failed, in all their attempts, to get the privilege to erect a green-house upon any part of the land, west of Charles street, belonging to the city. The uncompromising hostility of the directors of the mill-dam corporation, to this proposed improvement of the waste lands of the city, has been the cause of their not being allowed this privilege. The individuals composing the directors, who have succeeded in preventing the city from granting the prayer of the petitioners, must derive a great deal of satisfaction from the fact, that they have accomplished their designs.

Not to be prevented from proceeding with the establishment of a garden, the subscribers voted to purchase the large and commodious building, known as the Boston Riding School, near Braman's Baths, adjoining the mill-dam. This will be altered into a suitable green-house, or conservatory, with a domical roof, for the plants, which will be removed thereto as soon as possible, probably during this month. When the whole is completed, we shall endeavor to give our readers an account of the same, and, if permission is allowed us, a plan of the building when finished. We have understood that it can be made a fine structure for the plants. Operations upon the formation of the garden will be commenced, we presume, as soon as the weather will permit.

New Plants introduced into the country the past year.—The number of new plants introduced into the vicinity of Boston,

with the exception of camellias, was not so large the last season, as in 1837. All that we have been able to learn are the following:—

Azàlea Danielsiàna
— laterítia
— *le*difòlia álba plèno
— índica lilacìna aurantìaca
— — Smith's aurántia
— — — orange pink
— — — scarlet pink
— — — speciòsa
— variegàta
*A*càcia *C*yclópsis
*A*càcia latifòlia
— melanóxylon
Cèreus strigòsus
Echinocáctus crenàtus
Fúchsia mutábilis
— recurvàta
*R*hododéndron arbòreum máximum coccíneum
— arbòreum venústum
— campanulàtum.

Dicotyledonous, Polypetalous, Plants.

*Ternstromi*àceæ.

CAME'LLIA.

The camellias have just commenced blooming; and some fine specimens are now expanded in the various collections. It will be recollected that in our January number, of last season, we gave a list of new ones imported, during 1837, by Mr. Wilder. Since that time he has received several new varieties, some of which are from the Abbe Berlèse, the author of the *Monographie* of this tribe. From the descriptions, it is believed that many of them are very handsome.

Of the varieties enumerated last year, several will bloom well the present winter. C. j. imbricàta álba, in the collection of J. W. Boot, Esq., is budded finely. Donckelaèri will flower well with Mr. Wilder and Mr. Sweetser, as will some of the others. In our calls, during the winter, we shall note down all which are new that we find in bloom.

Mr. Wilder has kindly furnished us with a list of those he has imported, to which he has annexed the descriptions as received by him. The authority is good, and there is no reason to doubt but that they will prove fine. The following is Mr. Wilder's letter:—

Dear Sir—I send you below a list of some of the most distinguished new camellias, that I have imported this year. Where I have received descriptions, I annex them.

Camélia japónica Lady Grafton; a large beautiful flower, of the color and form of C. j. *R*òsa triúmphans.

C. j. rosétta; bright rose color; petals and form of the flower like C. j. imbricàta.

C. j. spectábilis maculàta; double white, with pink stripes, yellowish centre, after the manner of C. j. Press's Eclipse.

C. j. Loukiàna; double, orange red, striped and spotted with white.
C. j. Jussieuiàna; new Chinese variety; very bright orange red, after the manner of C. j. rùbra plèna; interior petals sometimes striped with white.
C. j. Tamponeiàna; double, well formed, of a cherry red color; the petals spotted, and striped with white.
C. j. Hendersònii; large, beautifully formed, rose-colored flower.
C. j. Carswelliàna; very fine, regularly formed flower, of a deep red color, beautifully marked with white.
C. j. Frasèrii; a large, full, brilliant red flower.
C. j. elegantíssima bícolor; double white, striped with rose.
C. j. Millinétti; large, double red flower; the petals bordered and striped with white.
C. j. York and Lancaster; white, striped with red; some flowers pure red, others entirely white.
C. j. Rollissòni; double white, handsome form.
C. j. Préssi nòva *r*òsea; form of the flower like eclípse, of a light pink color, with crimson stripes.
C. j. pictòrum coccínea; flower large, full, regular; of a cherry red color; petals broad, and gracefully imbricated.

C. j. Alexandria perfécta.
— — Beck's conspícua.
— — Bonárdii.
— — Cóckii.
— — compácta rùbra.
— — Crèwii.
— — dúlcis.
— — exònii.
— — fimbriàta *r*òsea.
— — formosíssima nòva.
— — Garvèyii.
— — Hondii.
— — láctea.
C. j. latifòlia macrántha.
— — Ludovìco.
— — Nannetiàna púlchra álba
— — nòva mutábilis.
— — *r*anunculiflòra striàta.
— — Róssii wàrratah *r*òsea.
— — Rushmoreàna.
— — spectábilis lutitiàna.
— — Spofforthiàna striàta nòva.
— — Yoúngii vèra.
— — Withe China.

The names of some of these may not be spelt correctly, but I give them as near as can be made out from the invoice. —*M. P. Wilder, Hawthorne Grove, Dec.* 15, 1838.

These fine varieties, we believe, with the rest, all go with the collection to the Public Garden, and another season probably many of them will bloom.—*Ed.*

Art. VI. *Notes on Gardens and Nurseries.*

New York, Nov. 1838.—Having paid a passing visit to some of the gardens of our friends in New York, Philadelphia, and Baltimore, the past autumn, we have the pleasure of giving our readers some of our observations thereon, trusting that they will not be found uninteresting. The season of the year was not a propitious one, to observe a great deal that was very interesting, as it was too late to find any remains of vegetation in the open garden, and too early for the denizens of the greenhouses to greet us with their welcome smiles. Yet we have observed something worthy of remark, and if we cannot descant so much upon the brilliant hues of the camellia,the lovely tints of the rose, or the grateful odor of the orange-flower, we may note down some facts in the treatment and management of plants, which may be of benefit and importance to all. Under our article of Retrospective Gardening, will be found all that is new respecting the formation of gardens, the erection of green-houses, &c.

Residence of N. J. Becar, Esq., Brooklyn.—In the early part of our Magazine, for 1837, some notice of Mr. Becar's place was made by one of our correspondents; and, later in the season, our own remarks, after a short visit, were laid before our readers. Since that period, however, Mr. Becar has added somewhat to the extent of his buildings, and gradually increased his collection of plants, until it has acquired that choiceness which few amateur collections in the country have attained.

In order to add value to our Magazine, as well as to enrich its general appearance, by the addition of engravings of beautiful garden structures, we shall, by the permission of Mr. Becar, as soon as possible, present our readers with a plan of the truly elegant conservatory which ornaments his grounds. Of its architectural proportions and general appearance, and of the neatness and finish of its internal arrangement, we have before spoken. And, as we shall give all the particulars when we offer the plan now alluded to, we shall not here repeat what we have heretofore stated, otherwise than to remark that, in addition to the conservatory and small hot-house, which was erected two years ago, Mr. Becar has added a low house about thirty feet long, adjoining the conservatory, which is devoted to the cultivation of flowers.

In the conservatory, every thing wore the appearance of neatness, attention, and care. It was truly a luxury to walk through the house, so orderly, so clean, and so fresh was the aspect of every part. The back wall is now covered with various kinds of running plants, including several varieties of passion flowers, four or five, or more of which, Mr. Becar has engrafted, himself, upon one stock. The roots of these are all planted in the back border, and luxuriate in the soil, throwing out a foliage large and vigorous, and redolent with health. In the front part of the house, the flowers of the chrysanthemums were just assuming a fading tinge, and would, in a few days, be removed, and their places occupied by a "corps de reserve" of other plants, grown in the adjoining house; thus keeping up the freshness of the house the season through. Few practise this mode, and, except in such large collections as Mr. Cushing's, where no expense is spared to keep up the beauty of the house, it is rare to find this system carried out. It is, however, the only way to keep a green-house or conservatory in beauty, and should be adopted by all amateurs who are desirous of rendering their houses attractive at all times. A plant in high health, whether out of bud, or in bud, is ever an object of admiration; but the withered flower stem, the faded blossoms, or the decaying seed stalk, are unsightly things, and should be removed from a place where their presence casts an air of cheerlessness, which should never pervade the green-house or conservatory during winter. But to return from this digression.

Mr. Becar is a great admirer of the camellia, and has been at much expense to procure nearly all the finest kinds. We saw planted out, in the centre of the house, and in full bud, imbricàta, élegans, conspícua, exímia, Colvíllii, flórida, and others equally fine, together with the C. reticulàta. A fine large white, and a *pæoniflòra*, were expanding their buds; Eugè*nia* myrtifòlia, a plant which has reached the top of the house, from its rapid growth, two or three times, and been successively cut part way down, was pretty with its pendent branches, covered with the clusters of berries. A large myrtle-leaved orange was full of fruit, as was also a common orange tree. Numerous other plants filled the bed, all of which are planted out in the soil. At each end of the bed is placed a marble vase of beautiful proportions, in one of which is planted an aloe, and in the other a *Yúcca*. These, with the fine proportions of the building, give a classic appearance to the interior.

The beauty of vases in garden scenery has been already urged by our correspondent, Mr. Downing, (Vol. II, p. 281,) and we had intended to add something to his remarks, ourselves, by the way of impressing the subject more upon the attention of our readers. We have, however, omitted to do so, and in a few words shall now endeavor to show the effect that they will have in greenhouses and conservatories, when filled with a proper selection of plants. To do this, we shall select one of the forms of vases which appeared with Mr. Downing's paper, and, filling it with plants, shall suppose the following (*fig.* 1,) to be a good representation of the effect it will have when the plants have made a vigorous and healthy growth.

1.

Surely we need not say any thing further to show how much they would add to the beauty of the garden, or the elegance of the conservatory. In either place, they are objects too inviting not to be found in every garden. These vases are easily filled with handsome plants, well suited to the situation, and the following might compose, in part, the group for the green-house. The centre plants may be geraniums, over which might twine a Maurándy*a* Barclay*àna*. To overhang the sides of the vase, and droop its graceful stems, might be planted the common periwinkle, the *V*erbèna chamædrifòlia, and Tweedie*àna*. These would make fine plants, though there are many others which will do; and when the geraniums are in flower, from March to June, over whose varied and odorous foliage creeps the Maurándy*a*, with its pendent purple bells, and at the base of whose stems bloom the brilliant verbenas, re-

posing their large umbels of glittering florets upon the deep green foliage of the periwinkle, with its procumbent stems trailing almost to the earth, no more agreeable *melange* of elegant objects could be desired.

In the house lately erected, Mr. Becar keeps a reserve stock of geraniums, roses, &c. &c., and in it all the operations of culture, as propagating, grafting, inarching, &c. are done. At one end there is a small pit, where a small quantity of vegetables, such as lettuces, radishes, &c. can be raised. The whole is well fitted up, and, being low, the geraniums are grown in the greatest perfection. Mr. Becar is his own propagator, and all the potting, propagating, &c. is done at leisure hours, with his own hands. When we present the plan of his conservatory, we shall say more; at present we have exceeded what room we intended to devote to his place.

Residence of J. W. Perry, Esq.—This beautiful place has been partially described in our previous volumes, in conjunction with Mr. Becar's, they being near each other. But since that period, the additions to the flower department have been extensive, and consist, as Mr. Perry's gardener has already informed our readers, (IV., p. 389,) of a new greenhouse and hot-house, about eighty feet long, and proportionally broad and lofty. This range, of which we may have occasion to speak more particularly hereafter, is well built and finished. Each department is heated with hot water, upon the same system as that which warms the conservatory, and which we have before given some description of (III, p. 163.)

It is so little time since Mr. Paulsen sent us a list of the principal plants contained in Mr. Perry's collection, (IV, p. 363,) that it will seem scarcely necessary for us to enumerate them again. But, as some of them were mentioned in name only, we shall note down a few which appeared to be of more interest than the others. Most of the specimens were large, and were purchased at the late sale of Mr. Pratt's plants, at Lemon Hill, Philadelphia, and at Dr. Hosack's, at Hyde Park, New York. Others were selected from various nurseries by Mr. Perry's gardener. The plants which struck us as valuable, were the banksias, of which there were four fine specimens; B. latifòlia was just beginning to show signs of flowering. The large double white camellia and the atrorûbens are superb plants, and probably as large as any in the country; the acacias were also fine, particularly *A.* decúrrens, of which Mr. Perry possesses a fine specimen.

In the stove department the plants were looking well, considering the short time they have had to recover, since their re-

moval. *Urèna* speciòsa was an imposing object, with a vigorous new frond, six or eight feet in length. Mùsa sapiéntum was also handsome; the ficuses were large and strong specimens. Córypha umbracaulifera and *Latània* borbónica were beautiful, as were some other palms. The huge Cèreus speciosíssimus Mr. Paulsen has trained up to the glass partition, between the stove and green-house; it looks well. Each department, considering that the range was not finished until late in the autumn, was in good condition; and when the large plants have been under the care of Mr. Paulsen another year, they will have altogether a better appearance than they possess now.

In the conservatory attached to the drawing-room of the mansion, the plants, since the spring of 1837, have made such an accession of new wood, that we hardly recognized them. The passion flowers, planted out in the borders, have almost overrun the ends and roof of the house. In the centre bed the camellias have grown astonishingly, and were full of buds. Mr. Perry has added several new ones. The chrysanthemums had been ornamenting the house, but were now past their beauty, and their places would soon be filled with geraniums, and other plants. We found the plants here in a healthy and growing state; and, like Mr. Becar's, cleanliness pervaded every part. Both places may be shown as specimens of neatness, cleanliness, and care, and worthy of imitation by all who possess a green-house or conservatory. We have hinted, in our remarks upon Mr. Becar's place, that it is our intention to present our readers with plans of beautiful green-houses, &c., and we have in view that of Mr. Perry's for one, if he should consent to our wishes. Mr. Perry has been to much expense the past summer, in the erection of his new house and the purchase of plants, and we trust the pleasure he will receive, from the addition of such a fine structure, will be sufficient, not only to amply reward him for what he has done, but to induce him to add, continually, to his collection, all the choice plants that are introduced. We have no doubt that this place will always be one of the first in the vicinity of New-York.

Multiflora Garden, Mr. Maynard.—Mr. Maynard has only a small green-house, containing a collection of geraniums and other plants. He intends, however, to enlarge and otherwise improve its appearance. Mr. Maynard's operations are principally confined to the open garden, where he has a superb collection of herbaceous plants, and one of the finest collections of dahlias in Brooklyn.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Foreign Notices.*

ENGLAND.

Heaviest Gooseberries in 1838.—The following are the weights of several of the heaviest gooseberries, of each class, for the past year, declared at the Lancashire Gooseberry Shows in August last.

Red:—London,	27 dwts. 6 gr.	Green:—Thumper,	23 dwts. 6 gr.
Wonderful,	25 dwts. 15 gr.	Peacock,	20 dwts. 6 gr.
Atlas,	21 dwts. 22 gr.	Overall,	18 dwts. 20 gr.
Companion,	21 dwts. 12 gr.	Green Prince,	18 dwt. 2 gr.
Yellow:—Seedling,	23 dwts. 12 gr.	White:—Fleur de lis,	21 dwts. 5 gr.
Leader,	21 dwts. 15 gr.	Invincible,	19 dwts. 8 gr.
Teazer,	20 dwts. 15 gr.	Nonpareil,	19 dwts. 6 gr.
Gunner,	20 dwts. 5 gr.	Freedom,	19 dwts. 3 gr.

The Roaring Lion, which has heretofore gained so many prizes, appears to be falling off—as does also the white Eagle. The London carries off the most prizes among the reds; the Leader among the yellows; the Peacock among the greens; and the Freedom among the whites.

A yellow seedling, raised by Mr. John Travers, near Ashton-Underline, won fourteen times at eight meetings: seventeen of the heaviest berries, from the seed plant last year, were as follows:—one, 23 dwt. 12 grs.; two, 23, 8; three, 22, 2; four, 22, 0; five, 22, 0; six, 22, 0; seven, 21, 20; eight, 21, 8; nine, 21, 6; ten, 21, 5; eleven, 21, 4; twelve, 21, 0; thirteen, 20, 14; fourteen, 20, 12; fifteen, 20, 11; sixteen, 20, 7; seventeen, 20, 3. The whole seventeen weighing 1 lb., 2 oz., 4 dwt., 16 gr.

This seedling is admitted, by all the growers who have seen it, to be the largest that was ever let out in Lancashire.—*Ed.*

The Metropolitan Society of Florists and Amateurs Dahlia meeting took place at Egyptian Hall, on the 28th of September. The first prize, for one hundred blooms, was taken by Mr. Widnall, whose success, the past year, has been wonderful. We have no room for reports in this number, but in our next shall give all that are of any importance.—*Ed.*

The tree Dahlia.—We have seen some statements heretofore, relative to the tree dahlia, but have doubted the existence of such a plant—that is, one belonging to, or having any connection with, the genus Dáhl*ia*. Like the tulip tree, so called—but which bears but a slight resemblance to that gorgeous flower—the tree dahlia may derive its name from some fancied approximation to the dahlia, as the former does to the tulip, and be a widely different plant. It is, however, accurately figured and described in the *Botanist* for October, and we hope to get a glimpse of that number of the work, if possible, in order to learn something respecting its habits and beauty. It is stated to be thirty feet high.—*Id.*

Coloring Dahlias.—At a late show of the Colchester Horticultural and Floral Society in October, the second prize for twelve dahlias, grown by gentlemen's gardeners, was adjudged to Mr. Mallet, gar-

dener to S. S. H. Smith, Bart., but was afterwards retained by the committee, in consequence of its being discovered that the eyes of the dark dahlias *had been colored*, with the evident purpose of deceiving the judges.—*Id.*

Magnificent display of Dahlias.—At the Cambridge Grand Dahlia Show, on the 6th of September, there was a most magnificent array of dahlias worked into various forms and devices. Two of the most splendid and attractive of these, were from that Prince of dahlia growers, as he has often been called, but according to the *Cambridge Chronicle*, that "levethean" grower, Mr. Widnall. One was a balloon and car, wholly composed of dahlia blooms, suspended from the centre of the room. The wire work, on which the dahlias were placed, was fourteen feet high and twenty-two feet in circumference; there were sixteen different colored compartments, representing the varied stripes of silk, the whole comprising between *sixteen and eighteen thousand* blooms. The other was the words "Grand Dahlia Show," on the outside of the hall, composed of about eight thousand blooms; making the whole number contributed by Mr. Widnall, upwards of *twenty thousand*. Besides these, there were other brilliant devices by other growers, which required many thousand dahlias in their construction.—*Ed.*

Camèllia Frederick Le Grand (Caméll*ia* japónica Flòy*ii*,) is advertised in some of the London catalogues at £7 7*s.* a plant. This is a pretty high price for this camellia, considering the number of years the variety has been in London. We hope that the London nurserymen will, when they become aware of its fictitious name, call it by the true one, C. japónica Flòy*ii*. It is not unlikely that the advertiser of the plant, may think it different from the latter.—*Id.*

Art. II. *Domestic Notices.*

The Agàve americàna in the collection of J. W. Perry, Esq., Brooklyn, N. Y., (some account of which was given in our Vol. IV. p. 361) has made a very fine growth the past season, and was (Dec. 1838) in fine health. Since Mr. Paulsen communicated to us his remarks upon the growth of this plant, it has made four more leaves, making, in the whole, *eleven* during the summer. The plant is now protected from the severity of the weather, by a temporary house made of double boards, and the space between the two filled with straw or hay, and covered with glazed sashes. In one corner of the building, which is about twelve feet square, is a stove, in which a fire is kindled when the temperature falls below the freezing point. Mr. Paulsen intends to keep the temperature as low as possible, and not endanger the health of the plant, so as to prevent it from making a premature growth, which it might do, were the house heated to a temperature exceeding 40°. We saw this plant on a late visit to New York, and should think there was no doubt that it would be carried through the winter safely, and at a slight expense.—*Ed.*

M*ò*rus *multicaúlis.*—This valuable tree has again, after the lapse of two years, been brought into notice, and from the many experiments which have been made upon it, in feeding the silk-worm, all of which have attested its excellence over all other varieties, there has been a great demand for the trees. To such an extent has this demand been carried, that trees, which could not have been disposed of last spring at scarcely any prices, now command from fifty to seventy-five cents each. The consequence has been, that many, who were the fortunate possessors of large quantities of these trees, have realized handsome fortunes. Many individuals, stimulated by the stories which have been circulated in the newspapers and agricultural publications, of the immense profits which have been made in the sale of the trees, have entered into the business, purchased trees, and, though wholly unacquainted with them, have, in most instances, sold at an advance which has afforded them a good profit for their time and labor.

In New England the cultivation of the M*ò*rus multicaúlis has been almost wholly abandoned. Most nurserymen, who formerly commenced their growth in considerable quantities, after having found that the sale of the trees was in no way proportioned to the ratio of increase, have, latterly, paid but slight attention to their cultivation; and now that the demand has been so great, and the prices so exhorbitant, they have but a small stock to offer, on which they might realize many hundred per cent. profit. The severity of our winters, for the three or four past years, has been such as to destroy thousands of trees; and farmers and others, who have left their trees exposed with the hope of acclimatizing them, have lost their whole stock; while other individuals, though not so unfortunate as to lose their trees in this manner, have, from a want of faith in the silk manufacture, taken no pains to increase their stock, and the present period has found them with scarcely a sufficient number of trees to commence their growth another year.

At the south this has not been the case; the trees there stand the winter without any injury, and when once planted in the soil there is very little danger of their loss afterwards; their growth, too, is immense, when compared with the trees of New England. The season, there, is two months longer, and the trees consequently attain to one third more height than in New England. While, therefore, at the north the trees have not been increased, at the south they have been multiplied to a great extent, and of the many thousands of trees which have been offered for sale, and have changed hands the past autumn, two thirds have been the growth of the middle and southern states.

The high price of the trees, it is thought, by many, is injurious to the cause of the silk manufacture; and that it will deter many gentlemen, farmers, and others from entering into the business. We think not. The price of the trees is based upon the fact, that there is not yet, in the country, counting every tree of any size, a sufficient quantity to manufacture five hundred thousand dollars' worth of silk, only *one-fortieth* of the consumption of the country in 1836. Supposing, therefore, that the manufacture of silk can be carried on at a great profit, as has been satisfactorily tested, it will be some time before there will be trees enough in the country, notwithstanding their unbounded increase, to feed worms sufficient to manufacture one half the annual consumption of silk. Taking this view of the

subject, the trees, at double the prices they are now held, would not be more than their intrinsic worth.

Professedly foreign from our province, as the growth of the mulberry tree and the manufacture of silk is, we cannot help expressing our sentiments upon the subject. Whether the *Mòrus* multicaúlis will be the tree *best* adapted to the climate of New England, remains to be tested; but that it is the variety which will afford the best and most profitable food for the worms in the middle and southern states, there is no doubt. Perhaps the Alpine, the Brussa, or the Canton will do better in the severe climate of New England, where large plantations are to be made; at any rate, each and all of these should have a fair trial, and if, from their hardiness, they surpass the Chinese, let them take its place. We shall watch the progress of the cultivation of the mulberry with some attention hereafter, and note down the results.—*Ed.*

Autumnal Marrow Squash.—A friend of ours in Hartford, Connecticut, to whom we highly recommended this variety of squash, so much esteemed in the vicinity of Boston, informs us that it is not so fine as he had anticipated. A small variety, called the Illinois squash, is cultivated around Hartford, and our correspondent observes that, "although he has a great respect for the opinions of his Boston friends," he thinks that the Illinois squash is far superior to the autumnal marrow. While on a visit to Hartford we were presented, by our correspondent, with one of the former; and when we have tested its qualities, we shall not forget to give our opinion of the comparative merits of both.—*Id.*

Bailey red and white giant Celery has been grown around Boston, this season, of enormous size. Dr. Howard, of Woodland, Brookline, has raised some fine specimens. In our garden, we have some roots which weigh five or six pounds. These are far preferable to the common sorts, and always command a high price in the market.—*Id.*

The Rohan Potato.—This celebrated potato will be very extensively cultivated the coming season. It is one of the most extraordinary varieties for productiveness ever known; nor are its eating qualities inferior. Though not held up to be equal to the forty-fold, the Mercers, and other well known kinds for the table, they are, nevertheless, equal, if not superior, to many of the potatoes which are to be found in our markets. For stock there is probably no crop that can be raised more productive. Twelve hundred bushels to the acre can probably be grown, if the statements of Judge Buel and others can be relied on, who have raised them. During the past dry summer, side by side with other kinds of potatoes, the produce was as ten to one. The severe drought affected the crop in a great degree, yet the produce was immense. St. Helena potatoes, a variety in considerable esteem, did not produce a crop that would pay the expense of digging, in the same ground where the Rohan afforded thirteen pounds to one planted. In our notices of vegetables, which will appear in our next number, we shall add some additional facts, relative to their growth, produce, and importance to the farmer.—*Id.*

Pansies, or Heartsease.—Our friend and correspondent, Mr. S. Walker, of Roxbury, now offers for sale all his new and beautiful named varieties of pansies, embracing some twenty or thirty of exceeding elegance, saved from the various sowings during four or five years of his cultivation of this flower, and probably selected from many thousand plants. We have, from time to time, noticed many of

these varieties, and can recommend them to amateurs and gentlemen who are desirous of making a collection of this pretty flower. Mr. Walker was at great expense to procure the most choice seed at first, and has labored long to produce kinds worthy of cultivation. We trust he will find his reward in a large and extended sale the coming spring.—*Id.*

The pleasant Residence of J. Lemist, Esq., together with the grounds, peacheries, graperies, &c. have been purchased by D. Dudley, Esq. What disposition of the grounds is to be made we have not heard. Probably they will suffer the fate of all such places, and be cut up into building lots. The fine collection of plants was somewhat reduced by the sale of many of the best specimens by Mr. Lemist, before it passed out of his hands.—*Id.*

Sabbàtia chloròides var. álba.—A beautiful white variety of this showy native plant was found, the past summer, in the vicinity of Plymouth, Mass., where the parent species grows in considerable abundance. Unfortunately, the specimen was cut before the importance of saving the seeds, to perpetuate the variety, was considered; and the particular locality of the plant is not remembered. The Sabbàtia being only biennial, the same root will not probably flower again, and if this was only a single plant, it is doubtful whether it may be seen again. A friend, who has seen the dried specimen, describes it as very beautiful.—*Id.*

Use of Sulphur in destroying the Wheat Fly.—We see it stated in the *Genesee Farmer*, that a farmer in Montgomery Co., N. Y., has preserved a large wheat crop, the past summer, from the grain worm, by using brimstone in fumigation, liberally, while all around him, who did not adopt this prevention, had their crops seriously injured or destroyed. The statement is taken from an Amsterdam paper, (a journal on the Mohawk,) and is probably correct. The mode in which the fumigation was performed is as follows:—The brimstone was prepared by melting, and in this, strips of old woollen cloth were dipped; these were fastened on sticks and fixed in different parts of the field, and were set on fire, generally in the evening. The matches were given in the greatest numbers to the windward side of the field, and the offensive and destructive smoke of course proved fatal to the insects that inhaled the gas. About one hundred pounds of brimstone were used to one hundred bushels of sowing, and the prevention was complete. The excellence of sulphur for the destruction of the red spider and other insects, in green-houses and hot-houses, is well known, and we have no doubt but the same remedy can be applied to the destruction of all kinds of insects injurious to vegetation. We hope that farmers and gardeners may each be induced to try the experiment fully, and settle its efficaciousness at once.—*Ed.*

Chinese Corn.—This is a new variety, raised by Grant Thorburn, of Hallet's Cove, L. I., from seeds said to have been taken from out of a chest of tea from Canton. According to a statement of Mr. Thorburn's, it is a most prolific and early variety, producing *twice* as much as the Dutton, and full as early. We shall notice it in our article on new vegetables, &c. The seeds may be procured of Hovey & Co. of Boston, Thorburn, of New York, and other seedsmen.—*Id.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, Oct. 27*th*, 1838.—*Exhibited.* From R. Manning, Brugmansbirne pears, and black apples. From Jos. Balch, a fine Portugal quince, weighing sixteen ounces. From Dr. Joel Burnett, Southborough, Burnet pears. From Peter Fay, an unknown variety of apples.

November 17*th.—Exhibited.* From the President, Napoleon, Lewis, Passe Colmar, Wilkinson, and Duchess of Angouleme, (the latter weighing 16 3-4 oz.) pears. From R. Manning, beurré Duval, and Newtown Virgoulouse pears; also, Killam Hill, Fall Harvey and Bean apples. From W. Kenrick, Napoleon, and Duchess of Angouleme pears. From S. Downer, Catillac and Bezi Vaet pears, and Pomme de Niege (snow apple) Flushing Spitzemberg, Brussels pippin, and American Nonsuch apples. From N. Clapp, Lewis pears. From Geo. Browne, Beverly Hasle pears. From Rev. H. Ramsdell, Thompson, Con., Nichols's winter sweet, Chandler, Reddick, Pomme Royal, Randall's red sweet, and red pumpkin sweet apples. From Mr. P. Sawyer, Arwigsburg grapes, and an unknown variety.

November 24*th.—Exhibited.* From R. Manning, Bishop's Thumb, Surpassse St. Germain, and pound pears, and Canada russet apples. From R. Ward, pears from a tree imported from France, the name of which was lost, but which are called the pond lily pears, from a resemblance in their odor to that of the water lily. From T. Magoun, jr. Medford, a basket of pears, the name unknown; in size, shape, and color they resembled the Bezi de Montigny. Dix pears were presented, the produce of the original tree, and kept in fine order.

December 1*st.—Exhibited.* From B. V. French, Wilkinson pears. From S. Walker, Chaumontelle pears and Nonpareil apples. From James Eustis, South Reading, spice, Trunnell and Ben apples, the latter a handsome and good fruit. Mr. Eustis communicated a letter with these apples, stating that the Ben apple is supposed to be a native. The original stock was standing, till within a few years past, on a farm belonging to the late Dr. Hunt, of South Reading, and which estate was formerly owned by Benjamin Smith, from whence it received the name. It was probably never grafted, as suckers have been taken from the tree which produce the same fruit.

December 8*th.—Exhibited.* From R. Manning, Glout Morceau, Burgomaster (of Boston,) winter orange, and Prince's St. Germain pears; also, Hooper apple, Danvers winter sweet, and Pomme Sans pippin. From Cheever Newhall, Baldwin apples. From W. O. Gordon, Dorchester, Dix pears. From W. S. Packard, Dorchester, winter pears.

December 15*th.—Exhibited.* From E. M. Richards, Bicknell or quince pears; also, wine apple (of Cox,) and another variety, the name unknown. From R. Manning, Chaumontelle pears and Danvers winter sweet, Bellflower and Pennock's red winter apples. From Jona. Warren, African Prince, Parks and American Nonsuch apples; the latter, however, is not the same as the Nonsuch, which is an English variety. From H. Aspinwall, Brookline, pears from a

tree received as the Monsieur, but which prove to be the Burgomaster (of Boston) pears. From M. P. Sawyer, Hooper apples.

The committees on fruits and flowers were to meet on the 29th of December, to award premiums for the past year.

Art. IV. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
Common, per bushel,	50	60
Chenangoes, per barrel,	1 75	2 00
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 50	1 75
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	2 50	—
Eastports, per bushel,	1 00	—
Sweet Potatoes, per bushel,	1 50	—
Turnips:		
Common, per bushel,	25	37
Common, per peck,	12½	—
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	4	6
Yellow, per bushel,	1 00	—
White, per bushel,	1 25	1 50
White, per bunch,	4	6
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	8	12½
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoys,	50	75
Drumheads,	75	1 00
Red Dutch,	75	1 00
Cauliflowers, each,	12½	25
Brocoli, each,	10	15
Lettuce, per head,	6	8
Celery, per root:		
Giant red and white,	10	20
Common,	6	10
Spinach, per half peck,	25	—
Tomatoes, per half peck,	—	—

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes:		
Autumnal Marrow, per cwt.	1 50	2 00
Winter crook-neck, pr cwt.	1 00	1 25
Canada, per cwt	2 00	—
Pumpkins, each	12	25
Fruits.		
Apples, dessert, new:		
Common, per barrel,	1 75	2 00
Common, per bushel,	50	75
Baldwins, per barrel,	2 00	2 50
Sweet apples, per barrel,	2 00	2 50
Golden Pippins, per bbl.,	3 00	4 00
Greenings, per barrel,	2 00	2 50
Russets, per barrel,	2 00	2 25
Blue Pearmains, per bbl.,	2 00	2 50
Pears, per dozen:		
Chaumontel,	20	25
Burgomaster,	37½	—
Beurre Diel,	25	50
Winter St. Michaels,	50	—
St. Germain,	50	75
Baking, per bushel,	2 00	—
Grapes, per lb:		
Malaga,	25	—
White sweet-water,	—	—
Citron Melons for preserves,	12½	—
Cranberries, per bushel,	1 50	2 00
Quinces, per bushel,	—	—
Berberries, per bushel,	1 00	1 25
Lemons, per dozen,	20	25
Oranges, per dozen,	—	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	1 75	2 00
Walnuts, per bushel,	2 00	2 50
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—Our last report, for want of room, was not accompanied with the usual remarks upon the state of the market. At this

season of the year, however, there is but a slight alteration in the prices of the principal articles. Since November, there has been but a slight change. Cold weather set in rather earlier than was anticipated, and some crops were not all harvested; but we believe, with one or two exceptions, no material damage was done to any of the principal productions for the market.

Potatoes have been received from the eastward in sufficient abundance to keep the market tolerably well filled with a good assortment; Eastports are rather scarce; but of other kinds there is an abundance. The present week about fifty tons of English potatoes have arrived, but probably in a very bad condition; having been taken in in bulk, and been out upwards of eighty days, the whole have been completely heated and steamed though. They were of handsome appearance, and would, undoubtedly, if they had been received in good condition, sold well. The market appears to be now amply stocked, and sales less brisk at the date of our last. Turnips are abundant and very superior. Of beets, carrots, &c. &c., the usual supply of good quality. A tolerable stock of onions by the bushel; bunched ones are rather scarce.

Cabbages are abundant and good; fine drumheads and Savoys come to hand. A few excellent cauliflowers, probably enough for the demand, which is yet limited, have also been received. Celery is good, though, from the sudden cold of the latter part of November, the whole crop was not got in, and consequently the stock is lighter than usual. Spinach comes in good. Autumnal marrow squashes, though there is yet an abundant supply, have, from the advance of the season, become somewhat more in demand, and prices range a shade higher than our previous quotations. A great many of spurious quality are in the market; the only really true ones, which are brought in, are raised in the vicinity of Salem, and particularly at Danvers, where no other kind is grown. From the fact that they have become mixed, more or less, from the negligence of the market gardener, they are losing their good name and reputation.

Of apples there is a good supply, and no alteration worthy of note has taken place, since our last; there are scarcely any sweet ones in the market. Some very good Burgomaster pears have kept up the supply of this fruit. Grapes remain the same; the stock is rather limited. Cranberries are in considerable demand, and prices have advanced. Other fruits, chestnuts, &c., about the same as our November report.—*Yours, M. T., Boston, Dec. 30th,* 1838.

HORTICULTURAL MEMORANDA

FOR JANUARY.

Another year has passed, and we have verged upon a new one. Well, if we have not spent the past one idly, or squandered away our time heedlessly, we need not opine that it has gone to oblivion. We wish all our friends—our correspondents and subscribers—a happy new year and a prosperous one; and while we hope that those which have passed, have not been without their sources of pleasure, hap-

piness and contentment, so we trust that the present one, which we are now entering upon, will afford us enhanced, and, if possible, far greater enjoyment. Proffering advice to our friends, under this head, and reminding them of their monthly labors through the season for four years, and now commencing with the fifth, we hope that a sincere and hearty wish for the continuation of life, health and prosperity to all—and particularly to those who have given us their aid and support, since we have undertaken the arduous task we are now performing, will not be considered here as uncalled for or misplaced.

The labors of the garden are not urgent nor fatiguing this month. Where there is neither green-house, hot-house, hot-bed, or frame, the gardener will have scarcely any thing to do, unless it is to tend a collection of plants in the parlor or cellar. As the season advances, however, his duties multiply, and by the month of March there will be plenty to do. Something can be done this month to forward the work of planting time; labels may be made, painted,and marked in anticipation; sticks, for training up early opening flower plants, may be also got out and prepared.

In the green-house and hot-house the active gardener will find much to do: plants will require continual cleaning, the pots to be occasionally washed, and the plants to be all trained up that need it; some things will now require repotting; others will not need it till later. Propagation of many plants may be carried on now successfully. Dahlias may be started where the object is to get good strong plants. Bulbs that have done flowering will not need much water. Labelling plants, &c. may be now done before more important operations will have to be performed.

In the garden, where there are hot-beds, frames, &c. at this season of the year, there is also plenty of labor to be continually going on. The preparation of horse manure, for hot-beds, must commence immediately. Plants in frames will also require care, and, as the season advances, to be exposed to the sun and air. Besides all these things to attend to in the forcing garden, the industrious gardener will not leave any thing undone which will facilitate his labors during planting time.

FLOWER DEPARTMENT.

Camellias should be carefully supplied with water, and all decayed blooms should be taken from the plants. Repotting may be commenced the latter part of the month.

Amaryllises should be now potted, if not done before.

Dahlias may now be brought forward, if wanted for early blooming. Pot the roots, and place them in a warm part of the house.

Verbena Tweedieana may be now increased by cuttings or layers with success.

VEGETABLE DEPARTMENT.

Cucumber beds should be now made up. A one or two light frame will be sufficient for the seedlings, which should be hilled out in three light frames. As soon as the seeds are up, commence the preparations for the beds in which they are to produce fruit.

Lettuce seeds may be planted in the beds with the cucumbers.

Rhubarb roots in pots may be now brought forward under the stage of the green-house.

Asparagus roots may be forced in beds prepared in the same manner as those for the cucumbers, using, however, less manure.

THE MAGAZINE

OF

HORTICULTURE.

FEBRUARY, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Remarks on preserving tender Shrubs and Plants during the winter, with some hints on Acclimation of Trees.* By A. J. DOWNING, Botanic Garden and Nurseries, Newburgh, N. Y.

THE amateur of fine flowering shrubs or plants will often find himself thwarted in his attempts to cultivate, in the open air, many beautiful ligneous and herbaceous species, which thrive, perhaps, with all their wonted vigor and luxuriance, during the warm and cloudless days of our almost tropical summer, but which the severe and protracted cold of our winters either partially or wholly destroy.

Such trees and shrubs as are not originally from the *tropical* regions, (which latter require the aid of the green-house or stove,) will, many of them, bear our winters in the Middle States with but a slight protection afforded, either by situation or actual covering, during the most inclement season. How in the best manner to apply this protection, so as to insure success, is a question of some importance to the novice in such matters.

It is a very common practice, even with many who consider themselves somewhat experienced horticulturists, when they wish to place a tender or half hardy shrub in a very favorable

location, to choose some *warm sheltered nook*, fully open to the *sun's rays* during winter. Here they flatter themselves the concentrated warmth of the aspect, and the many genial thaws which will take place in so comfortable a position, cannot but ensure the preservation of the individual shrub or plant. In the spring it is with much surprise they behold their favorite blackened and dead in all its leading shoots; and their astonishment will be still greater, should they have chanced to leave a duplicate of the same species under the *shade* of some cold north wall or building, where it will most probably be found perfectly green, fresh, and uninjured in its wood or branches.

The *rationale* of the foregoing facts seems to be as follows. In our cold and protracted winters, when the thermometer is depressed below the zero of Fahrenheit, the sap vessels of all half hardy plants become completely frozen. At the same time our sun, during many days in winter, shines out with an almost undimmed brightness and warmth, and, rapidly thawing the fluids in these sap vessels, the latter are so distended by the sudden melting and perhaps subsequent freezing, as in many places to be completely burst and incapacitated from performing the functions for which they are intended. Those plants, however, which are protected from the sun's rays, and, consequently, from the deleterious effects of this rapid change in the sap from partial fluidity to congelation, but which are, on the contrary, restored to their former state by means of a *gradual* thawing, as, for example, by the slowly increasing warmth of returning spring, they will, in most cases, be found to have sufferred little or nothing by the severity of the cold to which they have been exposed.

Acting in accordance with this, we may protect many tender plants, simply by placing them out of the reach of the sun's rays during winter. On this principle, a northern exposure will, in most cases, be found greatly preferable to a due south aspect. After the unparalleled rigor of the winter of 1836–7, peach and other tender fruit trees, planted on the northern sides of hills, were found to be but little injured, whilst those on warm southern knolls were almost universally destroyed throughout the Middle and Eastern States.

Carnations, monthly roses, and many other plants of similar habits, suffer severely in the more northern parts of the United States, if left in the open ground without covering; but, as many culturists are aware, the trifling shelter of a little straw, salt hay, or stems of decayed plants, thrown over them to protect them (not from the cold, but from the injurious influence of the sun) they are almost as perfectly preserved, as in a more temperate climate.

Cold frames, which are pits for the preservation of tender plants, without fire, are constructed upon this principle. A friend of ours has succeeded in preserving a very considerable collection of camellias in the open air in a thin board frame without artificial heat, and with only the slight covering of the common frame lights and a few layers of mats above them. During winter this was scarcely ever opened, except occasionally, to admit the air, but never the sun, and, at the approach of spring, the frame was again subjected to the full influence of the sun and air in the most careful and gradual manner.

Such half hardy trees or shrubs as the *Acàcia julibrissin*, the white European jasmine, &c., may be kept in fine condition, simply by sheathing them with straw at the approach of winter. Even the Lagerstræ`mia indica, and *Aúcuba* japónica, may be kept in full vigor in the open air, in this latitude, by this practice. Some of the more tender magnolias require and amply repay this trifling care, and almost every half hardy shrub, or tree, may be carried through the most inclement portion of our year, in a state of comparative security in this manner.

It is well known to those who have made many experiments in the naturalization of half hardy trees or shrubs, that the success with which they withstand the effect of intense cold depends mainly upon the complete maturity of the young wood. Should the shoots of the current year, even of our more hardy trees, be caught by an untimely frost, before they have ripened, they will suffer greatly by the combined action of the frost and sun upon the well filled and immature sap vessels; while, on the contrary, even comparatively tender trees will withstand very severe cold, if they are furnished only with sound mature wood. This will point out to the culturist the necessity of placing the half hardy shrub or tree upon a dry and warm subsoil, where it will not be likely to be urged into late growth by excessive moisture of the soil. In such situations, naturalization of tender trees may be carried on with the best hopes of success.

Nearly all half hardy trees will require the sheathing of straw before mentioned, over the whole of their exposed stems and branches while they are yet young; as the tree advances in size, only the upper branches will probably need protection until, in a few years, if the specimen is favorably situated, the covering may perhaps be dispensed with altogether, the wood having become sufficiently hardy, and the tree so much acclimated as to bear the full rigor of the season.

A. J. Downing.

Newburgh, N. Y., Dec. 1838.

ART. II. *Observations on heating Green-houses, Hot-houses, &c., with hot water.* By J. W. PAULSEN, Gardener to J. W. Perry, Esq., Brooklyn, New York.

As the following remarks on heating green-houses and hot-houses, by hot water, may, perhaps, be of some interest to gentlemen, who are erecting such buildings, I have sent them to you for insertion in your Magazine, should you deem them of sufficient importance.

Horticulture has made, within a few years, great advancement in this country; a better taste in the erection of green-houses, and hot-houses, and other garden structures, has prevailed, and the desire to cultivate the more choice and tender plants has increased of late, beyond the most sanguine expectations. The citizens of the United States can certainly look back with pride and satisfaction upon the growing taste and love for the science of gardening, which is generally displayed throughout every part of the country.

It is impossible to grow plants well, which require artificial heat, without giving them a steady and proper temperature, and particularly those whose growth is confined to hot-houses and forcing-houses, where a very high degree of heat is necessary to be kept up the whole winter season. It is highly important that the heat should be moist and like the natural atmosphere, and not of that dry and scorching character which is so prejudicial to all vegetation. No method of heating houses, for the growth of plants, appears so well adapted to effect this object as the hot water system; and amateurs and gardeners do not appear to appreciate the importance of this mode so fully as would be supposed.

In the conservatory, hot-house, and green-house under my care there are two hundred and six feet of hot water pipes; and, having effectually succeeded in keeping up a high temperature, I flatter myself that I can speak with some experience upon this mode of heating; and I shall endeavor to show the superior advantages of the hot water system, in warming green-houses and hot-houses, over the old method of heating by brick flues. In the first place, I shall state the objections to the flues; and, secondly, some of the principal advantages of hot water pipes.

Objections to brick flues.—1st. Flues diffuse a dry, and, therefore, a very injurious heat, and give an unequal tempera-

ture; because they always throw out almost a burning heat near the furnaces, while at the extremities they are nearly cold.

2d. Flues are apt to crack, and, consequently, allow the escape of smoke and deleterious gases into the house, which are injurious to all kinds of plants.

3d. Flues must be cleaned and repaired every year, and, besides the expense attending these operations, such plants as cannot be removed are covered with dust and soot.

4th. Flues, by diffusing such an unequal degree of heat, and their liability to become cold, demand unremitted attention during the long and cold nights, and require the gardener to be up late to the injury of his health; moreover, in extensive buildings, it is not only very difficult to keep the frost out, but impossible to regulate the temperature.

Principal advantages of heating by hot water pipes.—1st. Hot water diffuses a moist and bland heat, most congenial to all kinds of plants, and an equal degree of temperature in all parts of the house, in consequence of the circulation of the hot water through the pipes, which traverse all parts of the building.

2d. Hot water, considered in regard to economy in fuel, is of the greatest importance. The very small quantity of coal which is required to keep the water at a proper temperature, when once heated, is almost incredible. Although the expense of putting up an apparatus is, at first, very large, yet the very great saving of fuel, and the stability of the pipes (scarcely ever needing repair) will be found, in the end, much cheaper than brick flues.

3d. By the hot water system the highest degree of heat may be maintained in the houses during the coldest nights, without the need of additional fuel after the usual working hours in the winter; and the constant attendance of the gardener, who must watch all night with brick flues, is dispensed with, thus relieving him of the unpleasant, as well as unhealthy, task of attending upon the furnaces half, and sometimes the whole, of the long, cold, winter nights.

4th. From hot water pipes no smoke, gas, or steam escapes, and the plants are much easier kept clean from fall till spring.

5th. The pipes, if properly made and neatly put up, add to the appearance of the interior of the house.

I am well aware that it is the general supposition among many amateurs and gardeners, especially those who object to the hot water system for warming hot-houses and green-houses, that it is impossible to maintain the necessary degree of heat without the aid of flues; but this I can confidently assert to be

incorrect. If the apparatus is well constructed and properly attended to, it cannot but work to the perfect satisfaction of every person. On the construction of the furnaces, the boilers, and the reservoirs, depends, of course, every thing. The failure of many of the apparatuses, which have been invented, to effect the desired object, has undoubtedly prevented many amateurs from adopting this system of heating their structures.

The first person who put up hot water apparatuses in this vicinity, was Mr. David Anderson, 61 Tillory Street, Brooklyn. Some years since, he put one up for Charles Hoyt, Esq., on Brooklyn Heights, which gave the greatest satisfaction, and answered all the purposes for which it was intended. Since that period, Mr. Anderson has put up others in different parts of the country, and they have always been found to be perfectly adapted to the purposes of heating large houses. Mr. Anderson, having, consequently, devoted some years to the study of the system of heating by hot water, for the purpose of maturing a plan, which should combine the most advantages, has, at last, made such improvements upon his original invention, particularly in the economy of fuel, and the raising up a quick heat in the house, as to render his system very complete.

Having seen several modes of heating by hot water in operation, I am well assured that Mr. Anderson's is superior to all others, both in the economy of fuel and strength and durability of the pipes and boilers. I have, therefore, thought that a plan so generally liked by all who have had it in operation, should be generally made known to the horticulturists throughout the country. The first cost of Mr. Anderson's apparatus is large, and this has prejudiced some against it; but I am perfectly convinced that his mode of heating, from its superiority to any other system, will, in the course of time, be generally adopted throughout the country.

Brooklyn, N. Y., Nov. 1838. J. W. Paulsen.

Art. III. *Some Remarks on the sizes of Flower Pots usually employed for Plants, with hints upon the importance of having some standard for classifying the various sizes.* By the Editor.

The great number of plants which are grown in pots, and the frequent rules which are laid down in articles treating upon

the management and cultivation of flowers, seem to render it somewhat important that there should be some system adopted for classifying the various sizes. So far as we have given advice upon the growth of plants, we have always had a classification of our own, by which we might be understood; and when our correspondents have had occasion to recommend a particular sized pot, we have generally accompanied such designation with a reference to our own scale. But it is desirable that such a classification should be not only generally known, but put in practice throughout the country.

It is certainly a matter of no little importance to know what particular size is recommended in an article; for, of all the plants cultivated in pots, by those persons who are but partially acquainted with their management, probably one half are overpotted. It is, therefore, necessary that, in speaking of a particular sized pot, it should not be designated as a "four cent" or a "six cent" pot, a "forty-eight" or a "sixty-four" pot, a good sized pot, or a moderately large pot. Prices of pots vary in different sections of the country, and what we might call a "good sized pot," another might deem otherwise, and to designate by inches is a waste of words; rather let them be known by simple numbers, and these numbers to correspond to a scale by which pots should be made. We apprehend that such a system would be of great benefit to every person interested in the cultivation of plants.

The pots made in the vicinity of Boston, New-York and Philadelphia, are each different, both in the sizes and materials. Those around Boston are of the neatest proportions and finish, and those at Philadelphia of the best materials. The New York pots are, we think, so far as we have had an opportunity to see them, inferior to either: they appear to be made with less regard to beauty, and are generally burnt harder than they should be, which renders them improper for many delicate plants.

We do not wish to speak in too high praise of the pots manufactured in the vicinity of Boston, for fear that our southern friends will think we have too much of an affection for our own things; but, from the satisfaction which we have heard expressed by amateurs, who have visited the collections of plants around Boston, and from the fact that hundreds of pots are sent south, we believe that we are not claiming too much in saying that those made here are as good an article, if not superior, to those of any other city.

The beauty of a plant is, in a great degree, enhanced or marred by the proportions and finish of the pot, in which it is

grown. We have seen many a handsome plant in an ill-shaped pot, which a florist or nurseryman could hardly dispose of; while we have seen those of little or but slight beauty, growing in a neatly made pot, sold without any trouble.

A parlor window should never be disfigured with unsightly looking pots, which are too often found in that situation. Vases and fancy pots have often been sought after to remedy the defect of ugly pots; and, in most instances, on account of the impossibility of finding those of handsome shape.

We have, ourselves, paid some little attention to the manufacture of flower pots, and have endeavored to improve their appearance and quality as much as possible, and we believe we have effected some good alterations. They are generally made too thick and heavy; often too deep; and invariably burnt too hard. Too frequently there is not sand enough in the composition, which makes the material too compact, and prevents quick evaporation, which is necessary to the welfare of the plant. It is not expected that all manufacturers will make them equally good. Amateurs and others, using a great number, can, however, knowing what are best suited to the plants, give orders to have them made accordingly. Ericas, and all New Holland plants, require pots which should be burnt as little as possible, to give them strength and a good color. These plants often die off from a stagnation of moisture, caused by the firmness of the pots, preventing the excess of water from passing off by absorption and consequent evaporation. More judgment is requisite in the manufacture of flower pots than any other kind of earthern ware. Nurserymen do not appear to be sufficiently aware of the importance of having the pots properly made. With these hints on the quality of flower pots, we proceed to give a scale of sizes, which we should wish to see adopted by all growers of plants in the country.

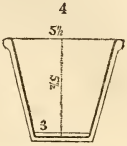
The smallest size made, is usually called the *thumb* pot, from the circumstance that, in manufacturing, the thumb only can be used inside to form the pot. The usual dimensions are about two and a half inches wide at the top inside; the same deep, and one and a half wide at the bottom. From its small proportions, and the little use that is made of it, except by propagators, we do not include it among those sizes which we designate by numbers.

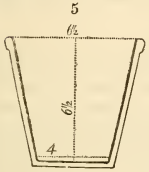
The dimensions of the different sizes are all *inside* measure; the pots should be of sufficient thickness to be strong without being heavy, generally varying from a quarter to half an inch.

The next size (*fig.* 2) we designate as No. 1, and its dimensions are as follows: three and a quarter inches wide at the top, and three and a quarter in depth, and two inches wide at the bottom.

No. 2 (*fig.* 3) is the next size, and measures four and a half inches wide at the top, four and a half deep, and two and a half inches wide at the bottom.

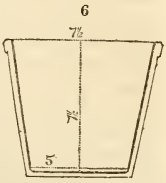
The next size is No. 3, (*fig.* 4,) and measures five and a half inches wide at the top, five and a half inches deep, and three inches wide at the bottom.

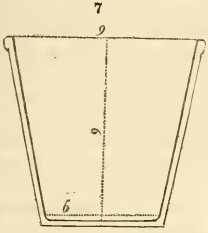




The next size, No. 4, (*fig.* 5,) is six and a half inches wide at the top, six and a half inches deep, and four inches wide at the bottom.

No. 5 (*fig.* 6,) measures seven and a half inches wide at the top, seven and a half inches deep, and five inches wide at the bottom.





The last size, No. 6, (*fig.* 7,) measures nine inches wide at the top, nine inches deep, and six inches wide at the bottom.

As few pots are used above the latter size, and may therefore be called *extra*, we have not designated them by a number. They are scarcely ever made by the manufacturers, unless expressly ordered by persons who desire such for particular purposes. Wooden tubs, or boxes, generally answer as well or better than pots of large size, as they are apt to get broken, especially in transportation.

The sizes of the pots which we have now recommended, correspond very nearly to the English pots, viz:—No. 1 is what is generally termed a forty-eight; No. 2, a thirty-two; No. 3, a twenty-four; No. 4, a sixteen; No. 5, a twelve; and No. 6, an eight. This explanation may be of some benefit to

those who read the English periodicals, in which the pots are always designated in this manner.

Should our remarks be the means of establishing some fixed scale for sizes, among nurserymen and florists, we shall feel that they have not been without some value.

ART. IV. *A few Observations on the comparative hardiness of American and European varieties of Fruits.—Old and new sorts compared.* By E. M. R.

AN impression extensively prevails, and it is very generally taken for granted, that varieties of fruits *raised from seed in this part of the country* are much more hardy than *imported ones*, and, consequently, less likely to be affected by the frequent and sudden changes in the atmosphere, for which this climate is so remarkable. Notwithstanding the popularity of the foregoing theory, it is thought that it is not warranted by facts, (which by the way are stubborn things,) one or two of which, we will endeavor to examine. Take, for example, the "Wilkinson" pear. Has not the fruit, in some instances, exhibited all the symptoms of blight, &c., which are supposed to belong to the *old* varieties, and to be infallible proofs of their being *worn out* sorts? And all the "Lewis" pear trees belonging to one person, three or four in number, were killed by the very severe winter we had several years since. As regards apples, it may be asked, what imported kind suffered in comparison with our justly esteemed "Baldwin," whole orchards of which were swept off, as with "the besom of destruction," the winter alluded to?

Another prevalent error is, that the cracking, blighting, &c. of fruit furnishes conclusive evidence of their being old and worn out varieties. To controvert this position, in addition to the two American varieties above mentioned, we will name, of foreign origin, the "Bezi Vaet," the "Forelle" or "Trout" pear, and the "Beurré Diel," all of which, more or less, have exhibited all the characteristics which are thought to furnish indubitable marks of their being old, worn out and discarded varieties.

We think that instances enough have been adduced to prove,—that American sorts are not more hardy than the Belgian or other imported sorts, and that the cracking, blighting, &c. does not *always* furnish conclusive evidence of their being old and worn out varieties.

If it should be asked, what practical utility can result from the discussion?—we may answer by asking, of what practical use can it be, whether correct or wrong theories prevail in regard to any subject? If we shall have been the means of eliciting any communications from your correspondents, we shall not have failed of one important object.

E. M. R.

Dedham, January 4, 1839.

ART. V. *Some Observations on the Rohan Potato.* By WILLIAM KENRICK.

THE Rohan potato, which is said to have originated in Switzerland, is so named for the Prince of Rohan, and is supposed to be the most productive potato in the world. This potato grows very large, and the quality, though not superior, is good, or in precise conformity to the description of Judge Buel, which I have subjoined. The tops grow with great luxuriance, and corresponding to the produce of the potato—therefore the hills should be allowed wide space, that the rays of the sun be not wholly excluded from the soil. The ground for their reception should be ploughed early, fine, and deep, and, for the production of a great crop in our climate, they must be planted *early*, or as soon as the ground is sufficiently warmed for their reception ; but two eyes being sufficient to plant a hill.

The seed of those which I now send you, was imported by me, late in the spring of 1837, direct from France; this being the second importation of the season, the first having perished on the passage. They were, consequently, planted late; yet, nevertheless, produced an abundant crop. Two potatoes of the same, which were cut up in single eyes and planted by my brother, at the same late season *produced five pecks.* This

year, the Rohan potatoes yielded me a large crop, while other kinds yielded not *one third* of a crop.

Of the great productiveness of this potato, we have many extraordinary accounts. Mr. Harger is stated to have raised *one hundred and forty-four pounds* from *thirteen ounces* of seed; and, as we are informed, some of his tubers thus raised, were sold at the horticultural fair at New Haven, at one dollar each; and from a single potato divided into eyes, the Hon. William Clark, of Northampton, has raised a barrel.

Judge Buel, the able and indefatigable editor of *The Cultivator*, fully concurs in recommending *deep ploughing and early planting*, as essential to the production of great crops of the Rohan. I subjoin a few extracts from his remarks:—

"We have cultivated the Rohan potato two seasons, and feel justified in recommending them as a valuable acquisition to our husbandry.

"*First*,—Because their quality, for the table, will justify it. If not superior, they are good. The flesh is yellow, solid and of good flavor.

"*Secondly*,—Because they admit of a great economy in seed; two eyes sufficing (and many of the tubers have from thirty to forty eyes,) to plant a hill, and three or four bushels to plant an acre of ground.

"*Thirdly*,—Because they require comparatively little labor in harvesting; a man being able to dig thrice as many of them in a day as of ordinary kinds. The tubers are very large, one hundred and ten of the largest of our crop completely filling a flour barrel. Twenty-seven bushels were dug in our presence in one hour, the tops being pulled, by one man, at moderate labor.

"*Fourthly*,—Because they yield an abundant crop. From *eighty-five* rods of ground we gathered *one hundred and seventy-five bushels*, while our common cultivated kinds did not yield us half a crop."

Respectfully, your friend and humble servant,

William Kenrick.

Nonantum Hill, Newton, Dec. 25, 1838.

Since our remarks upon this variety, in the early part of our last volume, a great many experiments have been made in its cultivation, and the result of all is, that it has been proved to be the most decidedly prolific potato ever raised. We have some further remarks to make upon it in a future number. —*Ed.*

Art. VI. *On the Cultivation of the Cauliflower.*

By J. W. Russell.

Your Magazine having, by this time, an extensive circulation through the different states in the Union, it is not (in my humble opinion) unreasonable to suppose, that, through the perusal of its pages, by your numerous subscribers, a greater amount of practical knowledge has been obtained, of the most approved methods of cultivating and propagating rare and choice flowering plants, than could, in any other way, have been so easily acquired.

I beg leave, therefore, to depart from the beaten track, and offer you a few brief and practical remarks on the propagation and cultivation of the cauliflower, which is not only a very curious flower to examine, but is, when properly cooked, one of the most delicious and delicate vegetables of the whole *brassica* or cabbage tribe. The flower *alone* is the part for which the plant is cultivated: the flower buds form a close round head, and very white, and a good flower will measure from six to ten inches in diameter; but if the flower is cut after it has begun to expand or open, it will, of course, appear larger than what I have stated; but it should be known, that it is by no means so valuable as it was in its firm, close state.

Cauliflowers are raised from seed, sown as early in the spring, on a warm southern aspect, as the frost leaves the ground; again, for the autumn crop, the first week in June, on a *northern* aspect. Half an ounce of seed, if good, will be sufficient to sow a bed four feet wide, by ten or twelve in length. The soil for the seed bed ought to be light and in good heart, but not too rich with manure; but those who have frames and glass lights could forward the plants at least six weeks, by making a slight hot-bed, and covering the manure about six inches with good fresh mellow loam. About the middle of March sow the seed, being mindful to secure the frame all round with dry litter, laying boards on the top of it to keep out the rain or snow, as well as to secure the soil in the frame from the frost, which might, otherwise, penetrate through and freeze it. Supposing that the seed is sown in a frame, and it having been secured as before advised, the plants will soon make their appearance, when plenty of air must be given, every day when the weather will admit of it, by propping up the glass, in order to make them strong and healthy. The plants by the mid-

dle of April will be ready to transplant, which might be done in the same frame they were sown in, if there is not another at hand, by first taking up the plants, carefully, with a trowel, and carrying them to some warm sheltered spot, until you get the frame ready. All that would be necessary to be done, is to remove the soil from the bed, and then to fork it well over, adding a little more manure if the bed is cold; but if the bed has any heat in it, no more will be requisite, as a slight warmth is all that is wanted. After the manure has been nicely leveled with the fork, and beat down solid, replace the soil and rake it smooth; then provide yourself with a board, the width of the frame, placing it on the soil to stand on, in order to prick out the plants about four inches apart; select the strongest first, and so go on, until all of them are transplanted.

As soon as the plants begin to grow, give an abundance of air, every fine day, and water when the ground appears dry. Every warm day, the glass should be taken entirely off the frame. If the weather is fine about the 20th of May, the plants may be put out in the ground, which should be prepared for their reception, to fruit or head. A mellow, loamy soil should be prepared, that has had a bountiful supply of well decomposed or rotten manure; holes may be opened about two and a half feet apart, from centre to centre, and about twelve in diameter, taking out six or eight inches of the soil, and filling it with the kind of manure spoken of, and mixing the under soil and the manure well together. By taking the plants carefully from the bed, with a hollow trowel, they will receive but a trifling check, if any, when transplanted.

The plants must now be kept in a growing state, by giving them plenty of manure water (which might be easily obtained in any farmer's yard) three or four times a week, if there should be a continuance of hot dry weather. This is where the whole secret lies, in the growing of the cauliflower, i. e., to keep the plants growing from the time of planting, until you perceive the flower has attained a sufficient size for cutting.

If the seed is sown in the open ground in June, a similar mode of culture should be followed in the transplanting, and final planting, as recommended above. These plants will not begin to show their heads or blossoms until late in the autumn; but if any of them should not complete their growth, they will do nearly as well as in the open ground, if placed in a good cellar where there is a good portion of light. Remove them carefully, and place the roots in good earth, and the operation is completed.

Plants for producing an early crop in the spring, should be protected in cold frames during the winter. The seed should be sown the latter part of July, or the beginning of August. The plants may be set out in No. 2 pots; and upon the approach of cold weather, they should be set in a frame and protected from frost. Take advantage of every warm day in January and February, to open the frame, and in the month of March they may be removed to a declining hot-bed, where they should be turned out of the pots into the soil. Here they may remain until the middle or latter part of April, when they may be removed to a warm spot in the open ground, as before advised. If a hollow trowel is used, and the plants are taken up with a good ball of earth, they will not suffer in transplanting. Hoe and water, if the weather should be dry, and by the end of May, or early in June, fine heads of flowers may be obtained, thus keeping up a succession the year round. In large private establishments, or where they are raised for the market, they may be grown in deep frames, where they will be fit for cutting the latter part of April. At Mr. Cushing's, cauliflowers are cut for the table as early as March, and the supply kept up the whole season by successive sowings, as here recommended. A good mellow soil, and plenty of water, during our hot summers, are the only requisites to ensure fine heads of flowers.

In another article, I shall give the cultivation of that fine vegetable, the Brussels sprouts.

Yours, J. W. Russell.

Mount Auburn, Cambridge, Jan. 1839.

Our readers will undoubtedly be gratified to learn that Mr. Russell will continue the subject of the cultivation of many of the choice varieties of garden vegetables. Such information is greatly wanted. Very few of the most common vegetables are seen in that state of perfection to which they are capable of being brought by judicious cultivation. In the hands of no person could this subject be better handled. Mr. Russell's practice in the cultivation of vegetables has been very extensive, both in England, and in this country, and we trust that his remarks will be the means of not only introducing such vegetables as the cauliflower, Brussels sprouts, &c., into more general notice, but of imparting such practical information as will lead to their cultivation in the highest state of excellence.—*Ed.*

ART. VII. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

Botanical Intelligence.—M. Noisette has dedicated a plant to the head of the reigning dynasty of France, Louis Philippe I. It is called the Philip*odéndron* règium, or Royal Philipodéndron. M. Noisette first met with the plant in England, and introduced it to France, where he multiplied it and distributed it under the name of *B*étula bélla. After ten years' care and labor, it attained only the height of three feet. M. Noisette then planted it in the open ground, where it soon became a tree of great height. On the 15th of August, 1837, it began to develop a flower stem. He perceived that it was a new species, and gave it the above name. The tree does not appear to have any inclination to rise the first ten years; but after that period, all of a sudden it assumes a new shape, and becomes a most beautiful pyramidal tree. Its place in the natural system has not yet been assigned, but it approaches near the malvaceous and rosaceous plants. In the north of France it appears to require protection. (*Hort. Jour.*)

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

*Ternstromi*àceæ.

CAME'LLIA.

In the *Horticultural Journal*, for June, a very beautiful seedling camellia is figured. It is in the possession of Mr. Glenny, but is not yet named. The flower is of good size; the petals not numerous, but large, broad, and handsomely

arranged in four or five rows: a few stamens are intermixed with the centre petals. The color is a deep rich red, with prominent veins of a darker tint. It appears to be one of much merit. The particulars of its growth are to be given hereafter.

Mr. Cowan, gardener to Col. Perkins, has now in bloom a large number of seedlings: we have noticed the plants in our visits to this place; but few of them have flowered till this season. We have not seen them, but understand, from good judges, that several possess considerable merit. We shall endeavor to see them, and give our readers some account of their beauty.

Mr. Carter, of the Botanic Garden, Cambridge, has also raised and bloomed a very pretty seedling this winter. The foliage is very large, firm, glossy and beautiful, and the habit of the plant erect and vigorous: the flower is a bright rose, with three or four rows of petals, arranged somewhat after the style of coccínea. The plant was exhibited at a late meeting of the Massachusetts Horticultural Society: it was only an inarching of six months, and probably, when the plant acquires strength, the flower will more fully show its true character.

Mr. Gardener, of Salem, has also flowered some seedlings this season, one or two of which, we have been informed, are very pretty plants. Mr. Wilder has some seedlings which will bloom. We omitted to state, in our notice of the sale of his collection, that he retains *all* the seedling camellias.

The show of camellias is now very beautiful, around Boston. At Mr. Wilder's there is the usual splendid display. At Messrs. Hovey & Co.'s some magnificent blooms are now open. C. j. élegans has sported to such a degree, that the blooms are considerably spotted with white, and in this state it is one of the most delectable flowers we have ever seen. C. j. Chándleri has been truly magnificent; we have never seen finer blooms of this very desirable variety. C. Schrynamaskèri, and some other new ones, will bloom this month, together with three or four seedlings. At Col. Perkins's, Mr. Cushing's, Mr. Pratt's, Mr. Winchester's, and other places, the plants will be at their height of bloom during all this month. Before our next, we hope to visit some of these fine places, and notice the various collections.

Fabàceæ or *Leguminòsæ.*

Hòvea illiciifòlia, a very beautiful and rare species, is figured in the *Horticultural Journal* for October. It is a pretty

plants, with light purple blossoms and holly-like leaves. It is a fine addition to this elegant genus.

The acacias will be now found displaying their golden blossoms in all the principal collections. All the varieties are exceedingly desirable plants.

Dicotyledonous, Monopetalous, Plants.

Ericàceæ.

A new and elegant *R*hododéndron is figured in the *Horticultural Journal* for September. In habit it resembles the hybridum, but the color of the flowers is much deeper, approaching almost to a purple. It was raised by Mr. Glenny, of Worton.

R. álta clerénse, in the collection of Hovey & Co., will bloom superbly in the course of the month.

Mr. Samuel Feast, of Baltimore, has raised a large number of seedling azaleas, many of which flowered last spring, and proved to be equal or superior to any of the old varieties. The plants are now showing bloom for the second time, and Mr. Feast has kindly offered to send us a list of all the best, with a description of the flowers.

Enkiánthus quinqueflórus, that lovely shrub, only in the collection of Col. Perkins, is now displaying a most profuse bloom. We have not seen it this season; but Mr. Cowan informs us that it never flowered so well before.

Mr. Towne's ericas are now beginning to put forth their varied and ever charmingly delightful blossoms. A great number will be in flower this month, affording a rich treat to the lovers of this elegant tribe.

Verbenàceæ.

*V*erbèna Tweedie*àna* (supérba?).—Some time since, (Vol. IV. p. 411,) we made some observations upon two kinds of the *V*erbèna, each of which is called the *V.* Tweedie*àna.* The conclusions that we came to were, that the kind generally grown the last season, the original plants of which came from Mr. Buist, was the Tweedie*àna* supérba, as it varied from one received from Mr. Thorburn. We expressed a desire that Mr. Buist would state from what source his plant was originally procured. He has communicated to us the following note:—

*V*erbèna Tweedie*àna.*—In a late number of your Magazine, you ask me to inform you from what source I procured my plant of *V*erbèna Tweedie*àna.* I purchased it of Messrs. Low & Co., Clapton, near London, on the 22d of April, 1837; and within twelve months of the time of its arrival in

my establishment, we had disposed of eleven hundred and sixty-three plants. Many of our citizens purchased from four to six plants each. It is a fact that all the verbenas are admirably adapted for *window plants*, delighting in a dry atmosphere.—*Yours, respectfully, R. Buist, Philadelphia, Jan.* 1839.

Mr. Buist has sent us the descriptions of four new verbenas, which we mentioned, some time since, he had raised from seed. We have no room for the article in this number, but it will appear in our next.

Art. VIII. *Notes on Gardens and Nurseries.*

After that portion of our last number went to press, which embraces the Review of Horticulture the past year, we received, from our correspondents, some notices of a few residences, which have been laid out or improved the past year. We are sorry they did not reach us in season, as it was our wish to make that article as complete as possible. We, however, take this early opportunity to insert, under this head, these omissions, with the hope that they will not be read with any the less interest on account of their not appearing before. We did not expect that we should be able to include every place which has been laid out and improved the last year; but, so far as lay in our power, it was our endeavor to procure all the information which would make our article a complete retrospect of the progress of the art in 1838.

Blithewood, the Seat of R. Donaldson, Esq., near Barrytown, on the Hudson river. We have heard much from our correspondents on the Hudson of the extraordinary beauty of the grounds of this place, which are beautifully disposed and laid out in tasteful walks, &c., and abound with fine natural trees in beautifully disposed groups. Elegant classic vases, sculptured in Maltese stone, stand on pedestals near the house, and in various parts of the grounds, and rustic seats, formed of branches and roots of trees, are distributed in appropriate situations. A beautiful entrance lodge, in the old English cottage style, is a picturesque object; and the views from the house, and various parts of the pleasure-grounds, are extensive and magnificent, commanding a fine view of the distant Catskills, with the lordly Hudson, broken up by several fine islands between.

Roswell L. Colt, Esq., is, we understand, fitting up a fine demesne at Patterson, N. J. The services of Mr. Hobbs, the intelligent and capable gardener of the late Dr. Hosack, have been secured by Mr. Colt, and we believe no pains will be spared to render the whole a very complete residence.

At Ogdensburgh, N. Y., large forcing-houses, conservatories, &c., with other extensive gardening improvements, are in progress by —— Van Rensellaer, Esq.

In the interior of Massachusetts, the taste of the inhabitants for flower gardens, and particularly for fine ornamental trees, is not surpassed in any part of the Union. The beautiful villages of Springfield, Northampton, &c., will recur to every traveller through that state as forcible examples of this. Nowhere among us, is higher keeping in suburban villas, most tasteful arrangement of shrubs and plants, or a greater fondness for gardening evinced. Superb elms, and other noble trees, overhang almost every building, and flowering shrubs fill the garden parterres. The elegant conservatory and grounds of S. Whitmarsh, Esq., of Northampton, a zealous horticulturist, are particularly deserving of notice here.

Pickering Dodge, Esq., of Salem, has lately erected a beautiful villa in the vicinity of that town; additional improvements will be made upon the grounds the ensuing summer, when we hope to have the pleasure of presenting our readers with a description of the same. Mr. Dodge has a fine grapery, upwards of fifty feet long.

Philadelphia, Nov. 1838.—In our last we gave our remarks upon those gardens in New York, which we had the pleasure of visiting. We now offer a few memorandums upon some of the private and public gardens of this city, commencing with a notice of the

Residence of J. B. Smith, Esq.—In our first and third volumes we have given some account of Mr. Smith's garden, green-houses, hot-houses, &c., and our readers are probably well aware, from our remarks, that he has one of the finest collections of plants in the city. As a cultivator, Mr. Smith stands at the head of all amateurs, and, we might with propriety say, of all growers of plants in the country. His skill in the growth of palms is remarkable, and the short time in which he has cultivated some of his largest specimens from seeds, would be almost incredible, were we not convinced of the fact from a yearly inspection of his plants. The whole of the present collection has been got up in less than five years; and, though in so short a period, for the magnificence of the specimens, few, if any other collections, will compare with his. Many

of the plants, such as lemons, oranges, &c., it is true, were purchased already grown; but a majority, and, in particular, the palms and tropical plants, have been either grown from very weak imported plants, or raised from seed since 1835.

By the kindness of Dr. Watson, we are enabled to give our readers a more complete list of the largest specimens which we saw on our visit, than we could otherwise have done; as our visit was limited, and by no means lengthy enough to do justice to a collection abounding in such splendid specimens of that noble order of the vegetable creation—the palm tribe.

Córypha umbracaulífera, and *Latània* borbónica, have attained the height of ten feet, and are probably the finest plants in the country. Thrìnax parviflòra, Elæ`is guineénsis, *Còcos* nucífera, *C*hamæ`rops hùmilis, *C*aryòta ùrens, and *Arèca* montàna, and other fine species of these same genera, all large plants, presented one of the richest displays of foliage imaginable. Could these same plants be shown to advantage in a lofty and elegantly finished house, (for Mr. Smith's collection is so great, that they are excesssively crowded,) a scene of grandeur would be displayed, equalling all that could be imagined of the richness and magnificence of oriental scenery. The broad, glossy, and waving fan-like fronds of the noble *C*órypha,—the light and more graceful ones of the *C*hamæ`rops hùmilis,—the equally beautiful, but more humble Elæ`is guineénsis,—and the gigantic caudex of the screw pine, with its deep green rigid leaves,—all unite to form a combination, which, though destitute of brilliant or odorous flowers, may claim our admiration, when the transient glories of the camellia, the rose, or the tulip shall have faded and passed from our remembrance. We sincerely wish that some spirited gentleman, who has the means, would purchase these fine plants of Mr. Smith, and build a domical hot-house, of such dimensions as to allow these lords of the vegetable world to attain to their natural stature. It has been generally supposed that palms are of slow growth; but this is not correct: if plenty of room is allowed to the roots, and the plants enjoy a temperature of seventy or seventy-five degrees, they will soon attain a very large size. No better evidence is needed to show this to be true, than the specimens in Mr. Smith's collection.

Among the other plants which Mr. Smith has raised from seed, are the Clùsia àlba, Moringa pterygospérma, Lawsò*nia* inérmis, *Hùra* crépitans, Bréxia integrifòlia and serràta, eight or ten species of Dracæ`na, five of Zàmia, Adansò*nia* digitàta, Jacquí*nia* ruscifòlia, &c. &c. Cárica *Papàya*, three

years from seed, planted in 1836, was in bloom and in fruit, with four or five of the latter nearly ripe: the plant was about eight feet high.

Mr. Smith's collection of cactuses is very large, and the plants finely grown. We saw a great number of the Epiphyllum truncàtum, grafted on the Cèreus triangulàris, in full bloom. He has also raised a new Echinocáctus from seed. Cèreus flagellifórmis we also noticed, grafted on the same stock; but so vigorous was its growth, as scarcely to enable us to identify it. He has, likewise, several new cactuses, but we had not the opportunity to take the names.

A new *Datùra* and a Brugmán*sia* have been raised by Mr. Smith: the latter is identical with the B. Whymán*ii*, noticed in our last volume, (p. 73,) as selling in London at three pounds sterling a plant. The flowers are produced one within the other, to the number of two, and often more. The *Datùra* has large white sweet-scented flowers, of the size of *D.* grandiflòra. Mr. Smith has also raised a great number of camellias from seed, and some of the plants, from the appearance of the foliage, promise well. He has succeeded in raising a seedling from the C. rẹticulàta, fertilized with some of the double varieties.

Had we the room, it would be impossible for us to enumerate near all the fine things which Mr. Smith possesses. He has promised us, however, a list of all the best plants in his collection, and we hope that we shall have the pleasure of laying it before our readers ere long. We left Mr. Smith, regretting only that we could not spend a whole day in looking over the plants.

Mr. Buist's Nursery.—Since we were here in the spring of 1837, Mr. Buist has made many additions to his stock of plants; he has also erected a new house, as we have before mentioned. We found but little in bloom worthy of note, except the pitcher plant, (Nepénthes distillatòria,) an account of the cultivation of which Mr. Buist has sent us, which will appear in our next. It is a remarkably curious plant, and is deserving of a place in every stove, from the singularity of its pitcher-shaped appendages.

The few orchideous plants here are doing well; they are all planted in cork boxes, as recommended by our correspondent, Mr. Brackenridge, (Vol. IV. p. 16,) and they have made fine roots into the peat, and over the edges and into the crevices of the cork: they are suspended from the roof. Very few of these have yet flowered; but the coming season, probably, they will have acquired sufficient strength to bloom. We

are desirous of seeing this tribe of plants cultivated by our amateurs, convinced that their growth is simple, and the flowers of the cáttley*a*, dendròbium, and other genera of the most gorgeous descriptions.

Mr. Buist's camellias are in good health, and his collection comprises a fine assortment of plants. He informed us that the demand for Flòy*ii* and Landréth*ii* from the London and provincial nurserymen had been so great, that the stock of young plants was completely exhausted. We saw nothing new to note; indeed, in camellias Boston excels all her sister cities. Many varieties, new and rare with Mr. Buist, have flowered both at Mr. Wilder's, and Hovey & Co's., for three or four years past. Mr. Buist is propagating his seedlings with all despatch. The new seedling verbenas he is also increasing as rapidly as possible.

Mr. Buist has many new geraniums, roses, &c. &c. But a mere enumeration of their names would not interest our readers.

Nursery of Messrs. Mackenzie & Buchanan.—Our young and enterprising friends, Messrs. Mackenzie & Buchanan, have already a very fine collection of plants; the two houses are fine structures, and, though only a little over a year since they commenced business, they are both nearly filled with plants. The geraniums were numerous and well grown; and the collection of roses and cereuses very good. Their stock of camellias is yet small, but they intend to enlarge it as speedily as possible.

We found here, on our visit, a splendid display of chrysanthemums. Messrs. Mackenzie & Buchanan received the premium at the November meeting of the Pennsylvania Horticultural Society, for this flower. The bloom was now on the decline, but about a hundred pots had contributed a gayness to the house, which, at this season, no other flower is capable of affording. The plants were well grown, with a single stem, and produced an abundance of blooms.

Mr. Mackenzie is favorably known to the public as the grower of some fine seedling dahlias, and as latterly having the charge of the collection at Lemon Hill. Mr. Buchanan is a very good botanist, and very well acquainted with our native flora, and, together, we doubt not they will command that share of business which they deserve for their skill and enterprise.

City Garden of George Pepper, Esq., Chestnut St.—The garden of Mr. Pepper, as well as the other places which we have just noticed, has been before described by us in our first volume; but since that time, although we have visited Philadel-

phia once or twice, we have not had the opportunity of seeing this fine collection. Since 1835, he has erected a very pretty new house, mostly devoted to the growth of camellias, ericas, and similar hard wooded plants; he has also made an addition to the old one, so that it now contains three distinct apartments, one above the other, viz: the green-house first, the succulent house next, and the stove last; when we were here before, the apartment now filled with cactuses and roses, (separated by a glass partition) was the stove; but the plants, outgrowing this rather contracted place, he was forced to put on another addition *above* this, and we should judge that nearly thirty steps would have to be ascended, before the level of the new stove could be reached. This is certainly making the most of a city garden; for by carrying the houses up over out-buildings, all the garden is saved. The stove is about fifteen feet high, and the same in width.

Mr. Pepper has been very fortunate in procuring the assistance of a very fine young man, Mr. Wm. Chalmers, Jr., who is devoted to his profession, and the collection shows that his skill in cultivation is equal to his ardor in the pursuit. We found every thing in fine order, and, for neatness, the houses under his care will not suffer in comparison with those of any other private collection. We have previously noticed the fine specimen of Epiphyllum truncàtum, which Mr. Chalmers exhibited at the November meeting of the Pennsylvania Horticultural Society. He has several others which are nearly as fine; and some of the plants which have not been grafted more than ten months, have made such vigorous growth as to produce from twenty to thirty flowers each. The splendor of this species cannot be imagined, from its growth on its own stock, but, grafted on the Cèreus triangulàris, it assumes an exuberance of growth, and displays a profuseness of flowers, entirely different from its general habit. Mr. Chalmers has worked many of the species of this tribe upon the triangulàris, and the change is favorable to a greater development of flowers.

In the stove the two most conspicuous objects are the *Pandànus* spiràlis and the *Latània* borbónica, each upwards of twelve feet high: they stand one at each end of the stove, and strike the beholder, upon entering, by their majestic beauty. Some of the fronds of the *Latània* are remarkably large: the *Pandànus* has begun to throw out a side shoot from that part of the stem from whence issue the first leaves. Fine plants of the Poinsétti*a* pulchérrima, with their gorgeous scarlet bracteæ, towering above the surrounding foliage, attract the eye by their vivid tints. Numerous other handsome plants fill up the

house, the names of which we have no room to add at this time.

The two green-houses we found filled with fine specimens of various plants. In the new one the camellias were pushing their buds rapidly, but none had opened. A great variety of chrysanthemums, interspersed among the other plants, gave a liveliness to the whole. Mr. Pepper is not so eager to possess new varieties, as fine specimens of the old and well known plants, and hence his collection of camellias, though very good, does not contain near the number of kinds which are found in the green-houses of many amateurs around Boston, whose collections of other plants are of a very limited description.

We left Mr. Pepper's garden, regretting that there are not more such fine places found in our large cities. How many of our citizens flee from the city, during the warm weather of our serene summers, to enjoy the freshness of the country air! But how few of them seem to appreciate the pleasures of a winter garden. In the climate of New England, where six months of the year the earth is shorn of its verdure, how great is the enjoyment to be derived from the possession of a green-house stored with the floral treasures of every region of the earth! Defying the hoary frosts of autumn—the storms and snows of winter—and the chilling winds of spring —surrounded with beautiful flowers, and verdant foliage—summer again approaches, greeting us in her varied and gay attire, and invites us to new labors, even while the departing season has scarcely passed from our remembrance. To us it seems that a green-house should be an indispensable appendage to every dwelling, and particularly to those citizens of our cities, whose means to erect them are ample, and to whose leisure hours they would afford so much gratification.

Residence of Wm. Lloyd, Esq., Turners Lane.—Mr. Lloyd is quite an amateur, and has lately erected a very handsome green-house, about eighty feet long. When we saw it, it was not quite finished. We found it, however, pretty well filled with plants.

Mr. Kilvington, Mr. Lloyd's gardener, is the raiser of the seedling chrysanthemums, of which we made mention in our last, and who, we also stated, (Vol. IV. p. 471) exhibited a number of seedlings at the November meeting of the Pennsylvania Horticultural Society. The plants were going out of bloom, and the flowers so much faded, that we could not tell the value of all of them; we saw enough, however, to convince us that Mr. Kilvington will save ten or fifteen, which will be great additions to this splendid tribe.

REVIEWS.

ART. I. *A Flora of North America, containing abridged descriptions of all the known indigenous and naturalized Plants growing north of Mexico; arranged according to the Natural System*, by John Torrey and Asa Gray. Vol. I, Part I, and Part II; pp. 360. New York: E. & G. Carvill & Co. Boston: C. C. Little & Co., &c. &c. 1838.

ABOUT two years since, we were told that the above work was in contemplation, and until the publication of its first part, in July last, we were eagerly anticipating it. The rapid progress which the science of botany has been making within a few years, especially in the extensive field of North-Western discovery, and amid the mountains and vast plains of the great West, even to the shores of the Pacific, rendered it next to impossible for the student, of limited means, to avail himself of all that information so desirable, in the pursuit of his investigations; scattered as such information would be likely to be in expensive periodicals and in foreign journals. A host of individuals, distinguished in botanical and floricultural science, have traversed throughout unexplored routes, and contributed, of their rich treasures, to swell the catalogue of plants. Of the zeal and ardor of some we have often heard, from those who have had the pleasure of their acquaintance amid these scenes of their enterprise. With another, to whom American botany is greatly indebted, we have long enjoyed a friendship. Our very green-houses and flower-beds are yearly reminding us of the names of others, who have transmitted, from California and Mexico, the beautiful and curious specimens of genera and species new and rare. The magazine, on whose pages this passing notice and brief tribute to science is inscribed, has from time to time dazzled our imagination, and excited our curiosity in behalf of the more desirable and elegant plants already in course of culture in England. Much more, undoubtedly, remains to be accomplished, many more gems of floral worth are yet to be gathered, which "are wasting their fragrance on the desert air." So rich have been the rewards of enterprise hitherto, that it is presumable these scattering gems will yet be collected and rendered familiar to our gardens.

The work before us, intends to be comprised in three closely printed octavo volumes of about 550 pages each. The specimens

of the first two numbers promise a work of exceeding value, embracing, as it will, all the indigenous and newly discovered plants north of Mexico: the work may be adjudged the most complete manual and guide to the North American botanist. Constant and numerous references are made to other authors and botanists, who have seen, collected, figured or described each species; and all of doubtful authority properly considered. Nuttall's *MSS.* notes on plants discovered by him, during his late journey to Oregon and California, by way of the Rocky Mountains, are to be comprised among the descriptions.

We subjoin a few notices of species of interest, as floricultural subjects, for the information of those readers who may not have seen the entire work. Forty-seven natural orders are already published, besides an unfinished number of the Leguminòsæ, now in course of preparation. These are as follows:—*R*anunculàceæ, Magnoli*àceæ*, *Anon*àceæ, Schizandràceæ, Menispermàceæ, *Berberid*àceæ, Cambobàceæ, Ceratophyllàceæ, *Nelumbi*àceæ, Sarraceni*àceæ*, *P*apaveràceæ, Fumariàceæ, Crucíferæ, Capparidàceæ, *R*esedàceæ, *P*olygalàceæ, *V*iolàceæ, Droseràceæ, *C*istàceæ, *H*ypericàceæ, Frankeni*àceæ*, Illicebràceæ, Caryophyllàceæ, *P*ortulacàceæ, *E*latinàceæ, *L*inàceæ, *G*eraniàceæ, *B*alsaminàceæ, Limanthàceæ, *O*xalidàceæ, Zygophyllàceæ, Xanthoxylàceæ, Anacardiàceæ, Amyridàceæ, Aurantiàceæ, Ternstrœmi*àceæ*, *M*alvàceæ, *T*iliàceæ, *M*eliàceæ, Cedrelàceæ, *V*itàceæ, *A*ceràceæ, Hippocastàneæ, *S*apindàceæ, *C*elastràceæ,, *R*hamnàceæ, Leguminòsæ.

Among species of *R*anunculàceæ, we find two pœonias, *Pæòni*a Bròwn*ii* (*Douglas*,) near the confines of perpetual snow, North-Western America. *Hook fl. Boreal. am.* i. p. 27.

*Pæoni*a califórnica *Nuttall's* Mss.—Petals small, deep blood-red; the flowers of both species small. We should like to see these American pœonies in our collections.

Among the *P*apaveràceæ, we notice the following remarks: Chrysè*is*.—"We follow Lindley in discarding the name of Eschschòltz*ia* (or Eschschòlts*ia*, as it has been commonly written) for this genus: there being an older and generally admitted genus dedicated to the father of Dr. Eschschotz, (or rather Elsholtz,) who accompanied Chancisso in Romanzoff's voyage, and whom this genus commemorates." (P. 68, note.)

To Chrysè*is* califórnica and cròcea, so well known to every florist, we find added C. cæspitòsa *Lindl.*, C. tenuifòlia *Lindl.*, C. hypecoìdes *Lindl.*, all with smaller flowers than the two older known species.

We perceive that Drs. Torrey and Gray have reduced *V*iola tenélla *Muhl.* &c. of the Western States to *V*iola tricolor, *a.* arvénsis, Dec. It always seemed to us a variety, resembling, in no faint degree, some depauperated specimen of the pansy of our gardens, strayed away and naturalized. We presume, however, that it is truly a native. (See order xviii. *V*iolàceæ, page 143.)

Among Caryophyllcæ, we find a little favorite of ours, Silène quinquevúlnera, and for whose curious little flowers we have cultivated it, despite its weedy aspect and habits. Supposed introduced: a native of England. Found in the Southern States, on the sea-shore, &c. &c. A brilliant co-species, Silène règia *Sims*, (*Bot. Mag.* t. 1724,) is described as found in Ohio, Louisiana, Kentucky; a superb plant for culture. The old Agrostémna *G*ithàgo, corncockle, is now *L*ychnis *G*ithàgo, a pretty but troublesome introduced weed among our wheat and rye fields.

Who has not admired the Calandrín*ia*, so new and so universally cultivated by the florist? We hope soon to see two others in culture, viz: C. Menzièsii, with rose-colored flowers, and C. marítima *Nutt.*, from the sea-coast of California, with its "large and rather showy, red" blossoms. (P. 197.)

*O*xalidàceæ contains a new curious species of *O*xalis, *O.* trilliifòlia, resembling Trillium grandiflòrum, when out of flower: blossoms, small white: found near the rapids of the Oregon. (P. 211.)

The Mahogony (Swietèn*ia Mahágoni* L.) nat. ord., Cedrelàceæ, has been discovered in South Florida.

Vitàceæ.—To *V*itis Labrúsca, Foxgrape, are referred the following favorite varieties, viz: *Isabella*, *Schuylkill* or Alexander's, *Catawba*, and Bland's Grape.

Among Leguminòsæ, we perceive a new addition to the garden in *L*áthyrus ornàtus *Nutt.*, with very showy flowers, as large as those of the sweet pea: Missouri, Platte. Thirty-three species of Trifòlium are described, and also forty species of Astrágalus!

Phàca sericea *Nutt.* Mss.—"Dwarf, depressed, densy and canescently silky villose; flowers purple, very numerous. On the high hills of the Platte, near the Rocky Mountains, a very elegant and curious species, forming a dense tuft, spreading from a few inches to a foot or more in diameter, densely clothed in every part with a silvery villous pubescence," &c. We think this would be a charming addition to our flower-beds, amid the heats of summer.

In conclusion, we recommend this distinguished and great work to every botanist and lover of native flowers, and at

the same time to wish it all possible success. We welcome its appearance among us, as a desideratum in advancing the progress of our American Botany. J. L. R.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Foreign Notices.*

ENGLAND.

Prize Dahlias.—At the close of our last volume, (p. 452,) we made some remarks upon the subject of prize dahlias, and gave the results of the exhibitions of five or six societies—all of any note that we had heard from at that time. Since then, we have received accounts of several other shows which have taken place in the provincial towns, and they gave nearly the same returns of flowers as those we have previously laid before our readers. That the kinds, however, which were in the prize stands at the exhibitions of two of the most popular dahlia shows, which are held in England, may be seen at length, we annex the reports of the Birmingham Grand Dahlia Show, and the Metropolitan Society of Florists and Amateurs' Dahlia Meeting, believing that the interest which is felt in the cultivation of this splendid flower, and the desire to know every thing in relation to the finest varieties, is so great as to need no apology from us for their full insertion. These displays must have been magnificent. The dahlia exhibitions of Boston, New York, and Philadelphia, are called beautiful beyond description, with only their few hundreds of flowers. What must be the splendor of the exhibitions of the English societies, where not only thousands, but tens of thousands of flowers are displayed at once! Ours, in comparison, sink into insignificance. We trust, however, that the cultivation of the dahlia, though the failure in their blooming, the past year, has been so general, will be by no means retarded; on the contrary, we hope that, from this very cause, individuals will be induced to give more attention to their growth, and by constant care and attention overcome any obstacles in the way of their successful cultivation. We hope, also, that *very liberal* premiums will be awarded by our horticultural societies, not for the greatest quantity, but for the most beautiful and perfect blooms; it is in this way, that more can be done than any other. It is to the almost lavish award of premiums, which has been made in England, that the dahlia has arrived at its present state of perfection, and the same good results will spring from a liberal offer of premiums by our societies. With these few remarks, we subjoin the reports of the exhibitions of the societies we have just alluded to, and, in conclusion, we have offered some observations on the most successful flowers.

Birmingham Grand Dahlia Show.—This annual exhibition was opened on the 12th September, and great as was the public expectation, from what had been the current report of the beautiful display that might be expected, the result proved that the anticipations which had been raised were fully realized.

Premier Prize, Twenty-four Blooms.

Widnall's Ne plus Ultra, Duke of Devonshire, Rienzi, Cambridge Hero, Horatio, Conductor, Royal Standard, Suffolk Hero, Dodd's Mary Queen of Scots, Variabilis, Unique, Rhoda, Topaz, Lady Kinnaird, Glory of the West, St. Leonard's Rival, Ruby, Springfield Rival, Conqueror of Europe, Ovid, Eva, and Brown's Sarah, Mr. Widnall, Grantchester, near Cambridge.

Twenty-four Blooms. Amateurs.

1. Countess Mansfield, Kingscote Rival, Rienzi, Widnall's Perfection, Squibb's Purple Perfection, Conqueror of Europe, Knight's Victory, Sir H. Fletcher, Topaz, Ruby, Springfield Major, Rosa Elegans, Blandina, Etonia, Jeffries' Triumphant, Suffolk Hero, Middlesex Rival, Sarah, Countess of Torrington, Beauty of Lullingstone, Dodd's Mary, Royal Standard, and Conductor, Mr. Searle, Cambridge; 2. Middlesex Rival, Dodd's Mary, Sir H. Fletcher, Suffolk Hero, Stone's Yellow, Louthianum, Oxford Rival, Diadem of Flora, Knight's Victory, Beauty of Bedford, Topaz, Juliet, Springfield Rival, Glory of the West, Grand Duke, Day's Mary Anne, Blandina, Napoleon, Lady Kinnaird, Bontisholl, Ruby, Flower of Eden, Bronze, Pandora, Mr. Hellier, Oxford; 3. Rival Sussex, Smith's Lord Byron, Elphinstone's Purple Perfection, Sir Isaac Newton, Royal Standard, Clio Perfecta, Marquis of Lothian, Dodd's Mary, Hopwood's Lady Anne, Rosea Superba, Foster's Eva, Jeffries' Triumphant, Ansell's Unique, Beauty of Lullingstone, Diadem of Flora, Marchioness of Tavistock, Knight's Victory, York and Lancaster, Doctor Halley, Girling's Horace, Rosetta, Middlesex Rival, Hermione, and Melberry Rival, Mr. Sadler, at Sir Charles Throgmorton's, Coughton Court; 4. Sir H. Fletcher, Dodd's Mary, Lady of the Lake, Lady Cowper, Hopwood's Lady Ann, Countess of Sheffield, Springfield Rival, Mountpleasant Rival, Giraffe, Jeffries' Triumphant, Goliah, Lord Liverpool, Topaz, Sir Walter Scott, Cassina, Hermione, Rival Sussex, Rhoda, Burgundy, Beauty of Berkshire, Brown's Sarah, Vandyke, and Wilmer's Superba, Mr. Mitchell, Lord Vernon's, Sudbury Hall, Derbyshire; 5. Kelnor's Etonia, Girling's Topaz, Kington's Nimrod, Sir Edward Sugden, Brown's Beauty, Grant Thorburn, Suffolk Hero, Maria Edgeworth, Dodd's Mary, Sir Henry Fletcher, Cambridge Hero, Brown's Sarah, Day's Oxford Rival, Lord Stanley, Sussex Rival, Ansell's Unique, Barratt's Stuart Wortley, Springfield Major, Clarke's Julia, Conqueror of Europe, Blandina, Calliope, Addison, Bowman's Premier, Mr. James Burbury, Stoneleigh.

Twelve Blooms.

1. Knight's Victory, Squibb's Purple Perfection, Rhoda, Hope, Etonia, Royal Standard, Ruby, Jeffries' Triumphant, Topaz, Suffolk Hero, Conductor, Countess of Torrington, Mr. Searle; 2. Topaz, Marquis of Lothian, Summum Bonum, Knight's Victory, Dodd's Mary, Pandora, Brown's Beauty, Bontisholl, Jubilee, Simmond's Alpha, Lord Lyndhurst, and Royal Standard, Mr. Foreman, Chellastone; 3. Sussex Rival, Marquis of Lothian, Whale's Royal Standard, Dodd's Mary, Foster's Eva, Cambridge Hero, Conqueror of Europe, Widnall's Duke of Devonshire, Girling's Topaz, Widnall's

Conductor, Maria Edgeworth, and Clark's Julia, Mr. J. Burbury, Stoneleigh; 4. Purple Perfection, Corinne, Springfield, Duke of Devonshire, Dodd's Mary, Suffolk Hero, Squibb's Purple Perfection, Brown's Beauty, Sir H. Fletcher, Conqueror of Europe, Marquis of Lothian, and Dodd's Mary Queen of Scots, Mr. G. Mussell, Mr. C. Ratheram's gardener; 5. Sir H. Fletcher, Dodd's Mary, Unknown, Rival Suffolk, Addison, Blandina, Perfection, Springfield Rival, Suffolk Hero, Perfection, Glory of the West, and Ruby, Mr. Thomas Taylor, Hinckley; 6. Ruby, Napoleon, Springfield Rival, Mrs. Broadwood, Sir H. Fletcher, Dodd's Mary, Oxford Rival, Sam Weller, Alman's Grand Duke, Bath Rival, Day's Mary Anne, and Suffolk Hero, Mr. Hellier.

SIX BLOOMS.

1. Suffolk Hero, Blandina, Knight's Victory, Topaz, Royal Standard, and Dodd's Mary, Mr. Searle; 2. Clio Perfecta, Suffolk Hero, Dodd's Mary, Sir H. Fletcher, Oxford Rival, and Beauty of the Grove, Mr. Hellier; 3. Pandora, Bontisholl, Glory of the West, Beaumonte's Premier, Royal Standard, and Suffolk Hero, Rev. Mr. Cresswell, Radford, near Nottingham; 4. Marquis of Lothian, Suffolk Hero, Sir H. Fletcher, Independent, Middlesex Rival, and Brown's Beauty, Mr. Henney, Wolverhampton; 5. Dodd's Mary, Napoleon, Fisherton Rival, Springfield Rival, Topaz, and Conqueror of Europe, Rev. Frederick Smith, Elmhurst; 6. Dodd's Mary, Topaz, Marquis of Lothian, Suffolk Hero, Foster's Hero, and Etonian, Mr. Mussell.

TWENTY-FOUR BLOOMS. NURSERYMEN.

1. Premier Cup, Mr. Widnall, as above; 2. Royal Standard, Suffolk Hero, Topaz, Squibb's Purple Perfection, Conqueror of Europe, Jeffries' Triumphant, Beauty of Berks, Maria Edgeworth, Hope, Mrs. Wilkinson, Hero of Navarino, Metropolitan Yellow, Unique, Conductor, Eva, Marquis of Lothian, Dodd's Mary, Bontisholl, Robert Burns, Lady Kinnaird, Rienzi, Premier, Springfield Rival, and Rival Sussex, Mr. Brown, Slough; 3. Dodd's Mary, Widnall's Conductor, Widnall's Duke of Devonshire, Royal Standard (Whale's,) Beauty of West Riding, Hope, Stamford's Perfection, Clio Perfecta, Rival Granta, Topaz, Springfield Major, Lady Dartmouth, Warminster Rival, Suffolk Hero, Boadicea, (Carmack's,) Widnall's Rienzi, Rival Sussex, Widnall's Perfection, Foster's Eva, Girling's Ruby, Springfield Rival, Girling's Exquisite, Knight's Victory, and Ansell's Unique, Mr. Hodges, Cheltenham; 4. Knight's Victory, Dodd's Mary, Marquis of Lothian, Countess of Torrington, Springfield Major, Foster's Eva, Duke of Rutland, Clio Perfecta, Squibb's Purple Perfection, Oxford Rival, Elphinstone's Purple Perfection, Ansell's Unique, Macket's Helena, Suffolk Hero, Widnall's Lavinia, Carmine Perfection, Jeffries' Triumphant, Glory of the West, Ruby, Lady Vernon, Blandina, Marquis of Northampton, Pandora, and Sir H. Fletcher, Mr. Bates; 5. Sir F. Burdett, Springfield Major, Ne Plus Ultra, Middlesex Rival, Ovid, Bontisholl, Clio Perfecta, Essex Rival, Sylvia, Jeffries' Triumphant, Perfection, Squibb's Purple Perfection, Grant Thorburn, Springfield Rival, Dodd's Mary, Exquisite, Unique, Independent, Dodd's Queen of Scotts, Horwood's Defiance, St. Leonard's Rival, Ruby, Conductor, and Rival Sussex, Messrs. Mountjoy and Sons, Ealing, Middlesex.

TWELVE BLOOMS.

1. Widnall's Rienzi, Widnall's Conductor, Eva, Springfield Rival, Suffolk Hero, Topaz, Dodd's Mary, Ruby, Unique, Lady Kinnaird,

Brown's Sarah, and Marquis of Lothian, Mr. Widnall; 2. Middlesex Rival, Conqueror of Europe, Rienzi, Beauty of Berks, Bontisholl, Unique, Oxford Rival, Lady Kinnaird, Bowling-green Rival, Eva, Topaz, and Sir H. Fletcher, Mr. Brown, Slough; 3. Barratt's Hero of Wakefield, Barratt's Honorable Stuart Wortley, Beauty of Kingscote, Dodd's Mary, Widnall's Reliance, Widnall's Conductor, Springfield Rival, Brown's Corinne, Maria Edgeworth, Widnall's Duke of Devonshire, Middlesex Rival, and Conqueror of Europe, Mr. Earle, Bristol-road, Birmingham; 4. Summum Bonum, Dodd's Mary, Middlesex Rival, Metropolitan Yellow, Jeffries' Triumphant, Springfield Rival, Suffolk Hero, Ansell's Unique, Bontisholl, Lord Byron, Addison, and Ruby, Messrs. Mountjoy and Son, Ealing; 5. Topaz, Heal's Glory, Dodd's Mary, Springfield Rival, Clio Perfecta, Widnall's Duke of Devonshire, Grant Thorburn, Holman's Scarlet Perfection, Bowman's Premier, Hope or Metropolitan Rose, Foster's Eva, and Rienzi, Mr. Willmer, Sunbury, Middlesex.

SEEDLINGS.

1. Cup, Mr. Smith, Worcester; 2. Mr. Widnall; 3. Mr. Willmer; 4. Messrs. Brown and Slough; 5. Mr. Widnall; 6. Mr. Willmer.

DEVICE OR GROUP.

1. Mr. Coudrey, Edgbaston; 2. Master William Pulling.

Metropolitan Society of Florists and Amateurs' Dahlia Meeting, Egyptian Hall, Piccadilly, September 27, 1838.—FIRST PRIZE,(GOLD MEDAL.) Mr. Widnall, Grantchester, for a stand of One hundred Blooms,

Mr. Burchett, Lee, for Twenty-four Blooms, viz:—Birmingham Victor, Knight's Scarlet Perfection, Miss Colt, Vanguard, Conqueror of Europe, Duke of Devonshire (Widnall's,) Countess of Torrington, Lord Byron (Allman's,) Sir H. Fletcher, Macket's Helena, Suffolk Hero, Avalanche, Purple Perfection (Elphinstone's), Clio Perfecta, Springfield Rival, Topaz, Rival Sussex, Victory (Knight's), Lady Kinnaird, Washington (Seal's,) Unique, Metropolitan Rose, Captain Cook, Rose Triumphant.

Mr. Hopkins, Brentford, for Twelve Blooms, viz:—Knight's Victory, Dodd's Mary, Metellus, Squibb's Purple Perfection, Horwood's Defiance, Bontisholl, Warminster Rival, Knockholt, Rival, Unique, Rosetta, Springfield Rival, Lady Dartmouth.

Mr. Widnall's, Grantchester, for Twenty-four Blooms, (Nurseryman's Class,) viz:—Widnall's Conductor, Ditto Cambridge Hero, Ditto Ne Plus Ultra, Ditto Sir Walter Scott, Ditto Duke of Devonshire, Hope, Sir H. Fletcher, Eva, Sarah, Springfield Major, Unique, Knight's Victory, Countess of Torrington, Calliope, Dodd's Mary, Macket's Helena, Springfield Rival, Topaz, Ovid, Ruby, Suffolk Hero, Conqueror of Europe, Warminster Rival, Lady Kinnaird.

SECOND PRIZE.

Mr. Willmer, Sunbury, for One Hundred Blooms.

Mr. Gurney, gardener to Capt. Lomax, for Twenty-four Blooms, viz:—Middlesex Rival, Gaines's Queen Victoria, Knight's Victory, Springfield Rival, Elphinstone's Purple Perfection, Girling's Topaz, Kingscote Rival, Willmer's Duchess of Montrose, Bianca, Suffolk Hero,Ansell's Unique, Rival Sussex, Cooper's Rhoda, Whale's Royal Standard, Kington's Maid of Judah, Bontisholl, Oxford Rival, Allman's Splendissima, Conqueror of Europe, Piltdown Rival, Dodd's Mary, Gaines's Mirror, Sulphurea Elegans, Springfield Major.

Mr. Headly, Cambridge, for Twelve Blooms, viz:—Vanguard, Eva, Victory (Knight's), Countess of Torrington, Sarah (Brown's,) Suffolk Hero, Topaz, Purple Perfection (Squibb's), Rienzi, Unique, Springfield Rival, Rosetta (Maher's.)

Messrs. Brown, Slough, for Twenty-four Blooms, viz:—Jeffries' Triumphant, Topaz, Duke of Devonshire, Lady Kinnaird, Royal Standard, Conqueror of Europe, Ovid, Foster's Eva, Beauty of Kingscote, Dray's Coriolanus, Clio, Middlesex Rival, Sylvia, Springfield Major, Ditto Rival, Sir H. Fletcher, Suffolk Hero, Warminster Rival, Unique, Rienzi, Brown's Julia, Clark's Julia, Rival Granta, Brown's Maria.

THIRD PRIZE.

Mr. Jackson, Kington, for One Hundred Blooms.

Mr. Howe, for Twenty-four Blooms, viz:—Dodd's Mary, Unique, Harding's Mary of Scots, Souter Johnny, Marquis of Lothian, Madonna, Rival Granta, Goldfinder, Plato, Rosetta, Duke of Sussex, Royal Standard, Rival Sussex, Rienzi, Duke of Devonshire, Topaz, Springfield Rival, Knight's Victory, Middlesex Rival, Ruby, Suffolk Hero, Conqueror of Europe, Addison, Dodd's Mary Queen of Scots.

Mr. Bragg, Windsor, for Twelve Blooms, viz:—Squibb's Purple Perfection, Metropolitan Yellow, Suffolk Hero, Countess of Torrington, Duke of Wellington, Howard's Defiance, Eva, Addison, Rosetta, Dodd's Mary, Springfield Rival, Unique.

Mr. Girling, Stowmarket, for Twenty-four Blooms, viz:—Robert Buist, Girling's Ruby, Eva, Man of Honor, Ansell's Unique, Rienzi, Mrs. Colt, Sir Walter Scott, Bontisholl, Corinne, Mungo Park, Hethergreen Rival, Summum Bonum, Helena, Rosetta, Middlesex Rival, Maid of Judah, Conqueror of Europe, Gaines's Queen Victoria, Marquis of Lothian, Sir H. Fletcher, Australia, Duke of Devonshire, Springfield Rival.

Prizes were also awarded to Mr. Gall, gardener to the Rev. E. Coleridge, Eton, for Twenty-four Blooms; Mr. Lidgard, Hammersmith, for Twelve Blooms; Mr. Howell, Deptford, for Twelve Blooms; Mr. Busby, gardener to Mrs. Crawley, for Twelve Blooms; Mr. Mayle, Bedford, for Twelve Blooms; Mr. Trentfield, for Twelve Blooms; Messrs. Catleugh and Son, Chelsea, for Twenty-four Blooms; Mr. Pamplin, Hornsey, for Twenty-four Blooms; Mr. Gaines, Battersea, for Twenty-four Blooms; Mr. Jeffries, Ipswich, for Twenty-four Blooms; Mr. Gregory, Cirencester, for Twenty-four Blooms; Mr. Willmer, Sunbury, for Twenty-four Blooms.

SEEDLING PRIZES.

1837.	1838.
Mr. Willmer, for Ringleader.	Mr. Wood, for Mountain Sylph.
Mr. Gaines, for Primrose.	Mr. Begbie, for Windsor Rival.
Mr. Protheroe, for Virgin Queen.	Ditto, for Matilda.
Mr. Jeffries, for Climax.	Mr. Whale, for President.
Ditto, for Diomede.	Mr. Brown, for ————.

After these complete returns, embracing those given in a previous number (Vol. IV. p. 452,) it may seem unnecessary for us to add any thing further. But, as some of our readers may like to see a selection of the names of those varieties, which were more particularly successful in winning the prizes, we have prepared such a statement from the returns of the societies, whose returns we have published, constituting as they do the most popular exhibitions, and upon whose reports we can rely with the utmost confidence.

It will be seen, from a glance at the reports, that there are several varieties enumerated, which were not in any of the collections in this country the past year. We have no doubt, however, but they will be added to our already extensive list of kinds, and we shall, therefore, divide our statement into two parts, viz:—the first, to embrace those flowers only which are already in our collections; and, second, those which will, in all probability, be added thereto the coming season.

FLOWERS IN THE COLLECTIONS OF 1838.

Dodd's Mary	56	Purp. Perfec'n (Elphinstone's)	15
Springfield Rival	54	Glory of the West	15
Suffolk Hero	54	Lady Dartmouth	15
Topaz (Girling's)	45	Conductor	13
Sir Henry Fletcher	40	Beauty (Brown's)	12
Conqueror of Europe	37	Warminster Rival	12
Ruby (Girling's)	35	Queen Victoria (Fowler's)	12
Middlesex Rival	35	Ne Plus Ultra	12
Victory (Knight's)	30	Springfield Major	12
Royal Standard	25	Beauty of Bedford	10
Blandina	20	Sarah	10
Hope, or Metropolitan Rose	18	Duke of Wellington (Dodd's)	10
Addison	18	Mary Queen of Scots (Dodd's)	8
Jeffries' Triumphant	20	Reliance	8
Rienzi	16	Marchioness of Tavistock	5
Purple Perfection (Squibb's)	16	St. Leonard's Rival	5

It will be recollected, that the new varieties which were first sold out last spring, from their very high prices, were not of course grown to one quarter the extent of the older kinds. Hence we see that Ne Plus Ultra, Rienzi, Hope, Royal Standard, and others, did not gain near the number of prizes of the old ones. It will be perceived, however, that they were in the *first class* prizes at the above shows. The best flowers of each class from the above, are as follows:—Best dark, Suffolk Hero; best purple, Purple Perfection; best scarlet, Glory of the West; best dark shaded, Ne Plus Ultra; best rose, Sir H. Fletcher; best yellow, Topaz; best white, Blandina; best edged, Dodd's Mary; Springfield Rival retains its character well.

FLOWERS SUPPOSED TO BE IN THE COLLECTIONS OF 1839.

Unique (Ansel's)	45	Oxford Rival	20
Eva (Foster's)	30	Cambridge Hero	12
Clio Perfecta	30	Bontisholl	12
Rival Sussex	30	Lady Kinnaird	12
Marquis of Lothian	25	Mount Pleasant Rival	10
Duke of Devonshire	20	Stuart Wortley	10
Countess of Torrington	20	Miss A. A. Broadwood	8
Rosetta	20	Ovid	8

A great many others gained prizes, but these include such varieties as are more frequently named. Undoubtedly, another season, they will take a large number of prizes.

From this summary view, the dahlia fancier may form an estimate, so far as one can be formed, from the success of the flowers, of the relative value of each. It will not be supposed, however, that those only which have gained prizes will be cultivated; but that a greater proportion of those kinds will be planted. Where the object is to have showy plants, and not for exhibition only, there are some other sorts which are fully as valuable.

A great quantity of new seedlings, to be sold out for the first time this spring, are now advertised. Mr. Elphinstone has eight or ten; Mr. Widnall, three or four; Messrs. Brown, three or four; Mr. Girling, six or eight; and many other growers, one or more each. There continues to be great improvement in the various properties of a flower, and we think we do not judge incorrectly, when we state that, five years from this time, not twenty of the kinds now grown will be then considered as worth possessing. A few will retain a place in our collections, but the majority will be consigned to the destiny of thousands before them.

We hope that our amateurs and florists will make experiments in raising new varieties from seed; for we are convinced that they will stand our scorching sun better than the English varieties: we have seen this tested in some American plants which we have grown the past year. Buist's Mrs. Rushton flowered the whole summer through, the plant attaining its full height; while not half a dozen other dahlias, out of five hundred plants, perfected their growth or displayed scarcely a bloom. The time is at hand for planting seeds, and starting the roots for early flowering, and we trust that the coming season will be favorable to their well doing, and that a more numerous and rich display of flowers will be made, than has ever yet graced our exhibitions.—*Ed.*

ART. II. *Supplement to the Reports of the Exhibitions of Horticultural and Floricultural Societies.*

In the last number of our last volume, we gave the reports of all the Horticultural and Floricultural Exhibitions which we had received. We omitted, however, in that report, the Horticultural Exhibition held in Bangor, in October last. The exhibition was got up by the spirit and enterprise of a few individuals, without the aid of a society, and a very excellent collection of plants and fruits was displayed. We shall commence with an account of this exhibition.

Horticultural Exhibition in the city of Bangor, Oct. 4th and 5th, 1838. The exhibition took place in the hall of the Mechanics' Association, and was well attended by the citizens, without any charge for admission.

Fruits:—From E. Goodale and Sons, of Orrington, thirty-nine varieties of pears and apples; among the former were the King of Wurtemburg, (or Capiaumont,) Napoleon, Harvard, Williams's Bon Chrétien, Passe Colmar, and Hardenpont de printemps; and among the latter, the Maiden's Blush, Grand Sachem, red and green Sweeting, Porter, Ribstone pippin, Golden Russet, Orange Sweeting, Gravenstein, Hawthorndean, yellow Siberian Crab, &c. &c. From Gen. Herrick, Hampden, fine Isabella, and white Chasselas grapes; also thirteen varieties of apples, viz: Swaar, Nonsuch, Gloria Mundi, Monstrous pippin, Wine apple, Seek-no-further, King's Pocket, Newtown pippin, Killam Hill, &c. &c. From David Crowell, Exeter, several varieties of apples, without the names. From Dr. Joseph

Huse, Campden, Huse seedling apples. From M. P. Sawyer, Portland, presented by J. S. Sayward, Egg plums, Isabella and white Chasselas grapes. From Asa Gilman, A. Walker Jr., and Mrs. Perkins, of Bangor, specimens of apples, plums, &c. &c.

Plants:—The exhibition of plants, mostly from private collections, was very splendid and vigorous. Miss Hutchings presented a fine collection of healthy and rare plants. Mrs. Sylvanus Rich, Jr., Mrs. Davidson, Mrs. J. Fiske, Mrs. Asa Sawyer, Mrs. John Hooper, Mrs. S. E. Benson, Mrs. W. B. Reed, Mrs. F. F. French, Miss Holland, Mrs. A. M. Roberts, Mrs. N. C. Bishop, Mrs. Isaac S. Whitman, Mrs. J. Barstow, Mrs. H. Little, Mrs. Daniel Stone, and several other ladies, presented beautiful specimens—monuments of their skill and perseverance.

Flowers:—The collection of flowers was very brilliant, and impregnated the air with their delicious odor. These were furnished from the private gardens of the city, and by fair hands, which are too numerous for us to give the names of the owners.

Vegetables:—The mammoth productions of the vegetable kingdom astonished every beholder. These were from the gardens of B. C. Attwood, at Glenburn Cottage; Samuel Stetson, Jesse Hinks, and Mr. Copeland, of Brewer; the cottage garden of F. Wingate, Mount Hope; Dr. Barstow, John Hooper, Amos M. Roberts, Ebenezer French, Thomas Beacroft, J. Young, Asa Davis, J. S. Sayward, W. T. Pierce, John Lowell, Nathaniel Jordan, M. T. Burbank, Lewis Spooner, W. E. P. Rogers, Mrs. Susan Thompson, and others. (*Mechanic & Farmer.*)

Pennsylvania Horticultural Society.—Monthly meeting, Nov. 23d. At the November meeting, the display of fruits, flowers, and vegetables, was, as usual, very interesting, and witnessed by a numerous congregation of ladies and gentlemen members.

The committee on fruits awarded the premium for apples to Mr. Thomas R. Fisher.

The committee on vegetables decided in favor of Wm. Chalmers, gardener to Mrs. Stott, for the best Cardoon, Brussels sprouts, and the most interesting display of vegetables.

The plant and flower committee yielded the premium for the twelve best chrysanthemums to Messrs. Mackenzie & Buchanan. The following are the names:—Superb orange, Park's small yellow, Expanded light purple, Curled pink, Expanded pale orange, brown purple, Golden lotus, Crimson, superb rose, (?) Tasseled purple, Starry purple, and Copper quilled, (?).

Also to Wm. Chalmers, gardener to Mrs. Stott, for the best display of plants as follows:—A grafted Epiphyllum truncàtum, nine feet in circumference, and in full bloom. E. Ackermánii màjor, E. speciòsum, Stapèlia ambígua, Agératum mexicàna, Erica vérnix coccínea, Amaryllis vittàta, Lechenaúltia formòsa, Eucòma fràgrans, crimson tea rose, Dáphne odòra, and a variety of chrysanthemums. An honorary premium of five dollars was awarded to Robert Kelvington, for his show of elegant *seedling* chrysanthemums.

Mr Alexander Parker exhibited sixteen varieties of chrysanthemums in pots, and twenty varieties cut; also, "Seal's Invincible" dahlia in bloom, and a root of a dahlia which had flowered this season without planting.

Several beautiful varieties of cactus were brought forward in bloom, by Mr. Wm. Chalmers, Jr., gardener to George Pepper, Esq.—*John W. Burrows, Recording Secretary.*

Horticultural Society of Charleston, S. C.—The following persons were awarded each a silver medal, at the anniversary of the Society in September last.

To Mrs. Davis, for ranunculus; to Mrs. Cochran, for picotees; to Mrs. Wagner, for the best cultivated garden; to Mrs. F. Rutledge, for the best cauliflowers; to Col. Lucas, for the greatest number and variety of the Camél*lia* japónica; to the same gentleman, for hyacinths; to the same for musk-melons; to Mr. John Michel, for C. reticulàta; to the same gentleman, for the finest specimen of a rose; to the same, for the finest variety of roses; to Dr. Winthrop, for the most beautiful flowering exotic; to Mr. Andrew Gray, for the finest collection of dahlias; to Mr. M. D. Stroble, for an indigenous shrub; to Mr. Edward Barnwell, for celery; to the same gentleman, for cabbages; to Mr. James Bancroft, for artichokes; likewise for Guinea squashes.

To Dr. E. Horlbeck, for London leeks; to Mr. Joseph A. Winthrop, for sugar beets; likewise for strawberries; to Mr. J. Hartman, for Napoleon potatoes; to Mr. Tobin, for white onions, raised in the garden of Dr. North; to Mr. Charles Bassacker, for peaches; to Mr. Henry Stifley, for apricots; to Mr. S. Magwood, for pears; to Mr. F. Michel, for Perrigaud plums; likewise for Portugal quinces; to Mr. William McKown, for apples; to Mr. T. F. Purse, for imported mulberries; to Mr. George Chisolm, for grapes; to Mr. Edward De Cottes, for figs; to Mr. Henry Horlbeck, for nectarines.—*Joseph F. O'Hear, Secretary.* (*Southern Agriculturist.*)

ART. III. *Massachusetts Horticultural Society.*

Saturday, Dec. 29th, 1838.—*Exhibited.* Fruits:—From J. M. Ives, Salem, Carthouse or Gilpin, Wellington, Michael Henry pippin, and Swaar apples; the first named a very fine fruit. From S. Walker, Boston Nonsuch apples. From L. P. Grosvenor, Nonsuch, Spitzemberg, Chandler and winter Queen apples. From Geo. Newhall, Hubbardston, Boston Nonsuch, and two kinds of apples, names unknown. From P. C. Brooks, apples, the names unknown. From J. Clapp, S. Reading, Nonsuch apples, and a seedling of Mr. Corses, of Montreal. From E. M. Richards, Moore's sweeting, Pomme d' Api, Baldwin, Gardener, white Calville, Sweeting, Winesap and another kind unknown; also Easter buerré, Prince's St. Germain, and L' Echasserie pears; the latter a fine winter fruit.

Jan. 5th, 1839.—*Exhibited.* Fruits:—Fine baking pears from Geo. Brown, Beverly. From L. P. Grosvenor, Chandler apples. From J. Prince, apples, the names unknown.

Jan. 12th.—Exhibited. Flowers:—A seedling camellia from W. E. Carter, Botanic garden, Cambridge. The flower appeared one of considerable merit. The color was a light rose; the foliage large and glossy, and the habit vigorous.

Fruits:—From B. V. French, Ortley pippin, Nonsuch, Courtpender plat, Sweet and Sour, Rhode Island greening, Ferns pippin, Seekno-further, yellow Bellflower, and Black apples. From R. Manning, Catillac pears, and Conway, Russet pearmain, Court of Wyck and Titus pippin apples. From E. M. Richards, white Calville apples. From George Newhall, Isabella grapes in a fine state of preservation.

Jan. 19th.—Exhibited. Fruits:—From R. Manning, Pomme d'Api apples. From S. Walker, Nonsuch and Baldwin apples.

Jan. 26th.—Exhibited. Fruits:—From B. V. French, Wellington, Pomme d'Api, and Monstrous pippin apples. From J. S. Cabot, Esq., Salem, Lewis, Coffin's Virgoulouse, Wilkinson, Chaumontel and beurré Diel pears.

The fruit, flower and vegetable committees have submitted their reports of the award of premiums for 1838; but we have no room for their insertion in this number.

ART. IV. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
Common, per bushel,	50	60
Chenangoes, per barrel,	1 75	2 00
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 50	1 75
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	2 50	—
Eastports, per bushel,	1 00	—
Sweet Potatoes, per bushel,	1 50	—
Turnips:		
Common, per bushel,	25	37
Common, per peck,	12½	—
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	4	6
Yellow, per bushel,	1 00	—
White, per bushel,	1 25	1 50
White, per bunch,	4	6
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	—	—
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoys,	50	75
Drumheads,	75	1 00
Red Dutch,	75	1 00
Cauliflowers, each,	12½	25
Brocoli, each,	10	15
Lettuce, per head,	10	12½
Celery, per root:		
Giant red and white,	10	20
Common,	6	10
Spinach, per half peck,	25	—
Tomatoes, per half peck,	—	—

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes:		
Autumnal Marrow, per cwt.	1 50	2 00
Winter crook-neck, pr cwt.	1 50	2 00
Canada, per cwt	2 00	—
Pumpkins, each	12	25
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 00	—
Common, per bushel,	50	75
Baldwins, per barrel,	2 50	2 75
Sweet apples, per barrel,	2 50	2 75
Golden Pippins, per bbl.	3 00	4 00
Greenings, per barrel,	2 50	2 75
Russets, per barrel,	2 25	2 50
Blue Pearmains, per bbl.	2 50	2 75
Pears, per dozen:		
Chaumontel,	20	25
Burgomaster,	37½	—
Beurre Diel,	25	50
Winter St. Michaels,	50	—
St. Germain,	50	1 00
Baking, per bushel,	2 00	—
Grapes, per lb:		
Malaga,	25	—
White sweet-water,	—	—
Citron Melons for preserves,	12½	—
Cranberries, per bushel,	2 50	3 00
Quinces, per bushel,	—	—
Berberries, per bushel,	—	—
Lemons, per dozen,	20	25
Oranges, per dozen,	—	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 25
Walnuts, per bushel,	2 00	2 50
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

REMARKS.—The mild weather of the past month, with the exception of one or two very severe days, has been favorable to a good

supply of such articles as are grown in the immediate vicinity; consequently, there has been the usual stock on hand, with but slight alteration in the prices. Potatoes are amply abundant to meet all demand for the present, without fearing enhanced prices; no arrivals, nor shipments to notice since our last. Turnips are good, and plentiful. Onions remain the same. No radishes have yet come to hand, but, before our next, a good supply is anticipated. The stock of cabbages holds out well and of fine quality. Cauliflowers are rather scarce, and in some demand. No brocolis in the market. The first lettuce has been received this week, and readily sold at our quotations. Spinach comes in of fine quality, but not very abundantly.

Of squashes, the stock, of all kinds, has become more reduced, and an advance has been made upon the prices; prime autumnal marrow sell quickly at two dollars; good Canadas the same, and common at one dollar and a half. A small lot of West Indies have arrived since our last. Pumpkins are about gone.

In fruit, with one or two exceptions, the market remains in the same state as at our last report. Apples are in good demand, and prices have improved accordingly; a scarcity at the south has caused the shipment of some small lots of Baldwins. Apples keep exceedingly well this season. Some Golden pippins and Lady apples are retailing in small quantities. Fine pears are about gone; some few St. Germains remain. Grapes without alteration. Cranberries have taken a very rapid rise, and our quotations are fully sustained; the stock is becoming very limited. Oranges and lemons are the same. Chestnuts have advanced a little, probably from the lateness of the season; the quality of the past year's crop has not been equalled for some years. Good walnuts are very scarce and in demand.—*Yours, M. T., Boston, January 26th,* 1839.

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

The same remarks which we gave under the head of January are, in part, applicable to this month also. Not any thing can be done out, this month, and the green-house, hot-house, frames, hot-beds, &c. will be all that will require attention; as the season progresses, every department will need increased care and attention.

FRUIT DEPARTMENT.

The whole operations in the department are confined wholly to in-door cultivation; grape-vines in green-houses, if not fully pruned, should now have the work completed: vines, in pots, should be brought in the latter part of the month, if desirable to get them forward early.

Strawberries, in pots, may be now successfully brought forward in frames, or on the upper shelves of hot-houses.

Peach and other trees, in pots, may be also hurried forward, by placing them in the green-house.

Scions, for grafting, may be cut this month, and put away in earth, in a cellar, until wanted for use.

FLOWER DEPARTMENT.

Camellias continue to require a good portion of air and water. If the plants have not been washed and cleaned of insects, let it be done as speedily as possible. Repotting may commence as soon as the bloom is fairly over. Seeds may be sown now.

Amaryllis should be potted as soon as they show signs of flowering.

Verbenas, of all sorts, should now have little more water. The Tweedieàna should be repotted, and receive a more liberal supply than the others. Train all of them to neat trellises made in any fanciful shape.

Dahlias. If early blooms are wanted, the roots may now be brought into the warmest part of the house and potted; as soon as they show their shoots, divide them, or propagate by cuttings. Sow the seeds now, so that the plants may flower strong.

Lechenaultia formosa. Water this plant with care, as it suffers from a superabundance of moisture.

Hyacinths, in pots, should receive a good supply of water, when in bloom.

Oxalises done flowering should be very slightly watered.

Gladiolus natalensis may now be potted for flowering early.

Roses, carnations, &c. in frames, should be looked after carefully; take off the sashes every fine day.

Seeds of some annuals may be now sown in a hot-bed if one is handy.

Geraniums, in small pots, should now be shifted into the next size, (No. 3.)

Trevirana coccinea. The little imbricated roots of this pretty plant should now be repotted in No. 1 pots.

Tree pœonies, in pots, should now be brought forward in the green-house or parlor.

Erica seeds may now be sown, and cuttings put in.

VEGETABLE DEPARTMENT.

Hot-beds, for early planting, should be made this month. Lettuce, radishes, &c. may be planted, and other work commenced.

Rhubarb roots may be forced in pots in the green-house or the frame.

Asparagus roots may be also forced in hot-beds or frames.

Tomato and egg plant seeds should now be sown, to produce a very early crop.

Cucumbers sowed last month will be ready for hilling out into new beds. Keep up a good heat by the aid of linings, if the weather should be very severe.

Cauliflower seeds may be sown for a very early crop.

THE MAGAZINE

OF

HORTICULTURE.

MARCH, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Notice of a paper of* Capt. S. E. COOK, R. N., *on the genus* Pinus *and* Abies. *From the Annals of Natural History.* Conducted by Jardine, Hooker & Taylor. Nov. 1838. No. IX. &c. By J. L. R.

CAPT. COOK, in communication before the section of zoology and botany, at the meeting of the British Association, has given a very interesting account of the most curious and valuable sorts of pine, whether considered as objects of botanical interest, or as materials for timber. Capt. Cook supposes that seventy species may be found in the British collections, and these confined to *Pinus* and *Abies*; many of these are well defined, others of doubtful nomenclature. As it would be incompatible with the means of an ordinary article to give a detailed account of all these, they are divided into groups, with occasional remarks on the European species.

The following are the groups.

1st. Old America—that is, the United States west to the Mississippi and Canada, with Labrador, and extending to the limits of vegetation to the north.

2d. Species indigenous to the range of the Rocky Mountains. This group, consisting of about fifteen species, he calls the "*Douglas Group*," after a traveller whose memory well claims such a compliment.

3d. From the uplands of Mexico.

4th. Species clothing parts of the Himalaya Mountains.

5th. Those of Europe.

Were information on the subject more complete, another and sixth group would be made from those of Caucasus and mountains north of Asia.

Of the first group, the number of species is about twenty, presenting every variety of form and size. Capt. C. supposes, however, that the timber of this group is only second-rate quality, attributing its faults to a too rapid and sheltered growth.

Pinus and Abies.—From the second, or Douglas group, much may be anticipated to the timber yard and woodland. According to accounts transmitted to Dr. Lindley, the *Abies Douglásii*, appears to possess the qualities of larch, durability, quick growth and utility when young, with the advantage of being an evergreen. It is readily cultivated from cuttings.

The Mexican species are few in number and of too recent introduction, to ascertain much respecting them, and probably are to be considered as tropical specimens, rather than as objects of utility. The Himalayan species are, as yet, few in number, but of great interest. Aided by the liberal scientific patronage of the East India Company, valuable results may be looked for in this department of dendrology. *Abies Webbiàna* has stood the winter, at Carlton, though suffering nearer London. It may, probably, succeed eventually, while *Abies Morinda*, which has stood uninjured, deserves attention. Both species grow from cuttings.

The Altaian silver fir, *Abies Pichta*, Capt. Cook thinks, might be found in the northern part of the Himalayan Mountains, a most desirable tree to possess; while exertion should be made, through the Russian government, to introduce it by importation of seed in cones.

The last group, and to which Capt. Cook gives the most importance and value, is the European. The reason of this, he asserts, is owing to the most exposed and northern habitat in which these species grow; being found in different latitudes, indeed, but in the same temperature, whether as growing on the sea-shore, or else on the mountain declivities. First, he computes *P.* sylvéstris, for its hardiness and good timber qualities, as the head of the scale. Two species only grow at a higher elevation, *P. Cémbra* and *P.* uncinàta. The former grows above all other forests. A few are remaining on the Montanuet Chamouny. It also thrives in the coldest parts of Siberia. Timber superior to that of the sylvéstris.

P. uncinàta forms a complete zone in the high Pyrenees, where it is placed above the *P.* sylvéstris.

P. sylvéstris is found from Norway to the south of Spain: supplies Madrid with building materials.

Next in rank are *P.* Larício, and *P.* hispánica. *P.* Larício seems confined to the central parts of the island of Corsica, in latitude 43°, at a moderately high elevation. *P.* hispánica ranges from Sierra de Segura, in latitude 39°, to the foot of the Pyrenees, in latitude 43°, generally at an elevation of two thousand to three thousand feet. Erroneously represented as found in France.

P. Pináster and *Pínea*, or stone pine, are next on the list. *P. Pináster* occupies a regular zone below *P.* sylvéstris, in the central range of Guadarrama.

The most northern limit of *P. Pínea* is on the plains and uplands of Old Castile. Although so northern, yet the timber is notoriously poor. Capt. Cook accounts for this fact on the ground, that, although thus found at the north, it in reality is better suited, in a spontaneous growth, to the sandy wastes of Andalusia, in the Terra Carliente of Spain, in company with the palm and the cactus.

P. halepénsis, and its three varieties, come next. These varieties are, first, that with large red cones, common in Spain, and the hardier; thè second has small cones, and was found on the Riviere of Genoa; the third is *P.* Brùtia of Prof. Tenore, of which a specimen exists in the Botanical Garden at Naples. Too tender for the growth of London.

Capt. Cook considers the species *P.* tartárica or Pallas*iàna*, and the austrìaca, as very nearly allied. The locality of the former is the Crimea. The austrìaca has been introduced recently by Mr. Lamson, of Edinburgh, and promises to be a most valuable addition to the arboretum of Britain.

Of the *Làrix* (Larch,) immense forests exist in the Piedmontese Alps, around Mount Rosa and Mount Blanc, and in ascending the Great St. Bernard may be seen overtopping every other object.

Of *Abies*, the first in hardiness is *A.* excélsa, or common spruce, ranging from Lapland to Savoy. *A.* pectinàta, or silver fir, is unquestionably less hardy than *A.* excélsa. Extensive forests of it exist in the Pyrenees, and a variety may be found in Greece.

Capt. Cook takes up the theory, that immense tracts of poor and wild land may be successfully employed in arboriculture. "There is no question whatever that the Grampian mountains might, at a cost comparatively trifling, enable us to provide for our own wants, and even to export timber.

"The last Duke of Athol calculated that the possessor of his woodlands, on the Tay, would, in a few years, be as rich, or richer, than any individual in Britain! What are these wood-

lands? They consist of ten thousand acres of larch, planted, in great part, upon barren moor-land, the aggregate value of which was a very few hundred pounds per annum! By devoting one hundred thousand acres, which is about the size of the larger highland estates, to a similar purpose, we should, in seventy to seventy-five years, proceeding on the calculation of the Duke of Athol, that, in the same period, his forests would be worth five to six millions sterling, be possessed of national capital, to the amount of fifty to sixty millions in timber alone. It is needless to observe, that this immense result cannot be obtained, or even the entire foundation laid in a moment, but must be attained by steady and systematic perseverance."

It is the opinion of Capt. Cook, that *P. Cémbra*, which, though superior to any other species, is of extremely slow growth, might be improved by grafting on the *P.* sylvéstris, after the Tchoudy mode. The spruce should receive a proper attention, being so well adapted to a damp soil. The silver fir, of a rapid growth, and resisting wind, would be worthy of trial in proper soils. An instance is mentioned of a specimen, not occupying a space of more than forty feet in diameter, being valued at one hundred guineas for its timber, in a season of scarcity for that article. The larch cannot be grown to much profit on cold wet lands. The cedar of Lebanon, with a little care, at first may be grown in any part of the south of England, being raised easily from cuttings, and doing well by grafting.

Larch may be considered an improver of the soil. Planted on wet land for this purpose, after fifteen or twenty years they may be thinned, and, as they fail, removed. To this end, they should be planted in masses, unmixed with other sorts, and considered as fructifiers or ameliators of the land; a few of the trees suffered to remain, to defray the expense and loss of time. In this manner, extensive and valuable pasturages may be secured. J. L. R.

ART. II. *Some Notice of the collection of Plants of Dr. Wood, Professor of Materia Medica in the Pennsylvania University.* By Dr. G. WATSON, Philadelphia.

IT may not be uninteresting to some of your readers to know the progress of our horticultural pursuits in Philadelphia.

I therefore shall commence by giving you some account of the collection of Dr. Wood, Professor of Materia Medica, in the Pennsylvania University. He has erected a stove and green-house, thirty-five feet in length, twenty feet high, and twenty feet wide, for medical plants, as well as those ornamental, to exhibit for the benefit of his class, combining utility with pleasure. His collection of medical tropical plants is limited as yet, but will soon be full, as he has ordered from Europe all that can be obtained. Connected with the above, is a large garden, beautifully laid out, filled with the native medical plants and shrubs, as well as those highly ornamental. In the middle there is a fish pond, surrounded with a suitable soil, containing many of the orchidea, Sarracè*nia*, *Nelúmbium*, *N*ymphæ`a, &c.

The following are some of the stove plants, which are in fine condition and large specimens, viz: Játropha *Mánihot*, J. *Cúrcas*, *Tamarindus* indica, Ipomæ`a *Jálapi*, *L*aúrus *C*ássia, *L.* cinnamòmum, *Coffèa* arábica, *Arèca Cátechu*, *P*hœ`nix dactylífera, Sáccharum officinàrum, *P*ìper mèdium, *M*yrtus ácris, *M. Piménta*, Eugè*nia* caryophilàta, *P*sídium pyrìferum, *A*sclèpias gigántea, Mangífera indica, *Jambòsa* vulgàris, Quássia amàra, Q. excélsa, *C*ycas revolùta, Cocólloba uvífera, Astrapæ`a Wallich*ii*, *Bixa* orellàna, Cæsalpì*nia* cucullàta, Melaleùca *Cajupùta*, Melástoma heteromálla, Dracæ`na terminàlis, D. férrea, Swietè*nia Mahágoni*, Alstò*nia* macrophylla, Strelítz*ia* regìna, *P*lumbàgo capénsis, Terminàlia *Benzoìn*, T. angustifòlia, *C*rìnum amábile, *D*ólichos prùriens, *H*ibíscus populnoìdes, *Técoma* capénsis, Calàthea zebrìna, Poinsétt*ia* pulchérrima, *A*loe perfoliàta, *A.* arbòrea, *A.* saponària, *A.* spiràta, *A.* soccotrìna, *A.* vulgàris, Zingiber officinàle, *F*icus elástica, *Vanílla* aromática; besides a great many of the finest cereuses, opuntias, cactuses, maryllises, &c.

In the green-house, *L*aúrus *Cámphora*, a fine specimen, *L.* nóbilis, *O*`lea europæ`a, *P*hòrmium tènax, *Thèa* vìridis, *T. Bohèa*, *P*istàcia lentíscus, *P.* Terebínthus, *S*chìnus mólle, Illícium *a*nisàtum, I. floridànum, *F*icus cárica, *S*cílla marítima, Lechenaúlt*ia* formòsa, Roél*la* ciliàta, *Ribes* speciòsum, in flower, Magnò*lia* fuscàta, a fine selection of roses, pelargoniums, azaleas, ericas, lemons, oranges, passifloras, &c. Many of the oranges and lemons are fine specimens, having been purchased at the late Henry Pratt's sale, Lemon Hill. The collection, in its imperfect state, does the Doctor the greatest credit, for his fine taste in the arrangement of his garden and houses. It is gratifying to see the love of plants on

the increase in this fine city, and the good effects it will have on the minds of the rising generation. When time permits, you will hear from me again, enumerating some of the other fine establishments recently erected here.

Yours, sincerely, G. Watson.

Philadelphia, Jan. 1839.

Art. III. *Notices of Culinary Vegetables, new or recently introduced, worthy of general cultivation in Private Gardens, or for the Market.* By the Editor.

In again presenting to our readers our remarks on new vegetables, we feel gratified in being able to state that our notices, which have appeared in our two last volumes, have been the means of introducing to greater notice and cultivation, many of the new productions which we have noticed and described. We shall continue to add all the information which can be gathered upon this subject, and shall not let any new variety, worthy of notice, escape our attention.

Among those kinds, which have been more particularly mentioned in our articles, and which have now become extensively known, and much cultivated, are Bailey's red and white giant celery, the forty-fold potato, the early Vanack cabbage, and the Soissons bean. Each of these varieties have been much sought after, and they have proved fully equal to what they were recommended. Many of the other sorts which were noticed are now under trial, and their good qualities will soon be ascertained. New vegetables do not find their way into cultivation with the rapidity of new fruits or flowers, especially among that portion of the community who would be the most benefited by their growth; the prejudices of market gardeners and farmers against new articles, as well as new experiments, are almost fatal to their introduction. Unless the merit of a new variety is so very great as to partake of the marvellous, it is a long period before it becomes generally cultivated. The information, however, which is now diffused through the great number of farming periodicals is, luckily, dissipating such prejudices, and the more enlightened of our

agriculturists have become somewhat convinced, that there may be great improvements made in the varieties usually cultivated, as well as superior kinds introduced, which may take the place of those we now value.

The past year there has not been so many new varieties brought into notice, as heretofore. In the kitchen garden department there have been one or two introductions of some merit. To the farm there has been one addition of great importance in the Rohan potato; indeed we may, with truth, say, one of the most important acquisitions ever made to our husbandry. The past year was not propitious to the gardener or farmer in our vicinity; the unprecedented drought, during August and September, cut short the crop of most vegetables. Potatoes suffered severely, and the only crop which may be said to have been good and large, was the squash. Corn suffered in common with all other products.

In Britain, and on the Continent, some new vegetables have been introduced, which have attracted considerable attention; these we shall briefly notice at this time, leaving a more extended account of them to a future period, when we may do so from our personal observation.

The *Cuba tomato*, introduced by Mr. Lowell, the seeds of which he procured in Cuba, during a residence there through the winter of 1837, was exhibited before the Massachusetts Horticultural Society, and noticed by us in our reports (Vol. IV. p. 390.) Mr. Lowell stated in a note, that it was preferred by the Spaniards to any other variety. The fruit is rather smaller than the common tomato, of an oblong shape, and of a deep red color, not quite so bright as the former. It is fine for preserves. It is an abundant bearer, and full eight days earlier than the common kind. Mr. Lowell's recommendation is a sufficient guarantee of its goodness.

The Imperial Watermelon, a new variety, was raised the past summer, by T. Allen, Esq., of Hyde Park, New York, which, for richness of flavor, firmness of the flesh, thinness of the skin, productivenes, and every other good quality, surpasses any thing we have ever tasted. We do not know the source from whence the seed was procured; but it is sufficiently early to arrive at perfection in our climate, and it must become very extensively cultivated. The seed cannot, probably, be procured in any quantity, as only a few melons were raised; we shall, after the trial of another season, notice it again.

The Cedo Nulli pea, introduced for the first time last year, has promised to be a fine and very early variety, and one which

we recommended to the notice of all gardeners. It is dwarf, early, and prolific. We would not have gardeners, as well as farmers, forget to cultivate, and extensively too, Groom's superb dwarf blue pea, which we have heretofore recommended.

The Rohan potato.—This remarkable variety of the potato will be very generally cultivated the coming season. The extraordinary produce in almost every single experiment which has been made in their growth, notwithstanding the past unprecedented dry season, has convinced even those who have little faith in new varieties of vegetables, that it is a most prolific, and, consequently, a valuable article. Only a very limited supply for planting could be obtained last spring, and four or five pounds was the most that could be easily procured by a single individual: but the increase has been so enormous, that, from this small amount of seed, a sufficiency has been raised to plant an acre or more.

After what we have said in our previous numbers, and the appearance of Mr. Kenrick's article, (p. 51,) it is not necessary that we should occupy the time of our readers with a repetition of the same, but simply remark, in addition, that there remains no doubt but that it is the most valuable article which has been introduced to our husbandry for many years.

We have given an account of the origin of this variety in our IV., p. 149. It was named in honor of the Prince Rohan, of Geneva, who was the first to disseminate it.

An opinion has gained ground, that the Rohan potato is very inferior to our common kinds: this, however, is a great error. We have previously given Judge Buel's opinion of its quality, and we can confirm what he has stated. When the potatoes are grown to their proper size, which is two or three pounds each, we have no doubt that, with the same care in cultivation, they will be found equal to any other variety. In proof of this, we may notice that a late London paper states, that a "new and extremely prolific variety, of German origin," was introduced last spring, and cultivated for the metropolitan market. Of its enormous produce there is no doubt; we lately stated, (p. 35,) that twelve hundred bushels might be raised on an acre; and we have no hesitation in saying that it may be made to exceed this!

A paragraph has just met our eye in the London *Gardener's Gazette*, stating that a new variety, called the mangel wurtzel potato, was introduced last spring, and that a gentleman of Waterford procured four of the tubers. These were cut into thirty-six sets, and planted on good land, with the usual quan-

tity of farm-yard manure, in drills three feet apart and twelve inches between the sets, the whole occupying just twelve square yards. When dug, the produce was one hundred and twelve pounds, being at the rate of *thirty-five tons* to the acre, or thirteen hundred bushels. There is not the least doubt but that the mangel wurtzel potato, *so called*, is the Rohan which has acquired the former name in England, from its great size. We again commend it to the notice of every farmer or gardener.

In our next article we shall notice some other new vegetables.

Art. IV. *Description of four new Verbenas.* By R. Buist, Philadelphia.

I beg to hand you, according to promise, a brief description of the new verbenas raised from seeds, which I received from South America, last April. The seeds were brought by Mr. Eyre, of this city, as being something entirely new, who very kindly presented them to me; and, although he then described a white sweet-scented verbena, I did not anticipate that I should grow such a one from the seeds; not doubting that such a plant existed, but fearful that we should not have the chance to grow it. It is, however, an astonishing fact, that, from the few seeds presented to me, four new varieties should have been grown; in fact, three of them are distinct species.

*V*erbèna Eyreàna.—Bright pink; flowers in corymbs as large as *V.* Tweedieàna, and is also very profuse; is of a very strong upright growth, forming a superb bush, from two to four feet high, well clothed with foliage. The leaves are ovate, lanceolate, if grown on strong ground; but if on poor soil, they are cordate, acuminate, and evenly dentate. It is a most distinct and beautiful species, and makes an excellent contrast with the procumbent sorts.

*V*erbèna álba.—White, flowers in spikes, frequently three to four inches long, and in the evening has the delightful odor of the jessamine; so much so, that it can be perceived at several yards distance. The plant has a half procumbent habit,

of stiff growth; the leaves are thickly covered with a silvery pubescence, and are ovate, lanceolate, and obtusely dentate. When I first saw the plant in bloom, I was under the impression that it would be the type of a new feature in this lovely tribe, and this impression is now strengthened, as it is a variety that seeds tolerably free, and is therefore excellent for hybridizing the other varieties upon.

*V*erbèna intermèdia.—Flowers rosy crimson, with a lilac edge, and is much of the habit of *V.* Tweedie*àna*, and equally as profuse of blossoms; it flowers in depressed corymbs. I have called this intermèdia, as it appears, both in flowers and habit, to be between Arran*iàna* and *Melindres* [chamædrifòlia,] and is a procumbent variety.

*V*erbèna Tweedie*àna* grandiflòra.—This is a distinct variety from Tweedie*àna*, and perhaps may yet become a species. The plant is of a stronger growth, with larger and more dense foliage. The flowers are also larger and equally as bright, and is, in every respect, as far as I have seen it, a superior plant, and will be found a valuable addition to this lovely group of perpetual blooming plants.

The day is not far distant, when the whole of this family will be fragrant; and I fondly anticipate that this country will even rival England in its cultivation.

All the verbenas delight in a dry, rich soil, and rather an elevated situation; severe watering and heavy rains make them meagre, yellow and sickly.

Yours, respectfully, R. Buist.

Philadelphia, Jan. 17, 1839.

Art. V. *Some Remarks upon the proper treatment of the Strelitzia regina.* By M. B. Bateham, Rochester, N. Y.

The Strelitzia regina, when blooming in perfection, is a most magnificent plant, and, considering its easy management and great beauty, it is surprising that so little attention is bestowed on its cultivation. On visiting, a short time since, the principal exotic collections in the vicinities of Boston, New

York and Philadelphia, I found but a very few specimens of this plant, and those were mostly small or sickly in appearance. This led me to infer, that our florists either never saw this noble plant in its full beauty, or else, as is often the case, they have been misled by great names, or false theories, and adopted a system of cultivation not suited to the nature of the plant.

Mr. Sweet, in the *Botanical Cultivator*, says the Strelítz*ia* "is a grand genus belonging to the *M*usàceæ." A *light sandy loam* is the best soil for the species. Loudon, McIntosh, and others, whose writings I have examined, all concur in recommending a light sandy soil. And it might appear like presumption in me to question their authority; but, as far as my observation has extended, I have never seen a thriving plant, of this species, growing in such soil.

The largest and most thrifty specimen of Strelítz*ia* regìna which I have ever seen, is one belonging to Mrs. J. Strong, of this city, now kept in the parlor of Mrs. H. Ely, and, at this time, in full bloom. This plant has grown several years in *a rather heavy, rich, black loam*, kept pretty moist, and treated, generally, like a *C*álla, which it somewhat resembles in its habit and growth. It has now sixteen or eighteen large, thrifty leaves, about three feet high, and three strong flower stems, with their crowned heads of flowers towering above the whole. Each stem has three or four large flowers, which open successively from a curious spatha calyx, and stand up like a crest of gold. The petals are of a rich, orange yellow, and inside of them are three broad stamens of the deepest purple. A drop of pure nectar distils from each flower, and stands, like a brilliant gem, on the outside. The whole combining to form a unique and gorgeous spectacle, justly admired by every beholder.

This plant was brought to this city about three years ago, and has flowered here three times. Its usual time of flowering is in March and April, but in the fine warm parlor, and under the excellent care of Mrs. Ely, it commenced blooming this year in January. It remains in flower more than a month.

Mrs. Ely's rooms are ornamented with a choice collection of green-house plants, which always appear in a fine healthy condition, and impart a pleasing air of refinement and elegance to her splendid mansion, while, at the same time, they afford its inmates constant and innocent enjoyment.

M. B. Bateham.

Rochester Seed Store, Feb. 8th, 1839.

The above excellent paper, upon the treatment of the Strelítzia, will add another to the many instances where plants have been grown to great perfection, by an entirely different mode of management than that laid down by even the most experienced cultivators; and shows that, however so much dependance may be placed upon the opinions of such practical men as Mr. Sweet, McIntosh, and others, there may be far better methods of treating plants than those which their experience has confirmed or suggested. Cultivators of plants are too apt to be led on by those systems of management, which are laid down in all works on gardening, fearing, after a long adherence to any mode of cultivation, to depart from the usual track, from the impression that they may be led into gross errors. Accident has, in many cases, revealed the fallacy of long established systems; and repeated experiments, guided by natural principles, will continue to make known new, and greatly improved, modes of cultivation.

The Strelítzia is a most gorgeous plant, and is, by no means, so well known or properly appreciated as it should be. Its management is simple, and adapted to the green-house or parlor; particularly to the latter situation, where it forms, with its resplendent orange-colored flowers and sameness of habit, a befitting counterpart to the broad and snow-hued blossoms of the Cálla ethiópica.

We can bear witness to the stunted appearance of the specimens which exist in our vicinity; and we hope that the possessors of the plants will profit by Mr. Bateham's remarks, and resuscitate them from their languishing condition to a healthy state, and render them, what they certainly should be, objects worthy of a situation in the richest collection of plants.—*Ed.*

ART. VI. *On the Growth and Treatment of the* Nepénthes *distillatòria.* By R. BUIST, Philadelphia.

WHEN you visited my place in December, you expressed your astonishment at the rapid growth the plant of the Nepénthes distillatòria had made, under my care, since the spring of 1837, when you saw it before, and desired I would give

you my method of treatment. I have therefore sent you the following observations, fearing, however, that as the cultivation of it in this country is so simple, the information will afford little interest to your readers. I shall commence by giving you the history of my plant, from the very day the seed was sown.

In the first place, let me say, what may appear singular, that, although I made repeated sowings of the seed, previous to my raising the plant I now have, and several subsequently, I never got but the single solitary seed to vegetate, from which the present plant was grown.

On the 22d of June, 1836, I sowed the seed in a pot of soil, composed of half peat and half cut moss or sphagnum, finely mixed together, and covered the pot with a glass, and gave it occasional waterings. In six weeks the seed appeared, growing close to the side of the pot, and grew with astonishing rapidity, after it had formed one or two *pitcher* leaves. The temperature, where it grew, was from 60° to 80° of Fahrenheit.

In the following winter I repotted the plant, and put a large bell-glass over it, a little tilted on one side, to admit the air freely; the pot was always kept in a saucer of water, which water was very frequently changed. In June, 1837, the plant became too large for the glass, and, for cheapness, I got a case made, about twenty inches square, glazed on four sides, having the top open, on the bottom of which was put the plant in the same kind of soil, as above mentioned, covering the surface with sphagnum, which is copiously watered every few days.

The plant is now upwards of five feet high, having leaves fifteen inches long, and one and a half wide, attached to the extremity of which is a real old-fashion shaped pitcher, which contains a quantity of water, seemingly confined by a lid, with which the pitcher is surmounted; this water is not received in the pitchers from any external source, but is conveyed from the roots, through the stem and leaves of the plant, and deposited in the pitchers, which is, no doubt, for some wise purpose, either for the benefit of the plant, or, as some writers say, to refresh man in the dry and arid countries of which it is a native. It will thrive exceedingly well in a common hothouse, or even in a well kept green-house, for I know the plant will stand 45° with impunity. All that it requires is plenty of fresh water, and an annual dressing with soil and fresh sphagnum; it also delights in a half shaded situation; and there is no plant in my collection that has so many admirers

as this wonderful plant. Hundreds, I may say thousands, have called expressly to see it.

I am, sir, yours, R. Buist.

Philadelphia, Jan. 18, 1839.

The pitcher plant, in the collection of Mr. Buist, is probably the only one in the country, and, as it is one of the most singular objects of the vegetable world, we shall probably be excused for making some additions to Mr. Buist's remarks upon its cultivation. We have already noticed it, (Vol. III. p. 222,) and given the English mode of treatment.

The *Nepénthes distillatòria* was first introduced into Britain in 1789, but it was shortly afterwards lost to the country. About twenty years since, it was again added to British collections; the Messrs. Spenderds, of Liverpool, succeeded in raising plants from seed gathered on the Cicar Mountains, in the north-east of Bengal.

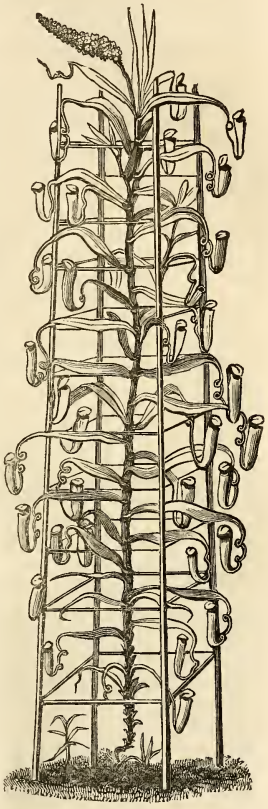
The economy and design of these curious pitcher-like appendages to the leaves, have been a matter of much thought and study to botanists, but no satisfactory reason has been assigned, and we are led to believe that they are, like other phenomena in the vegetable world, intended for no other purpose than to show the wisdom and power of the Creator.

The native habitat of the *Nepénthes* is in low situations, where the plants are often partially submerged in water. Linnæus thought that the pitchers were designed as reservoirs of water, to which animals might repair in time of drought; but this cannot be their purpose, as they grow in low and wet situations. The water contained in the pitcher is soon evaporated after the lid opens, but an equal portion is secreted during the night. The stem and petioles of the plant contain an immense number of spiral vessels; and, as it has been discovered that the air of such vessels contains about twenty-eight per cent. of oxygen, and that, as oxygen is destructive to vegetable life, the pitchers are intended as sources by which the plants may discharge it through these spiral vessels. Dr. Turner analyzed the contents of a large one, and found it to emit, while boiling, an odor like baked apples, from containing a trace of vegetable matter; and he found it yielded minute crystals of super-oxalate of potash, on being slowly evaporated to dryness.

The opened pitchers are invariably found to contain insects, which has led to the supposition, that the secreted liquid is for the purpose of enticing insects into the pitchers.

The plant, from Mr. Buist's article, appears of easy cultivation, although it has been considered by English gardeners to be of exceeding difficult growth. We saw it when it was but a week or two old from the seed, and only three or four inches high; last autumn we saw it again, and it had reached to the top of the stove, displaying an abundance of its pitcher-like appendages; it was only trained to a string which was tied to the top of the house. That our readers may have some idea of this extraordinary plant, we have annexed a view (*fig.* 8,) of a plant in the Duke of Devonshire's collection, copied from Paxton's *Magazine of Botany*. It is taken from an older, and stronger specimen than Mr. Buist's, and is grown on a trellis, thus showing its leaves to better advantage.

Fig. 8.



The flowers of the Nepénthes do not possess much beauty. They are produced, however, on a strong plant, for a succession of twelve or eighteen months.

We hope that Mr. Buist will succeed in increasing his stock, as it is a very desirable plant for the hot-house, and should be in the possession of every gentleman or amateur who has a desire to make his collection complete. It is increased by offsets, though very slowly. Mr. Buist's plant will soon outgrow its present situation.—*Ed.*

ART. VII. *Further Observations on the propagation, potting, blooming, and general management of the Auricula.* By JOHN CLARK.

IN my last communication in your Magazine, (Vol. III, p. 132,) I promised, at some future time, to continue my remarks, respecting the cultivation of the auricula and polyanthus. We had then proceeded as far as the time when the plants were coming into flower, and from that period I shall continue my observations.

Where a number of auriculas are grown, there will be some that open their flowers earlier than others; such plants should be removed from the frame which is, or should be, standing in a south aspect, to some shady situation, and be placed under hand-glasses; they should stand so as to catch the sun an hour or so in the morning, and the remaining part of the day to be shaded by some wall or fence; the glasses should be raised on bricks, to allow a current of air to the plants, but should be shut close and covered warm at night. If the early plants are allowed the full sun, the blooms will be off before your general collection is in flower. By this time, say the first of April, the sun shines with great power, and it will be necessary to draw the lights over your plants, and cover them with a mat in the middle of the day; but prop up the lights so as to admit air, and if the weather is pleasant let the lights be again removed by three o'clock, and let the plants remain uncovered till sun-set; but be sure to shut close and cover again warm at night, in case of frost.

Persons in possession of large collections of these plants provide a stage for them during the blooming season; those generally in use contain several shelves, placed in the same manner as the shelves in a green-house, the size, of course, to be according to the number of plants in the collection. I generally had from one hundred and fifty to two hundred blooming plants, containing about one hundred varieties; the stage I used was seven feet long, seven feet high, and three feet wide, with a roof sloping to the back, the front set facing the north-east. This would hold something more than one hundred full-sized blooming plants, and it was so constructed that when the plants were out it could be taken down and laid away. The front and end had curtains that could be drawn up or let down, as might be necessary, and were often needed to keep off driving storms, which would spoil the blossoms if

exposed; the stage should, however, be left open as much as possible, to prevent the plants from being drawn up weak. The flowers, with this treatment, will remain in bloom for three or four weeks, and a more pleasing sight cannot be seen in the garden through the year, and particularly at this early season, when they are the only flowers in bloom. For that reason I always prized an auricula very much, although the carnation was my greatest favorite.

As the blossoms fade, the plants should be removed from the stage, and placed in some shady situation, but not *under trees* or *bushes*, the dropping from which, in wet weather, would be very injurious; they may be set under a wall facing the north or north-east; a few inches thick of coal ashes should be laid down for the pots to stand upon, to prevent the worms from getting into the pots, as they do great injury. When the plants are all removed to this situation, they should be occasionally looked over, and the dead leaves picked off, the weeds removed from the pots, and, in dry weather, supplied with water two or three times a week. Look to the seed vessels, and gather them as they ripen, if wanted, for if they are allowed to remain on the plants after they are ripe, they burst open, and the greater part of the seed is lost. Should any one wish to raise seedlings, the best way is to select a few superior sorts and set them by themselves, as the plants that are bloomed on the stage are not so likely to produce seeds, and, if they do so, are not likely to be so good, owing to so many sorts having grown together. A few plants of the best kinds might be grown by themselves, placed so that they could have a temporary covering, in case of severe frost or storms of hail or rain. Grown in this exposed situation, they will be more likely to produce seed, and the seed will certainly be better. When the seed is gathered, it should be thoroughly dried and put away till the time for sowing, which is the latter part of February or first of March; some sow it as soon as ripe, but I do not think this is the proper time. It is best to sow when the plants are making their most rapid growth. So says Mr. Warris, a gentleman who ranks very high as an auricula grower, and one who has raised as many auriculas as any other man in England.

In the latter part of August, or beginning of September, I used to look over my plants, turn them out of their pots, and, if I found they needed it, shook the earth from them, and shortened the roots, and put them in fresh soil. If, on turning the plants out, I found them in a growing state, and the roots not too much crowded, I merely removed a little of the

earth from the top and bottom, and rubbed a little from the sides and replaced them in their pots, filling up the vacancies with fresh soil. Some growers of the auricula make a practice of shaking the earth from the roots every year; but I do not think it beneficial: if they are growing well, I think it preferable not to disturb them. I never found my plants grow well till the roots had reached the sides of the pots. During this operation all offsets, that are large enough, should be removed into separate pots, or two or three may be placed round a large pot, as before directed, unless the offsets can be taken off with pretty good roots. It is best not to disturb them before spring; the young plants should be placed under hand-glasses till they have taken root, and unless the operation of potting is performed in cloudy weather, the plants had better all be shaded for a few days. The same treatment will answer for the polyanthus as well as the auricula, excepting that the compost should contain rather more loam.

After this potting is finished, the plants will require but little care till the middle of November; merely look them over occasionally, pull up weeds and pick off dead leaves; and supply them with water when they become dry; should heavy rains occur during the fall, a temporary covering may be built over them to protect them from the wet. By the beginning of November, it will be time to prepare their winter quarters; many auricula growers in England do not put their plants under glass. I have seen the pots piled one upon another, on their sides, against a north wall, and a board laid upon them to keep off rain. I am told that many of the growers in Manchester keep their plants in a south aspect under shutters which can be turned up on fine days, and let down at night or in very stormy weather; those shutters rest upon a rail, placed about eight inches from the ground to admit air. I do not mention these methods of keeping auriculas through the winter, because I approve of them, but merely to show that they will bear the frosts of an English winter without receiving any injury. My plan was to place my cucumber frame in a sheltered part of my garden, fronting the south. I filled the frame three parts full of coal ashes, or sand, and in this plunged my pots to their rims; this brought them near the glass, and, being plunged, there was no danger from the frost. Through the winter I was careful to keep them dry, particularly in December and January; in that state the frost is not so likely to affect them. The lights of the frame should be drawn off every fine day, but take care to cover them towards evening. This is all the care that the plants require till the latter part of February or beginning of March.

When the time for sowing the seeds has arrived, some light rich compost should be provided for their reception; the best way is to sow them in pots or boxes; fill them to within one inch of their top, and settle the earth down firm, level the surface, and sow the seed as regularly as possible; gently press down the seeds and cover them about a quarter of an inch deep, with finely sifted compost; water them lightly, and cover the pots with pieces of window glass, and place them on the front shelf of a green-house, or in the window of a dwelling-house. Keep the earth moist, and, in three or four weeks, the plants will begin to appear. As soon as they get large enough, let them be transplanted into pots or boxes about two inches apart; place them in some cool, shady situation, where they can have temporary protection during violent storms; there they may stand till necessary to remove them to some place of shelter during winter. If they do well, they will need another shifting about the beginning of October, when the largest should be put into small pots by themselves, and perhaps some few of them may flower the following spring, but a greater part will not bloom until they are two years old, and some not till the third year. The raising of seedling auriculas, some persons may think, is attended with too much trouble, particularly when the probability that the greater part, by far, of them, will not be even fit for common border flowers; but if a grower raises one *fine* flower out of one thousand plants, it certainly will be as much as he could expect to do, although there may be many pretty varieties for stage flowers.

The varieties of auriculas are very numerous, but they are divided into five classes, viz: the green-edged, grey-edged, and white-edged, the self or whole colored, and the alpines. The green-edged flowers, with violet grounds, are the most admired and valued amongst florists, and of which there are many beautiful varieties; the foliage of this class is bright green, and so is the outer edge of the blossoms. The grey-edged, so called, has a lighter foliage, pea-green, and covered thinly with a white mealy powder; the outer edge of the blossoms of the same color, with generally black or purple ground, and a white edge. The white-edged, as the name implies, has a white lacing round a black ground, and white eye. Of self, or whole-colored flowers, there are many varieties with purple, scarlet, and yellow flowers, with yellow or white eyes. The alpines are something similar to selfs, but shaded round the outer edge of the blossoms: some of those varieties are very beautiful. Let the colors be what they may, the flowers must be hand-

somely formed or they are of no value. The petals should be large and spread out flat, the edges smooth or rose leaved, and the different colors about equally divided, and the eye round.

My object in filling my auricula stage was to have as much variety of foliage and blossoms as possible; many of our thorough-going florists would not grow any of the selfs or alpines, but I never considered my collection complete without some of the best varieties of each tribe: they make a pleasing contrast with the other varieties.

I believe I have now touched upon the principal matters connected with the growth of this beautiful flower, and shall feel gratified if I have imparted any information which may lead to its more extensive cultivation. Should any of your readers wish to try to import a few plants, I will endeavor to furnish them with a list of such flowers as I should wish to purchase, were I about to commence their cultivation again. I do not think there would be much danger of their being injured during the short voyages which are now made by the steam packets, if some person who understood the management of them would purchase them, and see to their being packed up. The proper mode would be, to import a few very fine sorts, and then raise seedlings from them.

Yours, very respectfully,

JOHN CLARK.

108 *Court Street, Boston, January*, 1839.

We can commend the above article to the attention of our readers. Mr. Clark's experience in cultivating the auricula, polyanthus, ranunculus, carnation, and other florists' flowers, in England, several years, has enabled him to impart the most correct information. The auricula can scarcely be said to be known among our florists, but its beauty entitles it to their fostering care; and we hope the time is not far distant, when we shall find the amateur grower possessed of his stage of auriculas, as well as his bed of tulips or pansies. There has been a great deal of quackery practised in the cultivation of auriculas by some English florists, which has conveyed the idea, to those who have happened to read works upon their cultivation where such particular methods have been detailed, that they were difficult to manage; but their growth to a high state of perfection is as simple as Mr. Clark has stated it to be.—*Ed.*

ART. VIII. *The Brunsvigia Josephinæ.* By X.

THE original bulb of this magnificent lily was in existence in 1817, at Malmaison, and, for aught we know to the contrary, still survives. It was procured by a Dutch flower collector from the Cape of Good Hope, and sent from Holland to the Empress Josephine, one of the most distinguished patrons of horticulture. Redouté figured it in his superb work on the *Liliàceæ*, under the name of Amaryllis Josephinæ. When Mr. Neill was at Malmaison, in 1817, it had already produced its flowers for the season; the expanded breadth of these flowers, forming a head, was three feet and a half, and the total number of blooms on the spike was more than fifty. The flower stalk alone was twenty inches high, and about three inches wide. Seeds presented to him at the time, from this plant, produced seedlings readily in the Dalkeith gardens. The species flowered, for the first time in England, in May, 1817, at the collection of Mr. Griffin, South Lambeth.

This species, by far the most showy, is by no means uncommon in collections in this vicinity. Fine large old bulbs have repeatedly flowered at the Botanic Garden, Cambridge. We believe that the seeds of this species, like some others of the Amaryllidàcæ are *vivaparous*, germinating in the capsule, and requiring to be sown immediately.

We hope to see, in the new City Garden, a good collection of this superb family, so attractive, gaudy, and calculated to produce universal admiration. X.

ART. IX. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Floricultural Intelligence.—New Corræas. Much attention has lately been given, by English floriculturists, to the production of new varieties of the Corræ`a, two or three species only of which, at present, are to be found in our gardens. Within a few years, three or four kinds have been raised by Mr. Milner, an amateur florist near London, each of which is said to be remarkably fine; the names of three of the best are C. Milnèrii, cordàta, and ròsea. The former was figured some time since in the *Horticultural Journal;* the plant has a fine habit, with bright foliage, and crimson flowers somewhat similar to the speciòsa. The second is, also, a free grower, with light green foliage and large showy crimson flowers; the last is a new rose-colored variety, and Mr. Milner has also a number of seedlings besides those which he has flowered, which may prove to be new and fine kinds. A plant of Corræ`a Milnèrii, exhibited before the Royal Society of Horticulture and Agriculture, though not ten inches high, was full of flowers. It is difficult to increase, and is selling at two guineas for a small plant. C. *r*òsea is selling at five guineas each.

The corræas are pretty plants and very desirable in a collection, and we hope our amateur florists will try the production of new kinds. We believe Mr. Towne procured seeds from the speciòsa last year, and we hope he has, ere this, the young plants coming on.

Verbèna Nivènii.—This is the name of a new species which we have seen noticed in a late number of the *Gardener's Gazette.* It was raised from seeds received by the Earl of Arran from Mr. Tweedie, in March, 1838. The seeds were committed to the care of Mr. Niven, of the Glasnevin Botanic Garden, where the plants were raised and flowered in July last. From the description, we have no doubt that it is identical with the species described by Mr. Buist, in a previous page, as the *V.* álba, and raised by him from seed last summer. It is described by Mr. Tweedie as a perfectly distinct

species, collected by him in a district called Iandel, in the interior of the country. "The beautiful spikes of white flowers are highly odorous, but especially towards the afternoon, and during the night. The plant is a remarkably free grower, and its beautiful rugose, opposite, leaves, are, with the stems, covered with glandular hairs." The spike of flowers, when full grown, is about six inches long. The description corresponds exactly with that of the *V.* álba of Mr. Buist, and we have no doubt of the two being identical. If Mr. Tweedie gave the specific name when he discovered it, it will have the priority, and Mr. Buist's must give way to that of *V*erbèna Nivèn*ii*. The question of priority is, however, of no great importance, otherwise than that there should be but one name. It must be a very beautiful species. Plants will be ready for sale by the time this appears in print.

It is very singular that three kinds of *V*erbèna should have been raised at about the same period in England, and in this country. Mr. Hogg's new scarlet and Arrani*àna*, (the former under the name of chamædrifòlia màjor,) were raised simultaneously in both countries, and it appears, from the above, that the *V.* álba of Mr. Buist, and the *V.* Nivèn*ii* of Mr. Tweedie, both, undoubtedly, one and the same, were also raised simultaneously. This tribe of plants will become one of the most valuable and interesting in our collections; being suited either to the stove, the green-house, the parlor, or the flower garden, and blooming a greater part of the year.

S*álvia pàtens* is the name of a new and beautiful variety with handsome broad flowers, of the most brilliant color. Messrs. Low & Co. of Clapton, have the stock to dispose of.

Pimelèa crinita.—A new species, with white flowers, slightly fragrant, has been raised from seeds received from Swan river.

Seedling Cyclamens.—Mr. F. Putnam, of Salem, has now in bloom a great number of seedling cyclamens. The plants are in a strong and vigorous state, and present an array of beauty seldom witnessed. We believe no remarkable new varieties were obtained among the number.

Camellias.—For want of room, we have been compelled to omit our notes on gardens and nurseries this month. We have only the opportunity to notice some few new varieties of camellias which have flowered, and a few seedlings.

Among the newest varieties which we have seen in flower, we may mention candidissima, Schrynmakérs*ii*, and *r*òsea plenissima; the former is fully equal to the double white; the sec-

ond is very similar to corállina, so much so as to raise some doubt whether it is not the same; there appears, however, a shade of difference, though we should not set it down as a new variety until we have seen it bloom again; *rósea plenissima*, said to be, as its name indicates, a very double flower, is not a remarkable variety; the flower is of a pale rose, tolerably full, the stamina intermixed with the petals similar to Welbánk*ia*. The following kinds have flowered in great perfection in the collection of Hovey & Co., viz. Flòy*ii*, conchiflòra álba, élegans, concínna, Landréth*ii* corállina, Goussòn*ia*, oxoniénsis, flórida, Colvill*ii*, and a great many others. *C.* reticulàta is now splendid, with several expanded flowers.

Mr. Carter, of the Botanic Garden, has flowered several seedlings, some of which are very pretty varieties; though none of them are very remarkable. Some of Mr. Cowan's seedlings were very fine; one which Mr. Cowan sent us, and which he has named Cowàn*ii*, is a very desirable plant.

In New York, Mr. Hogg has flowered Doncklaèr*i* in great beauty; Giles*ii*, another new one, also bloomed well, and our friends who have seen the flowers, inform us that both are very beautiful varieties, and worthy additions. Mr. Floy's new one, called Washington, is said to be very elegant.

Mr. Buist, and Mr. Smith, of Philadelphia, have had some of their seedlings flower. The Prátt*ii* of Mr. Buist, and the E'stherì of Mr. Smith, have bloomed this season very strong and fine, and established their character for splendor. Another year will be prolific in seedlings, and we doubt not that there will be some additions made to the already large list of American seedlings, which will equal, if not surpass, any of the English varieties.

In Baltimore, some handsome seedlings have flowered this winter, as will be seen in another page; one called Baltimòre*a* is said to be very fine. Messrs. Feasts', who have each fine collections of plants, have raised a number, but few of which have yet bloomed.

Rhododéndron pállidum, a new variety, is now in full bloom in Mr. Sweetser's collection. It is very showy, with large conical heads of pale rosy flowers.

Crìnums.—Mr. Samuel Feast, of Baltimore, has now in flower the following species of *C*rìnum, viz:—*C.* submérsum; bulb large, flower white, striped with a reddish purple. *C.* Commelìn*a*; bulb long like longifòlia, flowers pure white: both of them are beautiful species, which he received from the interior of Brazil; *C.* amábile has also flowered finely.

REVIEWS.

ART. I. *A Catalogue of Plants found in the vicinity of Milwaukie, Wisconsin Territory.* By J. A. LAPHAM, Milwaukie, W. T. 12mo., pp. 15. Printed at the Advertiser Office, 1838.

THE above is a small pamphlet, containing a list of four hundred and fourteen plants, growing in the vicinity of one of the lately settled and rapidly populated towns of the far west. Mr. Lapham is a botanist of some merit and of considerable observation, and has shewn, by this little unpretending effort in the cause of botany, a commendable zeal. The catalogue before us, like all others of a similar nature, will present nothing of much interest, to any but the student in the geography of plants. Over so extended an area of vegetation as these United States are spread, they afford to the inquisitive mind constant and numerous instances for research. Much hitherto unknown in the phenomena of the dispersion of plants, is daily coming under investigation, and is offered for the general advancement of science. In this particular respect, every offering, however humble, is not without its intrinsic value.

We notice, among others, the beautiful Aquilègia canadénsis, whose rosy nodding blossoms are among the first to remind *us* of spring; the *A*rbutus U`va u'rsi, no unapt representative of some delicate corolled heath; *A*ster Nóvæ ángliæ, or our own New England aster; the brilliant *A*sclèpias tuberòsa; Baptísia álba, or white indigo weed; the charming harebell, (Campánula rotundifòlia;) the gaudy painted cup (Euchròma coccínea;) the tardy, fringed gentian, (*G*entiàna crínita;) the wavy squirrel grass, (*H*órdeum jubàtum,) so common with us on salt marshes; the stately river queen, (*N*ymphæ'a odoràta;) two species of *P*hlóx, (the amateur florist's favorite;) with several other very interesting plants, peculiarly western in their habits. Of these latter may be mentioned that delicate spring flower, not enough cultivated, Polemònium réptans, which, in native situations, we have seen creeping over the ground in large patches, and sending up numerous spikes of its blue flowers, a character which cultivation does not impair. Then, too, is *D*odecàtheon integrifòlium, a co-species of that elegant garden gem, the American cowslip, (*D*. Meádia,) and the little daring flower of the west, which first tells of spring in the sunshine of March, Erigènia bulbòsa; and the delightful water

leaf (Hydrophyllum virginicum;) and the modest flowered May apple, (Podophyllum peltàtum,) whose ripened fruit betrays its presence by its perfume; and the snow berry under our own culture; that *indigenous*, and, last, not least, the blue spider wort, (Tradescántia virginica,) the beauty of whose diurnal flowers needs the aid of the microscope to entirely reveal! The Flora of the United States, whether northern, middle or southern, has already furnished the flower border with the treasures of vegetation; and it only needs further acquaintance with its riches to swell the florist's list with new and rare plants. R.

Art. II. *Address delivered before the New Haven Horticultural Society*, Sept. 25th, 1838. By Charles Upham Shepherd. 8vo., pp. 24. New Haven, 1838.

This excellent address has been laying before us for some time, and it should have received our attention long since; but the crowded state of our pages, attended with additional labor in preparing for a new volume, has put us under the necessity of deferring a notice of it until the present month. We have very little room to spare even now, but Prof. Shepherd's remarks are so good, and so appropriate to the state of horticulture in other cities, as well as New Haven, that we cannot refrain from making a few extracts.

Prof. Shepherd, though stating at the outset that if much was expected from him on account of personal experience, he should despair of fulfilling the requisites of the occasion, has, notwithstanding, performed his duty with honor to himself, and to the science to whose advancement the society is devoted. Professor Shepherd, in the first instance, urges, what we have repeatedly done, more attention to the cultivation of vegetables, both by the farmer, "the mechanic, the tradesman and the professional man," when a spot of ground is attached to his dwelling; and justly observes, that the "very free use of animal food is a vice in the dietetics of our people."

He next speaks of the soil of the gardens in the city and vicinity of New Haven; and the following remarks, in connection with this subject, are so correct that we present them entire:—

"A deficiency in the *pabulum* of vegetation, is at the foundation of the unproductiveness of our gardens. The soil being sandy, is strongly acted upon by the sun's rays, whereby the aqueous and gasiform ingredients of the compost are dissipated, or, in the language of the Cultivator, '*burnt up*,' a fact which is not so generally understood as could be desired; for many persons supposing, instead of this result, that the nutritious matter has descended into the subsoil along with the water of filtration, seem to imagine that, in place of a new dressing, the garden only requires deeper digging. This error of opinion, in respect to the easy descent of the fertilizing particles into our light soils, is particularly prevalent among the farmers of the vicinity, who, in applying fish to their land, do it in so unskilful a manner, that the stars equally divide the benefit with their crops. * *

"It should farther be observed, that if gardens are yearly dressed with proper amendments, they will be much better able to withstand the withering influence of droughts when they occur in late summer; for the crops will either be matured, or the ground so completely covered with plants, as to screen its surface from the scorching effects of the sun's heat. Under such circumstances, irrigation can be adopted with benefit; whereas, if the soil be exposed to the sun when artificial watering is resorted to, it rarely proves of any use."

Passing over a variety of subjects connected with that part of gardening which relates to vegetables and fruits, Prof. Shepherd approaches the "Domain of Flora," and in the following language urges the cultivation of flowers:—

"Need I speak of the inducements to cultivate such plants within and about our houses? While their delicious odors regale our senses, their form and beauty may be said to improve our taste. The inspection of plants so dissimilar to our native productions, is calculated to awaken in the minds of the young a curiosity in favor of botany; a science whose study has been found to be highly propitious to early mental culture,—operating as it does to sharpen the habits of observation, to promote discrimination, and to impart, in a remarkable degree, the perception and love of order. Or, if the growth of foreign plants go not so far as to make us botanists, it rarely fails of lending aid in several subjects of general intelligence. By whom, for example, can the figures in the sacred writings, respecting the heath of the desert, or the tares that grow with the wheat, be apprehended in their full force, except by the nice observer of plants? Readers of the bible, who are destitute of a curiosity in plants, will be apt to fall into the common error of supposing the plant which protected the fainting prophet from the ardor of an eastern sun, to be our well known gourd, instead of the *palma christi*, or castor-oil plant,—that the abstemious diet of the Baptist was a disgusting insect, instead of the saccharine pods of the beautiful caroub-tree,—or that the lilies of the field, whose glory attracted the notice of the Savior of mankind, was our white garden-lily, instead of the rarer green-house plant, the Pancràtium marítimum."

He next calls attention to the cultivation of our native trees, shrubs and plants, and notices upwards of fifty species, whose claims to our care are far greater than many of foreign origin. The list is too long for insertion, but a great part of them are those which have been described in our previous volumes

(I and II,) by Mr. E. Kenrick. Native ornamental trees are recommended, and the planting of the classic pine, especially the *P. Strobus*, "the loveliest of the group."

There are various other portions of the address which would be read with great interest, but we must close this notice with the following remarks on the planting of trees:—

"The planting of trees, though ennobled by the example of heroes, philosophers and patriots, is a mode of exercising benevolence, patent to all. The man in humble life may partake of the pleasure of erecting these verdant monuments to his memory, which outvie in perpetuity the splendid palace of his wealthy neighbor. The satisfaction of the employment is pure, and wholly unmixed with corroding care. He who erects magnificent buildings experiences unceasing anxiety while the work proceeds. His taste and judgment have to pass the ordeal of public criticism, and, whether approved or condemned, the exhibition of his wealth is sure to excite envy; while he must reflect, moreover, that what is now regarded as correct in taste, will, in thirty years, be considered odious and unsightly, and what is now fresh and perfect, will, in as many lustrums, yield to inevitable decay and ruin. On the other hand, he who rears trees, performs the useful labor without attracting notice, a circumstance not without some pleasure to a virtuous mind. He beholds them flourishing in elastic youth and vigor, spreading their fresh branches and lifting their verdant crowns into the air; he knows that they will continue to expand, to widen their shape and soar still higher, assuming the perpetually graceful forms which nature ever bestows on her own productions. And when the planter is himself called from

"The warm precincts of the cheerful day,"

he is sure that he leaves behind, monuments that can

"The place of fame and elegy supply;"

that as the wan traveller in future years rests his weary limbs beneath their shade, or as happy children gambol there, on him will be bestowed 'the passing tribute of a sigh;' and thus his name be handed down to after days, far beyond the date to which his unaided labors or virtues could have transmitted it."

Art. III. *The American Silk Grower's Guide, or the art of raising the Mulberry and Silk, and the system of successive crops in each season. Second Edition, enlarged and improved.* By William Kenrick. 12mo., pp. 168. Boston: Weeks, Jordan & Co. 1839.

If books were all that were wanting to ensure success in the silk enterprise, which is now attracting the attention of the community, there would be no fear but that it would progress

most rapidly. Since the publication of Cobb's *Manual*, some eight or ten, or more, small works have been got up, professing to give directions for the cultivation of the mulberry, the rearing of the worms, &c. The first named work, though not professing much, was nevertheless a practical one, as it was the result of much attention to the subject, and related principally to the rearing of the worms and the reeling of silk: the cultivation of the mulberry (the common white) being so simple as to require but little to be said thereon. The *Manual* had the effect for which it was intended, and was the means of drawing attention to this important subject. After a lapse of time, however, the interest in the silk enterprise fell off, and it was not till the introduction of the *Mo*rus multicaúlis that the public were again awakened to its importance.

With the introduction and cultivation of this tree, came a multiplicity of works upon its growth, (which is far more simple than the white,) and the manufacture of silk; and among the number was that which stands at the head of this article, the first edition of which was issued two years ago.

We will not say but that much good has arisen from the dissemination of these works; but we must not disguise the fact, that, with the exception of what relates to the cultivation of the tree, (which might be given in a few pages,) many of them have been merely compilations from Lardner's *History of the Silk Manufacture*, and other foreign works upon the subject, and not the experience of the authors.

Mr. Kenrick's work is divided into forty-nine sections, commencing with the history of the silk worm; next, the varieties of the mulberry—cultivation—gathering leaves—feeding the worms—reeling—successive crops—manufacture of silk, &c. &c. Mr. Kenrick was one of the first to introduce the *Mo*rus multicaúlis into this vicinity, and his experience in its cultivation enables him to impart much useful information in that portion of the work which relates to its growth and propagation.

Mr. Kenrick describes nine species and varieties of the mulberry; among the number is a variety called the Chinese, the young trees of which were introduced from Canton by J. P. Cushing, Esq., of Watertown, and which Mr. Kenrick considers "eminently splendid," for the feeding of the worms.

We conclude our notice of Mr. Kenrick's work, where, perhaps, we should have begun, by quoting part of his prefatory remarks, that our readers may see with what enthusiasm he grasps the subject:—

"Our advantages are indeed very great; to be duly appreciated they must be estimated singly and individually. How much greater and

more striking will they then appear, if considered collectively. Our innumerable rivers and rapid streams, our immense forests and mines, the exhaustless treasures of fuel and of flame, the combined elements of water, earth, and of fire, offer resources of mighty power, unknown and immeasurable, and willing aids in abridging the labors of man.

"History will record to endless remembrance, the names of those illustrious individuals who have persevered as the faithful guides and pioneers in this great work—those who, by their example or writings, have served as lights to illumine our way, and to cheer us through the long, dark and dreary night.

"The decisive impulse is already given—already are its mighty influences extending throughout our country, far and wide. The Americans are awake! Hope dawns auspicious—the day and its brightness will be ours. Endowed, as are our people, with fortitude, with energy, and with intellectual resources unsurpassed—is there one American who can doubt?

"Most of all, might I desire to be useful, by aiding in the introduction of a culture, which may make rich the people, even of the less fertile districts, and open to our country the resources of unceasing wealth."

ART. IV. *Rolling Ridge, or four and twenty Chapters.* 12mo., pp. 266. Boston, Crocker & Brewster, 1838.

THIS is an exceedingly interesting little work, and well adapted for the young reader who would wish to know something of the pleasures of rural life. It is written in a familiar and easy style, and illustrates the happy manner of passing a life far away from the fashionable world and scenes of vice. We cannot say that we have fairly read it, as our time has not permitted, but, so far as we have looked it through, we can commend it as a book well fitted to infuse the reader with a taste for agricultural and rural pursuits.

ART. I. *Foreign Notices.*

ENGLAND.

Large Oak Trees.—Loudon, in his *Arboretum Britannicum*, states that the oldest oak in England is supposed to be the Parliament oak, (so called from the tradition of Edward I. holding a parliament un-

der the branches,) in Clifstone Park, belonging to the Duke of Portland, this park being the most ancient in the island. It was a park before the Conquest, and seized as such by the conqueror. The tree is supposed to be fifteen hundred years old. The tallest oak in England was the property of the same nobleman—it was called *Duke's Walking Stick*—higher than Westminster Abbey, and stood till of late years. The largest oak in England is the Calthorpe oak, Yorkshire, measuring seventy-eight feet in circumference where the trunk meets the ground. The *Three Shire Oak*, at Worksop, was so called from covering parts of Yorkshire, Nottingham and Derby: it had the greatest expanse of any recorded in this island, dropping over seven hundred and seventy-seven square yards. The most productive oak was that of Gelonds, in Monmouthshire, felled in 1810. Its bark brought £200, and its timber £670, (about $4,000.)—*Arb. Brit.*

New mode of pruning Dahlias.—The winter of 1837-8 was so severe, that many persons lost their dahlias. The frost penetrated into cellars, orangeries, and even caves. The usual mode of preserving them was totally ineffectual, for a great number of roots were found frozen hard. However, we have learnt a mode which is practised in France, and is found to succeed perfectly. A dry spot is chosen out in the garden or grounds, and a pit is dug there five or six feet in width, and four feet deep. The length depends on the quantity of roots which are to be placed there. When the pit is three feet deep, it is narrowed three or four inches at each side, in order to obtain a ledge or resting place, for a purpose to be mentioned hereafter. The bulbs are then well wiped after the stalk is cut off in the usual way, leaving three or four inches, to which a number is attached in wood or lead. The bulbs are arranged side by side, the head upwards* in the pit. They are then covered with old boards, resting on the ledge spoken of above. If boards are not at hand, any old pieces of wood can be made to serve, and prevent the earth passing through. The earth is then thrown back into the pit, and well pressed down. If exceedingly severe frost is expected, leaves, litter or grass can be thrown over all. By this proceeding, the dahlias are sure to be safe. It sometimes happens, that the stalks to which the thickets are attached continue to live. We have seen some this year in bud as large as candles, which succeeded perfectly.—*Horticultural Journal.*

Art. II. *Domestic Notices.*

Sempervivum arachnoides.—This curious and beautiful little succulent, so rare in our collections, (another specimen of which we have since met with, in the green-house of Mr. Towne, Snowhill street,) was brought about a year ago from the Italian Alps, near the limits of perpetual snow. Casually gathered and thrown into a box, it was transmitted to this vicinity, and, being found alive after an incarceration of four months, was planted out, *while, true to its name, it revived and grew.* Several fine plants were raised from it, and are in possession of several lovers of the curious in vegetation. We hope

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* This, we venture to affirm, is exactly wrong; for by reversing it, every inclination to moisture drains out of the hollow stalk, and prevents a common occurrence—the rolling of the crowns, which prevents their breaking.—*Ed. Hort. Jour.*

to see it flower during the next summer. A fine netting of hairs extends from the tips of the leaves, and invests the entire plant. But, like many other vegetables, this perhaps will be regarded as a botanist's flower and *beneath the notice* of the florist. Rarity, however, may add a charm to some, but to us the little incident noticed above is sufficient to recommend it to our favor.—*Salem, Feb.* 1839.

ART. III. *Retrospective Criticism.*

Horticulture in Washington City, D. C. (page 9.) Dear Sir, —In your *Magazine of Horticulture*, January number for 1839, and page 9, in speaking of the horticulture of the United States, you are pleased to say, in speaking of Washington, that "Mr. Buist has introduced many fine things." This expression, of itself, may be well enough, but it implies that no other person has done the same thing, which implication is very incorrect, as you should have known by referring to the publication in your Magazine, of our horticultural exhibitions, both before and after Mr. Buist became a resident of this city.

If you will inform yourself properly, you will find there are two large and distinct green and hot-house establishments, of from ten to fifteen years' standing in this vicinity, and greatly superior to Mr. Buist's in every respect, each of which has, in addition, large vegetable gardens attached to them:—one is the property of Mr. Joshua Peirce, the other belongs to Mr. John Douglas, Senior. The proprietors of the above named establishments have been in the habit of "introducing many fine things," both before and since Mr. Buist was a resident in this city, and either of them would not hesitate to *compare plants* with him at any time.

Mr. Peirce has about four times the number of camellias, and greatly outnumbers him in dahlias, as well as plants in general; his green-house fruits are far superior, both in quality and quantity.

Mr. Douglas's green-house fruits are not inferior to Mr. Peirce's, and, consequently, superior to those of Mr. Buist's collection of fruits, and he would not hesitate to compare with Mr. Buist any variety of plants.

In addition to the new plants, brought into this city by the public gardeners, there are a number of private individuals doing the same; some of these plants, which are of difficult cultivation, would bear a comparison with plants of the best cultivators.

By examining the collection of Mr. Buist, you will find some of the finest specimens of his collection of plants have been purchased by him from the public and private establishments of this city. I would most cheerfully grant that Mr. B. is acting the part of an industrious and enterprising citizen in his adopted country; but at the same time, there are others who have long been doing the same, and continue to do so, and therefore should not be passed over unnoticed by those who profess to promulgate the true state of things.—*I have the honor to be, Dear Sir, your obedient servant, John Douglas, Jr. Washington, Feb.* 13*th*, 1838.

[Nothing gives us greater pleasure than to be corrected in any of our mistakes, and Mr. Douglas, Jr., will receive our thanks for the above note. We had no wish or desire to make it appear that Mr. Buist has done more, or as much as, any other nurseryman, in introducing new things into the District. We are not personally acquainted with him, and had no interest in saying so; the only knowledge we had of Mr. Buist's collection, was from his brother in Philadelphia, who informed us, when we saw him some time since, that he generally sent him a duplicate of such new things as he added to his collection.

It was our desire to make our article, (p. 1,) as complete as possible, and to give an impartial account of all the nursery establishments in the country. That we might do justice to all, we gave due notice, (see the cover of the September, October, and November numbers, 1838,) to that effect, and requested every gentleman, amateur, gardener, or nurseryman to communicate to us all the information which would aid us to do so. If we have been incorrect, it was not intentionally. It is impossible to inspect, personally, all the gardens and nurseries in the country at once, and we must, therefore, depend upon our friends for information. Although we regret that any errors have occurred, we do not take the blame to ourselves. Before our next volume commences, we hope to have the pleasure of seeing our friends in Washington; if we should not, we hope Mr. Douglas, or some other person, will put us in possession of such facts, relative to the progress of gardening in the city, as will enable us to do justice to all.—*Ed.*]

Pennsylvania Horticultural Society (Vol. IV. p. 465, and 471.) Sir,—Your remarks in your Magazine, article third, of Dec. current, in relation to the Pennsylvania Horticultural Society, have just met my eye, and I cannot forbear to express to you my regret, that therein you have placed me in an awkward position before your readers, as I deem very unjustly. When I had the pleasure of seeing you in November, you solicited from me, communications of our monthly and special displays, as they might occur; at which time you remarked, as I distinctly remember, that you had arranged with Dr. Watson, for a communication upon our October exhibition. Of course, it was settled in my mind that it would be fully done. If, however, you were not satisfied with it, I ought not to be involved. As respects the subsequent, or November meeting, the report of it did not appear before our community proper until two days prior to the December meeting, and then in connection with the call for that meeting, from motives of policy intended for the good of the Society.

If you misunderstood me, permit me now to be explicit. In my opinion it is due to our immediate community, that it should be *first* advised of the doings of the "Pennsylvania Horticultural Society;" if there be any echo thereof from abroad, well, whether from the east, west, north or south, doubtless it will be appreciated. I know of no periodical, upon the subject of horticulture, to which I would more cheerfully contribute than yours, but I must claim from you a qualification of your remarks alluded to, and an exemption from similar ones, until merited.—*Very respectfully yours, John W. Burrows. Philadelphia, Dec. 29th,* 1838.

[We regret that we should have misunderstood Mr. Burrows. It was our wish, after the full reports of Dr. Watson had appeared, in our pages, to continue them, in the same manner; but the change in the officers of the Society led to a different result. When we visited

Philadelphia in November, we expressed a wish to Mr. Burrows, that he would, as secretary, continue the reports as had been done by Dr. Watson, and understood him to say he would do so, remarking at the same time, that the October meeting was wanting to complete the connection, and that Dr. Watson had kindly consented to furnish it. We left the matter thus, understanding Mr. Burrows to say he would continue the reports (not official ones, but abstracts) from the November meeting; and it was not until we received the above that we were aware that it was necessary that they should appear in the city papers *first*. The delay thus caused, by our not receiving the report until after they appear in the papers, and that only two days prior to the succeeding monthly meeting of that, the report of which we wish for, would prevent their being inserted in our magazine until nearly two months after the meeting, when they would afford no interest to our readers, particularly those in Philadelphia, where, we are glad to say, we have a large number. We did not intend to apply any other blame to our correspondent, than that, as we understood him, he promised to give us an account of the November meeting, and we placed dependence upon it, we did not receive it in season. The "echo" of the meetings will be of no interest to us two months after they have been held; but Mr. Burrows will receive our thanks for his kind offer to send them. Dr. Watson has since, with much kindness, offered to send us immediate reports, and we trust that they will be so complete as to afford as much interest as those officially given. Any thing, however, of importance, which may be omitted by Dr. Watson, will be given at the conclusion of the volume.—*Ed.*]

Pennsylvania Horticultural Society.—In our January number, under our Retrospect of Horticulture for 1838, we stated, in our incidental remarks upon this Society, that there were many lady members belonging to it, and that we believed our correspondent, Dr. Watson, was the first to propose their introduction. We so understood some of our friends in the city; but Dr. Watson has requested us to say it is a mistake, as ladies have been members since its commencement. We are glad to make the correction, as we had no desire to make it appear that the Dr. had been more zealous in advancing the interests of the society, than many other of our friends who are, perhaps, older members and have labored longer in promoting its objects. —*Ed.*

Pennsylvania Horticultural Society.—Sir,—In reading your Magazine for January last, we were somewhat surprised at some of your statements in page 6, which relate to the Pennsylvania Horticultural Society. You state that the reports have regularly appeared in your pages this last past year, and the state of horticulture may be perceived from a perusal of these reports also; the Society is in a very flourishing condition; and that many ladies have been admitted members; and their presence at the meetings has given a life and degree of interest to the proceedings. Thus far all is well, and is as it should be, but, when you state that it was in *vain* to attempt to give life and interest before their admission, and that your correspondent, Dr. Watson, you believe, was the first to propose the introduction of ladies to the Society, we have no hesitation in saying it is not correct. Our object in thus writing to you is not to find fault, but to correct an error, which we hope you will receive in good faith. Independent of the error thus spoken of, there is nothing in your remarks but what is just and true, and we join heart and hand with you in those that refer to our worthy and highly talented President; for we know, by

experience, that since he has presided at the meetings of the society, new life and vigor has been the result of his labors, and our course cannot but be onward so long as he shall continue to dignify the Society by presiding at its meetings.—*With great respect, I remain yours, Edwin M. Mather, Philadelphia, Feb.*, 1839.

ART. IV. *Pennsylvania Horticultural Society.*

Monthly Meeting, Feb. 19, 1839.—At the last stated meeting of the Society, some very fine specimens of plants and flowers were exhibited, of which the following is a brief account.

Very fine plants from Mrs. Hibbert, to whom was awarded the premium for the best display. They were as follows:—Azàlea índica, A. índica álba, A. purpùrea plèno, and A. élegans; Lantàna mutábilis, Ruéllia formòsa, *Erìca* mediterrànea, *E.* arbòrea, Camél*lia* japónica var. speciòsa, and C. var. conchiflòra.

An honorary premium was awarded to Messrs. Hirst & Dreer, for twenty-five very superior double hyacinths in glasses.

The premium for the best bouquet was awarded to Robert Kilvington. Mr. K. generally exhibits fine taste in his basket bouquets; the handle and outside of the basket are covered over with various mosses, (hypnums,) while the interior of the basket is composed of every variety of flower attainable, and has a very fine effect.

J. B. Smith, Esq., exhibited some very fine *ripe* bananas, (*Mùsa* paradisiàca,) raised by him, for which he was awarded an honorary premium. Mr. Smith has a large crop on the tree almost ripe.—*Yours, respectfully, G. Watson, Philadelphia, Feb 23d*, 1839.

The Society have already published their list of plants, flowers, fruits and vegetables, for the best specimens of which, premiums will be awarded the present year. The prizes are liberal and the aggregate amount large. The list is so lengthy that we have not room to copy it. To the list is affixed the properties of all the florists' flowers, taken from standard English works; and the committees of the Society have agreed to judge the specimens in reference to their approach to the properties laid down. The idea is a good one, and we are glad to see this flourishing Society set the example of conforming to some standard rule.—*Ed.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, Jan. 19th, 1839.—The exhibition of fruits, &c. at this meeting, was given in our last, but we were necessitated to omit the reports of the committees, which were made at this meeting, for awarding premiums, until the present number. The following are the reports:—

FRUITS.

Pears.—To Mr. Samuel Downer, for the best summer pears, including the Julienne, Bloodgood and Dearborn's seedling, a premium of five dollars.

To Mr. Robert Manning, for the best autumn pears, including the Francreal d'Ete, Hazel, Belle Lucrative, Golden beurré of Bilboa, St. Ghislain, Marie Louise, Jalouise, Washington, Louise Bonne de Jersey, &c., a premium of five dollars.

To Mr. Aaron D. Williams, for the best summer seedling pear, a premium of five dollars.

Apples.—To Mr. E. M. Richards, for the best summer apples, including Williams' Early, Benoni, early sweet Bow, early Harvest, and early Red Juneating, a premium of five dollars.

To Mr. Joshua Gardner, of Dorchester, for the best autumn apples, the Gravenstein and others, a premium of five dollars.

To Mr. B. V. French, for the best winter apples, including the yellow Bellflower, Murphy and Danvers Winter Sweet, a premium of five dollars.

Cherries.—To Mr. Samuel Downer, for the best cherries, Downer's red seedling cherry, a premium of five dollars.

Peaches.—To Mr. J. L. L. F. Warren, for the best peaches of open culture. Specimens of Early Royal George, and George IV., a premium of five dollars.

To Mr. M. P. Sawyer, of the city, for the best peaches raised under glass, a premium of five dollars.

Plums.—To Mr. S. R. Johnson, for the best plums, including the Bolmar's Washington and Green Gage, a premium of five dollars.

To Mr. Samuel Pond, for the next best, being fine specimens of Bolmar's Washington, Prince's Imperial Gage, and Duane's Purple, a *gratuity* of five dollars.

Nectarines.—To Mr. Thomas Mason, for the best nectarines, a premium of four dollars.

Quinces.—To E. M. Richards, for the best quinces, orange and pear shaped, a premium of five dollars.

Grapes.—To Dr. J. C. Howard, for the best foreign grapes grown under glass, including the Black Hamburgh, and white Chasselas, a premium of ten dollars.

To Mr. William Oliver, for the best foreign grapes, out of door culture, the White Chasselas, a premium of five dollars.

To Mr. Thomas Lee, for the best native grapes, (Elsinburgh,) a premium of five dollars.

Gooseberries.—To Mr. Samuel Walker, for the best dessert gooseberries, included in these were Hopley's Globe, Gascoigne, Warrington Red, Wellington, Golden Gourd, Whitesmith and Princess Royal, a premium of five dollars.

Raspberries.—To Mr. J. L. L. F. Warren, for the best red and white Antwerp raspberries, a premium of five dollars.

Strawberries.—To Mr. Vose, President of the Society, for the best strawberries, Downton and Keen's Seedling, a premium of five dollars.

To Mr. Rufus Howe, for the best Early Virginia and Bath Scarlet strawberries, a *gratuity* of five dollars.

To Mr. J. L. L. F. Warren, for the best Methven Castle strawberries, and some other fine kinds, including a new variety raised by him from the seeds of the Methven Castle, a *gratuity* of five dollars.

To Messrs. Hovey & Co., for a new seedling strawberry, raised by them from seed, a *gratuity* of five dollars.

Currants.—To Mr. A. D. Weld, of Roxbury, for the best white and red currants, a premium of two dollars.

Musk Melon.—To Mr. Vose, President of the Society, for the best green-fleshed melons; these were the Persian, Minorca, Rock and Cantaloupe, a premium of three dollars.

To Messrs. S. & G. Hyde, for the best watermelons, a premium of three dollars.

FLOWERS.

Roses.—For the best display to M. P. Wilder, five dollars.

For the best twenty-four hardy varieties, to M. P. Wilder, three dollars.

For the twelve best hardy varieties, to A. Aspinwall, two dollars.

For the best twelve China and tender varieties to S. R. Johnson, three dollars.

Hyacinths.—For the best display, to Hovey & Co., five dollars.

Carnations.—For the best display, to Messrs. Winship, five dollars.

For the best six varieties, to T. Mason, three dollars.

For the best seedling, to Mr. Meller, three dollars.

Pinks.—For the best display, to S. Walker, five dollars.

For the best seedling to Wm. Meller, three dollars.

Tulips—For the best twelve varieties, to S. Walker, eight dollars.

Pansies.—For the best display, to S. Walker, five dollars.

For the best seedling, to S. Walker, three dollars.

Geraniums.—For the best display, to M. P. Wilder, five dollars.

For the best seedling, to W. Meller, three dollars.

Herbaceous Plants.—For fine displays of herbaceous plants and bouquets during the season, a gratuitous premium of five dollars each, to Dr. J. C. Howard, Messrs. Hovey & Co., and S. Walker.

Alpínia nùtans.—For a fine flowering specimen of this beautiful plant, a gratuitous premium of five dollars, to Mr. D. Haggerston.

Seedling Phlox.—For a fine white seedling phlox, a gratuitous premium of five dollars, to Mr. W. E. Carter.

VEGETABLES.

Cucumbers.—For the best specimen, to J. L. L. F. Warren, four dollars.

Beets.—For the best specimen, to S. Sweetser, two dollars.

Rhubarb.—For the best specimen, to S. Pond, three dollars.

Celery.—For the best specimen, to Dr J. C. Howard, two dollars.

Beans.—For the best specimem, of Lima, to R. Ward, three dollars.

Squashes.—For the best specimen, to S. Pond, three dollars.

Cauliflowers.—For the best specimen, to J. L. L. F. Warren, three dollars.

Brocoli.—For the best specimen, to J. L. L. F. Warren, three dollars.

Peas.—For the best specimen, to Rufus Howe, four dollars.

February 2d.—Exhibited. Flowers:—From Mr. E. Carter, three seedling camellias, viz:—No. 1, a single red flower, variegated with white. No. 2, very similar to *a*nemoneflòra. No. 3, named, by Mr. Carter, Lawrén*cia*, a fine double rose-colored flower spotted with white.

February 9th.—Exhibited. Fruits:—From E. Bartlett, Old Pearmain, Ortley pippin, and Newton pippin apples. From B. V. French, Newton pippin, and Baldwin apples. From L. P. Grosvenor, Chandler, and Queen Ann apples.

February, 16th.—Exhibited. Flowers:—From S. Sweetser, cut flowers of Camél*lia* japónica var. Lindbri*àta*, *Pæònia Moútan* papaveràcea var. Bánksi*æ*, and *Rh*ododéndron pállidum, hybridum, and Russell*iànum*, (the last not true.) From W. E. Carter, three seedling camellias, one of which promised to be a handsome variety.

Fruits:—From George Newhall, Isabella grapes in a fine state of

preservation. From R. Manning, Woolman's long pippin (of *Cox*, No. 124) and yellow Bellflower. From B. V. French, American Nonsuch, and Ortley pippins.

Art. VI. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
Common, per bushel,	50	60
Chenangoes, per barrel,	1 75	2 00
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 50	1 75
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	2 50	—
Eastports, per bushel,	1 00	—
Sweet Potatoes, per bushel,	1 50	—
Turnips:		
Common, per bushel,	25	37
Common, per peck,	12½	—
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	4	6
Yellow, per bushel,	1 00	—
White, per bushel,	1 25	1 50
White, per bunch,	4	6
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	25	—
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoys,	50	75
Drumheads,	75	1 00
Red Dutch,	75	1 00
Cauliflowers, each,	12½	25
Brocoli, each,	10	15
Lettuce, per head,	10	12½
Celery, per root:		
Giant red and white,	12	25
Common,	6	10
Spinach, per half peck,	17	20
Tomatoes, per half peck,	—	—

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes:		
Autumnal Marrow, per cwt.	3 00	4 00
Winter crook-neck, pr cwt.	2 00	3 00
Canada, per cwt	4 00	—
Pumpkins, each	12	25
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 50	—
Common, per bushel,	50	75
Baldwins, per barrel,	2 50	3 00
Sweet apples, per barrel,	2 50	3 00
Golden Pippins, per bbl.,	3 00	4 00
Greenings, per barrel,	2 50	—
Russets, per barrel,	2 25	2 50
Blue Pearmains, per bbl.,	—	—
Pears, per dozen:		
Chaumontel,	20	25
Burgomaster,	—	—
Beurre Diel,	—	50
Winter St. Michaels,	—	—
St. Germain,	50	1 00
Baking, per bushel,	2 00	2 50
Grapes, per lb:		
Malaga,	25	—
White sweet-water,	—	—
Citron Melons for preserves,	12½	—
Cranberries, per bushel,	2 50	3 00
Quinces, per bushel,	—	—
Berberries, per bushel,	—	—
Lemons, per dozen,	20	25
Oranges, per dozen,	—	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—The month, up to the present time, has been remarkably mild, and while we now write (25th) the weather has the appearance of April, rather than of February. The continuation of

such weather has been favorable to a full supply of market productions, and the stock of many articles is as good as at the time of our last report. Vegetables and fruits have kept exceedingly well; and this may be attributed to the long and serene summer of last year, by which, vegetables, as well as fruits, perfected their growth, and arrived at full maturity.

Potatoes have, contrary to the expectations of some, been quite abundant, and without any enhancement in price since the fall; this was hardly to have been supposed from the short crop of last season; but the great quantity which were pushed into the market from Maine, in the early part of the winter, had a tendency to fill the market; and the probability is, that there is a stock now on hand sufficient to last until the new crop comes in. The past week there have been arrivals of foreign potatoes, viz: five hundred bushels from Rotterdam, and a lot from Havre; the former were heated through, the latter we had not the opportunity of seeing, but they were said to be fine and in good order. Turnips and onions remain without alteration. The first radishes came to hand this week; they were of a fair size, and sold readily at our prices. Of horseradish, a good supply. Cabbages hold out remarkably well for the season; it is rarely that they are to be had of so good a quality as late as this. Cauliflowers are scarce. Celery is very scarce and prices high. Spinach is much more plentiful. Squashes are scarce, though, compared with the two or three last years, the supply, as late as February, is remarkably good, and prices moderate.

The stock of apples, as the season advances, and from a steady demand, gradually becomes limited and prices improve; we have now to note a little variation in all kinds; Baldwins and russets are the kinds of which there is the largest stock remaining. Pears are about gone; some few Chaumontels only being left. Cranberries are the same, with a fair supply. Of grapes there have been some arrivals, and in tolerable good order. There has been an increased demand for chestnuts and walnuts, and prices have advanced to our present rates. Of other kinds of nuts there is the usual full stock.—*Yours, M. T., Boston, Feb. 25th,* 1839.

HORTICULTURAL MEMORANDA

FOR MARCH.

FRUIT DEPARTMENT.

Grape vines, in vineries and green-houses, will now begin to swell their buds, and attention must be paid to them in order that they be made to break evenly. Prepare the border with a good dressing of manure, and, if severe cold weather ensues, protect with litter.

Peach trees and vines in pots may be brought into the green-house and forwarded a few weeks.

Strawberries in pots, in a fruiting state, should have an abundance of air, and be well supplied with water.

Gooseberry and Currant Bushes should be pruned this month, and,

if mild at the latter part, the ground enriched, and well dug between the plants.

Grape vines, of foreign kinds, protected by covering last fall, should have the same removed the latter part of the month.

FLOWER DEPARTMENT.

Dahlias will now begin to show their eyes, and if wanted for early planting, separate the tubers and pot them. The seeds may be sown now, and the plants will bloom early.

Geraniums will be now coming forward rapidly, and those that need it should be repotted.

Erica seeds may be now sown and cuttings put in.

Trevirana coccinea.—If the corms of this pretty plant were not potted last month, let it be done this without fail, to ensure a good growth.

Roses, carnations, auriculas, &c., which have been wintered in frames, should have an abundance of air every fine day.

Pansy seed may now be sown in boxes in the green-house or the frame, and the plants will flower early.

Verbenas, of all kinds, will now be growing rapidly, and will require repotting.

Cactuses that show buds should now be more liberally supplied with water.

Camellias will now be making their growth ; give good supplies of water, and syringe twice a week ; shade the plants from the hot sun; and perform inarching this month.

Tulip and hyacinth beds will require uncovering the latter part of the month, if mild.

Tender annual flower seeds, such as globes, balsams, ice plant, coxcomb, &c. &c., may be now sown in hot-beds to forward them.

Californian annuals, such as Clarkia, Chryseis, Gilia, Nemophila, Collinsia, Œnothera, Leptosiphon, &c., should be sown in patches in beds, as soon as possible after the frost is out of the soil, so that it can be prepared for their reception, for the first crop; a second sowing may be made in May.

Rose bushes may be pruned the latter part of this month.

Azaleas should be freely watered now: repot as soon as done flowering, if the plants need it.

Gladioluses may be planted in pots, for early blooming, and turned into the border in May.

Chrysanthemums.—The plants should be exposed as much as possible to the air and light, to prevent the young shoots from being drawn up.

VEGETABLE DEPARTMENT.

Rhubarb roots, in pots, brought into the green-house last month, will now afford good leaves for cutting; water with liquid manure.

Tomato, egg plants, lettuce, and other plants, sown last month in hot-beds, should be thinned out; the two first may be planted in pots.

Lettuce and radishes may be sown for a succession.

Celery seed, for a summer crop, may be now planted in pots or boxes.

THE MAGAZINE

OF

HORTICULTURE.

APRIL, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on a novel method of preventing Mildew in the open air culture of Foreign Grapes.* By A. J. DOWNING, Botanic Garden and Nurseries, Newburgh, N. Y.

THERE are many situations, especially in the neighborhood of cities, from Philadelphia, as far north as the forty-second degree of latitude, where the more hardy and prolific varieties of the foreign grape may be cultivated with considerable success in the open air. Indeed, the only obstacle to general success in their culture out of doors, in the Middle States, is their extreme liability to attack by mildew of the young fruit, when the latter are just swelling, or have nearly attained the size of large peas. The mildew that then fixes upon them appears to indurate the skin of the young grapes, prevent their swelling to their proper size, and, in short, it generally renders them unfit for eating or any other purpose.

Various methods have been suggested, by different persons, for the prevention of this mildew or blight, which have been tried with more or less success. Some have recommended us to train the vines high, so as to be out of the reach of the damp ungenial vapors of the moist earth; others, to keep them low and well furnished with a fresh supply of young wood. Another remedy, which appears to have found much favor, consists in syringing the bunches while the grapes are very young, with a solution of flower of sulphur, which, it is asserted, will, in most cases, prevent the attack of the foul parasite.

We have no remarks, at present, to offer your readers upon the relative benefits to be derived from any of these modes. We simply wish to place before them another, and, as it appears to us, a very successful mode of treating the foreign grape in the open air, so as to have an abundance of fine fruit perfectly free from mildew every year.

A person about four miles distant, who rears a considerable quantity of Sweet Water, Chasselas, and other foreign grapes, for market, and who was formerly much troubled with the attacks of the mildew, was, some two or three years since, while reflecting on the subject, struck with the fact, that, with him, young vines, when they first came into bearing, generally produced good and unblemished crops for the *first* one or two seasons. After this, becoming comparatively feeble, the mildew began to appear, and gradually grew worse every following season.

Reflecting upon this suggestion, thrown out by nature in the above instance, it occurred to him, that if he could always keep his vine young and thrifty, or by some means provide himself with a succession of such vines, he might place the mildew, in a great measure, at defiance.

This he has been able to effect in the following way, the results being highly satisfactory. In the month of June, every year, he selects, on every vine, a clean shoot, (left the previous summer for that purpose,) some five to eight feet in length, which he buries in the earth, about eighteen inches of its middle part, in the common method of *layering*. The plants in his little vineyard are planted in rows, and the layers being made in the line of the rows, between the old plants, when they are rooted, which they are the next year, they are tied up to a stake to receive a partial training. The next, or second season, all the old plants are dug up and thrown away, if they are not perfectly strong and vigorous. In this way he preserves a constant stock of strong new vines, which are able, by their superior vigor, to resist the attacks of the mildew, and which, as we can testify, bear beautiful and abundant crops of fruit, free from mildew.

Those of your readers, who grow foreign grapes, are recommended to put in practice this method of culture, which is really attended with a trifling degree of trouble. The success which attends this method of constantly renewing the vines would appear to lead to the conclusion, that, in a cold and comparatively ungenial climate like ours, the foreign grape, however well covered in winter, soon becomes too much enfeebled to produce fair and unblemished fruit. In the south-

ern parts of the other continent, its duration, and, to a considerable degree, its fruitfulness, extends to upwards of half a century. A. J. D.

Botanic Garden and Nurseries, Feb. 1839.

Art. II. *On the Cultivation of Brussels Sprouts.* By J. W. Russell.

The Brussels Sprouts are highly prized throughout Europe, as a delicate culinary vegetable. Therefore it is grown as extensively as any of the brassica or cabbage tribe. The appearance of the plants is more like the Savoy cabbage than any other variety, with this difference,—the stems grow to the height of three or four feet, and are closely set, from the bottom to the top, with sprouts like small cabbages in miniature; each being from an inch to two inches in diameter.

The plants are raised from seed sown in April or May, an ounce of which, if good, will be sufficient to sow a bed four feet wide by ten in length. If the seed is sown in April, (which would be the best method,) on a slight *hot-bed*, under glass, the plants will be ready for the final transplanting by the second or third week in May. Select a piece of ground for this purpose, that is in good heart, and where the soil is deep. The plants need not be set out more than eighteen inches apart *each way*, as the head does not spread like a Savoy, and the leaves drop off before the sprouts are ready for gathering, which will be by the first of October. The tops or heads ought to be cut off *two or three weeks* before the sprouts are gathered for use.

The whole treatment, as to the cultivation and management, is precisely the same as the Savoy cabbage. In November, or before the ground freezes hard, the plants might be taken up, and planted in earth in a cellar, pretty close together, and would be found to be an excellent vegetable through the winter.

J. W. Russell.

Mount Auburn, Cambridge, March 8, 1839.

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

AFTER the lengthy notice, which we have heretofore made of some new varieties of vegetables, it may seem almost a mere repetition of the subject to again revert to the same; the information, however, which has been heretofore given of new vegetables has, in the first instance, consisted of such facts as could be easily obtained from the best sources; but then subsequent recommendation to general cultivation has been only made from a perfect personal conviction, after a partial or complete trial, that they are such as will prove valuable additions to the private garden, or may be successfully introduced among the kinds which may be raised with profit by the market gardener.

It is our intention to notice every new variety of vegetable, whether valuable or inferior; but it will be recollected that a mere notice of a new kind, and a recommendation of it to general cultivation, are different things. Our object is to keep our readers informed of all that is new, that they may try their own experiments and judge for themselves; but we shall only advise the introduction of new kinds, when we are fully sure that, in some respects, they will prove as good or better than those usually grown. We believe that those who have relied upon our judgment for information, have not been disappointed.

The varieties now noticed, in addition to those in our last, are recommended as deserving of trial.

Young's Giant Tomato.—This is said to be a large variety of the common tomato, growing to a very large size, and producing an enormous crop, and fully equal, in its cooking qualities, to the common kind. We do not know its origin, but we have some of the seed, and shall try it the ensuing summer.

The Tobolsk Rhubarb.—Our readers probably recollect the extended notice we took of this remarkable variety last season. It continues to be highly praised in England, and meets with a very ready sale. We mention it at the present moment to remark, that we have procured a root or two of it, and shall endeavor to ascertain, as far as possible, from its cultivation the present year, whether it is all that has been said in its praise.

Myatt's new Gigantic Rhubarb is another kind, which is also highly extolled for its good qualities, as well as monstrous growth. It is yet scarce.

The Chinese Prolific, or Tree Corn.—Though not, perhaps, exactly a garden vegetable, but rather adapted to farm cultivation, we notice this variety, as some of our readers may like to try it as a table corn. As a field crop it is highly praised, and though there appears to be some doubt of its yielding the great crop which has been stated, it may, nevertheless, be a valuable kind. Mr. Thorburn, of Hallet's Cove, states, that the yield of the Dutton, (a variety whose excellent properties are well established,) planted in the same field, was not more than half as much as the Chinese. Both received the same attention—were equally manured, hoed, &c. The peculiar prolific quality is its producing two, and frequently three and four ears on a stalk, where the Dutton and other kinds, except the Baden, only produce one. It is said to be as early as the Dutton. The origin of the corn is ascribed to a few grains of it being found in a chest of tea on Long Island, where it has been grown four or five years. It is a white flint twelve-row corn, with ears from ten to fourteen inches long. We hope our farmers will try it with the Dutton, and see how good its claims are to general cultivation.

In France there has been considerable said, in their Journals on Gardening, upon the *Pe-tsaie*, or China Cabbage, a plant of late introduction. The past season many experiments have been made in its cultivation, and French horticulturists appear to be divided with respect to its merits. To set the matter at rest, however, a commission was lately appointed to inquire into the subject and make a report upon its qualities. This committee consisted of M. M. Castan, Porteau and Rendu; and, as the subject may be of some interest to our readers, we present the greater part of the same. The Chinese use extraordinary quantities of this plant. It grows with great rapidity, and is allowed, by those who deny its useful qualities as an esculent, to be a valuable article of food for cattle. It is known in China under the flattering title of the *Providence of the Chinese.* The committee conclude their report with a recommendation to its general cultivation throughout France.

"On the day on which we were appointed, we repaired at six in the evening to the residence of M. Bossin. Our honorable colleague placed before us a boiled vegetable of a deep green, chopped small, which he informed us was the Pe-tsaie. We tasted it, and at first perceived a slight flavor of spinach, to which succeeded immediately that of the endive chicory. After having again tasted it, with and without bread, we distinctly recognized the flavor of chicory.

"Your commissioners inquired of M. Bossin, in what manner the dish had been prepared. He informed us, that in the morning he gathered the first leaves of several of his Pe-tsaies, that they were placed on the fire, where they remained to whiten for three quarters of an hour; that, being taken from the water, they were drained, and strongly pressed, to free them from the superabundant moisture, and that then they were cut up as small as possible; after that, they were again placed on the fire in a saucepan containing melted butter; that salt was then added, with a little flour and some milk. Such, he informed us, was the preparation they had undergone.

"This explanation made us see the cause of certain hard particles which we had remarked in tasting the vegetable. They were the particles of the fibrous parts of the leaf, which, notwithstanding the boiling, had preserved their hardness. In fact, M. Bossin had dressed the outside leaves of the plant, and, consequently, the toughest ones. Your commissioners were inclined to think, that if the cottonous or fibrous parts were taken away previous to cooking, the dish would be much more tender, and more agreeable. They were also of opinion, that if salt was thrown into the water, the plant would be more tender still. M. Bossin determined to follow our suggestions, and we agreed to meet again in a week.

"However, that gentleman was kind enough to furnish me with a certain quantity of Pe-tsaie leaves, that I might let some of my friends judge of the flavor. On the next day, being in the country, I had them dressed, and offered them to a party who were dining with me. Every one at once perceived the flavor of chicory, and, as to myself, I found the same flavor as in the dish prepared at M. Bossin's, without finding any of the hard particles I objected to before.

"At the end of the week, we repaired to that gentleman's, as had been agreed on. This time the leaves had been taken from the best side of the plant, and were the inner ones; the fibrous parts were taken out, and the vegetable dressed as before. In order to vary the experiment, M. Bossin had part seasoned with the sauce proceeding from a duck dressed with turnips. When thus prepared, we discovered no hardness in the Pe-tsaie; its substance was uniform and smooth, and we again found, notwithstanding the seasoning, the flavor of chicory. At first, it is true, the taste of the turnip was perceptible, but after the second or third mouthful, we could find it no longer. The result of this second visit was, that your commissioners were unanimous in finding in the Pe-tsaie qualties which render it a vegetable essentially culinary. I have

forgotten to mention that we tasted some of it prepared without any seasoning whatever, and were unanimous in declaring that it possessed no flavor sufficiently determined to cause it to reject any kind of seasoning.

"In this state of things, and well assured that the introduction of the Pe-tsaie will render a veritable service to the culinary art in France, we have to recommend to you the propriety of addressing a vote of thanks to M. Bossin, for his perseverance in rearing the plant, and his politeness to your commissioners. We also recommend you to have the report in the annals of the Society, in order to give it all the publicity possible, and to determine, by this means, the cultivation and use of the vegetable throughout the kingdom."

From this extract it will appear that the Pe-tsaie is an article of much value, and we trust that the seed of it will be introduced to this country. It has been cultivated in France four or five years, though not publicly made known.

Art. IV. *Variations of Color from Original Types.* By J. L. R.

The following native plants have come under my notice, as subject to aberration in the usual tints of the flowers.

	Usual color.	Variety.	Locality.
Prunélla vulgàris	Blue	White	Cambridge, 1831
Gentiàna saponària	Blue	White	do. 1825
—— ——	do.	Blue & white variegated	do. 1825
Cypripèdium acaúle	Rosy	White	Newbury, 1837
Lobèl*ia* cardinàlis	Scarlet	White	Bot. Gar. Camb'ge
—— ——	do.	Rosy	Topsfield
*A*nagállis arvénsis	Red	Light rosy	Hingham, 1837
Sabbàti*a* chloroìdes	Rosy	White	Plymouth, 1837
Cichòrium Intybus	Blue	Rosy	Cambridge
Achillèa Millefòlia	White	Rosy	Charlestown, 1832
Hepática triloba	Blue	White	Common
—— ——	do.	Rosy	do.
Azàlea viscòsa	Light rosy	With a deeper stripe	Cambridge
Gratìola aúrea	Yellow	White	Plymouth, 1837
*L*upìnus perénnis	Blue	Rosy	Lexington

Several of these varieties are unique and rare, and should be carefully preserved for culture. The aberration in Lobèl*ia* is very rare, a single instance of exchange to rosy, and the

specimen lost by a severe winter, and two only of white, being known to me. The rosy variety of *Achillèa Millefòlia* is very beautiful, permanent, and easily cultivated. Very choice varieties of Azàlea may be found, by careful inspection of our swamps. J. L. R.

Salem, Mass., 1838.

Art. V. *Observations on the practice of forcing and blooming Plants in the winter season.* By J. W. Paulsen, Gardener to J. A. Perry, Esq., Brooklyn, N. Y.

On reading your remarks, in the last volume of your Magazine, (IV., p. 408,) upon the method of flowering the common white lily, in pots, in the winter season, I could not help thinking how very little the system of forcing and blooming common plants, in the winter season, is practised in this country. Nowhere does the practice of forcing flowers prevail to so great extent, as among the amateurs and gardeners in Russia, Germany and Austria; the climate being much more severe there than here, and the weather generally dull and cloudy from November to February, the gardener is necessarily forced in those countries to exert his greatest skill, in order to be enabled to supply flowers throughout the winter season. Loudon, although an Englishman, and perhaps not always quite impartial in his observations, still remarks, in his *Encyclopœdia of Gardening*, that "although the German gardener has to contend with the greatest disadvantages for forcing flowers, he certainly excels those of any other nation in this branch of horticulture." We may well consider this fact as a proof, that, whenever mankind have to contend with difficulties, their genius will be awakened and aroused to action, and, by continued exertion and perseverance, the superior talents which nature has bestowed upon them, will enable them to triumph over, and subdue, the greatest obstacles.

In Germany, at all the private gentlemen's residences, where a steady supply of flowers is wanted, or by gardeners, whose duty it is to raise them for sale, there is generally found a small forcing-house, made use of only for that purpose. It

usually consists of a small structure, about fourteen feet high at the back, and five feet in front, with a *span* roof; and with a stage inside, as near the glass as possible. Such a house should always face the south. It is separated, generally, in two equal parts, by a partition running the whole length of the centre of the house, and the divisions are distinguished as numbers one and two. In No. 1, the temperature should never exceed 50°, nor be allowed to fall below 40° of Fahrenheit. In No. 2, the temperature should not exceed 70°, nor descend lower than 60°. When gentlemen have only moderate collections of plants, and think that such a building as is here mentioned, is too large and expensive, they may bloom many kinds by leaving them as late as possible out of doors in the autumn, and gradually introduce them from the green-house to the hot-house ; thus dispensing with another structure.

Tulips, hyacinths, and all other plants, which are forced here, are grown in great numbers; but those which are principally selected and forced in such a house as I have above named, consist of the following kinds:—*Pæònia Moútan* and its varieties, *Kérria* japónica, (*Córchorus* japónica,) *Syringa* pérsica, and sinénsis, (lilac,) *Helléborus* nìger, and vìridis, *Íris* pùmula, biflòra, &c. &c., all kinds of hardy centifòlia, provins, and moss roses, frittillàrias, *Lílium* cándidum, Convallària majàlis, (Lily of the Valley,) violets, &c. The treatment peculiar to each is as follows:—

Tree Pæonies.—I have found the Chinese tree pæonies to be excellently adapted for early flowering, with the advantage that the plants will not be reduced by forcing, but that they will continue to flower every year, in great perfection, if managed after the following method:—Plant them in large pots eighteen inches in diameter, and proportionably deep, early in the spring: good, rich soil from the garden, mixed with a portion of leaf mould and very rotten manure, will suit them best. Plunge the pots in the open border among the other hardy green-house plants, and give them, likewise, a daily supply of water. About the first of November, having by this time lost their foliage, remove them to a cold frame. By the middle of the month, take one or more of the plants, (according to the number you have prepared for forcing,) to the house designated as No. 1. About the middle of December, they will be so far advanced as to be removed to house No. 2 ; at the same time bring in some plants from the cold frame to take the place of those received from No. 1; syringe plentifully in the house No. 2, in order to keep up a moist atmosphere. By the beginning of January, the plants first taken in will be-

gin to bloom; they should then be removed to the conservatory, or green-house. The second lot or succession plants, taken into No. 1, should then be removed to No. 2, and some more taken at the same time from the frame to No. 1. Proceed in this manner, and a continued bloom may be kept up, until April or May, or that period, when those growing in the open ground begin to flower. As soon as they have done blooming, remove the plants to the green-house; take them from thence to the frame at the end of March; and, in May, plunge the pots in the open ground with the other plants, and treat them as in the previous season.

Kérria japónica, (or Córchorus japónica, as often called,) is a pretty plant with showy yellow flowers, and may be treated precisely like the pæonies.

Syringa *pérsica* and *sinénsis*.—Although these are very common plants, abounding in our gardens, they are, notwithstanding, very cheerful objects in January in the green-house, scattering their fragrance all around. Small, handsome, and vigorous young plants should be selected and planted in pots, early in spring, and treated in the same manner as directed for the pæonies, with this difference, that the first crop should not be removed to the house No. 1, until the first of December. The *S.* pérsica cannot be forced successfully more than two succeeding years, when they must be turned out of the pots into the open border, to recover their strength, and be replaced by a new stock raised for that purpose.

Roses.—All hardy varieties of roses, especially the centifolia, (or French rose,) and provins roses, will flower well under the same management as that adopted for the syringas. The plants should, however, be always cut back to four or five eyes before their removal to the house No. 1, as they are, otherwise, apt to make long slender shoots, and produce no flowers. Except the camellia, there is not any flower for which there is a greater demand than roses; and there are none which sell better than a fine bud of the centifolia, or the provins rose, during midwinter.

Convallària majàlis.—This delicate plant may be flowered well in January, by taking up the strongest roots in the month of September. Set them half an inch apart in pots, in good soil. About the latter end of November, the first crop may be taken into the house No. 1; and by the middle of December, to the house No. 2. If the houses are heated by brick flues, they may be placed on one end of them, where the heat is not too great. Cover the top of every pot with an inverted one of the same size, first filling the pots with soft moss,

which must be kept regularly moist. By this mode they will bloom early in great perfection.

Gardeners who have to supply a conservatory with flowers, or gentlemen who are desirous of a fine display of flowers during the most dismal part of the year, will derive much satisfaction by carrying this system out. It is the only method to keep a conservatory in beauty, and render it attractive in the depth of winter. Among the varied foliage of the banksias, ficuses, acacias, &c., what object is there more delightful than the centifolia, or provins rose? What flower makes a more gaudy show than the stately bloom of the tree pæonies? What one has a prouder aspect than the frittillaria? What can be more pleasing to the eye, or agreeable to the sense, than the snowy and fragrant blossoms of the *Lilium candidum*? Add, to these, the sweet scented violet, the graceful and modest lily of the valley, the magnificent tulip, and the brilliant hyacinth, all intermingled with the camellias, ericas, &c., in full bloom,—and it must be confessed that a conservatory, or green-house, presenting all these claims, must afford a most interesting sight.

These remarks have been extended to some length, but I hope that they may serve to render the method of forcing common plants, for early flowering, much more familiar and more generally put in practice.

Yours, J. W. Paulsen.

Brooklyn, N. Y., February, 1839.

Art. VI. *Remarks upon growing Verbenas and other Trailing Plants in raised beds, upon turf, or the margins of grass plats.* By the Editor.

The cultivation of plants in clumps, in the flower garden, is but very little practised in this country. We have never seen any specimen, ourselves, which could be scarcely considered as any approach to the system which is so generally adopted by English practitioners. If, however, we reflect for a moment, it will not appear very remarkable that no more has been accomplished, for, until a few years, there has been no opportunity to procure information which would assist in putting the method into practice.

From the system of planting in clumps, in the flower-garden, has arisen that of planting in beds upon grass lawns, and which has, within a very few years, been carried to a great degree of perfection. With the introduction of the verbenas, their creeping habit, and brilliant flowers, much more attention has been directed to this mode of beautifying the garden and pleasure-ground, and perhaps no other improvement has added so much to the embellishment of the garden. These groups, or clumps, have been, in many instances, surrounded with wire-work, in imitation of baskets, and the effect of the grounds has been heightened in an eminent degree. Mrs. Lawrence, of Dayton Green, and Lady Broughton, of Hoole House, whose delightful residences are finely and accurately pictured in Loudon's *Villa Companion*, and *Gardeners' Magazine*, have exhibited great taste in the arrangement of their grounds, and particularly in the planting of clumps of various flowers, surrounded with trellis work, in imitation of rustic baskets, and also in the disposition of vases, (which we have frequently urged,) through the grounds, filled with verbenas, geraniums, &c., &c.

It is true that the state of gardening, in this country, will not admit of that display of taste which is so prevalent among the villa residences in England. The beauty and high keeping of their lawns, the result of the humid atmosphere and mild winters, and the great display of elegant shrubs and plants, which are too tender to live through our severe winters, prevent us from exhibiting that refined state of gardening, which we are so desirous of emulating. But if we cannot have such delightful green turf, or such rare shrubs and plants, in the open air, we can do much,—with the aid of taste in grouping, the assistance of art in the construction of rustic baskets, and the employment of statuary and sculpturesque objects,—to render the grounds of our villa gardens but little inferior, in general effect, to the most beautiful English residences of a similar character.

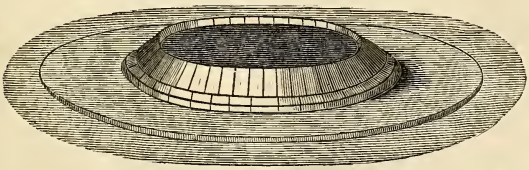
We make these remarks, prefatory to a design of ours, to introduce into our pages some engravings, illustrating the system of planting in groups, with the hope that we shall thereby be the means of inducing those who are desirous of embellishing their grounds, to put the method in practice. We are confident that when once the system is adopted, it will be found to contribute so much to the beauty of the grounds, that we shall have no necessity of urging its general imitation.

The continued introduction of new plants has rendered the method of grouping much more interesting; and the multiplication of elegant new varieties, by the now very prevalent practice of hybridization, has given to our gardens innumera-

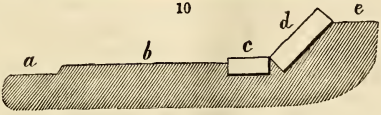
ble new forms, which have increased the splendor of the garden in a great degree. Among all that have been made known, none have so highly assisted to ornament the flower-border, as the many species and varieties of the verbena, and of which there seems now to be no end. They multiply readily from seed, and already the skill of the gardener has produced some unique varieties, by hybridization. Geraniums, too, are increased to an unbounded extent, and, within a year or two, improvements have been made in the form of the flowers, and the habit of growth, which have given almost a new character to the family. Both the geranium and the verbena are plants which are more particularly adapted, from their rapid growth, and period of blooming, to cultivation in groups, in imitation of rustic baskets, &c.

We had prepared a view of a basket of verbenas, to show its beautiful effect; but we are compelled to postpone the insertion of it till another number. In the mean time, we present a plan of forming raised beds on turf, or even in the flower-border, for the purpose of growing verbenas, mignonette, chryseis, anagallises, or other plants of similar habits. The plan is taken from the *Villa Companion*, and is so easily constructed, and at so slight an expense, that we recommend it for adoption. A mixture of white, rosy, crimson, and scarlet verbenas planted on one of these, and allowed to hang their trailing shoots over the edge, would form a splendid object. On flower-borders it would simply require a few bricks to be laid against some prepared soil, and laid with a little mortar, sufficient to keep their places. The plan, (*figs.* 9, and 10,) is as follows:—

9



10



In the section, (*fig.* 10,) *a* is the surface of the turf; *b* is a raised strip of turf, which serves as a preparation for, or base

to, the brick-work; *c* is a circle of bricks, laid flat, and half sunk in the turf; *d* is a circle of bricks, all laid in one slope, with their lower edges resting on the circle of bricks, (*c*); *e* is the level of the bed for planting. The perspective view (*fig.* 9,) shows the appearance of the bed, when completed.

Such a bed may have a fine large fuschia trained up to a single stem planted in the centre, and the surface covered with a mixture of verbenas, mignonette, nemophila, &c., &c. But as we have said something on this subject before, (p. 29,) we leave our readers to consult their own taste.

ART. VII. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Floricultural Intelligence.—New Verbenas. We have again to notice the raising of some new varieties of verbenas, which are said to be fine. The Philadelphia florists appear to be as zealous in the production of new plants, as our transatlantic neighbors; and particularly with the attractive group of verbenas, the names of several new varieties of which, it has given us much pleasure to enumerate in our Magazine. In our last, we gave the names of four raised by Mr. Buist: several more, equally as beautiful as those described, have

been recently raised and flowered by our correspondents, and enterprising florists, Messrs. Mackenzie & Buchanan, of Philadelphia. Mr. Lloyd's skilful gardener, Mr. Kilvington, the grower of the seedling chrysanthemums, which we noticed some time since, has also raised one exceedingly fine. We shall endeavor to give our readers some description of the flowers of these in a short time.

Euphórbia Jacquini*flòra*.—This fine flowering species of the euphorbia we lately saw in bloom, at Mr. Hogg's nursery, New York. We have noticed it in our last volume, (IV. p. 261.) The plant in Mr. Hogg's possession is small and weak; but we could see enough to satisfy us of its extreme beauty. Its habit of growth is rather awkward, though careful training will render it as comely as the other species. The long spikes of rich scarlet blossoms, which are very freely produced, have a magnificent appearance in a collection. We hope Mr. Hogg will succeed, in propagating the plant very rapidly.

Hòvea Célsii.—This interesting plant, which has rarely, if ever bloomed, in this country, is now displaying a few of its rich purple blossoms, in the collection of Hovey & Co. The flowers are yet scantily produced; but the plants appear tolerably strong, and will, undoubtedly, show a more vigorous bloom, when they have acquired more size.

Echinocáctus tubiflòrus has lately flowered, at Messrs. Winships' nursery. We have been informed, by those who saw it, that it ranks in beauty, with the Eyriès*ii*, which it resembles, except in the tint of the petals. It is, we believe, the first time it has flowered, in the country.

Camellias.—The production of seedlings appears to be rapidly on the increase. It will be seen, by the report of the Pennsylvania Horticultural Society, in another page, that several seedling plants, in bloom, were exhibited, and a premium awarded for one of the best. Mrs. Hibbert was the successful competitor; she also exhibited others, of some merit. Messrs. Mackenzie & Buchannan have raised a good one. Mr. A. Dryburgh, has also a fine seedling; and Mr. Smith has flowered two or three, which are said to be very remarkable; one resembles the C. var. Prátt*ii*, of Buist; it is a fine shaped flower, and has sixteen rows of petals; the first four of which, have two white stripes in each; the ground color is a cherry red; size, four inches. The other is a bold flower, of an elegant shape, with five rows of petals, and a warratah centre of small variegated petals; color, a deep cherry red; size of the flower, four and a half inches. This variety has

been pronounced as superior to Flòyii. Another season will more fully develop the character of these flowers, when we hope to give a more detailed description of all that are really worthy of being cultivated.

Mùsa Cavendishii.—Mr. Buist has fine plants of this new banana for sale at very reasonable prices. It is one of the most valuable of the tribe, and is easily grown, from its dwarf stature, in any ordinary hot-house, where it will produce its large clusters of fine fruit. A plant, only five feet high, has produced, under judicious culture, a cluster of fruit, numbering from sixty to seventy. It requires a pot about two and a half feet in diameter. The soil best adapted to its growth, is a mixture of peat, loam, and rotten dung; plenty of drainage should be allowed, and an abundance of water administered in summer. The foliage is the most magnificent of all the bananas, and, independent of its rich fruit, is every way worthy of a place in select collections.

Sálvia pàtens.—In our last, we noticed the introduction of this species into Britain; we have since seen an account of it, drawn up by Mr. Bentham, the Secretary of the London Horticultural Society, for the *Horticultural Transactions*, and which, as the plant appears to be one of great beauty, we annex:—

"The *S*álvia pàtens is a perennial, growing to the height of two, three, or four feet, erect and hairy. The leaves are large, ovate, or deltoid, broadly hastate, or somewhat heart-shaped at the base, or the upper ones rounded, green and hairy on both sides. The flowers are disposed in long terminal racemes, usually branching into three at the base; along this raceme they are placed in opposite pairs, each one at the axilla of a small linear-lanceolate floral leaf. The flower stalks are short; the calyx half to three-quarters of an inch long, hairy, green, and deeply divided into two lips—the upper one entire, the lower deeply two-cleft. The corolla, of a rich blue, between two and three inches long, is remarkable for its broad, gaping mouth; the upper lip being long, falcate, and erect, enclosing the stamens and pistil; the lower lip hanging, with two lateral oblong reflexed lobes, and the middle one very broad and emarginate.

"The *S.* pàtens will probably thrive best under the same treatment as that which succeeds with *S.* fúlgens; and, like that plant, it will be found to vary much in the size, the brilliancy, and the number of flowers, according to the temperature and light in which it is grown. Particular care should be taken not to weaken the plant, or suffer it to become etiolated,

in order that the raceme may not lengthen too much, and increase the distance between the flowers."

Mr. Bentham remarks, that the richness and variety of coloring observable in the numerous species of *Sálvia*, which adorn the mountains of South America and Mexico, have long been known to botanists, but it has happened that few of them have found their way into our gardens. The *S.* splén-dens, fúlgens, and Grahámii are well known, and he also adds that it may be a matter of much surprise, that a species growing plentifully in the same district with the *S.* fúlgens, should never, till now, have been transmitted to Europe. There are, however, others of great beauty, among the Peruvian mountains, not yet known, only from the dried specimens. *S.* longiflòra has a corolla five inches long; *S.* speciòsa, from the same place, has long dense spikes of rich purple; *S.* leucocéphala has white flowers, said to far exceed the beauty of *S.* leucántha. In the Mexican districts, there are also other species, with inflated scarlet calyxes; there are also others, said to have orange and yellow flowers of various shades. The field is therefore wide, and we hope that enterprising collectors will add all the finest to British collections. Seeds were first sent to England last spring, and it flowered for the first time, in August last.

Solànum Herbertiànum.—This is a new species of the Solànum, and is described as one of the most ornamental species of the genus. The flowers are of an intense and brilliant blue, and of a larger size than any of the species. Paxton, in the *Magazine of Botany*, in figuring the plant, states that it is remarkable for its dwarf and neat habit, while nearly all the species have a coarseness in their growth, which renders them by no means desirable. The present plant rarely grows more than two or three feet high, being of a shrubby nature, and the flowers are most abundantly produced when they are not more than six inches high. It is, therefore, admirably adapted to cultivation, but its flowers, to show the greatest beauty, should be looked down upon.

The plant has hitherto been treated as a stove species, and it is found to thrive best in a humid atmosphere, in a partially shaded situation. The soil best suited to the production of flowers, should be composed of light loam, with a slight admixture of peat.

Its period of blooming appears to be in the spring and summer. It is increased by cuttings, which generally flower a little more than a year after they have struck root. Messrs. Young, of the Epsom nursery, have the plants for sale.

REVIEWS.

ART. I. *Report of the Transactions of the Massachusetts Horticultural Society for the year* 1837–38; *with Preliminary Observations.* By JOHN LEWIS RUSSELL, Prof. of Botany and Vegetable Physiology to the Society. 8vo. pp. 116. Boston, 1839.

EVER since the formation of the Massachusetts Horticultural Society, until the past year, an address has been annually delivered before the members, at the anniversary meeting. From some cause, the address was omitted at the last anniversary; and, though we regret much that there has been a departure from such an established custom, we cannot otherwise than feel amply compensated, for any loss which we may have experienced, in the publication of the pamphlet at the head of this notice.

The Society have shown a commendable zeal in collecting together an account of its doings for the past year; and, although the substance of the report has been given in our pages, a compression of the same into a smaller compass than that scattered through several hundred pages, prefaced with the very interesting observations which accompany the report, must be an acceptable offering to the members who take any interest, or feel any pride, in the transactions of the Society.

The report before us was drawn up by Prof. Russell, at the request of the Society, and our readers are too well acquainted with the character of his articles which have repeatedly appeared in our pages, to need any praise of ours in support of the admirable manner in which the duty has been performed. The preliminary observations of Mr. Russell extend to thirty-six pages, and a great amount of interesting matter is embraced in the same. The remainder of the report contains only the weekly exhibitions of the Society for the year.

As this report may not reach the hands of many of our readers, particularly those at a distance, we take much pleasure in laying before them several extracts. The whole report is divided into eight parts, viz:—The open Flower Garden—The Green-house and Stove—The Nursery and Fruit Department—The Vegetable Department—The Native Flora, and its Culture—Remarks and Notices—Weekly Exhibitions—Annu-

al Festival. The report commences with a happy allusion to the progress of Horticulture in New England:—

"The fast fading glories of vigorous vegetation, or the yet lingering tokens of autumnal splendor, o'er forest and hill-side, in the parterre and flower border, are reminding us of a season of unusual character, as regards a tardy spring, an almost tropical summer and a mild, warm and bland autumn. Scarcely had the last tones of a voice* eloquent on antiquarian research, which recounted, from the brief and scattered notes of history, the successful efforts of horticultural skill on an untamed soil, two hundred years ago, died in our ears, than we were again reminded, by the united offerings of Flora and Pomona, of renewed efforts and acquired triumphs in the field of our own industry. Meagre as may seem to us the effects of such enterprise, the vista opens to us objects of interest as connected with the culture of the soil. On the very sites where whilom grew the native and introduced fruits of New England industry, are now gardens and orchards, vineyards and green-houses, the evergreen glades of rural enterprise, or the renovated forests of arboricultural skill. On a soil once enfeebled by negligent culture, or from a lack of knowledge of the laws of vegetation, in the immediate vicinity of Plymouth Bay, may be yearly seen, in the gardens of the amateur and florists, the gorgeous products of other climes, or in its orchards the luscious hightop sweeting apple, which, as has been suggested, perhaps owes its origin to an English climate, introduced at an early period into the colony, and scarcely straying out of the precincts of the county. Profusely scattered over hill-top and under pine shades, or bedecking the transparent borders of fairy lakes, are native flowers, too, of rare occurrence, whose prototypes, perchance, gladdened the eyes of the pilgrims as does their vernal or æstival blossoms now, those of their descendants; plants of great interest, and gradually introducing themselves into culture. The light, warm soil of Nantucket, productive of little else than a depauperated growth of oak, has been rendered the subject of horticultural skill, with whose choice products of the vine under green-house culture, few other districts can compare. Family tradition has given to Salem a venerable relic yet in comparative vigor of growth—perhaps the first imported English pear (in the garden of Endicott,) while not only the fruit list, but even the flower catalogue, will mark that its soil has not degenerated in the produce of Horticultural Science. The bold and rugged promontory of Nahant, washed by the perpetual spray of the ocean, is already blooming with sheltered flower borders, and destined to be again covered with some hardy tenant of forest growth.

"A view thus retrospective, even in the extended vista of two centuries, and over an area so thrilling with mementos of olden times, cannot be without practical benefit. Little remains to us of the original features of such times, save here and there a traditionary and revered relic, a few hoary and moss grown trunks of the primitive forest, or the enduring, never changing feature of geological formation; yet the thought that other flowers and fairer fruits have been introduced and naturalized, to add wealth and the comforts of existence, not only to our day and generation, but to those who will succeed; that the asperities of an almost boreal clime, and the harshness of a rude soil have been overcome, that each year is bringing some-

* See Ninth Anniversary Address, by William Lincoln, Esq.

thing new and still more rare and valuable—should incite to greater efforts and constant improvement.

"So progressive and rapid are the present advances of Horticulture, aided by the co-operation of its kindred studies, that the annual festival of a Society reminds the observer of new facts and important acquisitions. It has therefore been deemed advisable, that the review of the past year be instituted; and whatever facts have transpired, or suggestions made, be furnished as the Annals of the Massachusetts Horticultural Society."

Commencing with the open flower-garden, Prof. Russell first mentions the Dahlia, as claiming early notice, and hints at the scanty bloom the past year, as follows:—

"The Dahlia, for the past season, has succeeded less in display of flowers than in any previous, for many years. The extreme heat of a summer such as has not been known for several years, has proved extremely unfavorable to inflorescence, and has deprived the autumn of its usual floral charms. Compared with the last, the annual Exhibition of the Society was meagre in display as regards this choice production and universal favorite. Whoever witnessed the profusion of blooms, which gave a dazzling brilliancy to the flower-stands and to the very walls, must have been struck with the sensible deficiency of this season. New and choice varieties, imported by the ever active zeal and enterprise of those forward in the introduction of fine and new plants, failed to produce flowers, of which many were anticipating a gratified inspection. From the experience of several previous cool summers, exuberant in these floral gems, and from their universal dearth amidst the bright sunny days of an almost unclouded sky, it would appear that the several varieties, even under the effect of partial acclimation, and a long absence from a native habitat, have lost none of the peculiarities of constitution, with which a high and humid region had endowed the original species. Some of the finest flowers on the Society's tables were produced, as we understand, by a constant and profusive syringing over the foliage and tops, evidently an accidental imitation of the natural temperature; while other plants copiously supplied with water daily, at the roots, shared the same common fate in a depauperation or total absence of bloom. Facts like these should serve as valuable hints, if not for practice, at least for further experiment, and we feel assured that, on the minds of the investigating and studious, they will not be lost.

Summers of great heat are favorable to the insect race. The past has been a striking instance. Myriads of those minute foes, from the various species of caterpillar to the almost invisible fly of every genus, have ravaged equally our gardens and fields. Each year introduces a new species, or develops a new instinct in some well known species, rendering its ravages more deleterious or difficult of evasion. The Dahlia has not escaped : but some insidious insect has blighted the hope of the cultivator, or some new form of disease has been traced to the silent depredations of an unseen foe. In one instance, falling under our observation, no less than four or five distinct larvæ of moths, better known as caterpillars, have rendered assiduity necessary to preserve a luxuriant foliage, so essential to the vigor and health of the plant, while leading shoots and expectant buds have been prematurely ruined. Such discouragements are inevitable and to be expected, until some project can be devised for extirpation or insurance against their presence. Undoubtedly a better and wider

diffused knowledge of the exact species, and a studious investigation of their habits, might enable the florist to resist such vexing inroads on his time and labor. The gladsome visitants of spring, and the familiar denizens of our gardens, in the several kinds of insect-eating birds, should be made the welcome inmates and guests of our lawns, parterres, and orchards; nor should indiscriminate warfare be urged on all insects, as not a few are, in turn, carnivorous in their propensities, and devouring the more obtrusive and offensive. A peculiarly destructive insect has been so abundant the past season, as to destroy not only the Dahlia, but even choicer sorts of asters, zinnias and the like. It were desirable that specimens of every such foe could be collected and preserved for the Society's inspection, in order for their better recognizance. Every gardener and florist, every cultivator and amateur, could furnish information, falling under his notice, of decided utility and practical value."

The remarks relative to the diffusion of a knowledge of insects, should be remembered. Much time and labor might be saved by such an investigation of their habits, as would enable us to detect those stages of their existence when they might be easily destroyed.

Passing over a variety of information, in which Mr. Russell notices the various collections of plants in the vicinity, and in which he pays merited compliment to the amateurs, as well as professional gardeners, he arrives at that section denominated the Nursery and Fruit Department. Here the author urges the importance of the wider cultivation of American forest trees:—

"We could wish that the culture of our American forest trees from seed were more attended to, among our nurserymen. We suspect that the sale for younger specimens, would amply repay the trouble and expense of their sowing and care. In consequence of this striking deficiency in our cultivation, thousands of young seedlings, especially of the firs and larches and not a few of the oaks, are annually imported from England. There are no good reasons why the English oaks should be preferred to the American, nor would they be, were the facilities for procuring the latter, more attainable. Even these, and indeed most of the foreign species of forest trees, could be introduced into our own nurseries by the seed, and afforded at a rate, which, while liberally repaying the effort and labor, would diminish foreign importation. Several hundred of young plants of the English white oak, are yearly raised in the private establishment of a patron of agriculture, from acorns, the produce of parent trees imported about thirty years since. We are aware that, in several nurseries, this system has been for some years adopted, but we could wish that it were more extensive. We deem it at least, an experiment worthy of trial."

The following notes on pears, apples, and plums, furnished by Mr. R. Manning, contain some useful information relative to the fruit enumerated.

"*Pears.*—Duchesse d'Angouleme has done finely as a standard, and produced during the summer an abundance of fruit. Henry

4th may be considered superior. Marie Louise continues to hold its high character. Buerré Duval, (new) recently fruited. Hooper's Bilboa, very fine, beautiful and abundant bearer. Louise Bonne of Jersey, very superior. Alpha, fruited last year and also this, (new.) Rostiezer, (new) fruited last year for the first time. Petre, from Bartram Gardens, Philadelphia, fruited and very fine. Queen Caroline, very fine. Beurré Crapaud, very superior. Beurré Spence, fine. Beurré Bronze, (true) also exhibited by Mr. Manning, under the incorrect names of Fourcroy and Figue of Naples, by which they were designated when received by him.

"*Apples.*—Mr. Manning has raised the early red Margaret, new, and the best of the earlier sorts. Pennock's red, very superior. Murphy, raised in Salem, fruited for the first time eight or nine years since; very fine.

"*Plums.*—Coe's Golden Drop is highly recommended for a late fruit. The experience of a celebrated cultivator, who furnishes us with these memoranda, has been with regard to Prince's Imperial Gage, that it is apt to decay on the tree. The following, new and just fruited by him, are furnished by R. Manning: Red Apricot Plum, (New Edition, Du' Hamel.) Huling's Superb, very fine, large; fruited for the first time. Morocco, early, very delicious; fruited for the first time. Duane's Purple French, fine, and free from rot.

"*Cherries.*—We subjoin the following description, furnished by J. M. Ives, of a new Seedling Cherry, the finest of many sown and raised in the year 1821, by Mr. R. Manning.

"'Manning's Fine Red,' fruit, medium size, sweet and good; flesh firm, and of a fine sprightly flavor; leaves very large, hiding the fruit; a great bearer; ripens in the middle of July."

Under the head of native Flora, Prof. Russell notices the residence of T. Lee, Esq., and enumerates many of the fine American shrubs and plants which are so successfully cultivated in his grounds. We can bear witness to all that is said in praise of Mr. Lee's labors, and are glad that Mr. Russell has taken so favorable an opportunity to render his efforts so well known, and, we doubt not, appreciated, by all who take any interest in our native plants. The following are his remarks:—

"Although this branch of floriculture is not so much on the advance as we could wish, yet it is evident that a taste for the more beautiful or curious productions of the New England flora is gaining ground. The example, which, for so many years, has been set by T. Lee, Esq., Jamaica Plains, will, without doubt, exert its influence on the public. Specimens of New England forest trees may be here found in the lawns and woods; and copses of our flowering shrubs introduced with pleasing effect. Beside the native flowers of a spontaneous growth carefully preserved, and, from this circumstance, brilliantly covering the ground appropriated, the rarer and more delicate have been introduced with sedulous care. The showy orchideæ succeed well. Each year adds something new, by transplanting or by seed. Not discouraged by failures, repeated experiments have crowned with unexpected success the efforts in the exposed growth of the Rhododendron, Kalmia, Azalea, &c. &c. Such instances of vigorous growth in Rhododendron Maximum, are seldom seen. Kalmias of profuse inflorescence and of different colors cover the

ground in large patches. The past season has enabled the Rhododendron and Azalea to produce a great quantity of buds. In close proximity may be found Laurus Benzoin, whose fragant blossoms in early spring are perfuming the air, and the Mystic Witch Hazel, whose golden fringes are the last mementos of the dying epoch of annual vegetation. Nor are these fine native shrubs unrepresented by foreign co-species, found capable of enduring our climate. To the botanist we scarcely know of a spot so interesting in the choice grouping of fine plants. We could wish that such efforts in picturesque gardening were more frequent. The winding paths amid the forest trees, beneath which are the more delicate or hardier flowers, which otherwise deny their presence to the pleasure ground,—the rude rock in whose crevices are growing the feathery fern, and on whose sides the perennial moss,—the delicious perfume of the Clethra, mingled with the odor of the Azalea—the snowy or roseate corols of the Broad-leaved Laurel, and the superb heads of the Rhododendron Maximum, the northern Magnolia and its southern sister species—flower, shrub, tree, lawn, hill and dale, in happy unison, from the co-operation of Nature and Art—these we conceive to be worthy of attention in the cause of Horticultural pursuits, in a department hitherto too much overlooked."

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Haarlem Hyacinths.—In ordinary seasons these floral gems of spring are in their full glory in the Haarlem sale collections, between the 20th and 30th of April. They are usually grown in distinct beds according to their properties; they double or multiplicate by themselves, and so the early flowering and again the single of the finest bells, colors, shape. They are grown in a compost of fine white sand, rotted leaves of trees, fine peat earth, and a small proportion of thoroughly rotted cowdung; the whole intermixed and reduced by being turned over repeatedly.

Cáctus speciòsus.—Bonpland's original plant of this beautiful succulent, made its first blossoms at the regal gardens of Malmaison in 1811.

Observations on a new principle of Fencing, constructed by Mr. Bruse, formed according to the laws of vegetable physiology.—The above is the imposing title of a mode of live fencing, or hedging, lately used in England. Shrubs or trees are selected, at a certain age, and planted "in two directions, a foot from each other; one set, for example, pointing or sloping towards the north; the other set sloping towards the south." At the point of crossing, the bark is removed from each, and, by a system of inarching or grafting by approach, the entire row is made solid and firm. Fences of this nature

are to be found on the estate of Sir Thomas Neave, at Dugman Park, Essex, and formed of ash.—*Coll.*

Carbonic Acid Gas, on Plants.—According to Dr. Schleiden, of Berlin, the springs in the valley of Gottingen, are very rich, in free carbonic acid; and in these, are found a most luxuriant vegetation, appearing several entire weeks earlier in spring, and continuing very much later in autumn, than at other places of the same district. It is undoubtedly, the case, that the carbonic acid greatly promotes this precocity, and continued prolonged vigor.—*Coll.*

Hybrid Ferns.—A hybrid between Gymnográmma calomélanos, and G. chrysophylla, to which Bory St. Vincent proposes to attach the name of G. Martén*sii*, has been observed at the Botanical Garden of Louvain, by M. Martens. This gentleman conceives, that this hybridity is not uncommon in nature, he having received specimens of the same plant from Guadaloupe, through L'Herminier, where it grows indigenous. He supposes several other ferns may be considered hybrids.—*Coll.*

Preserving Potatoes.—Let potatoes be dug up on a fine day, when thoroughly ripe and dry, and let the haulm or straw be placed on the highest part of the field or garden, on which the potatoes are to be heaped, and let the heap be covered with dry straw, haulm, or refuse hay; a trench should then be dug round it, and the heap covered with fine earth thrown on the hay or straw, which ought to be thatched in such a manner that the droppings from the rain may fall into the trench. This mode must be preferable to pitting, which causes the dampness of the earth to rise, and, consequently, the premature sprouting of the potatoes.

The potatoes should also be placed in three or more heaps, in a field or garden, to prevent their over-heating, which would take place if they were all formed into one heap.

Or, if the potatoes are to be preserved in a dry cellar or out-house, it should be considered that stone or wooden walls not exposed to the sun or fire attract and retain dampness; and as moisture is transferable into icicles by the action of frost, so it is necessary to place dry sand, winnowed chaff, turf mould, reed straw, or any other dry article, two feet thick, between the walls and the potatoes, and also, under the latter, should the floor be earthen or otherwise damp, and over the whole, as a protection from frost and dampness.

It would also be proper to spread the dry saw-dust, or any other dry article, between layers of potatoes, to absorb the moisture, and to fill up all crevices in the doors and windows in the out-house, to cause the whole to be impervious to frost.

The experiment may then be made of dipping with a cabbage net, or small bag, a few of those ripe and sound potatoes into boiling water for one minute only, to deprive them of their sprouting qualities, and to keep them in a dry place secure from frost, to ascertain how long they would continue in a sound state for table use. (*Gard. Gaz.*)

Deleterious Acids in Soils.—Amongst the most extensive class of substances in chemical products, is that of the acids. These are given off in the decomposition of substances, for the benefit of the soil, and are easily detected by the chemist. They are distinguished by the peculiar property of being sour, though they cannot always be detected by applying them to the tongue. They possess the property of changing vegetable blue colors to red. The substance known to chemists as archil, or litmus, is applied either as a tincture or on paper. The spread of chemical knowledge in the

country has lowered the prices of tests, and what were sold a few years since at exorbitant prices, are now found at almost all shops in the country, whilst these, with the aid of a few domestic utensils, is all that is required for carrying on chemical inquiry. If this is not procurable, the test will be found by pouring boiling water over red cabbage, or even rubbing the rind of a radish over white paper. Gardeners or cultivators might often apply this knowledge to advantage. Some years since, a gardener in the neighborhood of London employed some sand to his heaths, when they all sickened and died. Although there was no suspicion of any deleterious substances, a chemist, on analyzing it, found free acid. The effects might have been easily prevented by pouring boiling water previously over the sand, and then introducing into it the stained paper. A similar effect was produced in the use of a brown loam with carnations, by which the greater portion of the stock was destroyed. There was no doubt but that, in this case, the acid was sulphuric acid, probably derived from the spot from which it was taken, from the slow drainage of an extensive portion of moor land, from the quantity of pyrites which it contained. That this was the case was evident, as all the water in the neighborhood was chalybeate, or in the state of sulphate of iron.—*Gard. Gaz.*

Double Flowers not monstrosities.—The President of the Horticultural Society of Paris, Viscount Hericart de Thury, in his late address before that institution, has made some excellent remarks upon this subject. There are many botanists who disclaim at every double flower as a perversion of nature, and who pretend that nothing is beautiful beyond its single state: to all such we commend the following remarks.—*Ed.*

"Let me express my surprise that any one can still persist in considering our admirable double flowers as so many irregularities or even *monstrosities*, as certain severe botanists express it. We reject the notion, and even the expression. Such a denomination presents to the thought only the idea of hideous objects, giving birth to disagreeable ideas, little in accordance with the most lovely flowers in existence. For my own part, I cannot decide what expression I ought to use to any person who tells me that the most beautiful roses, the most brilliant pinks, the finest camellias, are nothing but the freaks of nature, because they are not the produce of primitive origin. At all events, the doubling of flowers is not a modern discovery, and if it belongs not to nature herself—a question which it would be important to study and determine—it cannot be denied that the practice mounts back to the most distant periods, at least if we may judge by the history of the 'hundred-leaved rose'—'the rose daughter of the spring,' according to Anacreon; —the rose 'consecrated to Venus and colored by her blood,' according to Aphtonius, or 'the blood of the lovely Adonis,' if we credit Bion and Ovid—the rose, the queen of flowers, the most beauteous ornament of the sumptuous gardens of Babylon, and of all the nations of the most remote antiquity—the rose, in fine, whose origin is unknown, of which all the most favored countries of the East, the land of wonders and enchantments, pretend to be the birth-place."—*Id.*

Horticulturists not Florimaniacs.—Horticulture is then extended every where, yet still there are some botanists, who, in their extreme and disdainful severity, affect to confound us with the tulip-madmen of Holland in the last century—with those florimaniacs who did without eating or drinking, in order to increase the number of

their anemones—who spent whole days in admiring the colors of a ranunculus or the size of a hyacinth—who paid ten or twelve thousand francs for a single root—who indulged in a thousand follies of the same sort, so ruinous to their families, that the Dutch States were obliged to interfere to put a stop to this senseless traffic. A few such men may still exist, but such are not our horticulturists, those men who devote themselves to the scientific cultivation of plants and trees, who occupy themselves in naturalizing them and rendering them suited to the climate—to whom we are indebted for a crowd of useful discoveries—to whom we owe those beautiful double flowers which form the ornament of our gardens—to whom we must express our obligations for those delicious fruits, which are so many conquests or novel products. To become such horticulturists, it is necessary to be acquainted with vegetable physiology—to apply the laws of chemistry and physics to the cultivation of trees, plants and flowers—to be a botanist—to be, in fact, a persevering and indefatigable observer; for all the success of the business of florists, and of the science of horticulture, depends essentially on the exact knowledge of the *period of developments in vegetation in coming into leaf, in coming into bloom, and in the maturity of seeds and fruits.* Horticulture, then, is not the madness of the last century, but a science of deep observation and constant attention. The course which horticulturists should follow in their labors, has been pointed out to them by the greatest botanists, and it is after the precepts of Linnæus, of Rey, of Alanson, of Dumahel, of Jussieu, of De Candolle, of Bosc, of Richard, of Thouin, of Mirbel, of Lindley, of Loudon, and others, that the horticulturists execute their works—that they make their observations—that they try their experiments—and that each, according to his particular leaning, arrives at his object. One naturalizes foreign vegetables; another directs the blooming to his wishes, either by advancing it, retaining it, or retarding it, according to the weather, the circumstances which present themselves, or the fetes which he ought to furnish: one, again, busies himself in doubling flowers, and another in varying their tints; another ameliorates fruits, and creates new varieties, whilst his neighbor converts savage or bitter plants into nourishing vegetables or savory roots. Such are the labors of our horticulturists, which, day by day, present us with results of such great importance.—(*Extract from the Address of Hericart de Thury.*)

Art. II. *Foreign Notices.*

ENGLAND.

The Assam Tea.—Our readers probably recollect our notice some time since, that the East India Company's collectors had discovered the tea plant growing in Upper Assam, and that it was confidently anticipated that the company would succeed in manufacturing the tea. This they have succeeded in doing, and a quantity of it has been sent to London, the first public sale of which we find noticed in the *Gardeners' Gazette*, in January last, as follows:—

"*First public sale of Assam Tea.*—The Commercial Sale Room in Mincing-lane, where the public tea sales are held, was crowded at

ten, the hour of the sale, this morning, in consequence of its being known that the whole of the Honorable Company's recent importation of teas from their territories in Upper Assam, India, were to be sold. Mr. Thompson was the tea-broker selected by the Company to offer these teas for sale. They consisted of three lots of Assam Souchong, and five lots of Assam Pekoe. On offering the first lot, which was Souchong, Mr. Thompson announced that each lot would be sold, without the least reservation, to the highest bidder. We never before witnessed such excitement as prevailed when the first lot was competed for. The first bid was 5s. per lb.; a second bid was made of 10s. per lb. After much competition, it was knocked down for 21s. per lb., the purchaser being Captain Pidding, the proprietor of the 'Howqua's Mixture' tea. The second lot of Souchong was bought for the same person for 20s. per lb. The third and last lot of Souchong sold for 16s. per lb., Captain Pidding being the buyer. The first lot of Assam Pekoe sold for 24s. per lb. The second, third, and fourth lots of Assam Pekoe fetched the respective prices of 25s., 27s. 6d., and 28s. 6d. per lb., and was also purchased like the previous lots for Capt. Pidding. For the last lot of Pekoe most exciting competition took place. It was at last knocked down at the extraordinary high price of 34s. per lb. Captain Pidding was also the purchaser of this, and has thereby become the sole proprietor of the 'Assam' as well as the 'Howqua's Mixture' tea. The general opinion of the collected tea-brokers and dealers, with whom the room was crowded, was, that the Assam tea is not only valuable as a curiosity, but that the tea itself is of very superior quality, being of a pleasant flavor, and of such strength, that some asserted the fifth water from it was as strong as the first. Captain Pidding intends to allow small parcels of it to be sold out at prime cost. If this tea proves as good as that from China, we shall be enabled to employ hundreds of thousands of our own colonists in our Indian territory, instead of depending on the Chinese; and the constant intercourse and increased number of persons employed in our own immediate interests, will greatly strengthen our hold on the British territories in the East. Captain Pidding has asserted that nobody shall have more than a single ounce packet, which will enable the greater number to taste and give opinions on the quality of the article."—*Gard. Gaz.*

Beautiful Devices of Flowers.—At the Chelmsford and Essex Floral and Horticultural Society, in September last, a device was exhibited, which consisted of a carpet of flowers, imbedded in moss, of various fanciful devices, containing every flower at that time in blossom in the stove, green-house or open air. Another carpet, thirty-six feet in length, studded with different flowers and fringed with a border of globe fuschias, was also exhibited.—*Gard. Gaz.*

The Mangel Wurtzel Potato.—We have had exhibited to us a fine specimen of this species of potato, grown on Lord Ormonde's estate, at Garryricken, by Mr. M'Enery. We understand one hundred and sixty-eight of them, weighing eight stone and a half, were grown by him this season, from two potatos, cut into thirty-three seeds, and sowed a foot and a half asunder, in drills three feet apart. They were in all other respects treated like an ordinary drilled potato crop. Many of them attained an enormous size, and the smallest was equal to that of a large potato of the usual kinds. The produce rated at more than two hundred barrels the Irish acre. From its great fecundity, the ease with which it is grown, and the little liability there

is to failure of the crop, this root is likely to become a valuable addition in the green-cropping system.—*Kilkenny Moderator.* [The Mangel Wurtzel Potato, is, as we have before observed, nothing more than the *Rohan,* under another name.—*Ed.*]

FRANCE.

Acclimazation of Plants by succeeding generations not effected without hybridization with hardy species or varieties.—M. Soulange Bodin, Secretary of the Paris Horticultural Society, in an address read before the society, in June last, advocates the doctrine, that plants, not naturally hardy, cannot be made so by means of reproduction from the seed, and adduces an instance of this in the Bengal Rose:—

"What shrub," he says, "has been more handled and worked on by the hand of man, and, I may add, by M. Vibert himself, than the Bengal Rose? Fifty years of seed, coming from an infinite number of varieties, have given birth to thousands of individuals: all these different generations have passed under the eyes of M. Vibert—have passed through his hands, and never has he perceived, in favor of the species becoming quite at home in the climate, any perceptible progress. A proof, unhappily too convincing, has been given in support of this opinion during the last two winters. In the first, a few degrees of frost destroyed in a few days a vast number of Bengals. The wood perished as far as the graft, or on a level with the ground, almost all the sleeping eyes disappeared, and the young grafts left not the slightest hope. If the hybrids of the Bengal resisted, it is because the impregnating power which acted on the reproducing germes had destroyed, in the new produce, the character of their Indian type, and had assimilated them to our native rose trees. Camellias, which have many points in common with the tea-plant, have also refused to yield to our plans of seed, by means of making them used to the climate; and more than two hundred varieties, which they have furnished during the last five and twenty years from their seed scientifically impregnated, have not offered in their mode of vegetation any change which could lead us to suppose that their natural organization has been modified. Hitherto, therefore, the making plants quite at home in a new climate, is nothing more than an expression which hope has created, without any real value being attached to it. But M. Poiteau has re-animated our courage by remarking, that if, in the real acceptation of the word, pure acclimation is nothing better than illusory, yet incomplete acclimation, such as I have just described, can offer most valuable resources in the cultivation of our gardens." —*Gard. Gaz.*

The trunks of the Mòrus multicaúlis, *in France, have undergone in each of the last winters a fall of temperature estimated at* 18°.—M. Soulange Bodin, in his address above alluded to, makes this remark, and adds,—

"Winter assumes each year, in our country, appearances which deceive all the expectations of the agriculturist. It does not come to us, as it does in the northern regions, enveloped in a thick mantle of snow, which is extended from the period of autumn over the tender plants, and not withdrawn until spring; and its severe and repeated lessons have given us proof of the precautions which the cultivation of the mulberry tree, called multicaule, demands in this country. Meteorologists have proved that the trunks of these great shrubs have undergone, in each of the last winters, a fall of temperature estimat-

ed at eighteen degrees. 'But,' remarks M. Poiteau, 'if a vast quantity of wheat perished in 1740, no person will, from that circumstance, draw the conclusion that we should give up the cultivation of wheat altogether. Thus we must act respecting this kind of mulberry tree. It has a mode of development peculiar to itself, and its property of sending forth shoots from the stock is probably an indication that it would prefer to be cultivated rather as a tough-lived plant, than as a tree of high trunk.' He proposes, in consequence, to treat it as we treat the stocks of the quince tree, by turning them down every year in November, and by banking the stock in order to preserve them from the heavy frosts and the false thaws, which are more to be feared than a continued frost, no matter how severe. It is certain that we ought not to give up, without great hesitation, the advantages which MM. Loiseleur-Deslongchamps, Villa de Montpascal, and many other impartial men, have perceived in the multicaule mulberry. However we may succeed, we cannot but recommend to our cultivators to propagate, as abundantly as they can, the best varieties of the white mulberry; and, to assist them in their labors, we have to mention the mode of proceeding of M. Cante, who thinks it best to give the form of an inverted T to the incision of the graft on these trees. M. Vilmorin has declared to us, that he has proved the great advantages which are to be derived from this plan. M. Cante is gardener of the domain of Mivoyé, where the Marquis Amelot de Chaillou has made considerable plantations of mulberry trees, intended to furnish food to a large nursery of silkworms, which he has just erected."—*Gard. Gaz.*

Value of Plants displayed at the Anniversary Meeting of the Paris Horticultural Society in June.—One of the best horticulturists pronounced the plants exhibited, to be worth more than 400,000 francs, ($75,000!) (*Hort. Journal.*)

Art. III. *Domestic Notices.*

Blue Camellias.—There is a great desire, with many cultivators, to possess blue colors of peculiar tribes of flowers; for instance, the dahlia, tulip, rose, camellia, &c. But all attempts to produce any near approach to that color have failed. Within a few days, however, we have understood that the Messrs. Oddeaux & Co., "Florists and Nurserymen from Versailles, near Paris," who have lately arrived in Boston, have, among the many rare and *curious* plants which they possess, a blue Camellia!! also, that they offer it for sale at the very moderate price of $100. The Messrs. Oddeaux have, we have also learnt, agreed to guarantee it to be blue, or no pay will be received! They have, also, many other equally desirable new things; among others, a *scarlet* variety of Gardènia flórida! and a *white* Amaryllis formosíssima! likewise, the *alpine* dahlia, the roots of which are so hardy as to live through our winters unharmed! together with many more equally valuable things.

Many of our readers probably recollect the Messrs. Felix Préres & Co., "florists from St. Cloud near Paris," who arrived in Boston

some years ago, with a full assortment of plants, surpassing, by their descriptions, any thing before seen, and which they sold readily to the delighted amateurs around the city, who fancied they had at last realized all that their fancy had conjured up,—blue tuberoses—pinks two feet in diameter—blue, green,and violet roses,—yellow pæonies,—plants which flowered two or three years in succession, and other equally marvellous rarities! But, alas! their golden dreams faded as the contents of the packets became exhausted, and then, in the place of all their cherished plants, came nothing but the most miserable trash which had been banished from cultivation.

Such a lesson we should imagine would be sufficient to put every one on their guard, and prevent their being completely duped again. But there are some who fancy that nothing is too ridiculous to believe, and who are willing purchasers. Messrs. Oddeaux & Co. may have a brilliant selection of plants; and may, indeed, possess that rare object, a *blue* camellia. But it seems to us a great sacrifice of time and money to bring a plant so far which, at home, would command more than the whole collection of plants is worth, were it valued at a thousand dollars. We trust that gentlemen, as well as amateurs, will be cautious in their purchases of such marvellous productions, and we deem it our duty to put every one on their guard, that such barefaced imposition may be exposed.—*Ed.*

Large single Camellia.—In the garden of Col. Lucas, of South Carolina, there is now growing, in the open air, a very remarkable specimen of the single camellia, undoubtedly of much greater proportions than any other in the United States. The standing committee of the Horticultural Society of Charleston, in making their last annual report, have appended the dimensions of the tree, with a view to test the accuracy of the opinion, that there is no other in the country that will bear a comparison in size. The dimensions are as follows:—

	Ft.	*In.*
Largest diameter of the trunk, at the surface of the ground, . . .	1	
Circumference at do., ...	2	11½
Circumference, nine inches from the surface of the ground, where the branches commence, ...	2	9¼
At three feet from the surface of the ground, it divides into eight branches, six of which, in the aggregate, measure in circumference, . .	5	6
The largest of these branches is sixteen inches in circumference, and two others fifteen inches each, the aggregate	3	10
The largest diameter of the tree, measuring to the extremity of the branches and leaves, is	16	5
The smallest diameter, as above, ...	15	
The circumference, ...	49	8
The height, ...	16	10

We doubt whether there is such a large specimen in England, or, indeed, out of its native country. The climate of South Carolina is peculiarly adapted to its growth, and the mildness of the winters is such as not to endanger it, after it acquires a growth of a year or two. Mr. A. Gordon, Botanical Collector, in the *Gardener's Magazine*, (Vol. VII,) mentions a very large camellia as growing in the garden of Mr. Noisette; and, probably, this is the same plant which he alluded to. If the double and fine varieties of the camellia should prove as hardy as the single, and can be as successfully cultivated, they must add greatly to the splendor of the flower garden.—*Ed.*

The Aerides, or Tropical Epiphytes.—Various plans seem necessary to the successful cultivation and flowering of these compara-

tively new and rare treasures of Flora. It appears generally understood, that different species require a difference in the mode of treatment. Epidéndrum does very well wrapped in moss, (Sphagnum, Hypnum,) or the like. We have seen it flower attached to a dry limb, on which it naturally grew. A fine species, falling under our notice, once made a good spike of blossoms, grown in sphagnum, in a small flower-pot. In this instance it clasped the rim of the pot with its fibres, instead of striking them downwards. In some of the collections in France, trunks of decayed trees have actually been planted within the houses appropriated to their culture, and species of *Vanilla*, Dendròbium, tropical cymbidiums attached to them. Inserting the fibres under the bark, or by wrapping a little moss about them, they have done well, and flowered abundantly. We anticipate much satisfaction in the future inflorescence of several very fine species of West India epiphytes, brought home by Hon. John Lowell, and on which he is now instituting some experiments. An entire collection of these vegetable wonders, properly grown, how superb! We presume that more than a dozen distinct species may be found in the collections of amateurs in this neighborhood, and we hope that they will be still more numerous.—*Flos.*

Camèllia japónica var. Baltimòrea.—If it is agreeable, I will give you a description of a seedling Camellia, raised by Mr. Zebulon Waters, of Baltimore, now in flower. The flower is very large, of the most delicate white, with a slight stripe of dark red, and also shewing the same of a light blush, quite distinct from each other; some of the petals have only one or two of those stripes, which makes it very distinct from any other variety which has come under my notice; also the petals are very large, in character of the variegated, but cup-shaped, till fully expanded; it then becomes quite revolute, which shows the prominent petals beautiful with the slight tinges on them; it is not the character of the flower as to being double, but the bold appearance it assumes when in bloom. It is moreover one of the freest bloomers, seldom ever losing a bud. It is called *Baltimòrea.*—*Viola, Baltimore, Jan.* 1839.

Boston Botanic Garden.—This garden is now open to the public for exhibition—price of admission, twelve and a half cents. We understand that the encouragement, thus far, has fully realized the expectations of the proprietors. The arrangement of the house, which is well adapted to the purposes of exhibition, and the mode of heating the structure, which is said to be one of the best constructed in the vicinity, we shall notice in a future number. Mr. Wilder's plants appear to good advantage, and, under the care of Mr. Donald, who has the management of the collection, present a vigorous and healthy aspect. An aviary is connected with the conservatory, and "birds innumerable" caroling their sweet notes, lend an enchantment to the whole scene. On the whole, we think much good will arise from the establishment of such a place, and it will, no doubt, become a place of fashionable resort to the inhabitants of the city; the stranger will also find it an agreeable place to beguile away a leisure hour. Great credit is due to Mr. Gray for his zeal, which has alone enabled him to carry his project successfully through.—*Ed.*

Wistària Consequàna.—This most splendid climbing plant, which we have repeatedly urged upon the notice of our readers, is now flowering in great profusion at Mr. Cushing's, Belmont Place. The shoots are trained to the rafters of the conservatory, and the depend-

ing tresses of flowers are, many of them, nearly a foot long; the whole forming a most magnificent display. It is only two years since this plant was set out, at which time it was only two or three feet high; some of the shoots now reach nearly to the top of the house. At Mr. Pratt's, another plant is now blooming, but not in such splendor as that at Mr. Cushing's. We again commend this plant to the notice of every person who possesses a green-house, as one of the most truly ornamental objects which can be planted.—*Ed.*

Hand-Glasses for striking Cuttings, or protecting Plants.—Our correspondent, Mr. John Clark, No. 104, Court Street, Boston, has shown us a hand-glass, which he has lately made, and which is most excellently adapted to these purposes. The glasses are about a foot and a half square, and will contain a great number of cuttings. For striking cuttings, piping pinks or pansies, and for protecting early cucumbers, it is one of the best things which could be used. They may be seen at Mr. Clark's shop, in Court Street, or at the seed store of Hovey & Co., Merchant's Row.—*Ed.*

Splendid collection of Hot-house and Green-house Plants for sale.—Our readers will perceive, by our advertising sheet, that the splendid collection of plants belonging to J. B. Smith, Esq. of Philadelphia, is to be sold at public auction, the latter part of May, or early in June, unless previously disposed of at private sale. The collection is particularly rich in palms, many of which are of very large size. There are also many large and fine lemon and orange trees, and one of the best collections of camellias in the country, including a large number of seedlings, a few only of which have yet flowered. The cactuses are likewise numerous, and fine specimens. A reference to our notes upon Mr Smith's place will show what are the more notable species and varieties in the collection. We should hope some gentleman would buy the whole, as they are too valuable to be scattered over the country, and perhaps lost. All the plants are in the most vigorous health.—*Ed.*

A double Azalea.—At the last anniversary of the Horticultural Society of Charleston, a silver medal was awarded to Mr. Strobel, for a *double* azalea, an indigenous variety, taken from the forests in the vicinity of Charleston. It was pronounced very beautiful by the committee. (*South. Ag.*)

Art. IV. *Retrospective Criticism.*

Errata.—In our last, page 88, first line, for "*recommended,*" read "recommend." Page 111, fifteen lines from the top, for "*pruning,*" read "preserving."

Horticulture in Mobile, Alab.—From a perusal of the second number of your Magazine, which has been received, I perceive you occasionally notice the progress of old, and the formation of new nurseries; and perceiving little or no notice of any thing of the sort further south from you than Charleston, I take the liberty of giving you a slight sketch of the establishment I now have, (all of which has been recently erected by J. W. Tisdale, Esq., my patron and supporter,) under the supposition that the information will not be without inter-

est to you. The green-house, which was erected very late this last fall, is forty feet long, eighteen feet deep, and seventeen feet high in the back. Three years' experience in the south has convinced me that a low or narrow house will not succeed; first, from the circumstance that plants of vigorous growth, when well attended to here, during the summer, grow as much as a plant of the same sort would grow in the north in three, or perhaps five summers. Last April I had a plant of *Acàcia* dealbàta, about six or seven inches high; the same plant is now twelve feet high, and beautifully formed: a Eugènia myrtifòlia, about two feet high, at the same time. It is now between five and six feet high, with a beautifully formed head, about three and a half feet in diameter; other plants of a strong habit grow in the same way. Secondly, a low and narrow house is too much exposed to the *intense* rays of the spring sun for the benefit of the plants. My propagating house is twenty-four feet long; I have also considerable hot-bed frames. My stock of plants, considering the very short time since I commenced the business, I think is pretty good. I have about fifty varieties of camellia, (having imported some from England,) about forty varieties of pelargoniums, seventy varieties of roses, eighteen or twenty varieties of cactuses, a few rhododendrons, and eight varieties of Azàlea índica, three or four ericas, a small collection of choice hot-house plants, and a splendid collection of dahlias; and I am happy to be enabled to say, that the encouragement I have already received from purchasers is very promising; and I am glad to be enabled to state, that the taste for flowers and flower gardens is very fast increasing here. I am also contemplating the erection of a house for camellias, and some few other genera of plants.—*Yours, truly, Gilbert R. Rotton, Mobile, March* 5, 1839.

[Mr. Rotton will accept our thanks for the information contained in the above, and we hope he will give us further information upon the state of gardening, in the vicinity of Mobile, for our retrospective article for our next volume; we hope, also, that he may be induced to send us some communications upon the treatment of plants in the southern states, that our readers, many of whom reside there, may be benefited by the experience of such cultivators as Mr. Rotton. The management is materially different in the southern and northern states; and amateur gentlemen would, no doubt, be happy to have the opinion of practical men, who reside among them, upon the growth of plants.—*Ed.*]

ART. V. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society was held, on the evening of the 19th inst. The President in the chair.

The committee on plants and flowers reported, that they had visited the different green-houses and hot-houses in the city and vicinity, and had awarded unanimously the premium of ten dollars to William Chalmers, Jr., gardener to George Pepper, Esq., for the best ordered and conducted green-house; they likewise recommended, that

one of the Society's premium certificates be given him, attested by the President and Secretary.

They likewise awarded the premium for the ten best varieties of camellias, to George Pepper, Esq., he having exhibited Camél*lia* Landréth*ii*, C. *myr*tifòlia, C. fimbriàta, C. Lady Hume's Blush, C. imbricàta, C. àlba plèno, C. conchiflòra, C. *Pompònia*, C. variegàta, and speciòsa.

The premium, for the best seedling camellia, (C. Percivál*ii*,) was awarded to Mrs. Hibbert; the color a beautiful rose, with a tolerably well formed bold petal. The plant was not above eight inches high, and growing; and, although not a first-rate compact flower, it will still be a valuable acquisition, when well grown. Mrs. Hibbert had four others, tolerably good.

The premium, for the best bouquet, was given to John Sherwood, Laurel Hill.

The premium, for the best display of plants, in pots, was awarded to Robert Buist, who exhibited, Camél*lia* Wóods*ii*, C. flórida, E'pacris paludòsa, Pelargònium Lord Denman, Gem, Purpùrea cœrùlea, Compton*iàna*, Cicelia, Urbàna, Admiral Napier, Grant*iànum*, Man of Ross; Erìca pubéscens mìnor, *E.* rùbida, *E. pínea*, *E.* canaliculàta, *E.* regérminans; *V*erbèna álba, *V.* intermèdia, *V.* incìsa, *V.* Eyre*àna*, *V.* Tweedie*àna*, and *V.* T. grandiflòra; Azàlea índica élegans, Gillingh*ámii*, A. magniflòra, (a new seedling,) A. phœníca, A. álba, A. hybrida, and A. sinénsis; Pimelèa híspida, *R*hododéndron, arbòreum hybridum, Ixòr*a* ròsea, *E*uphórb*ia* splèndens, Diósma capitàta, Pultenæ*a* daphnoides, and *D*áphne neapolitàna.

An honorary premium was awarded to Andrew Dryburgh, for the next best display of plants, in pots, he having exhibited Azàlea índica, A. purpùrea, A. phœnícea, Amaryll*is* Johnsòn*ii*, A. vittàta, var. cinerària cruénta, C. linàta, Collinsòn*ia* bícolor, Prímula, double white and lilac, violas of various kinds, Metrosidèros floribúndus, *G*naphàlium grandiflòra, Cèreus Jenkinsòn*ii*, *E*uphórb*ia* splèndens, Coronílla glaúca, *V*erbèna Tweedie*àna*, *V.* incìsa, *R*hododéndron pónticum, Erìca andromediflòra, Pelargònium Queen of Scots, Sir William Wallace, Mahèrn*ia* adoràta, *A*trum crínitum, Ròsa Russell*iànum*, *R.* blush perpetual, *R.* índica multiflòra, Grand perpetual and sanguínea; Camél*lia* splèndens, C. conspícua, C. fimbriàta, C. Landréth*ii*, C. imbricàta, C. King of the Netherlands, C. fúlgens, C. *myr*tifòlia, Chándler*i*, C. *Pompònia*, and a *C*álla æthiópica.

The Committee on Vegetables awarded the premium for the most interesting display of vegetables, to Mr. Chalmers, gardener to Mrs. Stot, who exhibited two dozen mushrooms, oak-leaved lettuce, six cucumbers, radishes, and parsley.

The Committee on Fruit awarded the premium to Hugh Hatch, Camden, N. J., for the best display of fruit; he having exhibited some fine apples.

Robert Kilvington exhibited, *E*rìca urceolàris, *E.* nigrìta, *E.* imbricàta, *E.* regérminans, Gardoquì*a* Hookèr*ii*, Azàlea phœnícia, A. Ledifòlia, Mahérn*ia* odoràta, Pittósporum undulàtum, P. Tobìra, *L*òtus jacobæ'a, Blumenbách*ia* insígnis, Cheriánthus *Cheìri* plèna, *V*erbèna Tweedie*àna*, and a very superior new seedling, the largest flower I have seen; *R*ùbus rosafòlius, Hòy*a* carnòsa, Roses, Yellow Tea, Blush Tea, Thea golconda, *R.* Smith*ii*, *P*elargònium *C*óplea Seckle*ànum*, and two fine seedlings; Eupatòr*ium* fràgrans, *G*naphàlium aúreum, Cinerària cruénta, C. móllis, a fine display of hyacinths, polyanthuses, neriums, tulips, pansies, &c. &c., with the fol-

lowing fine native plants, viz: Pulmonària virgínica, *Saxífraga* sp. Houstòn*ia* cœrùlea, *Dr*àba vérna, *Ar*àbis coronopifòlia, *Corydàlis* cucullàta, *Senècio* aúrea, Claytòn*ia* virgínica, and Ophioglossum vulgàtum.

William Chalmers, gardener to Mrs. Stot, exhibited, Burchéll*a* capénsis, Amaryll*is* Johnsòn*ii*, Begònia argyrostígma, Lechenaúlt*ia* formòsa, Azàlea índica hybrida, *Polygala* oppositifòlia, *Ixia* tricolor, Cinerària purpùrea, Illícium floridànum, *Cyclamen* pérsicum, Pelargònium Fair Helen, Prímula sinénsis, P. double red, Petunias, Lady Slippers, Camellias, of various kinds, Yellow Tea rose and mignonette, &c.

William Chalmers, Jr., gardener to George Pepper, Esq., exhibited, Azàlea phœnícia, A. álba, A. purpùrea flòre plèno, Ixòr*a* coccínea, Melástoma hetromálla, Justíc*ia* calatrix, Lantàna mutábilis, *Euphorbia* splèndens, *Verbèna* incisa, *V.* Tweedie*àna*, *Rosa* Smith*ii*, Yellow Tea, Blush Tea, White Tea, Heliotròpium peruviànum, Camélli*a* Pœoni*flòra*, and C. cárnea.

Mrs. Hibbert exhibited Camélli*a* fúlgens, C. *Rosa* sinénsis, C. Lady Hume's Blush, C. conchiflòra, C. Goussòn*ia*, C. wárratah, C. Greville's Red, C. Flòy*ii*, C. *Pompònia;* Seedlings—C. Helèn*ii*, C. Enterprise,and C. Pric*iàna;* Lantàna mutábilis, *Calla* æthiópica, Mahérn*ia* odoràta, Cinerària amelloìdes, *Verbèna* Tweedie*àna*, *Erica pinea*.

John Sherwood exhibited, Camélli*a* King of the Netherlands, C. fimbriàta, C. imbricàta, C. Fairlè*a*, C. elàta, C. variegàta, C. *myrtifòlia*, C. wárratah, C. *Sasánqua rosea*, *Daphne* cneòrum, and a seedling camellia.

Alexander Parker exhibited various kinds of camellias, cactuses, &c.

Mr. Reilly, gardener to Pierce Butler, Esq., exhibited some very superior lettuces, radishes, and a head of cauliflower.

Archibald Ritchie, gardener to Joshua Longstreth, exhibited some fine lettuce, radishes of different kinds, parsnips, beets, &c.

The Society's room never before exhibited so much splendor, as it did that evening; it being literally filled with large and fine specimens of various kind of plants, tastefully arranged, loaded with a profusion of flowers of every hue and tint imaginable. The azaleas and camellias were in a fine healthy state, and had a most pleasing effect. The E'pacris palludòsa is a beautiful plant, the flower sweet scented, and will be a great acquisition to the amateur.

The vegetables were of the first quality, and does great credit to the growers.—*Yours, G. Watson.*

Art. VI. *Massachusetts Horticultural Society.*

Saturday, March 2d, 1839.—*Exhibited.* Fruits: From B. V. French, Royal, Mela carla, Bourassa, and Fearn's pippin apples. also, King's Bonchrètien pear, an old variety, introduced by the late Hon. Rufus King, of which the name was lost. From R. Manning, Danvers winter sweet, Pennock's red winter, and a kind of apple, received from France, unknown. From Judge Heard, a basket of

handsome red apples, with somewhat the appearance of the Spitzemberg, but unknown to the committee.

March 23d.—Exhibited. Flowers: From S. Sweetser, *Rhododéndron, arbòreum hybridum,* and *pállidum.* From J. H. Gardener, a plant of the yellow Noisette rose, in bloom.

Fruits:—From J. M. Ives, Salem, Carthouse or Gilpin, Bullock's Pippin or Sheep-nose, Wellington, Swaar, and Michael Henry pippin apples. From B. Bussey, St. Germain pears, in fine preservation. From Job Sumner, Roxbury, apples, names unknown.

The Committee on Flowers, through their Chairman, reported that the following premiums be offered for the year 1839.

FLOWERS.

Hyacinths.—For the best display, $5.00.

Geraniums.—For the best display, twelve varieties in pots, $10.00. For the second best display, twelve varieties, $5.00. For the best seedling, $3.00.

Tulips.—For the best twelve varieties, $10.00. For the second best twelve varieties, $5.00.

Violas.—For the best display, $5.00. For the second best display, $2.00. For the best seedling, $3.00.

Pinks.—For the best display, 5.00. For the best six varieties, $3.00. For the best seedling, $3.00.

Carnations.—For the best display, $5.00. For the best six varieties, $3.00. For the best seedling, 3.00.

Roses.—For the best display of flowers, $10.00. For the best twenty-four hardy varieties, $5.00. For the best twelve hardy varieties, 3.00. For the best twelve Chinese and other tender varieties, $5.00.

Dahlias.—1st prize, best display, $10.00; 2d prize, best display, $6.00. 1st prize, best twenty-four varieties, $8.00; 2d prize, best twenty-four varieties, 5.00. 1st prize, best sixteen varieties, $6.00; 2d prize, best sixteen varieties, $4.00. 1st prize, best eight varieties, $5.00; 2d prize, best eight varieties, $2.00. 1st prize, best seedling, $3.00. 2d prize, best seedling, $2.00.

Camellias.—For the best seedling, $10.00.

Heaths.—For the best six varieties in pots, $10.00.

The committee will also award discretionary premiums, for any remarkable production.

Messrs. Haggerton & Sweetser, who were appointed a sub-committee, at a previous meeting of the flower committee, to adopt regulations, to be observed on presenting shrubs, plants and flowers, for premiums, offered by the Horticultural Society, reported as follows:

First.—No shrub, plant or flower shall be displayed in but one stand for a premium, and the same shall not be eligible to but one prize.

Second.—All shrubs, plants and flowers so displayed, shall be labelled and numbered; and a duplicate of such label shall also be handed to the flower committee as soon as the said shrubs, plants and flowers are arranged in the hall for exhibition; in order that the committee may have time to examine the same and decide upon their merits for prices.

The following proposal of a member of the Massachusetts Horticultural Society, was read and referred to the flower committee, who were directed to make a report at the next meeting.

"To encourage the cultivation of the flowering plants of New England, a member of the Massachusetts Horticultural Society of-

fers the following premiums, to be awarded by the 'Committee on Flowers,' on condition that the Society offer an equal amount.

For the year 1839.

For the best exhibition during the season, at their Hall, of the native plants of New England, *wherever grown*,—

A first premium of five dollars.
A second do. of five dollars.
A third do. of five dollars.

For the year 1840.

For the best exhibition during the season, at the Hall, of the native plants of New England, *cultivated by the competitors*,—

A first premium of ten dollars.
A second do. of five dollars.
A third do. of five dollars.

For the year 1841. A first premium of fifteen dollars.
A second do. of ten dollars.
A third do. of five dollars.

For the year 1842. A first premium of twenty dollars.
A second do. of ten dollars.
A third do. of five dollars.

For the year 1843. A first premium of twenty-five dollars.
A second do. of fifteen dollars.
A third do of ten dollars.

As competition with the long established Botanic Garden, at Cambridge, would be hopeless, it is excluded. A gratuity, such as his exhibition of plants may merit, might still be allowed by the Society, to its skilful gardener.

The collection, also, of the donor, which, perhaps, is among the next best, will be excluded.

Although to many cultivators the pecuniary reward will be no inducement, others may consider it an object, as refunding, in some measure, the cost, and who also will, if successful, be more than repaid by the propagation and sale of their plants.

It is expected the Committee will distribute the premiums, in whole or in part, as they deem *just*—or withhold them altogether, should this attempt fail to bring into cultivation 'native plants,' the pride of our woods and meadows,—so justly valued abroad, and so long neglected at home."

March 30th.—*Exhibited.* Flowers:—from S. Walker, two seedling pansies, of great merit: one of these Mr. Walker has named Louisa; it is considered one of the best Mr. Walker has yet raised.

Vegetables:—From J. L. L. F. Warren, fine radishes.

The following business was transacted at this meeting.

Mr Walker, from the Flower Committee, to whom was referred the subject of the proposal, from a member of the Society, read at the last meeting, reported, that the liberal premiums offered by Thos. Lee, Esq., ought to be complied with: and the report was accepted.

We are happy to record this vote of the Society, upon this subject. Mr. Lee has long directed his attention to our native Flora, and his grounds probably contain a far better collection than that of any other individual. His proposal to place at the disposal of the Society, a specific sum, to be awarded in each season, of the next five years, amounting, in the whole, to one hundred and fifty dollars, displays a liberality only equalled by the zeal which he has manifested in the cultivation of the plants of New England. Mr. Lee has com-

municated to us some notes upon the most ornamental plants growing in this vicinity, which are demanding a place in our gardens; and we regret that they did not reach us in season to have given them a place in this number. They will, however, appear in our next.

Art. VII. *Faneuil Hall Market.*

	From	To
Roots, Tubers, &c.	$ cts.	$ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
Common, per bushel,	50	60
Chenangoes, per barrel,	2 00	2 25
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 75	2 00
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	2 50	3 00
Eastports, per bushel,	1 00	
Sweet Potatoes, per bushel,	—	—
Turnips:		
Common, per bushel,	25	37
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	4	6
Yellow, per bushel,	1 00	1 25
White, per bushel,	1 50	2 00
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	12½	—
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoys,	50	75
Drumheads,	75	1 00
Red Dutch,	75	1 00
Cauliflowers, each,	12½	25
Brocoli, each,	10	15
Lettuce, per head,	8	10
Celery, per root:		
Giant red and white,	25	—
Common,	12½	25
Spinach, per half peck,	17	20
Dandelions, per half peck,	37½	—
Tomatoes, (green,) per peck,	—	—

	From	To
Squashes and Pumpkins.	$ cts.	$ cts.
Squashes:		
Autumnal Marrow, per cwt.	4 00	6 00
Winter crook-neck, pr cwt.	2 50	3 00
Canada, per cwt	4 00	—
West India, per cwt.	2 00	2 50
Pumpkins, each	12	25
Pot and Sweet Herbs.		
Parsley, per half peck,	50	75
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	6	—
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 00	2 25
Common, per bushel,	50	75
Baldwins, per barrel,	2 50	3 00
Sweet apples, per barrel,	2 50	3 00
Golden Pippins, per bbl.	3 00	4 00
Greenings, per barrel,	3 00	—
Russets, per barrel,	5 0	3 00
Pearmains, per bbl.	—	—
Pears:		
Baking, per bushel,	2 00	2 50
Grapes, per lb:		
Malaga,	25	—
Cranberries, per bushel,	2 50	3 00
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	25	37½
Havana, (sweet)	50	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—A month unusually open and mild, has prevented the stock of some articles from getting so low as it often does, at this season. It is, undoubtedly, owing to the open winter, which has just passed by,

that prices have been kept so stationary since the fall. For five seasons since our reports have been commenced, there has not been one in which there has not been a greater fluctuation in prices than the last. Already early vegetables promise well, and the expectation now is, that the market will be better, and more abundantly supplied with choice articles, and at an earlier day, than has ever been done before.

Potatoes remain almost unchanged in price; there has been no advancement, if the quality of those now sold is taken into consideration. Eastports and Chenangoes are a shade higher, but this is on account of their being all picked over and in prime condition; the variation in prices, since last fall, would not more than compensate for the labor of picking without the loss of the stock. Turnips are exceedingly plentiful for the season. Onions are less abundant and prices have improved. Radishes now come in more plentiful, and of better quality, and at reduced prices. Horseradish is supplied in sufficient quantities. The stock of Cabbages, which has held out so well, is now getting reduced; prices remain the same for good quality. Cauliflowers continue scarce. Lettuce has come to hand, within a week or two, in abundance, and of fine size. Celery is very scarce; what there is on hand is inferior. Dandelions, of garden cultivation, have been received the past week, and readily taken at our quotations; they may be considered as something new at this early season. Market gardeners would find them a profitable crop to raise. Spinach is scarce for the season; this is, however, owing to the open winter, and consequent destruction of a portion of the crop; a partial covering of snow is generally depended upon; but the past winter so little fell, that the roots have been exposed and destroyed.

Of Squashes, there is a good supply of common quality. Prime autumnal marrows and Canada crook-necks are, however, quite scarce. West Indies are now abundant, there having been several arrivals within a week or two.

In fruit there is not much doing. Apples, unless of prime quality, all picked, scarcely maintain the rates at our last report. Pears are all gone, except the baking. Grapes nearly gone; what remains, of very inferior quality. Cranberries scarce. Lemons abundant. Of Oranges, a fine supply. Chestnuts are about gone. Walnuts are tolerably abundant, and in fair demand.—*Yours, M. T., Boston, March 26th*, 1839.

HORTICULTURAL MEMORANDA

FOR APRIL.

Grape Vines, in graperies or green-houses, will now have started so as to show their flower-buds by the middle of the month. Commence syringing once or twice a week, as the shoots progress, and let them be tied to the trellis, to prevent their being broken off. If any of the shoots have not broken well, they should be headed down, in order to make good wood for another season. Fork over the border, and add manure, if it has not already been done.

Peach trees, in pots, placed in the green-house last month, will now be in bloom; give an abundance of air until the fruit is set, when the

trees should be frequently syringed; young trees may be planted in pots, this month, and headed in so as to make fine trees another year.

Strawberries, in pots, if done bearing, should be removed to the open air. If still in fruit, give an abundance of air, and keep them near the glass.

Gooseberry and Currant Bushes may yet be trimmed, if not done before; the earth should be dug between the rows, and the plants staked, if large and not able to support themselves.

Raspberry Plants should now be uncovered and tied up to stakes; dig the soil round the plants as early as convenient. New plantations may now be made.

Strawberry beds may be planted with success this month.

Fruit trees, of all kinds, may be more successfully removed this month than at any other time in the year.

Grafting may be performed this month, and trees trimmed where neglected before.

FLOWER DEPARTMENT.

Tulip beds should now be uncovered, if not already done, and the surface of the beds loosened with a small trowel.

Hyacinth beds should also be attended to in the same manner as the tulips.

Chrysanthemums.—The plants may be separated this month, or cuttings may be put in which will root freely.

Perennial plants, of all kinds, may be successfully removed this month.

Ornamental shrubs may also be removed with safety, as soon as the places are prepared for their reception.

Californian Annuals, as recommended in our last, may be sown this month.

Rose bushes not yet pruned, should be finished as soon as possible.

Green-house plants, such as ericas, lechenaultias, &c. may be propagated this month.

Tender annual flower seeds, sown last month in the hot-bed, should now be potted off singly, into small pots, in rich light soil.

Dahlias will now begin to start their buds. Separate the roots ready for planting as soon as the weather is mild, when early flowers are wanted. For a fine bloom in September, the roots may be set out any time in May. Those plants forwarded as previously directed, may be turned out of the pots the latter part of the month, if warm. Seedlings should be repotted.

Pansies, which have been raised from seed in pots, or boxes, should now be set out in beds in the open air.

Tuberoses, and *Amaryllis formosissima,* may be planted in pots, in a frame, or hot-bed.

Verbenas will need repotting as fast as they fill the pots with roots.

Gladiolus, planted in pots, may be turned out into the border this month.

VEGETABLE DEPARTMENT.

Asparagus beds should be made and planted this month.

Rhubarb beds may be also made up, and the roots set out.

Lettuces, radishes, celery, &c. should be sown for a succession.

THE MAGAZINE

OF

HORTICULTURE.

MAY, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Horticulture in Buffalo, N. Y.; with a notice of the Garden of H. Pratt, Esq.* By M. B. BATEHAM, Rochester.

THE history, condition, and prospects of the city of Buffalo, are alike remarkable and peculiar. A restless spirit of enterprise and speculation appears to pervade all classes of the community, and manifests itself in all their operations. Their buildings, and other improvements, are characterized by a scale of magnificence, which often surprises the passing stranger; and if he looks at what Buffalo *was*, a few years ago, instead of what it *will be* a few years hence, he is half inclined to condemn their enterprise and liberality, as folly and extravagance. But those who view the subject in its proper light, and reflect on what that city must become, cannot but admire the liberal public spirit and indefatigable enterprise which the citizens manifest.

Buffalo is, emphatically, a *commercial* place, and the general embarrassment of commercial affairs, for several years past, has, of course, too seriously affected the community to allow of much being done, of late, by way of improvements. On visiting the city a few days ago, however, I was gratified to perceive, that the indomitable spirit of enterprise is still alive; the sound of the hammer and the trowel again salutes the ear; and the accumulating piles of timber, brick, and

stone, give good evidence that Buffalo will soon be "herself again."

But that which will most interest your readers, and afforded me the greatest pleasure, was my visit to the garden of H. Pratt, Esq., mayor of the city, and president of the bank of Buffalo. It is situated on a rise of ground, about a mile north of the city, on the road to Niagara falls. A beautiful stone mansion, erected the past season, is nearly completed, and affords a fine view of the city, and the broad blue lake. The pleasure-grounds and garden consist of about six acres; and, considering the short time which the improvements have been in progress, the present appearance of the premises reflects the highest credit on the taste of the wealthy proprietor, and the skill of Mr. Kelly, the gardener.

Near the house, and in other parts of the ground, Mr. Kelly has planted a large number of native forest trees, some of which are of very large size, and entirely prevent that naked, barren appearance which is generally seen at newly improved places. Some of these trees are from twenty to thirty feet high, with large spreading tops, and stems from eight to ten inches in diamater. They were transplanted last spring, and Mr. Kelly informed me that not more than two or three out of a hundred had died. They were removed by a pair of wheels with a long pole, nearly according to the directions given by Stewart, in the *Planter's Guide*.

On the north side of the garden, is a range of horticultural buildings, two hundred and sixty feet long, by fourteen wide, built in the best manner with brick and stone walls, and a uniform glass roof. Entering at the end nearest the dwelling, the first apartment is a peach-house and vinery about one hundred feet long, intended for a *succession* house, to be used without artificial heat. Some thrifty peach and apricot trees are trained on a trellis against the back wall, and grape vines are introduced through the front, and trained under the rafters. A path runs through the centre, and beds of lettuce, cauliflowers, &c. occupy the intermediate space. A large number of dahlias had just been potted and placed in this room.

The next apartment is also a peach-house and vinery, but this is intended as a *forcing* house and is heated by a flue. It is planted in the same manner as the first, with the addition of several fig, orange and lemon trees. The peach and apricot trees appeared in a very forward and healthy state, and (the 20th of March,) were just past full bloom—the young fruit on some beginning to set. The grape vines were fast putting out

their leaves;—radishes, lettuces, &c. had already been furnished for the table, from the ground beds in this apartment.

The next division is the green-house, and is of less dimensions than the other two. The collection of plants is not extensive, although very good, considering the short time it has existed. I observed some plants, which if I had time, and supposed you had the space, might be particularly noticed; but the collection is rather deficient in rare and interesting plants, particularly such as are of late introduction; (I was informed that Mr. Pratt intends to enrich this apartment, before long.) Some oleanders, geraniums, &c. are too large and old to appear well, but the younger plants are remarkably thrifty, and the general appearance of the whole does Mr. Kelly much credit. Among the plants in flower, I observed several camellias, a Yellow Tea, and several other roses; Cálla æthiópica, numerous pots of auriculas, daisies, primulas, &c. Large plants of Passiflòra are trained around some pillars in the centre of the house, and a Hòy*a* carnòsa is making good progress on a trellis against the wall. At the lower end of the range, and adjoining the green-house, is a neat brick cottage, and a seed room for the use of the gardener.

In the garden, are several large hot-beds in operation, one of which is in a more advanced state than any that I have seen. The cucumber plants were just beginning to flower, and the tomato and other plants were in a very forward state. One frame was filled with young green-house plants and cuttings. Among them I observed some newly grafted camellias, which were growing finely.

Mr. Pratt intends to erect a spacious conservatory against the south side of his house, with glass doors connecting with his parlors. This will be an admirable arrangement, and, from the known ability of the proprietor and good taste of Mr. and Mrs. Pratt, there can be no doubt but that it will be a splendid affair. This place, when completed, will not only exceed every thing of the kind in the western country, but, under the excellent management of the gardener, it must exert an influence in the promotion of scientific Horticulture.

There are several other private gardens in the vicinity of Buffalo, which deserve a passing notice; and also the thriving nursery establishments of Mr. A. Bryant and B. Hodge, which have snug green-houses attached; but I have already exceeded my limits, and must defer any description of them until I have time to make another visit to Buffalo.

M. B. Bateham.

Rochester Seed Store, March 26th, 1839.

Art. II. *Microscopic Observations, No. II.* By a Correspondent.

(*Continued from Vol. III, page* 41.)

The pubescence and armature of foliage, already noticed at some length, in the preceding article referred to above, introduce us to some more minute wonders, of a microscopic character, to which they are closely allied. For while the former display to the naked eye a configuration, varied and beautiful, the latter astonish by their inimitable elegance and peculiar structure. Submitted to a considerable magnifying power, leaves of vegetables are constantly subjects for study and of interest. Their minutely branching *veins*, their crystalline *vesicles*, their cellular interstices, their intricate network, rivalling and excelling the costliest product of the loom; their properties to produce, by the laws of their organization, such gorgeous colors or more delicate tints; the presence of chromate here, or the absence of the power to oxygenate the sap there;—and so again, the *spiral vessels*, tortuous, yet regular; the curious, mouth-like *stomata*, ciliated and fringed,—such, and other facts, in varied harmony, seem to render that observation an axiom, that "a leaf is one of the most wonderful productions in nature."

According to a theory of half a century's age, revived and modified, all the organs of plants are reducible to one type, a leaf. Without entering into a consideration of this curious theory, to the support of which, the physical structure of plants seems to be favorable, I shall be excused, should I deviate from the appendages of the foliar forms, to the peculiar beauty of the floral organs, while I claim so comprehensive a definition, in justifying my course. At the period when the following microscopic trifles were observed, to employ an idle hour and to amuse, there were few subjects for such research at hand. Spring had scarcely announced its intended visit, and the gleam of sunshine, and the fertilizing shower, had invited forth but a scanty number of its usual and delightful concomitants. Some amentaceous shrubs and trees were swinging their brown tassels on the breeze; the graceful elm was expanding its modest flowers; the little bluett was daring to peep under some quiet and sunny nook in the wall; and the pretty, golden anthered, early carex shooting its spike of scale-like flowers. Yet, appreciated as much as these vernal

visitors usually are, by the flower lover, their more attractive charms were hidden and unknown, until submitted to the magnifying glass. My elm flowers were gems of beauty, and the brown and unsightly tufts of the despised Lombardy poplar were unique and singular.

The hazel nut, (*Córylus americàna,*) so well known to every school boy as his legal plunder, when autumn scatters its nuts and berries on hill side and in hedge row, has two sets of flowers upon the same plant, viz. the barren and fertile. The former, in all monœcious and diœcious plants, are interesting appendages to the tree or shrub. The latter are smaller, and contiguous, surmounted with a beautiful tuft of crimson pistilla, or stigmas. The first is called an ament, and is composed of many scales, or bractes, beneath which are the stamens; thus each scale answers to a calyx. This calycine scale is sparsely fringed on its edge, but its upper surface is completely covered with a silky wool, composed of white and transparent threads; but tufts of *stronger and sharply pointed hairs*, the most beautiful of which are within, may be seen by an examination of one of the latter organs.

The flower cup of the elm, above mentioned, is also fringed with a most delicate and glossy appendage of ciliæ. The calyx is orange and green, the anthers are of a rich blue color, and its pollen elliptical in figure, and white. The inflorescence of a young and vigorous elm is rather pretty, when considered on the branch; the brown blossoms coming out on each side, and forming a fan-like appearance; but who would have thought that each little floret was as beautiful as some favorite of the flower border, and a rival with many a fashionable one?

The calycine scale of the poplar blossom, although it does not possess any pubescence, is yet curiously jagged on each of its five unequal lobes, and its color is a rich brown. Almost as much scorned and neglected, that pest of the cultivator, the hardy soapwort too, (*Saponària officinàlis,*) which, when double, assumes the rustic cognomen of "Bouncing Bet," has the edge of its leaves covered with transparent and singularly obtuse, but irregularly grouped, knobs or serratures.

The edge of the leaf of the welcome lilac (*Syringa* vulgàris,) has curved acuminations, alternating with globules, each of the latter furnished with a footstalk, and perfectly transparent.

A margin, with an occasional serrature, surrounds the edge of the tansy, (*Tanácetum* vulgàre,) while white hairs interspersed among shining points, or glands, probably secreting

its peculiar odor, may be seen on the surface of the leaf, more numerous on the lower side.

Each tooth on the leaflets of the monthly rose, (*Rosa indica,*) assumes the form of a gland, and is knobbed.

The young leaf of the native strawberry, (Fragaria virginica,) is covered with long, white hairs, silky and shining; while its congener, *Potentilla argentea*, is more densely clothed, not only in foliage, but on the other organs.

The leaf of Houstonia cærulea is ciliated only half way on its edge, with occasionally a few hairs on its upper surface, and these ciliæ, or hairs, delicate and glossy. But the most beautiful form of such organs may be seen in the throat of its flower, which is studded with short yellow points, or threads. The edge of the divisions of the corolla, though apparently uniform, is yet regularly serrated, while the very vesicles, which compose the substance of the blossom, are of a regular shape, and set in mosaic!

One of the first flowers of this month (April) is Gnaphalium plantaginium, possessing only tolerable merit to the unaided eye. But where is the proud flower of green-house or conservatory, which dares to vie with this humble plant? Look at it minutely, and you fancy some resemblance to the superb Protea mellifera, *var. alba.* Its calycine envelop is of ivory whiteness at the tips of the leaves, and of gauze-like transparency and singular net-work at base. Beaded and tufted filaments of pure white, surround each of the florets, which, before expansion, are of a club-shaped appearance, and of a rich brown and green. Its stigma is studded with globules, and its elongated anthers are reddish. I doubt whether the honest and truthful humble-bee, that "yellow breeched philosopher and epicurean," which visits its blossoms to sip its sweets or to gather its pollen, sees in his erratic rambles many fairer flowers than this.

Some of the mosses are elegantly terminated on their leaves, with a peculiar transparent bristle or sata, sometimes simple as in Grimmia pulvinata and leucophæa, giving to them a white and distinguishing aspect, and sometimes fringed as in the common Anictangium ciliatum, or the rarer and curious Diphyscium foliosum.

ART. III. *On the Cultivation of the Strawberry as an annual; being the substance of a Lecture delivered before the Society for the Promotion of Floral and Horticultural Knowledge. From the Midland Counties' (Eng.) Herald.* By the Editor.

THE cultivation of the strawberry, though generally considered as more simple than that of almost any other fruit, is far from being brought to perfection, notwithstanding some cultivators have made such modest assertions. Perhaps no fruit is more generally esteemed, and, undoubtedly, amid the great number of growers, there are some, who, by being favored with peculiar soils and situations well adapted to its cultivation, have been enabled to produce fruit of superior quality; yet, when we look back a few years, to the period when the old wood strawberry was alone cultivated, and compare the present state of the culture of the strawberry with its growth at that time, we shall find as much, or greater, improvement, than in any other fruit which is cultivated in our gardens. Not only do we see improvement in the size and other qualities of the fruit, but, latterly, far superior methods of growth. And shall we suppose that we have reached that point where improvement is to cease?—that there can be no better system than that which is now generally adopted? Those who are at all conversant with the subject of horticulture, have no such idea; on the contrary, there is every reason to suppose that each year will develop some new facts, which will lead to increased improvement in the cultivation of this fruit, and that, a few years hence, we shall look back upon the present state of its growth, and find as much improvement as we do now in reviewing the past.

We have been led into these observations, because there are some cultivators who would have us believe that a fruit so simply grown, is not susceptible of that improvement which is constantly being made in other fruits, and, on this account, pay but little attention to it, making no effort to increase the amount of the produce, or the quality of the crop, and too often consigning the strawberry to such neglect as would not for a moment be tolerated in any other fruit; allowing them, indeed, to take care of themselves. It is from the simple fact, that the cultivation of the strawberry is not understood, that the new and superior varieties of English origin, introduced to our gardens within a few years, have not proved equal to the expectations formed of their excellence, or have not produced

fruit here in any thing like the superiority which the same kinds have been grown under the care of English cultivators.

We have, in a previous article, (Vol. III, p. 241,) said so much upon the production of the strawberry from the seed, that we shall not here repeat the same; but we must not omit to mention that it is through the seed that we are to look for varieties which will eventually become principally cultivated. The climate of England and this country is so unlike, that a fruit, depending so much for its product upon other agents than the mere soil, is not so likely to succeed as any other fruit. The severity of our winters, especially when unaccompanied with snow, are particularly injurious to the strawberry; and we have satisfactorily tested the fact, that seedlings of our own growth are much hardier than any of the English varieties. The past winter has been more than ordinarily injurious to the strawberry, and herbaceous plants of similar habits, and the Keen's Seedling and other English varieties have been nearly destroyed, whilst our seedlings have remained wholly unharmed, though standing in near proximity to each other.

In introducing the following paper, which is the substance of a lecture delivered by Mr. Darke, we do not pretend to say that his system is as well or better adapted to this country, than the mode generally adopted; but, as it certainly has the merit of novelty, and appears to be founded on a correct principle, we hope that his system will be thoroughly tested. We certainly think favorably of the plan of growing the strawberry as an annual, and, if our scorching sun and drying winds are not too powerful agents in the young stages of the plants, to prevent their rooting well in the summer season, we have no doubt it will be a system which will be well adapted for small gardens, where the object is large and choice fruit, with neat and well arranged beds; and perhaps supersede, altogether, the present mode of cultivation where large and fine fruit is desired.

We deem it unnecessary to say any thing farther, and we hope that gardeners, as well as amateurs, will try Mr. Darke's method, and we shall be happy to publish the results, whether favorable or not:—

Mr. Darke commenced by observing, that from the earliest writers on horticultural subjects to the present time, the habits of the strawberry had never been examined minutely, with a view to improve its cultivation. It was true, that, owing to the impulse lately given by horticultural societies to a study of the improvement in the varieties of this plant, several val-

uable kinds had been generated, yet of these, scarcely one could be found that did not disappoint the expectations of the cultivator who adhered to the system hitherto adopted. In open, moist situations, where the soil was suitable, there was no difficulty in obtaining tolerable crops, provided sufficient space was allowed for the extension of the plants; but in the circumscribed limits generally allotted to gardens, in the vicinity of large towns, and particularly in the small portion of ground usually attached to the dwellings of cottagers, the successful cultivation of this fruit was found very difficult. It was with a view to remove these difficulties, as far as possible, that he was led to adopt a series of experiments, which, he was happy to state, had been attended with the most successful results.

The lecturer, having described the general appearance of the plant, from the time it was deposited in the bed till it arrived at maturity, observed, the portion of the plant which yielded fruit in the proper season, was confined to the offsets or runners of the preceding year, and, from thenceforth, they were nearly barren. Having observed that runners ceased to be produced about the month of September, it followed that the principal part of the sap was deposited subsequent to that time; and since the produce of the following year wholly depended upon the deposition of a sufficient quantity to render the blossom buds productive, he concluded, that if any means could be adopted to prolong the time naturally assigned for that purpose, in the same proportion would be insured a superior crop of fruit. The experiment he made was with the Downton strawberry. As soon as the runners had produced roots about half an inch in length, *and previous to their penetrating the soil*, he cut off a quantity, leaving on each side of the runner about four inches of the sarmentum. Having prepared a nursery-bed, by throwing out the soil to the depth of six inches, and trodden the bottom very hard, to prevent the young fibres from penetrating, he then mixed the loose soil with a quantity of light half-decomposed stable manure, which he returned into the bed, raking the whole smoothly over, and dividing the surface into drills, six inches asunder and one inch deep. He then took the runner, and placing a finger upon each end of the sarmentum, he pressed it down in the form of an arch, the plant being on the top, and resting on the surface of the soil; the sarmentum thus held it firm, and, as appeared to him, materially forwarded its growth and strength, by supplying it with the moisture absorbed from the soil. When the whole bed was thus planted, it was well

watered; and as the weather was very dry, a mat was thrown over it for a few days, to exclude the heat of the sun. Under this management, the plants soon established themselves and increased rapidly, the roots having, in about *ten weeks*, penetrated the soil in all directions. About the latter end of August, or early in September, he formed the bed for their final situation, *in an open, exposed part of the garden.* This he made eighteen inches wide, and having thrown out the soil to the depth of twelve inches, he filled up the trench with well decomposed manure, mixing it up with the soil at the bottom of the trench to the depth of another foot. The surface was then reduced to a proper height, on which the plants were placed, having, in order that their roots might sustain no injury in removing them from the nursery bed, divided the soil into cubes with a spade, each having a plant in the centre of its upper surface, which were placed twelve inches distant from each other. He then placed a portion of the soil that had been mixed with manure round the plants, which were afterwards watered, and nothing further was done to them till the following spring, when the bed was cleaned by hand weeding, to prevent injury to the roots by the use of either hoe or rake, and, in the course of the spring, they were twice well supplied with liquid manure. About this period, to his great surprise, instead of one scape from each plant being produced, as he had anticipated, none threw up less than three, and the average number was five, all sufficiently strong to support the fruit above the foliage. Having previously observed, that after the first seven or eight blossoms on each scape had set their fruit, the remaining ones were so small as to be nearly useless, he cut off all the blossoms except this number. Thus managed, the fruit all assumed the cockscomb shape, and were unusually large, and of a delicious flavor; indeed, so fine did they appear, that a professional gardener, to whom they were shown, could scarcely be persuaded that they were the production of annual plants, which had not been twelve months in the bed.

To pursue his experiments, he left these plants till the following season, in order to see what sort of a crop they would produce, doing nothing to the bed but removing the runners and weeds. On examining one of the plants, at the period when the blossoms began to appear, he found thirty-six distinctly formed offsets, three-fourths of which contained blossoms, but they were so weak that the stem did not exceed a rush in thickness, and the little fruit that came to maturity was small and ill-flavored. This result did not, however, appear surprising, for, on examination, it appeared that the thirty-six

offsets did not occupy a space of more than three inches in diameter, while the foliage covered the whole space appropriated to the plant, namely, twelve inches. In previously cultivating the Downton strawberry, he had planted them in the spring, and obtained the same year a sprinkling of fruit; but in the succeeding summer, after waiting eighteen months, he had been uniformly disappointed, the crop not proving worth the trouble of planting; whereas, by the mode above described, at the end of twelve months, an excellent crop had uniformly repaid his toil. On the whole, he could not avoid coming to the conclusion, in which he was justified by repeated experiments, that the Downton strawberry could never be successfully cultivated, but as an annual.

In noticing the treatment of the plant, according to the common mode of cultivation, Mr. Darke observed that the cause of the injury done to the crop by the use of manure, arose from the length of time which elapsed between the plant being committed to the soil, and its producing fruit. Mr. Knight had, in the Horticultural Transactions, justly observed, that "a great quantity of the sap was deposited during the summer months;" but a large quantity of foliage as well as runners, if the soil was rich, and the situation shaded, were at the same time produced; and it was evident that such a quantity of foliage must be prejudicial, by rendering the plants almost impervious to the sun and air, and by preventing the bud from maturing, so as to produce fruit. Now the reverse was the case, according to the annual mode of cultivating the plant, for he had uniformly found that in proportion to the quantity of stimulating liquid manure used, the crop had been fine and abundant. The lecturer, in conclusion, recommended the Downton, Roseberry, and Keen's Seedling, exclusively to those whose space of garden precluded the extensive cultivation of strawberries. Of the two first of these varieties, he had planted thousands, and never had a barren plant. The Roseberry and Keen's Seedling came in early, and continued to yield till the Downton was ready, the fruit of both attaining an earlier maturity from the treatment he had recommended, and which he had found uniformly attended with the most successful results.

The kinds which we would particularly recommend to the treatment proposed above, by Mr. Darke, are the Keen's Seedling, and Downton, which appear to be more impatient of ordinary cultivation than other sorts. But we hope that a fair trial will be made of all the best varieties, to fully test the value of annual culture, applied to the strawberry.

Art. IV. *On the Iris tribe, from the Cape of Good Hope.* By J. E. Teschemacher.

The recent arrival of several packages of these interesting plants, from their native country, where their graceful forms and lively colors embellish the arid wastes, has revived in full strength the enthusiasm with which I once cultivated these flowers; and the hope of seeing them become more frequent sources of pleasure to the amateur florist, induces me to call the attention of your readers to their cultivation.

They possess several qualities, which render them peculiarly attractive; particularly the bulbous genera: they are perfect parlor flowers, as they will bloom nearly as well at a sunny window, as in the green-house. Many of them, as Tritònia, *I*'xia, *G*ladìolus, Sparáxis, will bear, without injury, a degree of cold nearly approaching the freezing point; *Babiàna*, Moræ`*a*, and others, are more tender, but even these may be preserved, with a little additional care, such as removing them from the exposure of the window on very severe nights. Some usher in the reign of Flora as early as March; I have had Sparáxis in blossom the second week, followed by *I*'xia, and *Babiàna*; *G*ladìolus and others bloom in the summer and autumn, as well as in the spring, so that, with a tolerable collection, the parlor will be left scarcely three months of the year unadorned.

The cultivation of the bulbous varieties is extremely easy, unaccompanied by any of those refinements, in the shape of peculiar treatment or composts, of which gardeners are apt to make such mysteries, and for six months they require absolutely no attention whatever.

Their native soil is almost entirely sand, in which they remain, during the dry season, exposed to the parching rays of a vertical sun. As soon as the rains set in, they burst forth in full beauty, and at every gleam of the mid-day orb, spread their bright petals wide to its genial influence, and seem almost to shout for joy.

In our artificial cultivation of this tribe, we must endeavor to imitate, as nearly as possible, our great teacher, Nature. The bulbs should be placed about one inch under the surface, in a mixture of nearly equal quantities of peat or leaf mould, and sand, or sandy loam; the pots must be well drained with potsherds, in small pieces, to allow all superfluous moisture to

run off; they should be planted when they begin to exhibit symptoms of sprouting forth; this will be about September, or the beginning of October. At first, only a moderate supply of water will be required; as they proceed in their growth, it must be given more liberally, and should always be of the same warmth as the room in which they are grown. Small pots should be used for the smaller bulbs; they will all bear crowding pretty close. As soon as they have done flowering, and the leaves are turning brown, water must be withheld, and they must be exposed as much as possible to the sun, with all the protection against heavy rain that can be afforded; dews and slight showers will not materially injure them, but I would advise that they should be removed from the old pots about a month previous to the time of repotting. Thus managed, they will reward their possessors with a great variety of gaudy and elegant flowers, whose only fault is, generally, not universally, however, to want fragrance. The propagation of these bulbs is by young offsets, springing plentifully every year from the parent, and likewise by seeds, which will be produced in abundance and perfection in this climate. Varieties are readily produced by hybridization—a fact of much interest to the amateur—they may thus be rapidly multiplied and varied, and become a cheap and most amusing ornament of the window.

Tritònia crocàta is now pretty well known; it was formerly called *I'*xia crocàta—bears a spike of rather large, transparent orange-colored flowers. Other varieties of Tritònia are more rare, and not quite so beautiful.

Sparáxis tricolor is a larger flower than Tritònia:—dark orange, with a black, halberd-shaped spot at the base of each segment of the perianth, below which is bright yellow.

Sparáxis grandiflòra, pure white, with a delicate dark purple stripe in the centre of the back of each segment, and a black spot at the base, inside. Hybridized seedlings of this, vary from deep rose or purple blush, to the pure white above named; no doubt many of these will be produced here.

*I'*xia generally bears smaller flowers, but they are more numerous on the spike. I have had them almost of every color under the sun. *I.* viridiflòra is of a most beautiful and delicate French green, a color very uncommon indeed amongst flowers. There are some ixias, however, which are as large as Sparaxis; it is possible, however, as these differ in some respects, that these may hereafter make another division.

Watsò*nia*, *A*nthólyza, *G*ladìolus, and others, have generally large, showy, and numerous flowers; many of the latter, that

is, *G*ladìolus, are hardy enough to be planted out of doors, where they thrive best. *G.* natalénsis is now rather common here, but, in my estimation, is far below *G.* blándus, floribúndus, cardinàlis, and a host of others, in beauty.

La Peyròus*ia* corymbòsa, (not named after the unfortunate navigator, but after a botanist of that name,) bears corymbs of elegant light blue flowers, with a white or pale yellow eye. Others of this genus are not so handsome; but L. anceps has a delightful perfume.

Márica, a fibrous-rooted genus, and, I fear, too tender for the parlor, must, however, be called the glory of the Iris tribe. I believe only three species are known, M. North*iàna*, cœrùlea, and Sabìn*i*. It would be difficult to decide to which of these should be awarded the palm of superior beauty. Pity that their beauty should only be permitted to last a few hours of the early sunshine, and then melt into nothing.

Witsèn*ia* corymbòsa, another fibrous-rooted genus, to my great delight, is also in this country. It flowers throughout the winter, and bears corymbs of a most exquisite and lively cærulean blue. Its propagation, in Europe, is difficult; hence, it is rather a scarce plant; I hope and believe, however, that this difficulty will vanish in this climate, and that seeds may be perfected. Streptanthèra is also a very beautiful genus.

Anomathèca cruénta is a pretty little scarlet autumnal flower, has a good effect in masses, and ripens seeds here in abundance, bulbs from which bloom the second year. There are several other genera of much beauty, with which I am not so well acquainted. Enough have been enumerated, however, for those who are inclined to take interest in this tribe. South America produces many very fine *I*rídeæ, amongst which are Tigrídia pavònia, conchiflòra, Herbérti, and others, which I have seen in this country; I have also seen one of a dark blue color, which has certainly not been yet noticed in any European publication, bulbs of which have been sent to Mr. Herbert, and a few seedlings raised here. This gentleman, who has passed nearly thirty years in studying the bulbous genera, and whose recent publication on Amaryllidàceæ is considered the standard work on this subject, amongst botanists, is now engaged in writing a monograph on the genus *I*rídeæ, which is much needed, as no satisfactory arrangement of them has been promulgated since that of Mr. B. Ker, and the observations of R. Brown. I should be much pleased if a rapid dissemination of the varieties of the Iris family here, should create interest sufficient to render such a work, or, at least, an epitome of it, saleable amongst

amateurs. The taste is most assuredly not wanting, but only the materials to bring it forth, and make it a source of delightful occupation and enjoyment.

Boston, April, 1839. J. E. T.

ART. V. *Notes on some of the Flowering Shrubs, and Herbaceous Perennials, growing in the vicinity of Boston.* By a Member of the Mass. Hort. Society.

THE following notes of some of the flowering shrubs, and herbaceous perennials, of acknowledged magnificence and beauty, growing in this vicinity, may not be uninteresting to your readers, and may perhaps lead to their more general cultivation.

FLOWERING SHRUBS.

*R*hododéndron máximum, or Rose-bay.—In Medfield, Attleborough, and near Portland—in swamps, deep bog, and sandy peat.

Kálm*ia* latifolia, or Mountain Laurel. } In various places—well enough known.
augustifòlia. }

glaúca.—Not so common; springy ground, sides of hills and rivers.

*R*hodòra canadénsis.—Edge of swamps and meadows; Tewksbury, Lowell, Cambridge Port; sandy peat.

Azàlea viscòsa, or swamp honeysuckle.—Very common in wet grounds.

nudiflòra.—Princeton, Taunton, and in New Hampshire; wet grounds; not surpassed in beauty by the hundred imported varieties.

*C*lèthra *a*lnifòlia, or alder-leaved.—Edge of swamps; very common; fragrant.

Magnò*lia* glaúca.—Cape Ann; swamp; one of the most beautiful of the magnolias, in its glossy leaves and fragrant flowers.

Epigæ'a rèpens, or ground Laurel.—Plymouth, dry woods, and in Maine; abundant transplanting to gardens, not hitherto successful, but does well in the green-house, as will all the foregoing plants.

Many species of the *C*órnus, *V*ibúrnum, and Sumach, common enough in this vicinity, are very ornamental to grounds, although their flowers are not delicate or fragrant enough to gather.

Of the foregoing, the *R*hododéndrum máximum is the most difficult of culture, especially when torn from tangled swamps, where it has heat and moisture in summer, and shelter in winter. Although the first expense is greater, it is cheaper to take the plants from the nursery, (especially if few are wanted,) when they are already adapted to a *garden soil.* If many are wanted, like most of our plants, they can be imported very low from England. If taken from the swamp, the ground must be prepared with *bog soil*, and evergreens, or a wall, should screen (not cover) them from the south, otherwise the buds will be injured by the alternation of heat and cold in the spring.

The *R*hodòra, Azàlea, Laurels, *C*lèthra, and Magnòl*ia* may be made to thrive in any good garden soil.

An example of the *R*hododéndron máximum brought to thrifty flowering in three or four years, from the swamp at Medfield, and planted in a soil prepared as recommended, may be seen at the residence of Mr. Green, (late of Mr. Theodore Lyman,) in Waltham.

The successful culture of all these plants may be seen in this vicinity, on the upland in open gardens, in various soils, exposed to the scorching sun and drying winds of summer, and the severity of winter, merely by the practice of drawing round the plants leaves, the vegetable substances, and litter from the garden, which, being annually spaded in, create, by degrees, a congenial soil. Protection in summer, more necessary than in winter, especially for such plants, has, perhaps, not been enough practised.

Such treatment as the above is not recommended, but merely referred to, as encouraging to those, who, being limited in the choice of soil and situation, must resort to such means.

HERBACEOUS PERENNIALS.

*A*sclèpias tuberòsum, or Butterfly-weed.—Not very common about here, but is cultivated as a medicinal, and plants may be had at the agricultural warehouse of Hovey & Co.; it seeds freely, and flowers the second season; grows well in a common dry soil, and luxuriantly in a rich one.

Lobèl*ia* cardinàlis, or cardinal flower.—Common in the meadows and woods; thrives well in good moist soil; or in the green-house, may be forced to flower in April, or, turned into the border, to flower in May and June, as may the *A*sclèpias, *O*rchis, Trillium, and *C*ypripèdium.

Lilium canadénse.—Found in the meadows.

supérbum.—Not so common.

philadélphicum, or wood-lily.—In woods and pastures; will grow with great luxuriance in any good soil.

Perennial lupin.—Common in dry woods; thrives well in common soil, and flowers of various colors; exceeds all other lupins in beauty.

Trillium pictum. } Rare; in Princeton.
upright. }

nodding.—Common; the first has not been much attempted, nor with success, but its beauty merits the trial.

Tephròsia virginica.—In dry woods; not common; the same may be said as to its culture and merits.

Orchis fimbriàta.—Common about here.

grandiflòra.—New Hampshire, and in Lancaster.

white. } Rare in this vicinity.
yellow. }

The orchises growing in the meadows, must have a soil prepared of peat, and kept moist; not yet been well cultivated in the garden, but no doubt may be; like the foregoing, they would well repay the successful grower.

Rhéxia coccinea.—Not very common, nor yet introduced into gardens, where it would thrive, no doubt, and also in the green-house.

Sabbátia chloroìdes.—Plymouth and Barnstable in abundance; border of ponds; not now found in the garden, though once grown with success; the plants and seeds would well reward a gardener.

Cypripèdium acaúle, or pink.—Common in woods.

yellow. } Rare in this vicinity.
white. }

Thrive well in the garden and green-house.

Cymbídium. } In swamps; should be treated like the
Arethùsa bulbòsa. } orchis.

Sanguinària canadénsis, or blood-root.—Common in moist woods; does well in moist gardens. [No plant is more easily grown than this; in any moist situation, either under the shade of trees, or in more exposed and sunny aspects, it displays its snowy flowers in unusual abundance. We transplanted, several years since, from a locality where it grows in considerable quantities, on the Concord turnpike, a short distance from Fresh Pond, a few roots, which we placed under the shade of some evergreens and deciduous trees, and they have now spread, though yearly more or less reduced, over a foot or two of soil. The flower buds

are now breaking the surface of the ground, and in a few days their corols will bedeck the border, with no other companion than the gay adonis, whose yellow blossoms, and similar habit of growth, render it a fit companion to the sanguinaria. We trust that the latter plant, which may be so easily procured, without any other expense than the labor of digging the roots, will be hereafter more frequently seen, enlivening the border at this early season, when its humble and unpretending, though rather fugitive flowers, are welcomed as an early harbinger of spring. *Ed.*]

Bártsia coccínea, or painted cress.—In wet pastures; cultivation not attempted.

Gentiàna saponària.—Concord turnpike, in wet grounds.

crínita, fringed.—In meadows; all attempts to cultivate in the garden hitherto fail.

Gerárdia of several species.—Common in our woods and meadows; not yet cultivated.

To the cultivator of experience, or even the reader, the above notes may have little novelty or value; but the Horticultural Society having now offered premiums that may awaken a zeal to exhibit our "native plants," it is that the beginner might profit by this condensed list of the most conspicuous. For a scientific description, the *Flora* of Dr. Bigelow will always be resorted to.

Should a portion of the expense and skill so long bestowed on *exotic* plants, (many of which have not now even the merit of novelty,) be applied to the culture of our own, we may soon have a collection, which, whilst it may be shown with pride to the stranger, will not be more pleasing than *novel* to the inhabitant, unless, perchance, in some visit to England, he has found his patriotism rebuked, on seeing, for the first time, perhaps, the plants of his native land growing with luxuriance in the "American Plantation," the ornament of their landscape gardens.

A Member of the Mass. Hort. Soc.

Boston, March, 1839.

[The above excellent hints, by an amateur gentleman who has been exceedingly successful in attempting the domestication of our native plants, possess much value; and it is to be hoped that they will not be without their effect in inducing every lover of beautiful shrubs and flowers to add them to their gardens. We are sorry the article was not received in time for our last number; but the season is not yet so far advanced, but nearly every plant enumerated may be removed with perfect safety. *Ed.*]

ART. VI. *Observations on growing Verbenas, and other Trailing Plants, in groups, to represent baskets of flowers.* By the EDITOR.

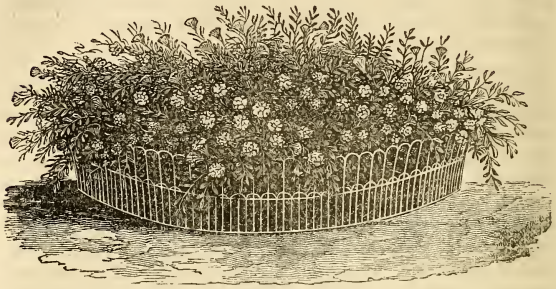
IN our last number, (p. 131,) in laying before our readers a new method of forming raised beds, for the cultivation of flowering plants of dwarf or trailing habits, we stated that it was preparatory to a design we had in view to introduce, occasionally, engravings, illustrating the method of planting in groups, now so generally practised, in England, in the grounds attached to many of the suburban villas and country residences, noted for their tasteful arrangement, picturesque disposition of the groups, and high keeping; examples of which, we remarked, were to be seen in the views given in Loudon's *Magazine*, (for 1838,) of the Lawerencian Villa, and other celebrated residences in the vicinity of London.

After the remarks which we gave in the article above alluded to, relative to the display of such a taste, in the present state of gardening in this country, it is not necessary that we should enlarge upon the same, otherwise than to observe, that, though it is not probable that the distribution of statues—the formation of rock-work—the addition of fountains, or even the introduction of basket-work will become for a long period very general, from the limited number of villa residences, in which such things would harmonize well with the general appearance of the grounds or surrounding scenery,—yet it is desirable that some specimens of the latter may be seen, to show how much they enrich and beautify the garden, and to serve as copies for imitation by those who are desirous of rendering their residences models of taste in the art of gardening. Planting in groups, surrounded with basket-work, upon the lawn, is undoubtedly one of the most pleasing as well as most simple modes of accomplishing much in the smallest space: for while the addition of statues would require room to display them—the introduction of fountains attended with great expense—and the formation of rock-work, unless on a magnificent scale, mere heaps of stones—the planting of groups of flowers may be attempted with good effect in grounds of the most limited extent.

We shall, hereafter, give some plans for laying out the grounds of villa residences, particularly for the grouping of flowers, upon lawns or small grass plats; but, for the present,

we shall only introduce the following imaginary view, (*fig.* 11) of a basket of verbenas, which we have designed.

11



We will suppose a small front grass lawn, of an oval, round, or parallelogram shape, to contain six or eight such groups, each surrounded with basket-work; that four are planted with verbenas, a different color in each group,—one with Chryseis crocea, one with clarkias, and the other two with anagallises and nemophilas;—we are confident that no mode of planting a front garden could be devised, which would afford such an array of beauty as this.

Basket-work may be made in various forms and of different materials, and can probably be easily procured of the basket maker; the wire-worker will also furnish a more durable material, which will present, perhaps, as beautiful an appearance as wicker-work. The basket-work may be made of any form which the fancy may dictate; these may be removed every fall, after the destruction of the plants by frost, and replaced again in the spring. Wire-work may be made with three or four large projecting points, which will keep it confined to the soil. A very neat kind of basket-work may be easily and cheaply made of laths, or thin strips of board, planed, and halved together, and painted when finished. These strips should be about a foot long, to admit of three or four inches being sunk in the soil to hold it firm. The strips should be put together in a diamond form, and, where they cross one another in the middle, they should be neatly nailed, as also at each end.

We hope that gentlemen and amateurs will attempt the planting of groups in this mode; and we shall be happy not only to record any such examples of grouping, but shall endeavor to give a plan and perspective view of any specimens tastefully executed, taken on the spot.

ART. VII. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Botanical and Floricultural Intelligence.—Dr. Gray, whose recent departure for Europe, we noticed in a late number, has been prosecuting his studies with much ardor. He has written many interesting letters to his friends in New York, in which he gives flattering accounts of his success in collecting botanical information. The first botanists of Europe afford him every facility in prosecuting his researches. He spent three weeks, working very hard, with Sir William Hooker, at Glasgow. He also labored with Arnott, at Arley—with Greville, and Graham, at Edinburgh; thence he went to London, where he spent six weeks; here he was with Brown, Lindley, Don, Ward, Boott, and other distinguished botanists of the metropolis. Next, he proceeded to Paris, but no letters have been received from him since he left England. He purposed remaining in France a few weeks, and then to go to Geneva, to study De Candolle's herbarium. Before he returns, he hopes to visit Vienna and Berlin.—*J. T.*

Verbèna teucroides.—Dr. Hooker has figured, in a late number of the *Botanical Magazine*, the new white verbena described by Mr. Buist, at p. 89, as V. álba, and noticed by us, at p. 102, as the V. Nivèn*ii*. It is also splendidly and accurately figured in Paxton's *Magazine of Botany*. From Dr. Hooker's account of it, it seems that dried specimens were first communicated to him from South America, by Dr. Gillies,

some years since, who discovered it growing on the highest ridge of the Upsalta mountains, at an elevation of ten thousand feet above the level of the sea. Afterwards, Mr. Tweedie sent it from the hill of Menteviedo, and more abundantly, from the sugar-loaf mountain of Maldonado, marked "No. 481 *V*erbèna, with slightly purple flowers, and highly odoriferous." In 1838, the seeds were sent to the earl of Arran, as we have previously stated. Mr. Niven states that the plant is of easy culture. Dr. Hooker describes it as belonging to the *Melindres* (chamædrifòlia) group, growing about two feet high, erect, of handsome growth; the upper part bearing numerous more or less spreading branches, the main stem terminating in a spike of dense flowers, a span or more long; the tube of the corolla very long; the limb of a delicate yellowish white on first expansion, afterwards becoming purplish rose-colored. Dr. Hooker regrets that it was not a new species, that the name of so distinguished a nobleman as the earl of Arran, a name almost indentified with the genus *V*erbena, could not have been given to so beautiful a species. (*Bot. Mag.*)

Seedling Chrysanthemums.—Messrs. Mackenzie & Buchanan, of Philadelphia, have purchased the whole stock of seedling chrysanthemums raised by Mr. Kilvington, formerly mentioned by us, (Vol. IV, p. 471,) and now offer some for sale at reasonable prices. We have some notes upon the colors and relative beauty of several of these seedlings, but as they are very short, we hope that Messrs. Mackenzie & Buchanan will favor us with a list of all the best, describing the color and habit of each at length. They have now, with the old kinds, fifty-six varieties.

Seedling Calceolaria.—A beautiful crimson calceolaria, a seedling raised by Mr. Donald, last season, at Hawthorn grove, is now flowering in the collection of plants in the new conservatory attached to the Boston Botanic Garden, now under Mr. Donald's management. It is a remarkably showy variety, and we trust Mr. Donald will perpetuate it. This family of plants, from some cause, has fallen into neglect in England, and is less appreciated here than it was a year or two ago, though it has never been very generally cultivated. The plants appear to be impatient of cultivation, which has undoubtedly tended to render them objects less desirable than if easily grown: still, they possess great elegance.

Clianthus punicens.—This rare shrub, which, a year or two since, sold at the high price of four to five guineas each, in England, and which was reported to be so brilliant an addition to collections, has, as will be seen by a reference to the report of

the exhibition of the Pennsylvania Horticultural Society, in another page, been brought into bloom by Mr. Sinton, gardener to Gen. Robert Patterson, of Philadelphia. Mr. Sinton exhibited a branch in full bloom, at a late meeting of the above Society. It is in nearly all the collections around Boston, but we believe it has not yet bloomed in the vicinity. The plants are subject to the attacks of the red spider, and, unless carefully managed, they fail to produce flowers; we hope, however, that among the many growing in the vicinity, it will soon be made to show its flowers here.

Cape Bulbs.—The proprietors of the Boston Botanic Garden have lately purchased a case of Cape bulbs, which recently arrived at this port. The bulbs were all put up by a botanical collector, and among the number are embraced a great many fine species; particularly of *Ixia*, *Babiàna*, Sparáxis, Moræ'a, Tritònia, &c. &c. The bulbs arrived in good order, and, under the care of Mr. Donald, we anticipate a fine display of these beautiful and pleasing flowers. Specimens of the Cape bulbs, properly grown, need only to be seen, to diffuse a taste for their cultivation, easy objects as they are to manage, particularly in rooms; and no better opportunity could be offered to bring them into notice and esteem, than that now afforded by the Botanic Garden. We hope the flowering of such a rich collection as they possess, will have the effect to render them desirable plants for general cultivation.

Beautiful new Pansies.—Mr. Walker, of Roxbury, who has so long devoted his attention to the cultivation of this beautiful flower, and whose success in the production of many elegant varieties is well known, has lately shown us two or three new seedlings, which excel any of his former productions. They are a nearer approach to the properties laid down by the London Metropolitan Society of Florists, as a standard for a perfect flower, than any he has before grown. The contour of the flowers is much more elegant, the petals but slightly undulated, the colors brilliant, and the eyes finely and delicately pencilled. Neither of these varieties Mr. Walker has yet named. One of the best, in our judgment, is a deep, rich, velvety purple, with a most exquisite eye, and a boldness of petal which we have not observed in any of his former flowers. Our readers will bear in mind that May and June is the season when pansies are to be seen in the greatest perfection. Mr. Walker has an immense number of new seedlings, and the plants never promised a finer bloom; an inspection of the whole of them should not be neglected by those who are lovers—and who is not?—of this now popular family.

REVIEWS.

ART. I. *Second Report of the Agriculture of Massachusetts.* By HENRY COLMAN, Commissioner for the Agricultural Survey of the State. County of Berkshire, 1838. 8vo. pp. 194. Boston, 1838.

THE second report of the agricultural commissioner for the county of Berkshire, has made its appearance. It will be remembered that we noticed the First Report in our last volume, (p. 223;) the present one is filled with a great variety of information upon agricultural topics, and every thing immediately connected with the subject, and will be found an interesting pamphlet, and of much importance to farmers, and the public generally, as showing the agricultural resources of the western portion of the State.

In our notice of the first report of the Agricultural Commissioner, we gave our views respecting the importance and value of a survey, of the agriculture of the State, to the farming community, and we believe that good results have already come out of what has been so far done. It only needs to be shown to the public that our lands are not yet quite "run out," but that as good crops may be obtained by judicious cultivation, as the soil has ever yet yielded since first redeemed from its wild and uncultivated state.

There is but little in the report, which would be adapted to the character of our Magazine; one extract, however, describing the general features of the county, we are induced to make, believing it will be read with interest:—

"*Boundaries and Situation.* The County of Berkshire forms the western part of Massachusetts. On the north line it is bounded by Vermont; on the west by New York; on the south by Connecticut. On the east, it lies contiguous to the counties of Franklin, Hampshire, and Hampden. Its length, on the western line, exceeds fifty-seven miles. Its breadth, at the north, on a line running east and west, is about fourteen miles—at the south, where it is bounded by Connecticut by a line parallel with its northern line, its breadth is about twenty-four miles. The breadth in some parts north of the south line, reaches to twenty-six miles: and in parts not far from the centre of the county, it is about sixteen miles. It lies between lat. 42° 2′—and 42° 44′ north. The longitude of the north-west corner of the county is nearly 73° 23′ west; that of the south-west corner is a little greater. The area of the county is about 950 square miles, or 608,000 square acres. The towns embraced within the limits of this county are thirty; and the population, by the official returns of May, 1837, was 39,101.

"2. *Division of Territory.* From the reports of the valuation Committee we gather the following returns: There are in Berkshire county,

In Tillage, - - -	Acres	26,817 ½
English and Upland Mowing, -	"	55,495
Fresh Meadow, - - -	"	7,729 ½
Pasturage, - - -	"	117,059
Wood, - - -	"	60,997 ¼
Unimproved, - - -	"	123,966 ½
Unimproveable, - -	"	103,694 ½
Owned by Towns or other Proprietaries,	"	15,010
In Roads, - - -	"	6,623 ½
Covered with water, - -	"	7,261 ½
	Total,	524,654¼

"3. *General Features and Aspect.* The county of Berkshire is an inland county; at its nearest point it is about twenty-five miles from any navigable waters. The county is well watered. The Housatonic river, a small stream, extends through it longitudinally. It rises from within about twelve miles of its northern boundary, and flowing in a southerly direction, it receives on its passage the contributions of many minor streams, until it passes beyond the bounds of the state into Connecticut, and empties at last into Long Island Sound. The Hosick river rises in the immediate vicinity of the fountain head of the Housatonic; flowing northerly and then westerly it passes through the south-west corner of Vermont into New York, and presently mingles its waters with those of the Hudson. Deerfield river passes for a short distance through the northern part of this county. Two branches of the Westfield river take their rise likewise in this county; and two streams of inconsiderable size, under the name of Green river; one in the northern part, emptying into the Hosick, and one on the south, emptying in Sheffield into the Housatonic, are likewise deserving of notice. There are other streams, furnishing multiplied advantages to farmers and manufacturers, and presenting valuable sites for mills and mechanical objects, which it is not necessary to particularize. The hills every where abound in springs of the purest water; and in an agricultural view, no country can be better supplied. The Pontoosuck lake, in nearly the centre of the county, one of the largest collections of water in the county, presents its mirrored surface to the traveller as one of the most beautiful objects on which the eye can rest. After furnishing several extensive and valuable mill powers at its outlet, its superfluous waters flow southerly until they mingle in the Housatonic.

"The surface of the country is broken and mountainous. There are generally considered three distinct ranges of mountains, running from north to south the whole length of the county. The easterly branch or range of mountains is a part of the Green mountains, which reach far into Vermont. The westerly branch is denominated the Taconic Range. The intermediate mountains are known by various local names, and are rather insular elevations than a continued range. Saddle Mountain, in the north-western corner of the county, and Mount Washington, forming its south-western corner, are magnificent elevations, and the highest mountains in the State. Saddle Mountain has in many places been cleared high up its sides; but its summits are crowned with a thick and beautiful forest of maple, oak, walnut, and other varieties of hard wood The ascent of

Mount Washington on the western and north-eastern side, is long and wearisome, but not difficult; and after ascending by the course of the road two miles or more, you reach an extended space of gently undulating country, and almost entirely surrounded by a belt or succession of hills of different elevations, which, from a distance, and before the mountain was ascended, seemed to form only a single elevation. This comparatively level space is cleared and cultivated, furnishing many valuable farms favorable for pasturage. It forms the town of Mount Washington, which now includes the whole elevated country, and that small portion of territory, making the south-western angle of the state, and known as Boston Corner.

"The Hosick mountain, lying at the north-eastern part of the county, is a considerable elevation, difficult of ascent by the road on the eastern side, and steeper, and in some parts precipitous, on its western side. The stage road passes over this mountain, and like Mount Washington, the top of the mountain presents a rolling country, with a productive soil, furnishing excellent pasturage, and valuable and thrifty farms. The other mountains in the county are insulated. Several of them are immense masses of limestone and marble; but many of the minor elevations are rounded and beautiful summits, cultivated to their tops.

"4. *Soils.* In passing through the county from east to west, you meet a succession of valleys of remarkable beauty and fertility; and on the Housatonic, the Hosick, the Green river, and Hop Brook, there are extended alluvions or intervales, which furnish a productive soil. The hills every where abound with springs of the purest water; and these, added to the numerous permanent streams intersecting the country in various directions, afford extraordinary advantages to the farmers of Berkshire over the tenants of a level country.

"The alluvial meadows on the Housatonic seldom exceed a mile in breadth. These are mainly to be found in the Pittsfield valley, in South Lee, in Stockbridge, in Great Barrington, and in Sheffield. In general, these lands are annually overflowed, and the deposits of rich mud superinduced by such freshets, prevent the necessity of any artificial manuring, and keep these lands in a state of exuberant fertility. These deposits are mainly composed of finely comminuted sand, and rich loam and vegetable mould; and in many cases the deposits have accumulated to a great depth, as the presence of large logs, and partially decayed stumps and roots of trees, found often at the depth of fifteen and twenty feet below the surface, evince.

"Of peat bogs, there are few in the county. These are of small extent; but some found in the neighborhood of Pittsfield, which have undergone the process of ditching, draining, and manuring, present encouraging examples of an enterprising and intelligent husbandry. This description of land throughout the state is destined to become highly valuable and productive. For fuel, where the use of peat for fuel prevails, this land, or rather the right to dig the peat, is sold for three dollars per square rod, the purchaser being limited as to the depth he shall go. As manure for upland, when decomposed and dissolved by heating manures, or deposited in the barn yard, where it absorbs the liquids of the manure heap, it has been found efficacious and valuable. As land for cropping, under good management, of which I propose presently to give several remarkable examples, it has proved eminently productive in grass, potatoes, turnips, and carrots.

"The soils in Berkshire are various. There is little pure clay.

There is little pure sand. The Hosick mountain, and the Green mountain range is generally composed of granitic rock. The other mountains, and in general, the rest of the county, rest upon beds of limestone, or mica slate, which sometimes rise into high and abrupt elevations, and are every where to be seen, showing themselves above the surface. Some parts of the county are rich in iron ore, especially the beautiful valley of Richmond, and the vicinity of the highlands designated as Mount Osceola. In many parts of the county, as in Lanesboro', Williamstown, and Stockbridge, the soil presents the appearance of rich vegetable mould, resting upon a substratum of a greenish color, strongly argillaceous, and retentive of moisture. The same remarks apply to the soils in Cheshire, furnishing the richest pasturage to be found in the state. These lands are well adapted to grass, potatoes, and all esculent vegetables. Other lands in the county are better suited to grain crops, being gravelly, and abounding in calcareous matter; as the Pittsfield valley; much of the land in Great Barrington, west of the village; and especially the town of Egremont, and the lands lying towards the eastern side of Mount Washington, on the great road from Egremont to Salisbury in Connecticut.

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"5. *Markets and Manufactures.* In an agricultural view, the county of Berkshire is singularly favored in respect to its climate, its soil, its water, its capacity of production, and its vicinity to markets. By the great lines of communication now in the course of construction, and which concentrate in this county, it will be brought into much nearer communication with the great marts upon the seaboard. With the exception of pork, which has usually gone to Hartford, and in some rare instances to Boston, the produce of Berkshire beyond what is demanded for their manufacturing population, goes to New York. The Hudson is reached from almost any part of the county in a distance of thirty-five to forty miles; and from all the points on that magnificent thoroughfare of wealth and population, the city of New York is reached in a few hours. The immense consumption of this great city, this insatiable consumer, demands all the contributions which can be poured into it, for use or traffic.

"The greater part of the population of Berkshire are occupied in the pursuits of agriculture. The establishment of manufacturing villages creates a demand for the products of agricultural labor, and a permanent and certain home market is established for the supplies, which the farm will furnish. The manufactures bearing directly upon agriculture, are those of woollen cloths and paper. The number of pounds of wool used by the factories in the county, from the returns of 1837, appears to have been 875,957 lbs. The amount of teasels purchased by these same manufactures is not ascertained. The quantity of paper manufactured amounted in value to 333,000 dollars. What amount of this was in paper made from the straw of oats or rye cannot be determined. "In 1837," an intelligent farmer of Lee writes me, "about five hundred tons had been used in their manufactures. Wheat, rye, and oat straw, if not rusted, was used indiscriminately, and was purchased at the mills at $5 per ton." The advantages to agriculture of the latter kind of manufactures, and of the appropriation of the straw of a farm to such purposes, is, to say the least, of an equivocal character."

The commissioner states, in his introductory remarks, that the reports of the counties of Franklin and Middlesex are com-

pleted, and that they will be made with "all practicable dispatch." The consideration of the sheep husbandry will be fully considered in the report of the former county.

We also learn that the commissioner has procured seeds of the best wheat from Portugal, the best teasel seed from Germany, and other seeds of superior quality. He has also taken measures to procure a complete collection of specimens of the grasses of the commonwealth, and of the weeds most pernicious to agriculture.

We hope that the reports will be speedily made; and, though we are aware that it is a laborious task to collect together the amount of information contained in the reports, still we think there has been some unnecessary delay, and we trust that the future ones will be soon completed. The duties of the commissioner should be *wholly* devoted to the completion of the survey; and it is to be hoped that they will follow one another in speedy succession, and not at intervals of a year each. Three thousand copies were ordered to be printed by the legislature.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Foreign Notices.*

ENGLAND.

Effects of the frost upon vegetation, in the winter of 1837–38.—Another part of the transactions of the Horticultural Society, has been lately completed, and contains a very lengthy and detailed article upon the effects of the frost upon vegetation in the winter of 1837–38, drawn up by Dr. Lindley. This paper is exceedingly interesting throughout, and we should be glad, had we room, to present a greater part of it to our readers. This, however, it is impossible for us to do, and we therefore have made only a few extracts, which, we doubt not, will be read with much interest. Many new facts are developed, relative to the effects of frost upon plants, and it appears that some of them, from a warm climate, have suffered less than those from colder regions. This was particularly the case with Mexican and Californian plants, the former of which proved hardier than the latter. A list of many hundred plants is given, embracing all those generally cultivated, with remarks upon their hardiness in various situations throughout the kingdom. The report proceeds as follows:—

"Not only were all the common annual vegetables cultivated in kitchen gardens entirely destroyed, in the colder parts of the country,

but strawberry plants prepared for forcing, were so much injured, as to be incapable of producing their flowers; and the vine was in many cases killed in green-houses, in which a fire was not lighted. Among our native trees, the yew was affected in Cambridgeshire, and much more so at Glasgow; Ruscus aculeatus was injured in its native woods in Kent; the ivy lost its leaves, and common thyme and broom were killed near London; the furze perished wholly above ground, not only all round London, but even in South Wales, Cornwall, and Devonshire; Atriplex halimus lost its branches in Cambridgeshire; many of the hardy heaths were killed to the ground; and the common periwinkle was observed by Mr. Dillwyn to lose its leaves at Sketty, in South Wales. Even at the latter place, where the climate is comparatively mild, Menziesia polifolia was destroyed; Erica vagans, with its varieties, was much injured at Woburn; and the common holly was extensively affected in several places in the middle and north of England; this plant, however, offered very different powers of resisting cold, some of the varieties proving much hardier than others, and according to the observations of Mr. M'Intosh, those which are variegated, more so than the plain kinds. Of numerous exotic trees and shrubs from the south of Europe, New Holland, the Himalaya mountains, China, and the alpine regions of South America, many of which had been growing for years unharmed, a large proportion perished. Nearly all the rare specimens of this kind which had been collected, with so much care and cost, in the Society's Garden, were destroyed. All round London fine old evergreen oaks and cork trees had their leaves and young shoots turned brown; laurustinuses, sweet bays, and the common arbutus were generally cut off; while in most gardens not a plant remained alive above ground of all the beautiful varieties of the China rose and its kindred species."

The thermometer ranged from zero to 20° below, at the places noticed, the ground being covered, in many places, with from two to six inches of snow. The ground froze from one foot to two feet in depth.

The following memoranda of the relative hardiness of roses and rhododendrons, two families of plants more extensively grown with us, than most of the others enumerated, we append.

"*Roses.*—Of the *Banksian* rose, both the yellow and white variety suffered severely in all the northern parts of England. At Claremont, plants 15 years old, and covering 60 or 70 yards of wall, were killed to the ground; fine old specimens perished in the Society's Garden; at Brenchley, a plant with a stem 11½ inches in circumference, and covering the whole side of a house, was entirely destroyed; they equally perished in Hampshire, but it was observed at Owston that one plant against a shaded wall escaped. The varieties of Rosa *multiflora* were destroyed. Rosa *bracteata*, the *Macartney rose*, was killed back to its old wood, or even down to the ground. R. *microphylla* suffered in the same degree; other China roses in general were killed to the ground, or totally destroyed. The white and yellow China rose, the sweet-scented hybrid, *Hamon* and *Blairii*, were entirely destroyed even in Hampshire; but the latter was injured on a south wall at Dropmore. Generally speaking, the *Noisette*, *Isle de Bourbon*, and *tea-scented* varieties, were found the most tender; hybrids, between the China rose and European species, were much less affected; the beautiful Rosa *ruga*, a mule between Rosa *indica* and *arvensis*, did not suffer in the least at Pit-

maston, or even at Redleaf, where the *Noisette*, and every description of *China rose*, was killed down to the ground. It was, however, very different in Cornwall and South Wales; at Carclew, Rosa *involucrata* was the only rose that suffered, while *Rosa microphylla*, close beside it, was uninjured. At Sketty, *Rosa microphylla* was slightly injured, but at that place no other of a large collection was at all injured. At Penlargare, R. *microphylla* against a wall was quite unhurt. R. *sinica* perished on a south wall in the Society's Garden."

"Rhododendron *arboreum*. The red variety was killed near London, at Sketty, at Stoneham in Hampshire, at Owston, where it had been newly planted, was nearly killed at Singleton, was untouched at Carclew. R. *arboreum album* was uninjured at Sketty, but killed at Stoneham, and destroyed to the ground at Dropmore. Of the hybrid varieties, *Smithii* and another were a little injured at Singleton, more at Woburn, Spofforth, and Norwich, and still more at Stoneham. In the Society's Garden they were all, without exception, killed to the ground, but shot up again from the root. The variety called *Nobleanum* was uninjured at Norwich. Mr. Walker found that the hybrids between R. *arboreum* and R. *Catawbiense* or *caucasicum* stood well at Calderstone, so did R. *altaclerense*. Mr. John Wilson states that at Osberton in Nottinghamshire, where the thermometer fell to 2 deg. *below* zero, the hybrid rhododendrons, of which there is an extensive collection, although much injured, all recovered and pushed forth new buds vigorously. In Mr. Garnier's garden, at Bishopstoke in Hampshire, R. *Smithii* and some others lost their leaves or became a little brown; but the Highclere hybrids stood perfectly well. With regard to the hybrids, and Indian species, Mr. Herbert's observations at Spofforth are as follow:—'My seedling Rhododendrons from *arboreum* by the rose-colored *ponticum* have not lost the foreright shoots, though the leaf is damaged, answering in that respect my expectations, that they would approximate to the constitution of the hardier male. R *altaclerense*, from *Catawbiense-ponticum* by *arboreum*, is disfigured in some situations, and scarcely touched in others, but the foreright buds and flower-buds were unhurt. R. *Lindsayi* from the American *arborescens*, (*maximum* var. *purpureum* of Pursh) is not much injured. A plant of it taken up to be forced, after the severest night, when the snow was melting, flowered splendidly and its leaves were unhurt. R. *Haylocki*, from *Catawbiense* by *arboreum*, has received no injury, and bids fair to flower profusely. R. *Knightii*, from the rose-colored cinnamon leaved *arboreum* by *caucasicum*, is uninjured, and now (April 26th) in flower. R. *Acklandi*, from *altaclerense* crossed again by the scarlet *arboreum*, is killed near to the ground, those from *Haylocki*, by *arboreum*, the same. The scarlet *arboreum*, against the front wall of the stable covered loosely with a single mat, was killed nearly to the ground, but having been taken up in March, it sprouted from the bottom in the stove, but died soon after. The white cinnamon-leaved variety, (which has stood twelve years in the middle of the garden unprotected, and formed a large round, close-leaved bush,) is killed to the ground, and it is doubtful whether it will push up again; it measured 18 inches round close to the ground, and its principal branch was 3 inches diameter. It stood in a peaty compost, and the plant of *altaclerense* touching it is more damaged than any of the same cross. I believe that in a drier soil the *cinnamon-leaved* Rhododendron, whether white or rose-colored, would

have escaped, for another plant of the white, inarched on a *ponticocatawbiense* stock, and planted out only last summer, but growing in the natural barley-soil of the garden, against a stone (east) wall, and covered with an old single mat full of holes, is quite unhurt, and shooting early, which makes it very liable to be cut by spring frosts. The mules from R. *arboreum* by the white *maximum*, and from the latter by R. *arboreum* were not the least hurt.' R. *anthopogon* died at Somerford; R. *campanulatum*, without any shelter, bore a temperature of 5 deg. below zero at Highclere. At Spofforth the *deciduous* R. *davuricum* was killed, the *evergreen* variety flowered more abundantly than usual."

Few of the *Australian* plants were able to bear the cold, nor did those of *New Zealand*. Those of *Japan*, especially from the higher regions, afforded some evidence of future acclimization. The *Cape plants*, with some exceptions, all appeared too tender for any open culture. Of those from the *Himalaya mountains*, Dr. Lindley notices as follows:—

"The species native of the *Himalaya mountains* have resisted the cold to so great an extent, that there can be no doubt of a large proportion of the vegetation of those northern parts of India proving hardy in England, Wales and Ireland. This fact alone, is of the highest interest, because there certainly is no country more accessible to us, or whose productions are more worthy of being imported, whether for their value as timber, their beauty and variety as forest trees, or their brilliancy as mere objects of ornament. The mere knowledge that the noble Deodar cedar is capable of enduring the utmost rigor of an English winter, is almost alone sufficient to compensate for the destruction produced by the frost among other plants. All the pines and firs appear more or less hardy, except Pinus longifolia, which is not a mountain species. Benthamia fragifera, although tender in the midland counties, appears at home in Cornwall and Devonshire; the beautiful Berberis, many Cotoneasters, a Euonymus, Juniperus recurva, Leycesteria formosa, all the Spiræas, Viburnum cotinifolium, and, above all, the magnificent Rhododendron campanulatum have to be added to our lists of common shrubbery plants. Clematis montana, too, proved so robust that we have not only secured that beautiful addition to our climbers, among which variety is so much wanted, but have well grounded expectations that some of the many other beautiful species of the same genus still to introduce, will prove equally suited to this climate. The results of the frost upon the hybrid Rhododendra have been already sufficiently detailed, and need not be repeated."

The plants from the *south of Europe* are generally tender, but the frost brought some new facts to light, and confirmed other opinions which were not previously established, to the satisfaction of every one, "and a few are inexplicable upon any principle with which I am acquainted. That Aristolochia sempervirens, a native of Candia; and Peganum harmala, a common Syrian plant; Ilex balearica and Buxus balearica, evergreens inhabiting the islands of Minorca and Majorca; Juniperus oxycedrus, quite a southern bush; Pistacia terebinthus, which is not found wild north of the coast of the Mediterranean, should all have been found hardy, where such plants as the Tamarisk, Arbutus unedo, and the cypress perished, are results which could hardly have been anticipated. They are, however, of the first importance, because it will induce the more general cultivation of those among them which are beautiful. It is interesting to

know that Arbutus andrachne is more hardy than A. unedo, a fact which may be perhaps connected with their very different localities when wild; the former being exposed to the severe cold of south-eastern Europe, while the latter, although wild in Ireland, is more peculiar to the west of Europe. Connected with this is the important fact that A. andrachne inarched upon A. unedo, in which condition it is usually sold in the nurseries, is unfit for planting, because of the tenderness of its stock. By taking care that plants of A. andrachne, and also A. hybrida, are on their own roots, two fine evergreens may be considered secured to the gardens of the greater part of England."

"The low southern latitudes of *South America* have furnished a few accessions to hardy collections, among which the Araucaria dombeyi is the most interesting for the possessors of parks and large gardens, and it has now become an object of some national importance to procure supplies of seeds of this plant from Valparaiso; for to introduce in abundance so remarkable a vegetable production as this is when old, with columnar trunks often 100 feet high, surmounted by a pyramid of grotesque branches, would be an object scarcely less than national, even if the plant did not furnish excellent timber, and an abundance of valuable resin. It also appears that Aristotelia macqui, and the escallonias, rubra, and glandulosa, all beautiful evergreens, are about as hardy as a Laurustinas, that the graceful little Berberis empetrifolia is regardless of cold, and that Colletia horrida, Duvana ovata, and Heimia salicifolia, also seem likely to bear this climate. The preservation of herbaceous plants is less important; but it is satisfactory to know that some at least of the Alstromerias may be henceforward regarded as hardy border flowers.

"The number of *Californian* and *Mexican* plants in our gardens, which have been the subject of experiment, is inconsiderable. Of these it is found that the species from California are more tender than those from Mexico: a circumstance doubtless to be explained by the Californian species having been taken indiscriminately from warm valleys and mountain sides, while no one has thought of naturalizing any Mexican species except from the cold mountain ridges. What is most important is, that all the beautiful pines and firs from these regions, of whose habits so little was previously known, prove to be perfectly hardy wherever they have been tried, with the exception of Pinus insignis and P. leiophylla."

The article is concluded with many interesting facts relative to the effect of frost upon plants, some parts of which we may at another time present to our readers.—*Ed.*

Art. II. *Domestic Notices.*

Pits for protecting plants during winter.—I think you would tempt many of your amateur subscribers, by making them acquainted with the virtues of a good pit for the keeping of tender roses, fúschias, pæònias, (tree) verbènas, carnations, and other tender herbaceous perennials generally—rhododéndrons, azàleas, English laurels, *Aúcuba* japónica, etc., Kérria japónica. I had one constructed this

fall, 22 feet by 14, and 3 feet deep. Every fine day I remove the shutters (if there be no frost within) and give air. I have in it all the above kinds of plants, except azaleas, and, as yet, every thing is in a fine healthy state. The thermometer has been but once below thirty-two degrees, and then I believe it was not quite one degree below it. There has been very little frost within. I presume it would answer for camellias, as they could stand considerable frost, if the airing take place gradually, and with the exclusion of the direct rays of the sun.—*Yours, J. W. J., February*, 1839.

Successful experiment in multiplication of petals.—For the encouragement and gratification of the florist, especially should he be a lover of native plants, we subjoin an interesting fact connected with his pursuits. A few years ago, a specimen of *Thalictrum anemonoides* (better known as *Anemone thalictroides*) having an extra number of petals, was observed and gathered in the vicinity of one of our western cities. Submitted to pot culture, in a good compost, it showed a decided tendency to become multiplex, until its bloom on the present spring has exhibited a truly double character. This little plant, or rather its British representative and co-species, is familiarly known as a delightful floral gem, to several, who have a taste for choice flowers; so early, so pretty, so white, and so modest its habits, it needs but an introduction, to be admired and prized by all. Not a few of our native plants may be annually detected in this abnormal aberration, and should be immediately transplanted into a more congenial soil, that they may become valuable, not only to that rare class of florists, the lover of American plants, but also to every one who delights in multiplex or double flowers.—*J. L. R.*

Mr. Walker's Tulip Show.—Before our next number will appear, the splendid tulip show of Mr. Walker will take place. We have noticed in a previous page, some of his beautiful new seedling pansies, all of which will be displaying their flowers in great perfection, at the same time, thus affording visitors an opportunity of seeing both at once, either of which are worth twice the price of exhibition. Mr. Walker's efforts to render both the tulip and the pansy popular flowers, are deserving of high commendation, and we hope he will find himself amply rewarded in a numerous assemblage of visitors. Amateurs, who are desirous of possessing a good bed of that gorgeous flower, the tulip, or of that more humble, but not less delicate one, the pansy, will find the opportunity a good one to make selections. It will be, perhaps, gratifying information to our readers, to inform them that Mr. Walker has promised us an article on the cultivation and treatment of both the pansy and tulip.—*Ed.*

Art. III. *Retrospective Criticism.*

Errata.—In the haste of getting out our last number, several typographical errors occurred, viz. at p. 150, eight lines from the top, for "packets" read "pockets." P. 155, nine lines from the bottom, for "does," read "did." P. 158, second line, for "demanding," read "deserving."

Horticulture in Washington, D. C.—Sir, In the March number of your Magazine, page 112, under the head of Retrospective Criticism, you published an article signed by John Douglass, Jr., of this city, in which that gentleman makes several statements in relation to Mr. William Buist's collection of flowers, &c., to which, as a friend to Mr. B., I wish to reply. The whole tenor of the article is of such a character, that I am sure Mr. Buist would not consider it worthy of his attention to contradict the misstatements it contains; and it is only an apprehension that it might be credited, by those who know not Mr. Buist's establishment, that induces me to correct those misstatements.

The writer of that article commenced by stating, "that in your January number for 1839, you are pleased to say that Mr. Buist has introduced many new things;" this just praise appears to be the cause of the ill feelings expressed in his communication. He does not question the truth of the statement, that Mr. B. had introduced many fine things, but thinks that you were not prompt enough in saying that he introduced many also; and, fearing that his fame might not be spread, he determined to blow his own trumpet. He goes on to say, that "if you will inform yourself properly, you will find that there are two large and distinct green and hot-house establishments in this vicinity, of from ten to fifteen years' standing, greatly superior to Mr. Buist's in every respect, each having, in addition, large vegetable gardens." This is an error. Mr. Buist's was the first hot-house in this city or vicinity; but it is true that the other green-house establishments have vegetable gardens, which Mr. B.'s has not, he being satisfied to confine his attention to floriculture alone, and in this line, so far from being behind the others, I do not think that Mr. D. could get any impartial person, who is any judge of these matters, to say that he is not foremost. Perhaps the owners of the establishments mentioned by Mr. D. "would not hesitate to compare plants with Mr. B. at any time," but the comparison might not end so much to their satisfaction, as Mr. D. would seem to infer. True, Mr. Pearce may *outnumber* him in camellias and dahlias, as stated;—Mr. Buist's ambition is to excel rather in the variety and quality of his plants, than in number, and their comparison of green-house fruits is a poor affair, for if Mr. D. knows as much of Mr. B.'s collection, as he intimates, he must be aware that Mr. B. has no such fruits, nor does he *pretend* to have any such collection; and the intention of this part of Mr. D.'s communication could only be to cause those who had not seen his collection, to suppose that he had assayed to cultivate green-house fruits, but had entirely failed.

If Mr. Buist has purchased some of the finest of his specimens from other establishments, as stated, it only proves that he cares more for fine specimens than he does for money, and that those who sell care more for the money than they do for the plants. But why should a mere passing and just encomium of Mr. Buist, from you, in a former number, call forth this attack on him? and why should you thank the author of it for such a production? In my judgment, it is not very creditable either to the author or publisher. Mr. B.'s collection can neither be benefitted nor injured by casual praise, or jealous censure: all who wish can see and judge for themselves, and I am certain that the verdict will be in Mr. Buist's favor.—*Yours, &c., David Buist, Washington City, March* 25, 1839.

[We are not desirous of continuing a controversy which will afford so little interest to the generality of our readers; but we have

given place to the above, that both sides might be heard, willing, as we are, to do justice to both parties. Our correspondent, who thinks the insertion of Mr. Douglass's communication not very creditable to us, is informed that he does not understand the case under which it was done. We did not know Mr. W. Buist, and at the time we made our remarks, did not know but that his place was the only one of any extent in the city, and it was not till we received the communication of Mr. Douglass that we were aware of this. The article below, from another correspondent, has assured us that Mr. Douglass was in haste in writing his communication, and that the establishment of Mr. Buist received no more than just praise at our hands.—*Ed.*]

Horticulture in Washington, D.C. (p. 112.)—Upon what principle in human nature, is it, Mr. Editor, that amateurs and professors of the arts and sciences are so prone to indulge in jealous feelings at the advance of their fellow-laborers? It would seem, and I regret that the manifestations of it are so numerous, that, with very few exceptions, not satisfied with their own progress towards the temple of fame, the aspirants for public favor or consideration, in whatever branch their labors may be directed, seem disposed to throw obstacles in the way of those who are pursuing the same pathway to that temple with themselves, as though they could, by depressing others, elevate themselves. These remarks have been induced by seeing a communication in your last number from one of the worshippers of Flora in our city, in which this disposition is strongly manifested. As a citizen of Washington, and as one who has been much delighted by the spirit infused into the minds of our people by all those here who pursue this delightful branch of industry, I regret that the feeling should exist that could conceive, much less promulgate, such an article. Our city has been much benefited by the labors of several florists, amateurs as well as professors, (I presume I may justly use these terms,) and each, and all of them, are entitled to our gratitude,—and certain it is that they are all entitled to much praise; each has excelled in certain branches of floriculture, as the minutes of our Horticultural Society fully prove; but I cannot, as an impartial judge, decide that Mr. Buist is the least worthy of our prominent florists, or that his establishment is behind theirs in any point of merit. As I have already stated, each has no doubt excelled in some branch of this science, but when we examine the establishments as a whole, I think that it will be admitted by all candid judges, that Mr. Buist is not one jot behind the foremost. Mr. Douglass, I think, will allow upon reflection that he was in error when he stated that there had been other hot-houses within our vicinity before Mr. Buist's. It is true that Mr. Pearce's green-house was established long anterior to Mr. Buist's, but it certainly is not *within* our city, and Mr. Douglass would have had to go but little further and by a much fairer road to have enlisted Mr. Yates in his catalogue, whose establishment, by the bye, stands deservedly very high with the lovers of Flora and Pomona. Mr. Buist's was the first (although yet very young,) public institution of this kind within our city proper, and he is, or was, until within a few months, if not now, the only one who follows floriculture *alone*, and makes a business of it, and he receives, and liberally too, substantial marks of the approbation of our citizens. He came here, as Mr. Douglass has stated, a stranger, comparatively speaking, selected a spot in our city remarkable for nothing but its rugged, barren appearance, a mere clay heap, on which

not a spear of grass relieved the cold and cheerless prospect; by industry, which cannot be surpassed, and labor of the most devoted kind, assisted in all by his brother David, a most excellent and worthy disciple of floriculture, he has made this dreary waste to bloom and blossom with the rose and every other flower of beauty or fragrance that can endure our peculiarly changeable and unkindly climate, and for those which cannot, he has reared *one hot* and three green-houses, large and commodious, in which and in his garden the visitors are ever kindly welcomed and waited upon, whether they come to purchase or gratify their taste or curiosity, and in which they may, within the compass of a few hundred yards, see rich and rare varieties of Flora's kingdom in all their native beauty and perfection, called from all climes from the poles to the equator. There the highlander may see his native heath bringing fresh to his memory the rich and romantic scenes of his native home far away over the blue waters, where his early days were passed in joy and gladness, and where his heart ever turns with the flood-tide of pure and warm affections from the coldness and unkindness of the world; there too the Gaul may see in all its perfection and beauty the lily, the pride and glory of his own sunny, fruitful, vine covered, glorious France; the South American may behold, rich and perfect, as in his own towering and evergreen forests, the gems of those forests; the East Indian, the flowers he deemed he had left forever behind him; all, *all*, may see somewhat to remind them of home, dear, sweet home, from whatever country they may come. But enough—they all deserve high praise, but candor compels me to say, that Mr. Buist's establishment, taken as a whole, in view of the great variety of rich and rare, as well foreign as domestic plants, is superior to the others of our city, even keeping out of view the short time it has been in operation; and if its enterprising proprietor progresses as he has done, I doubt not it will, before many years, stand in the front rank of all within our country, if it be not unrivalled. While upon this subject permit me to address a word of advice to the citizens of these United States, and particularly to parents. As a parent, I have had, and know, the difficulties which parents experience in restraining their children from evil associations, and did parents but know how easy they might be restrained, I am sure they would all adopt the course; it is a simple one, easy and not expensive, and most certain in its results. All children are fond of flowers; cultivate this taste, furnish them with a few plants, and a little green-house to preserve them from the cold of winter, and you will attain your object, besides realizing much pleasure from the fruits of their thus amusing labor, and their better natures, being uncontaminated by bad associates, will flow on in perfect harmony and happiness, in the simple and sinless amusement there provided for them, and they will be easily induced, assisted by the light of revelation, to look through nature in her beauty and loveliness, up to nature's God. Let parents try this remedy, and they will soon find the truth of it, and be satisfied that it comes from—*One who Knows. Washington City, March*, 1839.

[It is not our practice to insert anonymous communications under this head; but as the above appears to be written by one who views the matter in its true light, and gives due justice to all, we willingly give it a place.—*Ed.*]

Art. IV. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society took place on the evening of the 15th April, the President in the chair.

The competition for the best six heads of forced lettuce took place on the 30th of March last, at the Society's intermediate meeting. The committee had great difficulty in awarding this premium, the lettuce being all so superior. They gave the first premium to Robert Reid, gardener to J. J. Vanderkemp, Esq., and an honorary one to Archibald Ritchie, gardener to Joshua Longstreth, Esq., for the next best. Daniel Reilly, gardener to Pierce Butler, Esq., exhibited four very large heads of cabbage, with some fine lettuce and cucumbers.

William Chalmers, gardener to Mrs. Stot, exhibited some fine lettuce. Philip Reilly, gardener to Mr. Gratz, exhibited likewise some fine lettuce.

The committee on plants and flowers awarded on that evening, for the best collection of plants in pots, to Robert Buist, he having exhibited a large collection of fine Pelargoniums; we noticed a very fine seedling, named Buist's Hero; some others were not named. An honorary premium was awarded to Robert Kilvington, for a fine display of native plants, viz., Dentària laciniàta, D. pinnatífida, *A*rabis lyràta, Mitélla diphylla, Corydalis cucullària, Pediculàris canadénsis, Epigæ*a* rèpens, Tr*i*llium cérnua, Aquilègia canadénsis, Pulmonària virgínica, Houstò*nia* cærùlea, *V*iola cucullàta, *V.* villòsa, *T*halictrum dívicum, *A*nemòne *t*halictroìdes, Erythrònium americànum, *A*rum triphyllum, Botrychium virgínicum, Paux trifòlia, *A*splènium ebeùcum, *A*diántum pedàtum, Stellària pùbera. Exotics—*V*erbèna Tweedie*àna*, Ixò*ra* coccínea, an *E*chium, a seedling, flower light blue, fine, Lobè*lia* sp., *Petùnia* green edged.

Mr. Sinten, gardener to Gen. Robert Patterson, exhibited a branch of the Cliánthus puníceus in fine flower.

For the best display of vegetables, the premium was awarded to William Chalmers, gardener to Mrs. Stot, he having exhibited leeks, mushrooms, new potatoes, radishes, Brighton Cos, and Cabbage lettuce, and Flanders spinach.

The Society's premium for the best forced cucumbers was awarded to Patrick Reilly, gardener to Pierce Butler, Esq.; for the best sea kale, to the same; and an honorary premium for cauliflower; he exhibited eighteen very superior heads, with spinach and asparagus. Archibald Ritchie, gardener to Mr. Longstreth, exhibited let tuce, asparagus, spinach, radishes of different kinds, leeks, colewort, sprouts, cucumbers. William Graham, gardener to the Blackley almshouse, exhibited some very superior lettuce.

Messrs. Leffnesty & Lentz exhibited three bunches of very fine asparagus.

P. Burke, gardener to William Cammac, Esq., exhibited some fine lettuce of the Brighton Cos, and cabbage, spinach, &c.

The premium for the best fruit was awarded to Hugh H. Hatch, Camden, N. J., for some fine winter black apples. Thomas Fisher exhibited some fine apples of different kinds.—*Yours, G. Watson, Philadelphia, April* 16, 1839.

[The Society voted, at their last meeting, to hold an exhibition in

June, which, we doubt not, if properly got up, will prove a splendid affair. We wish the Massachusetts Horticultural Society would hold a spring, as well as an autumnal, exhibition.—*Ed.*]

Art. V. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 50	1 75
Common, per bushel,	50	60
Chenangoes, per barrel,	1 75	2 00
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 75	2 00
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	3 00	—
Eastports, per bushel,	1 00	—
Turnips:		
Common, per bushel,	25	37
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	5	8
Yellow, per bushel,	1 00	1 25
White, per bushel,	1 50	2 00
Beets, per bushel,	50	75
Carrots, per bushel,	50	75
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	10	12½
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoys,	75	1 00
Drumheads,	1 00	—
Red Dutch,	1 00	1 50
Cauliflowers, each,	12½	25
Brocoli, each,	10	15
Lettuce, per head,	6	8
Celery, per root:		
Giant red and white,	25	—
Common,	12½	25
Spinach, per half peck,	12½	
Dandelions, per half peck,	8	10
Cabbage Sprouts, per half p'k	12½	—
Turnip Tops, per half peck,	10	12½
Asparagus, per bunch,	12½	17
Rhubarb, per pound,	12½	17

Squashes and Pumpkins.	From $ cts.	To $ cts
Squashes:		
Autumnal Marrow, per cwt	6 00	—
Winter crook-neck, pr cwt.	6 00	—
Canada, per cwt	6 00	—
West India, per cwt.	2 50	3 00
Pumpkins, each	12	25
Pot and Sweet Herbs.		
Parsley, per half peck,	50	75
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	6	—
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 50	—
Common, per bushel,	1 00	—
Baldwins, per barrel,	3 00	3 50
Sweet apples, per bushel,	2 00	—
Golden Russets, per bbl.	3 00	—
Greenings, per barrel,	3 00	—
Russets, per barrel,	3 00	—
Pears:		
Baking, per bushel,	2 50	3 00
Grapes, per lb:		
Malaga,	25	—
Cranberries, per bushel,	2 50	3 00
Cucumbers,	25	50
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	25	37½
Havana, (sweet)	50	75
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—Since our last, there has been a very good supply; and prices have continued nearly the same. In some articles, from an apprehension of a small supply, there has been a slight advance.

The weather has continued fine and warm, compared with last season, and early vegetables have come forward much more rapidly than last year; consequently, we have now to note a very good supply of nearly all those articles which are usually only brought forward so early as this by artificial means.

The stock of potatoes, of prime quality, is gradually lessening; and, in consequence, an improvement has taken place in the prices. The stock of Eastern is rather limited, many having been sent south the present month, and there is some fear that few remain on hand except such as are wanted for planting; prime Eastports are quick at our quotations. Turnips unusually abundant. Onions are getting out of season, and prices, for those in good order, have advanced. Radishes are plentiful, and the quality very fine. Of Cabbages there are now but a very few on hand; good Red Dutch are particularly in demand. No Cauliflowers have been received since our last. Celery is scarce, there being few or no roots left. Spinach, dandelions, and other early sprouts, are very plentiful, and prices low. Rhubarb has come in the past week in fine quantity, for the season; there is now a promise of an abundant stock. Asparagus has been brought in, and, like rhubarb, in larger quantity than usual in April. Squashes are mostly gone; some yet remain on hand, which command full our present rates; the West Indias are now relied upon to satisfy the principal demand, although they are much inferior to those of last year, being rather green.

There is more animation in the fruit market than has been exhibited for some time. Apples are in tolerable quick demand, and are taken at our quotations; the stock of some kinds is exhausted. Pears remain nearly the same. Cranberries are a little higher. Lemons and Oranges continue as heretofore, the stock sufficient for the present. Some Pine Apples have come to hand; among them one small lot of the most superior quality, varying from five to six pounds each. Cucumbers have been brought in since the date of the last report, and command good prices; one very long one sold as high as one dollar. In Nuts of all kinds there is no variation worthy of note.—*Yours, M. T., Boston, April 26th,* 1839.

HORTICULTURAL MEMORANDA

FOR MAY.

FRUIT DEPARTMENT.

Grape Vines, in green-houses, &c., will now be advancing rapidly, and will require attention. Towards the middle of the month they will be setting their fruit, when the temperature of the house should be a little higher, with less air. Leave off syringing until the fruit is well set.

Grape Vines, in open air, should be trained up neatly to the trellis or wall and the shoots carefully fastened. Dig round the roots and manure, if required. Cuttings may be put in this month.

Peach trees, in pots, which have set their fruit, should be well watered and syringed. Trees may yet be planted out successfully.

Strawberry beds may be as well made now as at any time in the year.

Raspberry vines should be pruned and tied up to stakes.

Grafting of trees may be yet performed.

Trees of all kinds may be removed yet for several days.

FLOWER DEPARTMENT.

Dahlias will now require more attention. Prepare the roots for setting out one lot about the 20th. The first of June another lot may be planted, and a succession of flowers will be obtained. Pot the roots and place them in any situation out of the way of cold storms and frost. Let the ground where they are to be planted be well dug, and, if poor, manured.

Hyacinth and Tulip beds should be shaded when in bloom.

Chrysanthemums should be propagated by cuttings, or suckers, this month.

Gladiolus Natalensis, and Tiger flowers, may be planted in the border this month.

Pansies, raised from seeds, should now be set out in beds, if not done before.

Tender and half-hardy annuals, sown in pots in March or April, may be set out in the ground about the 20th.

Annuals.—A general sowing of annuals should be made about the 15th or 20th. Then is the safest season to plant.

Tuberoses, started last month in small pots, should be repotted.

Camellias will continue to require good supplies of water and frequent syringing.

Ericas, and all New Holland and Cape plants, should be repotted before they are taken out of the house. Cuttings may be now put in.

Cactuses will now be blooming, and should therefore have more water.

Perennial plants may be yet transplanted with good success.

Verbenas should be again shifted, if they have filled their pots with roots.

Green-house plants, of most kinds, may be removed into the open air the latter part of the month. Prepare a suitable place for them, and repot any that need it.

Lechenaultia formosa may be propagated by cuttings now.

Trevirâna coccínea.—The little corms should now be potted separately in the smallest size pots.

Oxalises, Ixias, Sparaxises, and other Cape bulbs, done flowering, should be removed from the green-house to the open air, and placed in a situation sheltered from the rains.

Geraniums, now in bloom, should be well watered and have an abundance of air.

THE MAGAZINE

OF

HORTICULTURE.

JUNE, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Some notice of the Plants in the collection of Gen. Robert Patterson, Philadelphia.* By DR. G. WATSON, Philadelphia.

IN a late number of your Magazine, in noticing the collection of plants belonging to Dr. Wood, I informed you that I should, as soon as my leisure would permit, send you similar notices of other fine places in this city, believing such notices would be gratifying to your readers; I therefore send you some remarks upon the collection of plants belonging to Gen. Patterson, of this city.

Gen. Patterson's establishment is situated on the corner of Locust and Thirteenth streets, and it may be safely said, that it is one of the neatest, and best kept, both as regards the garden and green-house, in or around this city. Many of the plants are very fine and large specimens, particularly the orange and lemon trees, they having been purchased at the sale of plants belonging to the late Henry Pratt, Esq. of Lemon Hill, and once forming part of that well known and splendid collection of plants. The following list embraces all the principal plants now in the collection of Gen. Patterson:—

Cliánthus puníceus, Kennédia monophylla, Indigófera austràlis, Swainsònia galegifòlia, Diósma capitàta, Gortèria pavònia, Acàcia conspícua, A. stricta, A. dealbàta, and A. lophántha, Begònia incarnàta, Burchélla capénsis, Corræ`a álba, Polygala cordàta, Lechenaúltia formòsa, Corræ`a pulchél-

la, C. speciòsa and C. vìrens, Callícoma seratifòlia, *C*lématis flórida flòra plèno, Calothámnus quadrífida, and C. villòsa; *J*asmìnum azóricum, Cèreus grandiflòrus, a very large specimen; Illícium floridànum, Manéttia cordifòlia, Blètia Tankervíllæ, Rivìna hùmilis, Russéllia *j*úncea, *E*uphórbia spléndens, Gésnera aggregàta, G. Douglásii, and G. spicàta; Melástoma heteromálla, Ceropègia élegans, *Coffèa* arábica, Ixòraròsea, Strelítzia regìna, Passiflòra Loudòni, and P. Kermesìna; Thunbérgia odoràta, *C*rìnum amábile, Ipomæ'a Horsfálliæ, E'pacris grandiflòra, Carmichaèlia austràlis, *L*òtus jacobæ'a, *P*æònia arbòrea, [*Moútan* papaveràcea, var. Bánksiæ,] *Técoma* capénsis, Kennédia rubicúnda, Pittósporum *Tobìra*, and *Tobìra* variegàta; Hibbértia volùbilis, Bignònia *j*asminoides, [*Técoma j*asminoìdes,] and Lady Banks's yellow rose in fine bloom.

The collection of camellias is excellent, and contains the following sorts:—Caméll*ia* japónica álba plèno, fimbriàta, atrorùbens, speciòsa, Greville's red, imbricàta, variegàta, *Pompònia*, intermèdia, exímia, cárnea, coccínea, Wóodsii, élegans, Chándleri, *R*òsa múndi, Fairlèa, candidíssima, *R*òsa sinénsis, C. sasánqua ròsea, &c.; *R*hododéndron arbòreum hybridum; Azaleas of different varieties; with a fine collection of pelargoniums, roses, &c. &c.

The above named plants are in the best order, and fine condition; the specimens large, with the exception of the camellias, and the greater part of those now enumerated, were in full bloom when I saw them, presenting a fine display. The Cliánthus puníceus, a beautiful new creeper, was in fine flower, and it is one of the most showy plants, with its bright scarlet flowers, that has lately been introduced. I believe it is the first time that it has flowered here, if not in the country. [We hope that our correspondent, or Gen. Patterson's gardener, will send us an account of the manner in which this plant was treated, to make it bloom; as all attempts have mostly failed around Boston.—*Cond.*] The Indigófera austràlis is a beautiful shrub, with a profusion of red flowers. The Diósma capitàta was a better specimen than I have ever seen. Begòn*ia* incarnàta, a large specimen, was covered with flowers, and looked extremely well. All the creepers are tastefully arranged to the columns around the house, being planted in a border inside the wall. The green-house is not large, but very high; the General has, however, in contemplation to build a beautiful range the coming summer, in a spacious style. The garden occupies half a square of our city, and is beautifully laid out, having a fine *jet d'eau* in the centre. The appearance of the whole reflects great credit upon Mr. Sinton, the gardener. Yours, G. Watson.

ART. II. *On the propagation, cultivation, and general treatment of Pelargoniums, (Geraniums.)* By the EDITOR.

AFTER the excellent papers which have appeared in a previous volume, (III., p. 94 and 292,) by those practical and experienced cultivators, Mr. Russell, of Mount Auburn, and Mr. Hogg, of New York, it may seem almost superfluous for us to take up the subject at the present time, for fear that it might be a repetition of what has already been said. We shall venture, however, to offer a few of our own observations upon the growth of pelargoniums, for the particular information of many of our readers, who, we believe, have never read the excellent articles above referred to; trusting, at the same time, that they will not be without some interest, even to those who have availed themselves of the good advice of Messrs. Russell and Hogg.

The cultivation of the pelargonium received its first impulse from the efforts of the late Mr. Sweet, whose magnificent work on the *Geraniàceæ*, extending to several volumes, with splendidly colored plates, of all the choice and rare varieties originated, rendered it at once a fashionable and favorite flower. Under the care of the late Mr. Colville, at whose nursery many of the most beautiful kinds were produced, by Mr. Sweet himself, the plants were grown and flowered in great perfection: Mr. Colville was the first cultivator who saw the importance of growing pelargoniums in a house by themselves; and, by setting the example himself, he was soon followed by other cultivators, and there are now but few collections, of any extent or beauty, either public or private, but what are grown in houses erected solely for their growth.

From want of encouragement to Mr. Sweet's work, which was expensively got up, or from some other cause, its publication was stopped after some hundred plates had appeared. After this there seemed to be less attention paid to the growth of the plants, and for a few years a less number of new kinds was produced than had been in previous years; subsequently there was a revival of the former taste for the flowers, and the desire to possess them has continued to increase rapidly, so that, at the present moment, the pelargonium may be said to be the most popular flower, excepting the dahlia, cultivated in England. This taste is, we are happy to say, spreading rapidly here, and through the collections of Mr. Hogg, of New York, and other cultivators, have been disseminated many of the

fine varieties produced by the most celebrated English growers, Messrs. Gaines, Cox, Hill, Dennis, &c.

The rapidity with which new kinds are originated, and the many good qualities combined in the pelargonium, render it, above all others, well adapted to universal cultivation. Of simple growth—free propagation—easily kept in the parlor, green-house, frame, or even cellar—blooming from three to six months in the year—and presenting such a diversity of shapes, tints and colors,—there is no flower which can more fully claim our care, or excite our admiration.

Since the production of that "prince of geraniums," as it has been styled, Dennis's Perfection, another character has been given to the family. This variety was the foundation of a new and vastly improved habit, and from it have been raised seedlings, partaking of the same superior qualities, viz: beauty of habit—robustness of growth—elegance of the truss—contour of the flowers—and brilliancy of coloring. These are the properties now sought for in the production of seedlings, and, by judicious intermixture, varieties have been raised, within a year or two, which so far surpass any thing we have heretofore considered beautiful, that, in a short time, those now generally grown will be banished from cultivation, to make place for a race far excelling in splendor.

The cultivation of pelargoniums, common as they are, has not arrived at that state of perfection, that will not admit of being improved by further information upon the subject. Heretofore, with a majority of those who grow plants, particularly in rooms, it has been supposed that there was but very little necessity to consult books, to learn how to propagate and manage plants so universally cultivated; but within a short time those who have been inclined to such ideas have been convinced that they were in error, and that pelargoniums, though seen in nearly every collection of plants—whether decorating the cottage window, or blooming in the parlor of the wealthy,—are found only in their highest perfection, where care and skill have alike been exercised in the treatment of the plants.

The pelargonium is a native of the Cape of Good Hope, and very few species of the genus have been discovered elsewhere. They are generally found growing on the open plains, which they beautify during the flowering season by their endless diversity of colors. In the cultivation of the plants, it should be the purpose of the grower to imitate as near as possible the temperature of their native climate. During part of the year, when the rainy season commences, the flowers burst forth, revealing their brilliant and various-hued petals, and

clothing the plains as with a carpet composed of all the tints of the vegetable kingdom: this lasts for many weeks; then succeeds the dry season, when the plants, from want of sufficient moisture, undergo a state of repose; for though they continue to grow, they do so slowly, acquiring thereby renewed strength, which prepares them for a strong and vigorous bloom. In the artificial cultivation of the plants, it should be impressed upon the grower to imitate, as nearly as possible, such a climate. It is from the want of the knowledge of this simple fact, that most cultivators do not grow their plants more successfully; but, quite contrary to the most natural practice, they keep them continually excited, and supplied with moisture, until they become,—instead of dwarf, compact and rugged plants, profusely laden with blossoms,—mere masses of huge foliage, with a few scattered and straggling trusses of flowers.

With these preliminary remarks, we come to the cultivation of the plants; and for convenience, as well as for the plainer instruction of our readers, we shall divide the subject as follows:—Propagation of the plants—Treatment in the house—General treatment when out of doors—Soil—Water—Repotting the plants—Destruction of insects.

Propagation of the plants.—Geraniums, or, properly speaking, pelargoniums, are grown both from the seed and from cuttings. The former method is only adopted for the multiplication of new varieties, and the latter to propagate and perpetuate them. The method of growing them from the seeds is very simple, as they generally vegetate freely and bloom the second season. The production of new kinds from seed has not been often attempted in this country, though there have been some few very fine varieties originated. Mr. Buist, of Philadelphia, and Mr. Hogg, of New York, have probably grown more than other cultivators. Mr. Donald, now of the Public Garden, has also raised some very pretty ones, a few of which are now (May 15th) in flower. The seeds only require to be sown in light rich soil, and placed in a green-house or frame, where they will soon vegetate; when an inch high, pot them off into the smallest sized pots, and continue to treat them as will be described for cuttings. Cuttings of geraniums may be put in at any season of the year, but there are certain periods when they do better than at others. When the plants are grown in a house by themselves, or where there is a large collection, and a succession of flowers is wanted the whole season, cuttings should be put in at three different periods. The first in June, the second in August, and the third in October; the first will commence blooming in March, the second

in May, and the last in July; thus keeping up a period of blooming from March till September.

The cuttings should be from five to six inches long, and contain about four joints, directly underneath the lower one of which it must be cut across smoothly with a sharp knife; take the leaves off from that part which is put into the earth; but the remainder of the foliage should be left entire, and not shortened in the least, unless it be to cut off a decayed or yellow leaf. When the cuttings are all prepared, take as many *thumb* pots as there are cuttings; fill them with a compost, first putting some drainage at the bottom, of decomposed leaves and sand, mixed in the proportion of one third of the latter. Put in each cutting in the centre of the pot, about one inch deep, pressing the soil firmly down and around the cutting; finish the operation with a gentle watering, and place the pots in a declining hot-bed, or, if one is not at hand, under a hand-glass. If neither are to be had, and the number of the cuttings small, place them in a warm situation, where they should be shaded from the sun until they have struck root; pick off all decayed leaves, keep the frame close, and give water in small quantities. At the end of a month or six weeks they will be sufficiently rooted to pot off into No. 2 pots, in a soil prepared as hereafter to be noticed. Place the plants where they will have plenty of light and air, until they are removed to the greenhouse, or the parlor, for the winter. Allow them to remain out as long as there is no danger of frost. At whatever period the cuttings are put in, either in June, August, or October, they should be shifted into No. 2 pots as soon as they are well rooted.

Treatment in the house.—By the first of October, at the latest, and perhaps previously, if the nights are cool, the plants should be removed to their winter quarters. If in the greenhouse, they should be placed in situations *as near the grass as possible.* With a strict adherence to this rule lies the great secret of growing geraniums; the plants, if placed far from the glass, and out of the reach of the air, draw up weakly, and soon become straggling and uncouth looking objects, fit only to stand among a mass, but possessing no beauty as single specimens. If the stage is at some distance from the glass, and in a house with other plants, an extra shelf should be put up on purpose to raise the plants close to the glass. During October and November, they will make considerable growth, and at that time the main shoot should be topped to make it throw out lateral branches. All geraniums have a tendency to run up, and, unless this is checked early, the plants are almost ru-

ined for another season. The plants should not be arranged too near together. Water sparingly during November and December; pick off all yellow leaves, and if any insects appear destroy them as will be directed.

In February most or all of the cuttings put in in June will show flower-buds: as soon as these are discovered, they should be repotted into No. 3 pots; give liberal supplies of water until the bloom is over. The plants should be slightly shaded during the hottest part of the day when in full bloom, and the beauty of the flowers will be retained for a much longer time than if they had not been protected.

General treatment out of doors.—Early in June the plants should be removed to the open air, in order that the young wood may harden; place them in a half shady situation at first, as a powerful sun might injure them by being too suddenly exposed. About the middle, and from that to the last of the month, the plants should be cut down to within six or eight inches of the pot, and the cuttings taken off for a new stock; the old plants may be then thrown away, or, if desirable, they can be retained for cultivation; but as young plants are, in our estimation, preferable to the old ones, they need not be retained: when only a few cuttings are wanted, these may be taken off and the plants turned into the border, where they will bloom during the summer. Such of the old plants as are retained, should, as soon as the new shoots are an inch or two long, be exposed to the full influence of the sun and air. Keep the plants well watered; let them be arranged neatly together, and set upon a bed of coal ashes, to keep the worms from entering the pots.

Soil.—Pelargoniums, or, improperly speaking, geraniums, delight in a good rich soil, not too light; when young it should be rather sandy, with a portion of rotten leaves; but when the plants are shifted into their blooming pots, a compost of good rich light loam and well rotted manure, in equal quantities, is the best suited to the production of strong plants and fine flowers; give the pots a good drainage with broken potsherds. Bone dust and other strong manures have been tried, but only in a cautious manner, and then without any beneficial effects.

Water.—We have already remarked that the plants should be sparingly watered in winter; in no instance should large quantities be given until the plants begin to show their flower-buds, after which time there is no danger of their being over-watered. The syringe need not be resorted to on any occasion of their growth, unless it be to wash off the dust from the leaves, should the plants stand where they were liable to get

dusted. In winter there is no necessity for it, and if often used when the plants are in bloom, the flowers are soiled and damaged so as to disfigure the trusses; at the root, however, give water freely, without any fear of endangering the health of the plants.

Repotting the plants.—When the young plants have finished their first bloom, and are removed from the green-house to the open air, they should be cut in to within five or six inches of the pot; if the plants have made a rapid growth, the pots will probably be very full of roots; if this should be the case, the plants should be turned out, and after shaking the earth partly from the roots, the larger ones should be wholly cut out, leaving only the small fibres. They should then be repotted, either in the same sized pots they were turned out of, or in smaller ones if the roots will admit of being reduced. Place the plants in a sheltered and partially shaded situation when they are cut down, and expose them to the full sun by degrees, after the new wood has attained the length of an inch or more. If too many young shoots appear, the weakest should be rubbed off, that the remainder may gain more strength. Such treatment is for plants which have flowered once, and are to be kept to bloom a second season. In repotting or shifting young plants, the soil should be disturbed as little as possible, otherwise they might be checked in their vigor.

At the time the old plants are repotted, should there be a frame at hand, with a very slight bottom heat, they may be removed thereto for a short time, until the young shoots have broken well; when the plants may be taken out into the open air, as before directed. If at any other time than that of cutting in the plants, they should need shifting, it should be borne in mind that at such period the ball of roots should not be disturbed. The routine of watering, &c. is the same as for young plants.

Insects.—The geranium is, fortunately, troubled with but few insects; indeed, the only one which ever infests them in any great degree, is the aphides, or green fly, which, sometimes, if allowed to become numerous, entirely destroy the beauty of the plants, and prevent their blooming; but they are by no means a very formidable enemy: unlike the red spider, the scale, or other enemies to plants, they are more easily and quickly destroyed than any other. A simple fumigation of the plants with tobacco will carry dismay into the phalanx of destroyers, and, unless exceedingly abundant, will be sufficient to clear the plants; but if as numerous as we have seen them, two successive fumigations will not be too much. After they

are destroyed, give the plants a good syringing, to wash them off and clean the foliage. The scale sometimes attacks the plants, but not often enough to render any precaution against them important. Fumigation may be effected on a small scale, by placing the plants under a large box or cask; put the tobacco on a dish, set it a burning, and then turn the box or cask upside down over the plants.

We have thus been minute in giving the manner in which we have cultivated the pelargonium for several years, in order that those, who have heretofore had no experience, may be enabled, with what we have written, coupled with some judgment, to grow the plants to a high state of perfection. Those who have not found Mr. Russell's or Mr. Hogg's articles complete enough for their instruction, will, we hope, be enabled to find, in our remarks, what they may have left unsaid that is worth knowing. Such of our readers as have not read their observations at all, will, we trust, glean sufficient information from the above to supply, in part, their place.

It might be supposed, as a conclusion to this, that we should add a selection of the best kinds for general cultivation; but as they are continually increasing in number, as well as improving in beauty, it would seem almost superfluous. In our Floricultural Notices, and under our head of Notes on Gardens, &c. will be found descriptions of all the new kinds as they are introduced, from which selections may be made. What are now considered prime kinds, will probably, in a short time, be thrown out of cultivation altogether, and their places taken by others new and superior. For the guidance, however, of those persons who may be wholly unacquainted with the varieties, and who are willing to rely upon our judgment for a selection, we would recommend the twelve following kinds, for general growth in parlors: the amateur who grows a greater number will refer to our pages for a larger list:—Gen. Washington, (Boll's, said to be synonymous with Hericartiànum,) Perfection, (Dennis's) (the Tam O'Shanter of collections around Boston,) Polybianum, Adelinæ, Queen Bess, Hill's Champion, Lovely Anne, Diadematum, Sir John Broughton, Tam O'Shanter, (true,) Lord Denman, and Speculum mundi. All of these may be had at moderate prices.

ART. III. *An account of five Seedling Camellias, raised by Dr. J. L. Gunnell, of Washington, D. C.* By G. H. F.

DEAR SIR,—According to promise, I send you a list of the names, with the descriptions, of five seedling camellias of great merit, raised by Dr. J. L. Gunnell, of this city.

1. *Camèllia japónica* var. *Peter Francisco.*—This is a very vigorous growing plant, with unusually large, round, and thick foliage, very deep green; the buds are about the shape and color of the old striped; the flower also, in number and shape of petals, anthers and stigma, like the striped; the ground color is rose, with many of the petals striped, (or clouded) near the centre of each, though some of the flowers have very little white in them; about fifteen large petals and five smaller ones; a seedling of the old *a*nemoneflòra; superb.

2. *C. j.* var. *General Nelson* has foliage like the conchiflòra, but much more pointed; the flower is nearly like the Derby*àna* in color and shape, though much more double, having *thirty large petals*, and some small centre ones, a little variegated, with anthers, and style tolerably good; green pericarp. Also, a seedling of the old *a*nemoneflòra; superb.

3. *C. j.* var. *George Mason*, sen. (of Gunston.)—This variety is a vigorous grower, having foliage very much like *C.* Flòy*ii*; the pericarp green, and the flower very double; about forty large petals, of a fine red color; the petals nicely imbricated, except a small part of the centre, which is full of very diminutive petals. A seedling of old *a*nemoneflòra; superb.

4. *C. j.* var. *John Randolph* is a seedling of the old striped; the foliage of medium size; the pericarp green; the flower red, with about fifteen unusual shaped narrow petals; style and anthers good; curious.

5. *C. j.* var. *Old Virginia* is also a seedling of the old striped; the plant is about three years old, and about fifteen inches high, without a limb. The pericarp is green, and the shape and size of the flower and petals as perfect as the old double white, or C. j. var. Landréth*ii;* the ground color is a rich pink, and most of the petals have an irregular white stripe running through them; this is a magnificent variety.

Independent of the above, Dr. G. has raised many other fine seedlings of great beauty, and well worthy of a place in our large collections of this truly beautiful flower. It is to be hoped, however, Dr. Gunnell will lose no time in propagating

the five varieties I have described, which are considered magnificent, and should be in possession of every amateur. The great success he has met with is only equalled by his zeal and knowledge in their culture. His collection of seedlings numbers nearly sixteen hundred, and, from their present flourishing condition, much may be expected.

Very respectfully yours, G. H. F.

Washington, D. C., May, 1839.

ART. IV. *On the employment of Vases in Gardens.* By the Editor.

WE have often urged the introduction of vases into garden scenery, as objects combining to give both a beautiful and classic appearance to situations where they may be introduced. Our correspondent, Mr. Downing, (Vol. II, p. 281,) has some very just observations upon the employment of ornamental vases in garden scenery, and the good effect they produce when placed in appropriate situations.

In a previous page (29,) we have shown the effect which vases of flowers would have when confined to green-houses, conservatories, &c. In the open garden they are beautiful objects, either with or without flowers, and, set upon the edges of lawns or on small grass patches, give a classic and refined aspect to the situation. They are occasionally seen without flowers, and our object is to induce those who may already possess vases to fill them with plants.

One reason why vases are not oftener employed is, the difficulty of procuring them of handsome form, of a material which will endure the weather, at reasonable prices. But as artificial stone vases are not to be easily procured, our purpose is to recommend the common vases cut from Maltese stone, great numbers of which are imported, and usually sold here very low. The largest size of these, which usually measure about twenty inches in diameter, are capable of holding a variety of flowers, which will bloom well, when planted in them. We have had dwarf dahlias standing in these vases, covered with flowers.

The Maltese vases were extensively used in the garden of the King of the Belgiums, at Claremont, and added greatly to

the appearance of the flower garden, along the walks of which they were distributed.

The vases should be elevated upon a plinth, and not immediately set upon the ground, as nothing detracts so much from their classic character, as the idea of their being easily moved; from their size there should be a solidity to the base, that will give it the appearance of a permanent structure.

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The annexed cut, (*fig.* 12,) though very similar to the one which we have before given, (p. 26,) we make no apology for presenting again with a slight alteration. It represents very correctly one of the Maltese vases filled with plants, in a thriving state. If filled at the present time with the following plants, they will soon make a fine appearance. A dwarf dahlia may be planted in the centre; around the outer edge *V*erbèna Tweedie*àna* may be set, together with plants of the stoloniferous nummularia, (or moneywort;) a root or two of large pansies may be placed on either side of the dahlia, and the dark crimson nasturtium planted, and the shoots trained up to the dahlia; seeds of mignonette may then be strewed on the surface. When in full flower, a beautiful and glowing effect is presented: the scarlet tints of the verbena, the crimson blossoms of the nasturtium, the purple ones of the pansies, and the dahlias, together with the odor of the mignonette, render such vases most acceptable objects.

Another very beautiful way of rendering such vases ornamental, is, by planting them with the *V*erbèna Tweedie*àna* alone, and training the shoots to a neat trellis, made in an oval form, or any fanciful shape, about two feet high. We have had them in this way, with more than sixty umbels of flowers, presenting a splendid display. A mixture of the different kinds, as *V.* Arran*iàna*, álba, &c. trained up together, would make a unique appearance when in full bloom.

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

AFTER a long time we again resume our notices of plants figured in the London periodicals. For some time they have not reached us with regularity, and we have been compelled to omit them in part. As we have now, however, received several numbers, we commence again, trusting that we shall be enabled to continue them with regularity.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculàceæ.

Pæònia Makòy*a* is the name given to a new kind figured in the *Botanist*. It is also figured in the *Bon Jardiner* for 1839, under another name, and as a variety of *P.* édulis. The flowers are very large and double, of a pure white, and the centre petals tipped or edged with crimson. We believe it originated in Germany. M. Makoy, of Liege, has the plants for sale, at the moderate price of twelve guineas each.

Delphínium Barlòw*ii*, already noticed in Vol. III, p. 250, is figured in the *Magazine of Botany* for January. It is one of the most showy larkspurs, and would be a great accession to our collections.

All the delphiniums are fine plants for planting in masses, where their long deep blue spike of flowers, produced nearly half the summer, make a very showy appearance. The plants

should be tied up to neat stakes, or the stems will grow crooked, and have an awkward appearance.

Dicotyledonous, Monopetalous, Plants.

Ericàceæ.

ERICA
tricolor var. supèrba. A green-house plant; growing two feet high; with pale rose-colored flowers; appearing in July; a native of the Cape of Good Hope; increased by cuttings. Pax. Mag. Bot., Vol. V, p. 3.

A most exquisite variety of this charming group, raised from seeds, and flowered for the first time in 1836. The flowers resemble in form the ventricòsa, and are produced in terminal clusters of eight or more flowers each; they are of a pale flesh color, and have a glossy appearance, not seen in but few of the species. According to Mr. Paxton's account, it is "unrivalled by any of its allies." The foliage is of a very deep green hue, prettily ciliated, and presents a pleasing contrast with the charming flowers.

Messrs. Rollison, of Tooting, who are well known as possessing one of the finest collections of the *Erica* in Britain, raised this variety about five years since. The seeds were supposed to have been saved from the *E.* tricolor. It requires the culture applicable to a greater part of the species, and is readily increased. (*Mag. Bot.*, Feb.)

At Mr. Town's, at the present time, there are a variety of fine heaths in bloom.

E. canaliculàta, a beautiful species, with small white flowers, very numerous, is now in elegant bloom, at Messrs. Hovey & Co's.

Asclepiadàceæ.

PHILIBE'RTIA
grandiflòra. A green-house climber; growing ten feet high; with spotted buff-colored flowers; appearing all summer; a native of Buenos Ayres; introduced in 1837; increased by cuttings; grown in light loam and sandy heath mould. Pax. Mag. Bot., Vol. V, p. 7.

"Few plants better exhibit the interesting habit of climbing shrubs than the species of Philibértia. Their slender, flexible stems seem so admirably befitted for clasping the stronger and more arborescent forms of vegetation, that their general character cannot be mistaken. The very remarkable prodigality of their blossoms, is another quality which invests them with interest; some idea of which may be formed when we state, that from the axil of every leaf a cluster of flowers is produced, and thus more than a hundred of them are frequently expanded at one and the same time."

The present species grows with great rapidity, and is well adapted for training on the rafters of a camellia house, where it seems to flourish as well as in more exposed and sunny situa-

tions. It is also a good plant to train to circular trellises in pots, when it presents a beautiful appearance. The pots should, however, be elevated, as the blossoms are pendulous, and a greater part of their beauty would be hidden. The flowers are very elegant, of a fine buff, rarely seen in flowers, and prettily spotted with red. The foliage is neat and comely, and altogether it is a valuable plant. The specimen was furnished by the Messrs. Young, of Epsom, from which the drawing was taken. (*Mag. Bot.*, Feb.)

Scrophulariniàceæ.

Collínsia heterophylla *Nutt.*, seeds of which were brought from Columbia river by Mr. Nuttall, in his last excursion, is figured in the *Botanical Magazine*. Seeds were sent to Scotland, by Mr. Buist. It has flowered in this vicinity, and is a pretty species.

Solanàceæ.

SOLA'NUM

1 erbertiànum *Benth.* A stove plant; growing from two to three feet high; with deep blue flowers; appearing in summer; increased by cuttings; grown in light loam and heath mould. Pax. Mag. Bot., Vol. IV, p. 269.

After the notice which we have already given of this species, (p. 137,) it is not necessary to repeat the same here. The flowers are of a very deep blue, of large size, and the foliage delicate. The flowers are erect, and make their appearance when the plants are not over a foot high. It requires the heat of the stove to thrive well, and likewise a partially shaded situation, though not too far from the light. Loam and heath mould form a suitable compost; but when the plants arrive at a large size, a richer soil may be used. (*Mag. Bot.*, Jan.)

Labiàteæ.

SA'LVIA

pàtens *Benth.* A green-house perennial; growing two feet high; with blue flowers; appearing all summer; a native of Mexico; propagated by cuttings; grown in a light, rich soil. Pax. Mag. Bot., Vol. V, p. 1.

We have already copied a notice of this plant in a previous page, (136,) but, as it appears to be one which will come into universal growth, we shall offer no apology for mentioning it again. The plate displays a spike of blossoms as large and as numerous as the old *S.* splèndens, but the color of which is of a most intense and dazzling blue. It is stated to be a free flowerer, a character which that splendid species, the *S.* fúlgens, does not possess. A plant standing in the open ground, last season, continued to throw up its spikes, though frequent decapitation of its shoots took place for the purpose of propagation, until cold weather set in, notwithstanding it had, in the mean time, been removed to a pot for wintering in the green-

house. "From the summit of each of the principal stems (which, in a large plant, would be numerous,) and also, though at a somewhat later period, from the extremities of all the lateral shoots, a similar number of flowers, of equal size and splendor, is produced."

This species is readily increased by cuttings, which root easily in the spring, in light soil, planted in a slight hot-bed; and in the summer season in the open border. The roots appear to be somewhat tuberous, which will, perhaps, enable it to stand wintering in the cellar, where it may be kept till spring, and then set out in the garden. We have no doubt it will be speedily introduced. (*Mag. Bot.*, Feb.)

Monocotyledonous Plants.

Hæmodoràceæ.

ANIGOZA'NTHOS

coccineus *Lindl.* A green-house plant; growing four to five feet high; with crimson flowers; appearing from June to August; a native of Swan river; increased by division of the roots and by seeds; grown in a light loamy soil. Pax. Mag. Bot., Vol. IV, p. 271.

A very showy species, with beautiful crimson flowers, slightly tipped with green; produced in great profusion upon a tall branched stem. The flowers are tubular and erect. This species was introduced from Swan river by A. Mangles, Esq., who has received many fine plants from that region, and is the handsomest of the genus. The plants thrive well in the green-house, under the following treatment:—Put the plants in a moderate sized pot, in a light loamy soil, and give an abundant supply of water in the summer; but administer it with great care in the winter. Place them in an open situation, where they will not be encroached upon or shaded by other plants; let them be well exposed to the sun to prevent mildew. Grown in this manner, the plants throw up tall stems, which produce a ramified head of blossoms a foot across. The best mode of propagation is by seeds, which vegetate freely; if these cannot be procured, the roots may be divided just after the flowers have faded; the young plants will speedily form new roots, when they should be potted. This species is very showy, and is one which we should like to see in our collections. (*Mag. Bot.*, Jan.)

Liliàceæ.

LI'LIUM

lancifòlium ? var. ròseum. A green-house bulb; growing from three to four feet high; with white flowers, dotted with pale red; appearing in August; a native of Japan; increased by offsets; grown in a rich soil. Pax. Mag. Bot., Vol. IV, p. 267.
Syn: *Lilium* lancifòlium punctàtum.

"In the exquisite loveliness of its flowers, their superior size, and the stronger and more robust habits of the plant, this

charming variety almost outvies the splendid species, *L.* speciòsum," noticed in our Vol. IV, p. 62. Nothing can be more beautiful than both of these plants, for though quite unlike each other in color, they are equally superb. The present subject has large white sepals, slightly recurved, and dotted and blotched upon the surface with pale red, giving to the flower a most unique appearance. The anthers are long and slender, and of a fine orange color.

Both the *L.* speciòsum and the present plant are truly most magnificent objects, and the statement is not thought to be exaggerated, "that they are unsurpassed by any plants previously known and cultivated in Britain."

Dr. Siebold first introduced the plant from Japan, together with the *L.* speciòsum. So far both have been cultivated in the green-house, and the plants are yet too valuable to try experiments with setting out in the border. They may prove hardy in the mild climate of England, though not so in ours, should they be introduced. They require a deep soil, and abundance of solar light, to bloom well.

The drawing was made from the collection of Messrs. Low & Co. of Clapton, who have plants for sale. (*Mag. Bot.*, Jan.)

Art. VI. *Notes on Gardens and Nurseries.*

Mr. Walker's Tulip Show.—May 20th. Again we have the pleasure of noticing Mr. Walker's splendid tulips, the third annual exhibition of which commenced on the 18th, and is to continue until early in June. The early period of blooming this season, compared with the two last, has enabled us to present our readers with some account of the same, ere the whole bed will be out of flower.

Mr. Walker, from the very flattering success which has attended his previous exhibitions, has been induced to increase his exertions to add many of the newer and more rare kinds. He has, consequently, several very superior flowers in the collection now, which were imported last year, and the whole

number grown is upwards of a thousand bulbs, seven hundred of which are in the long bed particularly designed for show.

The bulbs are, in our opinion, exceedingly well grown, and the colors of the flowers as perfect and distinct as we have ever seen them. The Bybloemens are many of them very superb; some varieties have not, for three or four years, flowered any thing near so finely as they have this season. The old favorites, which we have before named, were nearly all showing flowers; but the places of many of the duplicates have been usurped by stars of "greater magnitude," whose increased beauty has thrown into the distance many of those which have struck us as superior, on a first view, in previous years. The following are mostly new ones:—

Byblomens.—Violet Triumphant, Cerese à belle, Sang de Bœuf, Magnifique, Incomparable la Mère Brun, Princess Royal, Majesteuse le Grand, English Belle, Bathsheba, Bienfait, Reine de Violet, Holmes's King, andRose Ephergine.

Bizarres.—Abercrombie, Claudius, Charles X, Gloria Mundi.

Several of these were among those kinds which gained the Queen of England's plate at the Exhibition of the Metropolitan Society of Florists, at Hampton, last June, an account of which was given in our last volume, (p. 349,) and which is annually one of the most celebrated displays in or around London. The Incomparable la Mère Brun and Majesteuse le Grand were, we venture to say, as fine blooms as were ever seen of these sorts; Holmes's King, a fine variety, has come more distinct this season than the two last; the same remark will also apply to several others, whose habits are so capricious, that it is only once in two or three years that a faultless bloom is seen.

Mr. Walker informs us that he has already ordered many more fine kinds, to take the place, next year, of some of those of ordinary beauty which are now growing in the bed. Amateurs of this flower may therefore rely upon an opportunity of inspecting before they purchase, thus giving them a chance to select, without danger of being deceived, as purchasers too often are, when procuring a collection.

We have alluded to the fine pansies which Mr. Walker has been so successful in raising; these plants were now in their greatest splendor, and, with their infinite array of varied tints and monstrous flowers, appeared to dispute the palm with the proud and lordly tulip. One bed of selected plants, which are intended both for seed and propagation, contained some which

are an improvement upon any that Mr. Walker has heretofore grown; and show how much may be attained in so humble a flower by skill in cultivation; some of the individual blooms would measure nearly three inches in diameter.

We hope that Mr. Walker will name some dozen or more of these, which, together with those already known to cultivators, would make a fine collection. The English florists enumerate some hundred or more sorts; but we think that twenty or twenty-five is a sufficient number to designate by name; new varieties might be added every year, and the poorest of the old ones withdrawn to make room for new seedlings. We hope soon to present an article from Mr. Walker on the treatment of the pansy.

The exhibition has been much better attended than in the two previous years; and the inference is, that a taste for the tulip, and particularly the pansy, is rapidly spreading around Boston.

The Public Garden, May 20th.—Since the completion of the conservatory attached to this garden, we have not had the pleasure of passing through the house until the present moment.

The plants look exceedingly well and healthy, and, though just now but few flowers are expanded, present an array of varied foliage, redundant with vigor and strength. The camellias had nearly finished their bloom when removed into the house, and there is now only a few plants, excepting the geraniums, which contribute to enliven the heavy masses of foliage. Some deciduous azaleas, of very pretty kinds, have been very showy, but they were now shedding their flowers.

The conservatory, which is a large square building, with a domical roof, partly glazed, is arranged with a large circular stage in the centre of the house, which contains a greater portion of the plants in the collection. In the angles of the square building, where the domical roof commences, are also placed numerous plants, though out of the reach of the sun and air; such a situation is not very favorable to the growth and blooming of plants, but camellias, and other hard-wooded evergreens, may do well for a while, though they will need shifting to some part of the great centre stage, to allow them an opportunity to receive a due proportion of the light and air admitted from the glazed portion of the dome.

The shelves adjoining the gallery walk, against the glass, contained a variety of geraniums, verbenas, petunias, &c., which were covered with an abundance of blossoms. Márica Northiàna had just closed some of its beautiful though transient flowers; but there were other buds which will expand in a day

or two; a shelf above this one contains mostly the collection of Cape Iridàceæ, which we mentioned in our last, had just been added.

The geraniums are now the most interesting plants, and Mr. Donald has some new seedlings which are exceedingly fine: to these he has not yet given names, and we cannot therefore particularize any individual plants. The whole are, however, pretty, and three or four of them truly superb. Mr. Donald has another lot of seedling plants, just up, which will bloom next year; and, if his success should be as good as last season, he will have some fine ones to add to the kinds already in general cultivation. Those who are lovers of the Geraniàceæ should inspect these seedlings of Mr. Donald's, that they may see what pleasure is in store for all who may attempt the production of new varieties from the seed.

One of the most interesting and novel features of the exhibition is the two aviaries attached to the conservatory; these are placed on either side of the centre of the stage of plants; one of them is mostly filled with canary birds, and the other with a variety of feathered songsters, carolling their tuneful notes as they flit from plant to plant, in almost unrestrained liberty, thus rendering the illusion of the scene more complete. Four species of parrots, and the ominous cat owl stand perched upon the branches of a rustic tree; the former startling the passer-by with their continuous chatter.

We shall notice, from time to time, the plants in the collection, as they come into flower, as many of them are new and rare. The operations in the garden are now going on rapidly, and a great many shrubs, herbaceous plants and seeds have been planted. A new fence around the garden is partly completed.

Mr. Leathe's collection of Geraniums.—We have, in another page, introduced a long article upon the cultivation of this beautiful flower, with the hope of rendering it still more generally diffused, certain as we are, that it will give better satisfaction and afford more pleasure than any other to the generality of persons who have a desire to cultivate flowers. The new kinds are being rapidly added to our gardens, and their beauty is so surpassingly superior to the old sorts, that they strike and dazzle the beholder by their unequalled brilliancy.

Among the many collections around Boston, none can outvie, in rarity of kinds and choiceness of selection, those in the possession of Mr. Leathe; they may number more varieties, but not so superb an assortment. Speculum mundi, a variety

which, from its striking appearance, is admired by every one who sees it, first flowered with Mr. Leathe a year since, though some other cultivators, who have not flowered it until the present spring, have stated that they were the first to bloom it, and have sold the plants at twice their value, under the plea that it was in only one or two hands. Several others among the number have not, we believe, flowered elsewhere in the vicinity.

Some of the more notable which we have just seen, are the following:—Lady Isabella, rose with dark spot; Beauty of Cambridge, dark rose, fine truss, and large flower; Maid of Athens, pale blush, with dark lines; Imogene, white, with velvet spot; Champion of Devon, crimson, with dark purple spots; Sir John Broughton, fine large rose, with dark lines; Diomede, rose, with large spot, fine shaped truss; Polybianum, fine rose, with delicate lines; Tam O'Shanter, (true) rose, with fine eye; Dennis's Perfection, fine deep red with crimson shade, elegant; Charles X, white, with dark spot; Lord Denman, fine crimson; Gen. Washington, (Boll's) fine bright crimson purple, beautiful; Adelinæ, bright rose, with exquisite pencilling; Incarnatum superbum, pink, with dark spot, very fine: these are only a few of the more showy, all of which have large flowers. The plants have made a brilliant display, and there yet remains many fine trusses of blooms, although now in a declining state from the advanced season.

In the collection of Hovey & Co. several varieties of geraniums have made an excellent display; among others are Speculum mundi, Diomede, Diadematum, diversum (elegant,) Dennis's Perfection, Adelinæ, Polybianum, Lovely Anne, Buist's Fair Maria, Charles X.

One of the most showy objects has been the Lechenaúl*tia* formòsa, which has been constantly in bloom, in the greenhouse, for upwards of six months. It is a delightful plant, and easily grown in the parlor, where its profusion of orange-red flowers present a lively appearance. Echinocáctus Eyriès*ii* is just flowering, and other buds will expand early in June. Cèreus speciocíssimus, Jenkinsòn*ii*, &c. have all flowered abundantly. The Yellow Noisette and Yellow Tea Roses, budded as standards, are about flowering with great luxuriance; the former having from five to seven buds in a cluster. Several other plants are also showing flowers.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Method of preserving Botanical Specimens to be framed for constant exposure on the walls of a museum or room.—Take a specimen, recently dried in the usual way, between folds of bibulous paper, in order that every shade of color may be natural and fresh as life; procure a pane of glass of sufficient size, and a plate of tin, zinc, copper, or sheet lead,* half an inch longer and half an inch broader than the pane of glass; bend this around the edges so that it will embrace the glass; remove the latter, and place in the shallow cavity a thin layer of cotton batting; upon this sift a thin stratum of the powder of quicklime; over this another layer of batting; upon this a sheet of tissue paper, and on the tissue paper, the specimen and label. Over all, place the clean pane of glass; press it gently down, and carefully turn over it the edges of the metallic plates. Secure the junction of the glass and metal with a ceroid or resinous cement, as bees' wax, shellac, or sealing wax: or what is more convenient, and seems to answer well, fill the crevices with stiff glazier's putty, and when that gets dry, pass over it with thick Japan varnish, of which two or three successive coats may be used. If the back be of sheet tin, zinc, copper, or thick sheet lead, a ring may be soldered to one end, for the purpose of hanging up without further preparation. But if very thin sheet lead be used, it may require to be first protected by a back of binders' board and some kind of frame.

With a view of subjecting theory to the test of experiment, I enclosed in this manner a dried specimen of *Lycopodium apodum*, and also attached a part of the same specimen by means of sticking wax to the outer surface of the glass. It was exposed to air and sunshine in a high and sheltered situation. After the lapse of two or three days, the outer specimen had obviously begun to lose its color, and was inclining to yellow, while the enclosed specimen, equally exposed to light, still retained its vivid green and apparent freshness. The outer specimen continued to fade until it became nearly decolored; but the enclosed one suffered not the slightest change in appearance.

It is not essential that the specimen should be dried previously to being thus enclosed. By increasing the quantity of lime to three or four times the weight of the substance to be desiccated, a specimen just plucked may be carefully arranged beneath the glass—it may be then subjected for a couple of days to a few pounds of pressure, may be sealed up, and never afterwards removed. The degree of perfection with which the most delicate tints of flowers can thus be preserved, is incapable of being surpassed. In the space of two or three days, the specimen generally becomes more thoroughly dry than it is practicable to render it by bibulous paper.

Upon carefully surrounding fresh specimens of Asclepias Drakeana† and Rosa Gallica, with fine powder of quicklime, in a close tin box, complete desiccation was accomplished in a single day; and I was agreeably surprised in finding, that the lime had not in the least modified any of the colors. The flowers were taken out, of

* The sheet lead which lines tea boxes answers very well.

† Undescribed. Flowers yellow and crimson. Louisiana.

their natural shape and color, but stiff and brittle from dryness. It is sometimes rather difficult, however, to remove all the lime from some portions of the flowers. Probably it would be best to fill the interior of deep flowers with fine clean sand, before burying them in the powder of lime. In this way fruits, fungi, insects, small fish, and even reptiles, may be effectually embalmed. (*Silliman's Journal, Vol. XXXV, p.* 340.)

Rhubarb Jam.—To one pound of rhubarb stalks, cut as if for a tart, add one pound of lump or brown sugar; boil till the ingredients are well blended, and acquire the proper consistence. Ginger (root, not ground) and candied lemon, boiled in the jelly or jam, is a decided improvement. Jelly, of a superior quality, may be made in this manner. (*Gard. Mag.*)

Art. II. *Foreign Notices.*

ENGLAND.

Death of Plants effected by Frost.—In our last number, (p. 188,) we gave some extracts from a paper read by Dr. Lindley before the London Horticultural Society, upon the effect of frost upon vegetation, and remarked that we should revert to the same subject again. We now offer the concluding portion of the paper, which relates to the manner in which the death of plants is effected by frost:—

"In considering the various circumstances alluded to in this paper, I was naturally led to inquire into the exact manner in which the death of plants is caused by cold. Very little, however, is to be learned upon this subject, from the writings of physiologists.

"The common opinion is, that frost acts mechanically upon the tissue of plants, by expanding the fluid they contain, and bursting the cells or vessels in which it is enclosed.

"M. Gœppert, of Breslau, in a paper, originally read at a meeting of German naturalists at Leipsig, in 1829, briefly abstracted in *Oken's Isis* for 1830, p. 497, and translated in the *Edinburgh Journal of Natural and Geological Science for* 1831, p. 180, denies that this supposed laceration of vegetable tissue by frost takes place. He is represented to have stated, that the changes which plants undergo, when they are killed by cold, do not consist in a bursting of their vessels or cells, but solely in an extinction of vitality, which is followed by changes in the chemical composition of their juices.

"Professor Morren, of Liege, in a paper, printed in the fifth volume of the *Bulletin de l' Académie Royal de Bruxelles*, has published some exceedingly interesting observations upon this subject. Like M. Gœppert, he denies the truth of the statement generally made, that frost produces death in plants by bursting their vessels; and he assigns the effect to other causes. His more important conclusions are, 1. That no organ whatever is torn by the action of frost, except in very rare cases, when the vesicles of cellular tissue give way, but that the vesicles of plants are separated from each other by frost without laceration. 2. That neither the chlorophyll, the nucleus of cells, elementary fibre, amylaceous matter, raphides, nor the various crystals contained in vegetable tissue, undergo any

alteration, unless perhaps in the case of amylaceous matter, which in some cases is converted into sugar, no doubt, in consequence of the action of some acid, formed by the decomposition of the organic parts. 3. That the action of frost operates separately upon each individual elementary organ, so that a frozen plant contains as many icicles as there are cavities containing fluid; the dilatation thus produced not being sufficient to burst the sides of the cavities. 4. That such dilatation is principally owing to the separation of the air contained in the water. 5. That this disengagement of air by water during the act of congelation, is the most injurious of all the phenomena attendant upon freezing: introducing gaseous matter into organs not intended to elaborate it, and bringing about the first stage in a decomposition of the sap and the matter it precipitates; so that with a thaw commences a new chemical action, destructive of vegetable life. 6. That the expansion of the cells and aquiferous organs drives a great quantity of water into the air cells and air vessels, so that the apparatus intended to contain liquid only, contains water and air, while that which is naturally a vehicle for air contains water. Such an inversion of functions must necessarily be destructive to vegetable life, even if death were not produced in frozen plants by the decomposition of their juices, the loss of their excitability, and the chemical disturbance of all their contents.

"Prof. Morren's observations were made upon various plants frozen in the spring of the present year, having been exposed to a temperature of from 4° to 9° Fahrenheit. One of his statements I give in his own words. 'In the parenchyma of many plants, and especially in that of succulent fruits, it is easy to ascertain what modifications are caused by frost in the internal organs of plants. If a frozen apple is opened, it is obvious that the ice is not a continuous mass, but that it is a collection of a multitude of little microscopical icicles. Under the microscope, the fact becomes evident. We know how excessively hard some fruits become, when frozen by this mosaic of icicles, especially pears. If we thaw them, it is seen that on the instant, a multitude of air bubbles are extricated from the juice of the fruit, and that this juice has then acquired new chemical qualities. I wished to ascertain the cause of these phenomena, and the following is what observation has shown me. I studied for this purpose more particularly the tissue of the apple. Each cell is filled with a small icicle, which has in its middle a bubble of air. We know, that when water freezes, the crystals so arrange themselves, that the air separated from their mass by the solidification of the liquid is intercalated between their planes. This air also places itself in a mass of congealed water in a regular manner, the nature of which depends entirely upon that assumed by the crystals, as may be seen by freezing water in a cylindrical vessel, when the air bubbles always assume the form of a very long cone, terminated by a spherical cap. The augmentation of the volume of water is in a great measure owing to this interposition of masses of air. All these effects take place in each cell of a frozen apple, which thus increases in size, because each cell of its tissue becomes individually larger. When thawed, the cell recovers itself by the elasticity of its vegetable membrane, and frozen fruit becomes, as we know, very much shrivelled. Each cell, therefore, acts like a bottle of frozen water, only there is no bursting, because the membrane is extensible.'

"But when plants, easily killed by cold, are exposed to so low a

temperature as that just described, it is to be feared, that phenomena actually connected with the destruction of vegetable life may be intermixed with others, which merely indicate the physical effects of cold upon vegetable matter already dead. For the purpose of judging how far this conjecture is well founded, I have carefully examined the post mortem appearances of several plants killed by exposure to a temperature artificially reduced only to from 28° to 30° Fahrenheit. These observations, while they have confirmed the general accuracy of Prof. Morren's statements, have led to other conclusions which also appear important.

"I could not find the vesicles of cellular tissue separable from each other, even in the most succulent species submitted to experiment; and I conclude that this circumstance, to which Prof. Morren attaches importance, and to which M. Payen ascribes the difficulty of extracting starch from frozen potatoes, is not so much connected with the destruction of vegetable life, as a result produced upon the tissue by a great intensity of cold. I did, however, find it lacerated in several cases, as if by the distention of the fluid it had contained. In a Stapelia, the whole of the cellular tissue was soft, and deformed, as if it had been extended with but little power of recovering itself again, and several large irregular lacerated cavities were observed. The same appearances were remarked in Euphorbia tirucalli, but the laceration of the tissue was much less extensive. In Hibiscus rosa sinensis the cells of the cortical integument, (mesophlœum,) were very much torn, and in Hibiscus militaris, not only the cells of the bark, but especially those of the pith, were so completely broken up, that it was difficult to obtain a thin slice of those parts for examination. In no case, however, have I found any kind of tissue ruptured, except the soft cellular dodecahedral or prismatical. It would also seem that M. Payen recognises the laceration of tissue by frost, for he ascribes the acridity of frozen potatoes to an extravasation of the acrid matter which exists in the epiphlœum of such tubers, and which, in a natural state, is locked up in the cells of which that part consists. Independently of these observations, it is not to be doubted that frost does split the tissue of plants. I saw the youngest shoots of Erica mediterranea, cinerea, and others, shivered into thousands of pieces in the Horticultural Society's garden, on the morning of the twentieth of January. The branches of Melaleucas were rent to their points at Carclew. Several cases, among others that of the common holly, were observed at Claremont, where the bark was split, and rent asunder from the wood below it; and Sir Oswald Mosley has given me the following instance, which occurred under his own observation. 'An oak tree, growing upon the south side of a hill, in a sheltered situation, in Knightly Park, near Burton-upon-Trent, in the county of Stafford, was rent in the severe frost of last winter, in two different places, to the height of thirteen feet three inches. There was an interval of eleven inches between the two shakes, which were each of them one quarter of an inch wide, and extended in depth to the heart of the tree. The girth of the tree is six feet ten inches, and as soon as the frost went the openings closed again, and the tree is now as flourishing as ever.' To these cases many more might be added.

"The organization of woody tissue appears to be affected, but not by laceration. If a frozen and unfrozen transverse slice of the stem of Hibiscus rosa sinensis be placed, side by side, upon the field of the microscope, it is obvious that the diameter of the tubes of the

wood and liber is considerably less in the former than in the latter; this appears to be owing to an increase in the thickness of the sides of the tubes, which has the effect of diminishing their calibre.

"The expulsion of air from æriferous organs, and the introduction of it into parts not intended to contain it, is a striking phenomenon. Every one must have remarked that when a leaf has been frozen to death, it changes color as soon as thawed, acquiring a deeper green, and being nearly of the same depth of color on both sides; the same appearance is produced by placing a leaf under the exhausted receiver of an air pump, and in both cases is owing to the abstraction of air from the myriads of little air chambers contained in the substance of this organ. If the leaf of Hibiscus rosa sinensis in its natural state is examined, by tearing off the parenchyma from the epidermis with violence, it will be found that the sphincter of its stomates, the cells of the epidermis, and the chambers immediately below the latter, are all distended with air; but in the frozen leaf of this plant, the air has entirely disappeared; the sphincter of the stomates is empty; the upper and under sides of the cells of the epidermis have collapsed, and touch each other, and all the cavernous parenchyma below the epidermis is transparent, as if filled with fluid. Whither the air is conveyed is not apparent; but as the stomates have evidently lost their excitability, and are in many cases open, it may be supposed, that a part of the air at least has been expelled from the leaf; and as the pith of this plant, in its natural state, contains very little air, and in the frozen state is found to be distended with air, it is also probable, that a part of the gaseous matter expelled from the leaf when frozen is driven through the petiole into the pith. In the petiole of this plant are numerous annular and reticulated vessels, which under ordinary circumstances are filled with air, but after freezing are found filled with fluid: is it not possible that their functions may have been disturbed, by the violent forcing of air through them into the pith, and that when that action ceased, they were incapable of recovering from the overstrain, and filled with fluid filtering through their sides? That annular ducts are in some way affected by frost was shown by their state in a thawed branch of Euphorbia tirucalli, when they were found in a collapsed state, empty of both air and fluid, with their sides shrivelled, and with the fibre itself, which forms the rings, also wrinkled transversely. Facts of an analogous kind were remarked by me in Erica sulphurea. The minute long-haired leaves of this species are in their natural state firm, bright green, with a rigid petiole, and upon being exposed to pressure in a *compressorium*, at first offer perceptible resistance to its action, and afterwards, as the pressure increases, discharge, chiefly through their petiole, a great quantity of air. But leaves of this plant, which have been frozen by exposure to the temperature of 27°, are very different; they are softer, dull olive green, with a flaccid petiole, and offer but little resistance to pressure; yet, although they give way freely, the quantity of air which the compressorium expels is comparatively small, and readily driven out. Moreover the long hairs of this plant, which in the natural state are occupied by fluid, were always found filled with air after freezing, and this without pressure having been exercised upon them.

"I am inclined to refer to this cause the well known fact, of which many cases occurred this winter, that the sudden exposure of frozen plants to warmth will kill them; though they may not suffer if warmed gradually. In such cases, it may be supposed that the air, forced

into parts not intended to contain it, is expanded violently, and thus increases the disturbance already produced by its expulsion from the proper air cavities; while, on the other hand, when the thaw is gradual, the air may retreat by degrees from its new situation, without producing additional derangement of the tissue. It is also possible that leaves, from which their natural air has been expelled by the act of freezing, may, from that circumstance, have their tissue too little protected from the evaporating force of the solar rays, which we know produce a specific stimulus of a powerful kind upon those organs.

"These circumstances are, in themselves alone, sufficient to account for death being produced in plants by frost; and it is chiefly to such as these, that Professor Morren has directed his attention. It however appears to me, that there are some other points of importance to which observers have not applied themselves." (*Gard. Gaz.*)

Victoria Rhubarb.—Mr. Myatt, the grower of this variety, exhibited at a meeting of the London Horticultural Society, the past season, stalks which measured two feet eight inches in length, and six inches in circumference; twelve of them weighing forty-six pounds. (*Gard. Mag.*)

Exhibition of Hyacinths.—An exhibition of hyacinths has taken place the present spring, in the vicinity of London. A Dutch florist, who has taken up his residence in London, has planted several beds, containing, in all, about three thousand bulbs, and upwards of three hundred sorts. It will undoubtedly be the means of increasing the taste for this fragrant and showy flower. (*Newspaper.*)

Gigantic Cactus.—Among a recent importation of Cácti, by Thomas Harris, Esq., of Kingsbury, is a plant belonging to the Melocacti division, which measures four feet ten inches in circumference, and which is, undoubtedly, the largest specimen of melocactus in Britain. Mr. Beaton, Mr. Harris's gardener, observes, that if this specimen were divested of its spines and ribs, it might be taken for an old-fashioned Scotch haggis. (*Gard. Mag.*)

*Ipomœ'a Horsfállii*æ.—This beautiful species may be readily increased by grafting on the tuberous roots of the I. insignis. The process of grafting is quite simple: take the scions with two eyes, the upper one to form the leading shoot; cut below a joint, and take off a slice an inch long on the opposite side of the eye; take away a similar slice from the tuber, and, fitting the two together, bind them with a piece of matting. Put the tuber in a small pot, using light soil, and place the pot in a hot-bed or the stove, and in a few days the scion will begin to grow. (*Id.*)

The Màdia *Sativa.*—This species is said to be valuable as an oil plant, and the following is the yield of an acre, compared with the rape and the poppy:—

The rape, which attains its perfection only in the second year, produces from four to five scheffels (bushels) of seed per acre, and but seldom succeeds well. One scheffel of rape seed gives ninety-six pounds of oil; therefore one acre, in the space of two years, produces four hundred and eighty pounds of oil, which makes for one year two hundred and forty pounds.

One acre, sown with poppies, gives two and one quarter to three scheffels of seed; from one of which are obtained eighty-eight pounds of oil, which gives two hundred and sixty-four pounds per acre.

One acre of *Màdia* sativa, which ripens generally towards the end of July, produces four to six and a half scheffels of seed. One scheffel

gives sixty-eight pounds of oil; therefore six and a half scheffels make a produce of four hundred and forty-two pounds of oil.

It is considered a valuable introduction, and the King of Wurtemburg has awarded a gold medal to M. Bosch, who introduced it. The oil is said to be highly useful to manufacturers and machinists. (*Gard. Mag.*)

Apples imported into Liverpool, from New York, from the 1*st to the* 31*st of December*, 1838.—From the entries at the Liverpool custom-house, it appears that four thousand four hundred and sixty-three barrels of apples were imported into Liverpool in the short space of one month; and yet, after this great drain upon our market, prices ranged nearly the same all winter. Had not such extensive exportations been made, there must have been an unusual supply, after the favorable season of 1838.—*Ed.*

Verbenas.—In Dr. Hooker's *Botanical Miscellany* twenty-four species of *Verbèna* are described, and only four or five of them have, as yet, been introduced. Much may therefore be expected from those which yet remain unknown only from dried specimens. "If," says the conductor of the *Gard. Mag.*, "these have so enriched our gardens, as to form a new and striking feature in them, (we allude more particularly to *V.* chamædrifòlia and its varieties,) what may we not expect to be the result, when all those described by Dr. Hooker are introduced!" From the descriptions we suspect the real beauty of the group is but half known. (*Gard. Mag.*)

Remarkable specimen of Cèreus speciosìssimus.—In the garden of Thomas Holman, Esq., at Folkstone, Kent, is a remarkable specimen of this species. The plant is standing in the pit of the stove, and trained to small copper wires, stretched horizontally, four inches apart, across a row of posts that separate the pit from the back path. The trellis thus formed is twenty-five feet by eight feet, so that the plant covers, with its shoots only four inches apart, a space of two hundred square feet. Until November last it stood in the middle of the same pit, and grew at random: but it occupied so much room, that removal or cutting away became necessary. When the present plan suggested itself, a great deal of the actual size of the plant was unavoidably lost, in reducing it to its present figure. It suffered little from being moved; and, during the time of flowering, there were often from thirty to fifty of its magnificent flowers expanded at once, forming a most splendid object. The centre shoot is carried over the path, and trained on the back wall, to form an exact counterpart to that already on the trellis; when this is completed, it will form a path literally beset with thorns, and prove, perchance, the finest specimen of the sort in Britain. (*Gard. Mag.*)

SCOTLAND.

Caledonian Horticultural Society.—On Thursday, the Spring meeting of this Society was held in the Council-room, at the Experimental Garden, Inverleith. Notwithstanding the great inclemency of the weather, the display of fine flowers was very considerable, and the attendance of professional and amateur cultivators was numerous. The prize committee commenced their labors soon after eleven o'clock, and at two, gave in their report to the general meeting, (Sir John Robison in the chair,) to the following purport:—

For the prize offered for the six finest and newest varieties of Camellias, four collections had been sent in competition. The silver medal was awarded, as first prize, to Mr. James Kelly, foreman to

Messrs. Dickson & Sons, Inverleith Nurseries, the kinds being Juliàna, Gray's Invincible, Chandlèrii, hórrida, reticulàta, and Fairlèa. A second prize was voted to Mr. Robert Watson, gardener to David Anderson, Esq. of Moredun, whose kinds were, Gray's Invincible, reticulàta, Juliàna, imbricàta, Colvíllii, and Lady Eleanor Campbell. The committee, observing in a third parcel a new variety, marked as imported from China, by Mr. James Nairne, of Claremont, voted an honorary premium to Mr. Brewster, at Balcarras, who had sent the flowers, and they named the variety Camélliа Nairniàna.

For the prize offered for the four finest species of E'pacris in flower, three competitors appeared, and all the collections were considered meritorious. The first premium was found due to Mr. Kelly, Inverleith Nurseries, whose species were E. impréssa, ceriflòra, pulchélla, and variábilis; the next to Mr. Watson, Moredun, who produced E. impréssa, ròsea, púngens, and nivàlis; the third to Mr. John Addison, gardener to the earl of Wemyss, at Gosford, whose collection included a remarkably fine variety of E. variábilis.

For the prize offered for the finest plant in flower, exclusive of the preceding genera, and of recent introduction, five competitors came forward. The silver medal was awarded to Mr. David Brewster, gardener to colonel Lindsay, of Balcarras, for Cinerària formòsa, having blossoms of an intensely brilliant purple, and possessing the character of novelty. For a well grown specimen of *Euphórbia jacquiniflòra*, beautifully trained around a light oval trellis, a premium was voted to Mr. Kelly, Inverleith Nurseries.

For the prize offered for the best six named hyacinths, there were no fewer than six competitors. The silver medal was voted to Dr. Adolphus Ross, whose kinds were Voltaire, Vulcan, Rouge eclatante, La grand Vidette, Anna Maria, and Porcelaine Sceptre. For another fine collection, consisting of Emilius, Lord Wellington, Bouquet tendre, La grand Vidette, Voltaire, and Amicus, a premium was again found due to Mr. Kelly, Inverleith Nurseries.

There was no competition in late dessert pears, last season being very unfavorable for their production. But two prizes were awarded for apples; the first to Mr. James Murray, gardener to Andrew Fletcher, Esq., of Salton, the kinds being Ribston, Phillips's General Wolf, Margil, Winter Strawberry, Scarlet Golden Pippin, and Empress Josephine; and the next to Mr. William Thom, gardener to David Anderson, Esq., of St. Germain's; kinds, Orange Blenheim, Luffness Matchless, Paradise Pippin, Emperor Alexander, Ribston, and Fulwood.

The only kitchen vegetables exhibited, were forced sea-kale, and forced rhubarb stalks, both of good quality. For the sea-kale, a premium was awarded to Mr. James Thomson, gardener to William Keith, Esq., Corstorphine Hill; and for the rhubarb, to Mr. Robert Miller, market gardener, Gorgie.

Two excellent bunches of White Raisin Grape, recently cut from the tree, the vinery having, during winter, merely had fire heat sufficient to dry off the damp, were sent from the garden of Sir David Erskine, at Cambo. This is the variety so largely imported from abroad, under the name of the Portugal Grape. It was mentioned that the vine had "proved a very sure bearer at Cambo, not having missed a crop for the last thirty years, and that it is well worth a place in every late vinery." The silver medal was voted to Mr. James Falconer, gardener at Cambo.

It may be added, that there were sent for exhibition, a specimen

of the rare Brugmán*sia* lùtea, or yellow trumpet-flower, from the garden of Sir Archibald Campbell, of Garscube, and some beautiful varieties of camellia, from the gardens at Prestongrange, and Edmonstone. (*Newspaper.*)

Extensive flower and fruit garden belonging to the Duke of Buccleugh.—Mr. Mackintosh, late gardener to the king of the Belgians, and author of the *Green-house, and Flower Garden*, (two excellent works, lately published,) but now in the employ of the richest nobleman in Scotland, is forming a new kitchen, fruit, and forcing garden, of *sixteen acres*, at Dalkeith, with very extensive ranges of hothouses and pits; and when it is completed, which will be in three years, he will commence upon *thirty-four* acres of flower garden, upon the banks of the picturesque river North Esk. The present gardens are to be removed, to allow the park to be opened up in the true English style. The duke of Buccleugh has placed the disposition of his horticultural expenditures in the hands of a man who understands his profession. (*Gard. Gaz.*)

FRANCE.

Elm leaves as food for cattle.—M. Poiteau, while on a horticultural tour from Paris to Fontainbleu and Barres, between the latter place and Nemours, found the boys and girls of the neighboring villages perched on the elm trees which line the public road; and not only gathering the leaves, but breaking down the young shoots, in order to carry home as fodder for cows. Many trees had not a single leaf, except at the extremities of the branches, which could not be reached by hand. M. Poiteau was informed that this was the custom of the country, and that the elms on various properties, are kept pollarded, in order to facilitate the taking of the leaves and young shoots by means of a short ladder. The leaves and shoots are found highly nutritive to cattle, whether eaten in a green state, or after being dried and stacked for winter use. (*Annales de la Societé d' Hort. de Paris.*)

Mòrus.—M. d' Arcet has found that the leaves of the white mulberry may be eaten as spinach, as may those of the black mulberry, and the maclura. The leaves of the two last, when properly seasoned, are said to make a dish by no means disagreeable. (*Id.*)

Betterhave jaune d' Allemagne is a new variety of mangel wurtzel, which is found to be far superior to any other hitherto in use for fattening cattle. Seed of this variety may be had of M. Vilmorin, Paris. (*Bon Jardiner*, 1839.)

Cultivation of Radishes.—M. Chainè, the only market gardener in Lyons that ever grew mushrooms, and whose cellars and forcing houses produce them every day in the year, has this season, up to this date, (March 30,) sold early radishes to the amount of twelve thousand francs. (*Annales des Sciences Physiques, &c.*)

Convolvulus Batàtas *L.*—The sweet potato has ripened seeds in the garden of M. Sagèret, in Paris, from which young plants have been raised. Among these, it is hoped some may be found hardier than others, and, on this account, more likely to succeed in open air culture. (*Bon Jardiner*, 1839.)

Art. III. *Domestic Notices.*

The Canker worm, (name not known to me) is destroying the beauty of our town. They have entirely stripped some of our finest elms, leaving them as bare as in mid-winter, and it is difficult to find a leaf without holes in it. The maples are but little troubled. The apples, in some exposed situations, are quite brown. If some effectual means of prevention in future are not adopted, our fine elms are as inevitably destroyed, as if the axe was laid at their roots. We have applied to Dr. Hawes, of Cambridge, for an account of the insect, he having written on it in the New England Farmer, ten years ago. These vile worms are as much annoyance to foot passengers as to the trees, for they hang by their little silver ropes from the limbs, and adhere to whoever passes, in great numbers.

I suppose the worm about ten days hence, burrows in the ground, goes into the chrysalis state, and lies dormant until fall. In November and December, and again in March, if I am right in the observation, in mild evenings, with a lamp in hand, you may see them in multitudes ascending the trees, the females (?) being wingless, while the males fly about, attracted by the light, quite independent of the laborious operation of crawling. If I have not mistaken the moth for the image of some other worm, it would seem that nature has here given man an opportunity to destroy this little pest, by applying some cincture to the tree, which shall obstruct their passage, and in the death of one female moth destroy hundreds, perhaps, of worms. So abundant have these things been this spring, that as I lay in bed at night, I could distinctly hear the noise of their cranching among the leaves of the elms that line the avenue where we live; and thousands of canker-birds, or cedar-birds, (*Bombycilla carolinensis*) with their sly, plaintive whistle, may be observed in the tops of the fruit trees and orchards, quietly gorging themselves on their favorite food. My barn-door fowls, also, have acquired the habit of eating them, and so much do they prefer them to other food, that we have found it quite harmless to allow them the range of the flower garden, which lies near some large elms much infested with worms, and here they industriously pick the worms from the plants, quite forgetful of their old tricks of scratching and burying themselves in the earth. In this way, I have kept some fine plants from serious injury.

Can you give us any light on the history and mode of destroying this insect? It seems quite careless of tobacco water, applied with a powerful syringe, except so far as they are removed by the mechanical force of the water. Tobacco smoke would, no doubt, prove effectual, were there any mode of applying it as effectually as we can in a green-house. *Yours truly, B. Silliman, Jr., New Haven, May*, 1839.

The Horticultural Association of the Valley of the Hudson will hold its second semi-annual meeting in the city of Albany, at the city hall, on the 25th day of June next. Specimens of early fruits, vegetables, flowers, and farm and garden productions of every description, will be received by the committee, on the spot, the day previous, or before 9 o'clock, A. M. on the day of exhibition.

This association, composed of practical men, amateurs, and gentlemen resident in all the various counties bordering the Hudson, was established in 1838, and aims at the promotion of horticultural im-

provement, and the taste for rural affairs generally throughout this portion of the country. At the semi-annual meeting, it is desirable that specimens of the fruits and plants, of all the various districts and soils of the Hudson valley, should be brought together for comparative exhibition; and the association indulges the hope, that all persons friendly to the object in view will contribute something for this purpose.

The annual election of officers of the association will also be held at Albany on the 25th of June. The autumnal exhibition of the association will take place in New York, about the middle of September next. *A. J. Downing, Cor. Sec., Newburgh, N. Y., May 22.*

Planting the butt ends of potatoes, in preference to the seed ends.—Mr. Pollard, of Maine, in a communication in the *Maine Farmer*, on the cultivation of potatoes, observes, that it is a "custom with farmers to cut off what they termed the seed end to plant, thinking it best, and also to make a saving of their potatoes. In fact, I followed this custom myself, until I found by experience that it was wrong, and have tried to convince my neighbors of the error in this practice; and those who are not already convinced, I think will be, after trying an experiment by planting the seed end and butt end. Cut one third from the seed end, and plant them three succeeding years from the same seed, and you will find that your potatoes are nearly run out, and scarcely fit to cook; whereas if you plant, in all cases, the butt end of the potato, they will never diminish in size or quality; and those raised from the butt end will weigh from six to eight pounds per bushel more than those raised from the tip end, and will not be hollow." (*Maine Farmer.*)

Art. IV. *Retrospective Criticism.*

Errata.—Some typographical errors occurred in the article by a member of the Massachusetts Horticultural Society, in our last, which should be corrected as follows:—P. 176, four lines from the bottom, for "woods" read "brooks." P. 178, twenty-one lines from the top, for "that" read "thought."

New varieties of Camellias, (p. 63.)—Sir, your Magazine of this month has this day come to hand. In page 63 you say, "Many varieties (camellias,) new and rare with Mr. Buist, have flowered both at Mr. Wilder's and Hovey & Co.'s for three or four years past." Sir, you will oblige me by naming these varieties at as early a date as possible through your pages: perhaps the kinds you boast about, are single or semi-double. With a collection of such I make no pretensions.—*I am yours, R. Buist, Philadelphia, April* 26, 1839.

[The above should have been inserted in our last, but owing to the crowded state of our pages, was necessarily deferred. When we penned the remarks alluded to by Mr. Buist, we did not intend to say that all the new varieties in Mr. Buist's collection had flowered three or four years previous around Boston, but only a few varieties, which he particularly pointed out to us, such as he was then selling at a high price as rare; among these was the *C.* j. var. Travérsi mutábilis, which flowered here three years ago, together with several others which bloomed at the same time. Not thinking of referring to the

subject again, we do not at this moment recollect all the other sorts; but there were some five or six or more which had not flowered at all in Mr. Buist's collection, which we had seen here two years previous. We regret that Mr. Buist should take our remarks as intimating any thing more than that several of his new sorts, by the enterprise of Mr. Wilder, and others, had been introduced and flourished around Boston before they had elsewhere in the country.—*Ed.*]

Multiplex or double flowers, irregularites.—Notwithstanding the high authority of the President of the Horticultural Society of Paris, (Viscount Hericart de Thury,) who denies that the above is true, or affects a surprise at the assertion, boldly made by "certain severe botanists," (see No. for April of this Magazine, p. 145,) we presume, that the botanical axiom will prevail. Nature, we are constantly reminded, knows nothing but species; it is the province of systematists to form genera, and classes. And although she is ever evincing an erratic and wayward disposition, setting at defiance all rule and authority, and will not be restrained by systems and prescribed formulas, yet there are certain peculiar types, by which she seems to model the most perfect and numerous of her forms. When in unrestrained and wild luxuriance she throws over mountain and plain, in forest shade and desert, her myriad blossoms, (so rare any deviation from the original and most universal type,) that the observing botanist has no hesitation in pronouncing it a variety, if it bear not the distinctive and essential marks of a species. How eagerly too is a casual aberration in the usual number of the floral organs of our most common flowers, seized upon, as something rare and unique! Our well remembered childish curiosity and wonder in finding a leaf of trefoil with four, five or six leaflets, instead of the regular three, seems far surpassed oftentimes, in the experimental florist, when he traces his favorite flower in its first efforts to produce another and another whorl of petals. And if, perchance, he meet some wildling in a similar sportive freak, he dreams of reputation and honor in the successful series of experiments to render it a worthy guest of his flower-bed, by the gradual obliteration of the thread-like stamens, and destruction of the golden anthers.

How seemingly absurd, were not floriculture an art, instead of a science, the rules which the amateur dictates as criterions in taste! A stigma, forsooth, must not protrude above the throat of the corolla of the polyanthus primrose, because a *pin eye* would totally ruin the flower-head, be the border ever so fine and regular! A heart's ease must have its peculiarity of form. A tulip must be the gorgeous but regular and symmetrical cup of the florist, not of Flora herself, who scorns *his pencillings*, and sets at naught his precision. Your tulip amateurs, in their branch of floriculture, would surely be at variance with Mr. President Thury's opinion. They detect at a glance the uninitiated into the secrets of their craft, by their admiration of so *monstrous* a perversity as a double tulip! Yet in what respect is a double ranunculus or anemone superior, were it not that they differed only in the delicacy of the organic structure of the petals? Who prefers the double tropce'olum to the single "primitive" form? Or who would reject the elegant, single and primitive Chrysèis californica, to adopt exclusively its double variety? Indeed, some flowers are so distorted and monstrous by this aberration from the original type, that nothing would recommend them to notice but novelty, or their bizarre character.

Floriculture and botany should no longer be at variance, nor con-

tend about subjects belonging in common to neither. The botanist is concerned only with nature's general and universal types and forms, unless his pursuits into her physiology lead him to occasional studies into her aberrations. We cannot expect that the florist shall always be the enthusiastic botanist; why, then, should botanical nomenclature and science be objectionable to floricultural ears? Their pursuits rise indeed at the same fountain-head, but soon diverge into widely differing channels. It is indeed possible to unite them again so that they flow in happy unison, but this is rarely done; the true botanist is generally content with his simple "primitive" form, the florist will prefer his modified construction. For our own part, we admire the triumphs of floricultural art, in the ivory petaled camellia, that queen flower of the conservatory, or in the superb inflorescence of the dahlia. We bend a willing knee in our attraction to the snowy or golden or rosy double stemless primrose (Prímula acaúlis,) or to its beautiful rival, the white, blue or purple *Hepática* triloba. But our native American species (*Hepática* americàna) will receive equal respect, when its simple and lovely primitive forms are bedecking the hill-side, and closing or opening its deep blue petals, as sunny gleam, or fitful shade, pass over them. The sweetbriar, which carelessly throws its long and flexible spray, gemmed with paly-red buds or blossoms, or the perfumed swamp rose, which for so many weeks exhibits an attractive display in unadorned simplicity, catches our eye and delights our senses, though the "eastern bride of the nightingale," in the double roses of Persia and Cashmere, be flaunting in dazzling glory at their side. Antiquity may tell of its "hundred-leaved roses," but however beautiful and wondrous they may be, the five-petalled type will lose none of its charms.

The botanist however has his own veritable double flowers. Polypetalous plants frequently occur. The stately river queen, (the snowy water-lily) is his, and also those gorgeous and sacred congeners, in the species of *Nelúmbium* of the Nile. The mysterious visitant of night is his, (that pride of the hot-house,) the Cèreus grandiflòrus; nor scarcely less curious, the varied forms of Cactus and its allies. Nature here triumphs over art; the unadorned simplicity of the primitive Flora competes with the monstrosities and aberrations produced by horticulture.

In conclusion, we presume that this subject will never be set at rest, so long as the florist is unwilling to accede to the botanist his peculiar taste, or is offended at his technicalities. Imagination may connect impressions of "hideous objects" with its morbid ideas of such language, but the calm language of nature is still the same, "I am perfect, for I acknowledge no laws, nor observe no rules, but the dictates of Omniscient Power."—*An Observer of Nature.*

ART. V. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society was held on the evening of the 21st, the President in the chair.

The Committee on Plants and Flowers awarded the premium at the Society's intermediate meeting, on the 1st, for the six best varieties of pansies, to Andrew Dryburgh.

The Committee on Vegetables awarded the premium at the Society's intermediate meeting, on the 1st, for the twelve best heads of spinach, to Patrick Reilly, gardener to Pierce Butler, Esq. The premium was awarded to I. Patton, gardener to Mrs. Kohn, Turner's Lane, for the three best bunches of asparagus.

The Committee on Plants and Flowers, on the 21st, awarded the premium for the ten best varieties of sweet-scented China roses, to Andrew Dryburgh; no competition.

The premium for the best American seedling rose was awarded to Andrew Dryburgh; a very fine dark red rose.

The premium for the best collection of plants, in pots, was awarded to Mr. Chalmers, gardener to Mrs. Stot, he having exhibited *Antirrhinum* caryophylloides, and Calceolaria Majoriàna supérba, besides twelve different varieties, many of them very fine; also, *Verbèna* incìsa, *V.* Eryiàna, *V.* venòsa, *V.* albiflòra, *V.* Tweedieàna, *Vínca* ròsea and álba; a fine seedling petunia, Nierembérgia filicaúlis, Gloxínia speciòsa, *G.* grandiflòra, Alstræmèria tricolor, Ixòra coccínea, *Mimulus* cardinàlis, Lophospérmum scándens, *Ixia* crocàta, Loàsa aurántia, *Pelargònium* Capt. Cook, *Ròsa* múndi, Micans, Megalánthemum, Divérsum, Hericartiànum, Coplèyii, two seedlings, carnations, and a large specimen of Canterbury Bell.

An honorary premium was awarded to Andrew Dryburgh, for a very fine specimen of Gésnera bulbòsa.

The premium for the best bouquet was awarded to William Chalmers, gardener to Mrs. Stot. They also notice a fine basket bouquet, composed of indigenous plants, by Hirst and Dreer; and a fine bouquet, from Robert Weston, gardener to Mrs. Roland.

The Committee on Vegetables awarded the premium for the three best forced cauliflowers, to George Robinson, gardener to Horace Binney, Esq.

An honorary premium was awarded to James Oldham, gardener to George Pepper, Esq., for some very fine cauliflowers.

The premium for the best blanched rhubarb was awarded to George Esher.

The premium for the best forced potatoes was awarded to James McKee, gardener to Charles Chauncey, Esq.

The premium for the best lettuce sown in the open ground, in New Jersey, was awarded to James McKee, gardener to Charles Chauncey, Esq.

The premium for the best early peas, grown in New Jersey, was awarded to Adam Price.

An honorary premium was awarded to William Chalmers, gardener to Mrs. Stot, for some fine peas, grown in Pennsylvania.

An honorary premium was awarded to George Esher, for some very superior potatoes, grown in the open ground. He stated they were planted on the 12th of last March, about two and a half inches under the surface, and some straw placed over them was allowed to remain till they came up through it, then covered with earth, and the result exceeds belief in quality and quantity.

The premium for the best display of vegetables was awarded to Mr. Chalmers, gardener to Mrs. Stot; he having exhibited early frame peas, three bunches of Spanish dwarf ditto, nine inches high, cauliflowers, early cabbages, asparagus, onions, radishes, leeks, very fine, curled Indian lettuce, Brighton Coss ditto, Royal cabbage ditto, and oak-leaved ditto.

P. Burke, gardener to Mr. Camac, exhibited cauliflower, asparagus, spinach and turnips.

Hugh Hatch exhibited some fine winter blush apples.

George Robinson, gardener to Horace Binney, Esq., exhibited kidney potatoes, forty-fold ditto, peas, beets, cucumbers, cabbages, sallad, &c.

James McKee, gardener to Charles Chauncey, Esq., exhibited beets, cauliflowers, four different kinds of potatoes, lettuce, cucumbers, peas, rhubarb, some fine lemons and oranges.

The Committee on Fruit awarded the premium for the best display of fruit to James McKee, gardener to Charles Chauncey, Esq.; having exhibited some very fine specimens of lemons and oranges.

The display of vegetables was beyond all praise, more especially the cauliflowers.—*Respectfully, G. Watson, Philadelphia, May 25th,* 1839.

ART. VI. *Massachusetts Horticultural Society.*

Saturday, April 6th, 1839.—*Exhibited.* From Henry Reed, gardener to S. S. Lewis, Esq., fine specimens of cucumbers; their beautiful appearance did great credit to the skill of Mr. Reed.

Distributed. Seeds of the *Màdia* sátiva, a new oil plant, received from H. Rin, of Frankfort on the Main. The *Màdia* sátiva is stated, in foreign journals, to be more valuable to agriculturists as an oil producing plant, than the olive, the poppy, or any other more cultivated.

May 4th.—Exhibited. From T. Lee, Esq. some fine specimens of various plants: among others a beautiful rose, called the *Bouquet,* which is probably a hybrid, as it is said to be a hardy variety in France: the present specimen was cut from a plant, budded as late as last July, and on the cluster there had expanded forty buds out of fifty-four; there were now some twenty or thirty remaining, in beautiful bloom. It is a most delicate white rose, and one which should be universally grown; Mr. Lee also exhibited Clárk*ia* pulchélla and pulchélla álba, the latter an extremely delicate annual; both are well adapted to green-house culture; fine flowers of Collín*sia* bícolor, *Cen*taurèa suavèolens, double purple jacobæ'a, *Phlóx* Drummónd*ii,* each of which, though generally only grown in the summer, are delightful winter plants in the green-house; also specimens of the following roses and geraniums:—*Thèa* Hymenè, Triumph of Bolwiller, double Macartney, and Yellow Tea roses; Diademàtum, Mary Queen of Scots; and Charles X, geraniums; and of other plants the following: black birch, Méspilus arbòrea, double flowered cherry, (beautiful,) and *Ver*bèna chamædrifòlia.

From D. Haggerston, splendid specimens of Combrètum purpùreum, Magnòl*ia* Thompson*iàna,* and the true Greville rose; the latter was one of the most beautiful objects imaginable; in the cluster were roses of every shade, from white, or pale blush, to deep purple, including some twenty or twenty-five flowers. This variety is too little known, for its great beauty entitles it to a place in every garden: the plant from which the specimen was cut is growing on the back wall of one of the houses adjoining the conservatory, at Mr. Cushing's, and had a large number of clusters expanded at one time, presenting a magnificent display.

At this meeting, the Rev. Joseph Tyso, of Wallingford, Eng., was admitted an honorary member, and Carey Tyso, Esq., of the same place, a corresponding member of the Society.

May 19th.—Exhibited. From Prof. J. L. Russell, specimens of native plants, under cultivation, viz: Trillium grandiflòrum, Claytònia spathulàta, Thalictrum diòcum, Uvallària sessiliflòra, Convallària stellàta, Pulmonària virgínica, Phlóx stolonífera and *P.* nívea. From Messrs. Winship, a fine bouquet of flowers. From the estate of Madame James Perkins, Pearl street, Boston, fine specimens of the beautiful double-flowered cherry.

May 26th.—Exhibited. From Messrs. Winship, two fine bouquets of flowers. From S. Sweetser, Cèreus crispàtum, aurantìaca, and new scarlet; there appeared to be a difference between them, but so faint that only those with a practised eye could discern it; they were imported from France under these names, but we think that some of them will prove identical with Jenkinsònii; also fifteen bizarre and bibloemen tulips. From Francis Parker and E. Weston, Jr. Esq., the following specimens of native plants, (uncultivated):—*Bérberis* vulgàris, Aquilègia canadénsis, *Prùnos* obovàta, *Ranúnculus* bulbòsus, *Geránium* maculàtum, Arenària latifòlia, Chelidònium màjus, *Saxífraga* pennsylvànica, *Vaccíneum* corymbòsum, Fragària virgínica, *Viola* cucullàta and blánda, *Trum* tryphyllum, *Thèsium* umbellàtum, and *Gnaphàlium* plantagìnium.

From J. Donald, Boston, a fine variety of geraniums, embracing ten or twelve seedlings of much beauty, together with the following kinds:—Adelinæ, Hills's Champion, Dìomede, Divérsum, Diademàtum, and other sorts not named; in all, twenty-three plants. From Hovey & Co., twelve geraniums, viz:—Spéculum múndi, Dìomede, Scítulum, Diademàtum, Adelinæ, Divérsum, Polybiànum, Gen. Washington, Nimrod, Lovely Ann, Lucifer, and one unknown.

From Mr. Meller, the following geraniums:—Coronation, Neltjieànum, Oxoniénsis, Mary Queen of Scots, Lord Denman, Nimrod, Admiral Codrington, Albídium, alabidum (?) Rob Roy, Countess of Munster, supérba, No. 6, and seedling; also six calceolàrias, *Verbáscum* sp. *Malòpe* trífida grandiflòra, and two varieties of roses, with cut flowers of the yellow and blush tea rose. From S. Walker, twenty-four tulips of fine sorts, as follows:—

Bybloemens:—Fair Ellen, Duke of Wellington, Princess Charlotte, Mirabelle, Incomparable la mere Brun, Rose Vesta, Rose Thelestris, Prince Regent, La Beaute Virginia, Rose Domingo, Rose Ephergine, Voorhelm, Majesteuse, Bugby Queen, Incomparable de Holland, Sang de Bœuf, Cerese Royale.

Bizarres:—Abercrombie, Lord Duncan, Bonaparte, seedling, Capt. Marryatt, Scarlet and Gold, Demetrius.

The present meeting was especially appointed for the exhibition of geraniums and tulips for premiums. The judges awarded as follows:

For the best twelve varieties of tulips, to Mr. S. Walker, a premium of ten dollars.

For the second best twelve varieties, to Mr. S. Walker, a premium of five dollars.

For the best twelve varieties of geraniums, to Mr. Meller, a premium of ten dollars.

For the second best twelve varieties of geraniums, to Messrs. Hovey & Co. a premium of five dollars.

No seedling was entered for a premium which was thought worthy of such distinction.

The judges on tulips were Messrs. Donald and Meller; and on geraniums, Messrs. Donald and Sweetser.

The exhibition of pansies, for prizes, will probably take place in the course of a week or two.

Art. VII. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Common, per barrel,	1 25	1 50
Common, per bushel,	50	60
Chenangoes, per barrel,	1 50	2 00
Chenangoes, per bushel,	75	—
Nova Scotias, per barrel,	1 75	2 00
Nova Scotias, per bushel,	75	—
Eastports, per barrel,	3 00	—
Eastports, per bushel,	1 00	—
Turnips:		
Common, per bushel,	37½	50
New, per bunch,	10	12½
French, per bushel,	37½	50
Ruta Baga, per bushel,	37½	50
Onions:		
Red, per bunch,	5	8
Yellow, per bushel,	1 50	2 00
White, per bushel,	1 50	2 00
New white, per bunch,	3	6
Beets, per bushel,	75	1 00
Carrots, per bushel,	75	1 00
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	3	6
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Drumheads,	1 00	—
Red Dutch,	1 00	1 50
Cauliflowers, each,	12½	25
Lettuce, per head,	3	6
Spinach, per half peck,	8	10
Dandelions, per half peck,	8	10
Cabbage Sprouts, per half p'k	12½	—
Turnip Tops, per half peck,	8	12½
Young Turnips, per half p'k,	6	8
Dock tops, per half peck,	6	8
Peas, per bushel,	2 00	—
Peas, per half peck,	31	—
Asparagus, per bunch,	10	12½
Rhubarb, per pound,	3	4

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes:		
Autumnal Marrow, per cwt.	6 00	—
Winter crook-neck, pr cwt.	4 00	—
Canada, per cwt	6 00	—
West India, per cwt.	3 00	—
Pumpkins, each	12	25
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37½
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6
Fruits.		
Apples, dessert, new:		
Common, per barrel,	3 00	—
Common, per bushel,	1 00	—
Baldwins, per barrel,	3 00	3 50
Sweet apples, per bushel,	2 00	—
Golden Russets, per bbl.	3 00	—
Greenings, per barrel,	3 00	—
Russets, per barrel,	3 00	3 50
Pears:		
Baking, per bushel,	2 50	3 00
Green Gooseberries, per q't,	12½	—
Strawberries, per basket,	20	25
Malaga Grapes, per lb.	25	—
Cranberries, per bushel,	3 00	—
Cucumbers, each	25	50
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	75
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—Although the month of April, and the early part of this month, betokened a very early season, these expectations have

not been realized, as respects the earliness of corn, vines of all kinds, and similar plants which require a warm May, to come forward early. Fruits of all kinds, it is true, are at least ten days earlier than last year, but we believe that the cold and wet weather, with slight frosts in some places, which has prevailed the latter part of the month, has put back vegetation so far as to render this little or no earlier than the last.

Potatoes are plentier than at our last report; there have been several arrivals of good Chenangoes, and our quotations note a slight reduction. Turnips are higher; new ones of small size just in. Old onions almost gone; a few bunches of new have been received. Beets and carrots higher. Radishes are at moderate prices, but the supply is not large for the season.

Cabbages are about gone. Lettuce is plenty and dull; the weather has been favorable to a good growth. Greens of all kinds abundant and low. Peas from New York have come to hand, and are selling at fair prices, though rather inferior from carriage. Asparagus has not been abundant, the cool weather having prevented a free growth. Rhubarb plenty. There have been arrivals of West India squashes since our last, and the market is well supplied with those of fine quality.

Apples are scarcer; but few now remain on hand, except russets; those of good quality are higher. Pears are gone. Cucumbers come in in tolerable abundance, and command fair prices. Cranberries are most gone. Oranges are higher. A few pine-apples remain, but the quality not very good. Green gooseberries, from New York, are selling quickly at our quotations. In nuts there is no change.—*Yours, M. T., Boston, May* 27, 1839.

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape Vines will by this time have set their fruit, which will soon swell rapidly, and, by the middle of the month, need to have the clusters thinned out, that the berries may grow to a large size. Syringe now three times or more every week, and, if the weather proves dry, give the borders a good watering; liquid manure may be used once a week. Keep all the new wood, which is intended for bearing another year, tied up to the trellis, and cut away all superfluous shoots, so that the fruit may have all the influence of the sun and air.

Strawberry beds will need attention: the runners now begin to shoot out, and, when not wanted for filling vacant places in the bed, or for plants for setting out new beds in the fall or spring, should be cut off, as they tend to weaken the old plants. Water the beds liberally, if the weather should be dry. The latter part of the month will be the proper time to set out the plants to be grown on the *annual*

system, as recommended in our last, p. 167. We trust that cultivators will test Mr. Darke's method the ensuing year.

Fruit trees, in pots, of whatever kinds, should be kept properly watered, occasionally giving liquid manure.

FLOWER DEPARTMENT.

Dahlias should be planted this month. From the 1st to the 20th is the proper time; those set out in the earlier part of the month will commence blooming a few days sooner than those planted later, and a succession will be thus kept up. The ground should be dug deep, and, if not in very good condition, should have two or three inches of *well decomposed* manure of any kind spread upon it, and dug in. Mark out the rows, if to be planted in beds, and turn the plants out the pots, placing them an inch or two lower than the surface of the soil.

Geraniums should be cut in, this month, as directed in a preceding page. The cuttings should also be put in: for directions for doing which, see the pages referred to.

Cuttings of Heaths may now be put in with success. The plants should all be repotted when they are removed from the green-house, and placed in a situation where the sun will reach them but two or three hours in the morning.

Tender annuals, raised in pots in frames, may be transplanted into the border in the early part of the month.

Verbenas will again require to be shifted into larger sized pots. When they are wanted to embellish the border, the present month is a suitable time to transplant them.

Chrysanthemums not propagated last month, by suckers or cuttings, should be done so without delay.

Tulips must be taken up the latter part of the month.

Biennial and perennial seeds may yet be sown.

Cactuses should be removed to the open air the latter part of the month, and placed in a sunny situation.

Ixias, Sparaxis, and similar bulbs, should now be taken from the pots, and put up in dry papers, and placed away in a dry airy room.

Rose bushes, (of hardy kinds,) may be propagated by layering any time this month.

Camellias should be removed from the green-house as soon as the shoots have attained a slight degree of woodiness, and the flower-buds for next year are perceived.

Green-house plants, of all kinds, may be removed to the open air the latter part of the month.

VEGETABLE DEPARTMENT.

Celery plants, raised in boxes, should be transplanted into small beds, preparatory to setting in the trenches.

Lettuce may be sown for a succession.

Cucumbers, for pickling, should be sown the last part of the month.

THE MAGAZINE

OF

HORTICULTURE.

JULY, 1839.

ORIGINAL COMMUNICATIONS.

ART. I.—*Native Floriculture; with Remarks on attention to some of the more common foreign species, which have representatives in this country.* By PHILANTHOS.

IN the number for May, of this Magazine, will be found some notes and remarks on a few of the prettiest as well as most striking flowers found in this vicinity, which are worthy of culture. Prepared, as they are, by a gentleman whose successful efforts are known and appreciated, they come to us with that effect which always acccompanies experiment rather than theory. Without intruding on the same department of intelligence, and hoping that our own scanty communication may elicit more of such important information from the same source, we have ventured to suggest a few thoughts as they occurred to our mind. For, though we will not call ourselves theorists, yet our series of experiments have not been directed to some of those more difficult subjects in which he has been most signally successful. We love flowers for their intrinsic merits, yet we will acknowledge that a rhododendron or an orchis bloom quite as much to our satisfaction, and at times give us a little more pleasure, if we know that culture and care have been expended on one of these choice plants selected from a neighboring swamp, rather than brought from lands beyond the seas. We admire the aspect and countenance of our own New England flowers, the American character which invests them, and the northern hardiness which is united with their peculiar

beauty. Your pelargoniums and your heaths look as if, in truth, they had not forgotten the desert, arid and bare, on which their ancestors first came into being; and your camellias present you with foliage and flowers, as stiff and uncompromising as their own Chinese and Japan countrymen. But the lordly magnolia and tulip tree are the monarchs of their native hills; the broad-leaved rosebay is, at all times, a fit representative of cool and spring-gushing mountain swamps—the superb laurel is comely in winter or summer—the Mayflower, (Epigæ`a,) with its oft accompaniments, checkerberry and northern Linnæ`a, is like its native spot, and congenial and proper to the dry and healthy plains, over which wave the elegant white pine, the hemlock or spruce, and on which springs up the hardy and valuable pitch-pine. From the wide regions of Canada, Virginia and Carolina, the earlier botanists culled their most choice treasures; nor despised or neglected, but the rather most peculiarly cherished, are some of our flowers, in royal gardens, which we affect to overlook.

Linnæ`a boreàlis, so named by Gronovius, in honor of Linnæus, is found in the woods of Essex, and is not uncommon in the western and middle parts of Massachusetts. Easily cultivated on a rock-work, or in a cool green-house, whoever once examined its rosy-pencilled twin corolla, or breathed its delicate perfume, would never forget the northern Linnæ`a.

Similar in appearance is Gualthèr*i*a hispídula, crawling up and over many a dead stump, and covering the prostrate and rotten logs. Stems trailing, leaves small and fringed with stiff hairs, flower white.

*L*upìnus perénnis, or perennial lupin, mentioned in the communication just now referred to, grows with the greatest luxuriance in the driest and most barren sand. Not a half mile from where we are now writing is nearly an acre of such soil, covered with its splendid spikes of blue flowers. Some varieties, such as white and pink, occasionally may be found. Grows best from seed, and blooms on the second year.

An exquisite and almost leafless summer plant (*P*olygonum articulàtum,) looking like a beautiful heath, grows in similar soil, and may be seen on the sandy plains contiguous to Mount Auburn.

Dry woods produce also the pale and pretty Canadian rock-rose, (*C*istus canadénsis,) whose petals are as fugacious as its beauty is striking, and the spectator needs to rise with the sun to see its humble offering to that luminary. A monitor of duty would be our little flower, to any one who adopts it as a garden companion.

There grow also the unrivalled Trientàlis americàna, whose seven petals, seven stamens, and oftentimes seven leaves in an elegant whorl, have elicited the admiration of many a young botanist, who plucked its neat stem from the ground. We would like to see its co-species Trientàlis europèa, of England; nor do we fear that our own little plant would not be found by far the prettiest. Side by side should they grow, that we may love our own the best.

Cypripèdium parviflòrum, or Yellow Ladies' Slipper, grows plentifully in Vermont, and resembles C. calcèolus, an English species. These should also be cultivated in the same spot. The same remark holds good with Erythrònium americànum and Erythrònum Dens cànis, formerly mistaken as identical, and both called Dog's Tooth Violet.

The buckbean (*M*enyánthes trifoliàta,) of our overflowed meadows might probably be easily cultivated, by preparing a hole with peat and wet moss, and keeping a pot sunk by its side, in which an abundance of water should be poured once or twice a day. A beautiful spike of white feathered flowers would compensate the trouble. With Sarracèn*ia* purpùrea it could be grown in a pot filled with similar compost, and flowered in the green-house. Both may be found in abundance near the brook from Fresh Pond, on the West Cambridge road.

The sundews, (Drósera,) of which there are in this vicinity three species, viz. D. rotundifòlia, D. longifòlia, and the rare and curious D. tenuifòlia of Plymouth, we have no doubt would thrive to the greatest advantage in moss and water, under a bell-glass, and exposed to the sun. The crystalline glands on their surface equal, if not surpass, the famous and favorite ice plant, (Mesembryánthemum crystallìnum.)

*P*arnássia caroliniàna, (Grass of Parnassus,) rare, an inhabitant of wet meadows, is a fine plant, with smooth leaves and a white flower, and grows with facility, according to our own experience. We, several years ago, found it in Danvers.

We have often wished to see more of the common English plants in our gardens, and, as there are several which have representatives in our own country, and sometimes bear the same names, yet, for the most part, are different, it would add much to the interest and effect of our collections to see these cultivated together. A few have been long residents and favorites, as the London Pride, (*S*axífraga umbellàta,) and the *V*iola odoràta, or sweet-scented violet.

A friend of ours oftentimes liberally gives us, or kindly points out some "little English flower," on which we gaze

with interest, or safely bear home to try its luck in our small collection; not unwilling to welcome any such floral inhabitants of that country, and desirous of affording all such courtesy towards the stranger, which should be shown to so delicate an ambassador from Flora's domains. The blue flowers of *Jasióne montàna* we have seen expand within our "gardens pale," and the leaves of *Ranúnculus Ficària*, or little celandine, with which Wordsworth fell in love, are unfolding themselves with as much security as under their own green copse. We would fain greet, too, the genuine crimson-tipped daisy, not as we now have them, all disfigured by superfluous florets, but in a ring of silver, enchasing its golden disk. Why should not the Michælmas daisy help out our scanty autumnal display, and the Dog rose give its tribute to June's triumph of the queen of flowers? We might substitute, with some advantage, the clusters of the Birony for the nightshade, which hangs on our walls, and the "rare pyrola" would lose none of its merit, if it grew beside its sister gems from our own woods. The British ferns are, many of them, of peculiar delicacy and beauty, and would help to ascertain and illustrate our own. Those curious bee and fly orchises, too, some of which we have seen in fine condition, and a host of pretty British plants, figured in botanical publications, should be better known among us, for the benefit of the botanist, and to create a taste for the delicate and pretty, whether native or foreign.

ART. II. *Some Observations upon the Climate in the Southern States; with Remarks upon the management of Greenhouse Plants, and a list in bloom in the months of March and April.* By G. R. ROTTON, Gardener to J. W. Tisdale, Esq., Mobile, Ala.

I NOW comply with a wish of yours, expressed to me through your Magazine of Horticulture, (p. 153,) viz: "That I would be induced to send you communications upon the treatment of plants in the southern states," &c.; and, first, I must state that I fully concur with you as to the treatment being entirely different here from what it is in the north; for instance, the

amaryllis bulbs require to be buried in the pots, after the manner of a hyacinth, and have plenty of water to bloom them in perfection; this remark is also applicable to all bulbous roots here—I have proved it to my complete satisfaction. The cactus tribe require more water, and *much* more pot room here than in the north, and are difficult to keep here during the summer, requiring to be placed away from the direct sun. The camellias you can put out in almost any situation, if the pots are sunk to the rim, except where they get the evening sun. Some of my camellias have made young wood since the blooming season, of four, and one or two even six inches long. I find the pretty Didymocárpus, though a native of the Cape, will not stand the sun here without a net-work over it; the fuchsias die almost instantly after they show blossom; the gardenias stand uninjured by either frost or sun, and bloom in splendor. I believe the whole of the Meterosidèros tribe will stand uninjured by the weather; the Gesnerias and gloxinias require a deal of water, when in a healthy growing state. As yet I find all the tropœolums die here during the summer, however attended. I am not aware of a single rose, but will stand out of doors in all weather.

The difficulties attending a high and healthy state of cultivation here, are much greater than can well be imagined by any novice. One of our great difficulties is, the *extreme variableness* of our winter months; as an example, I will give you the state of the thermometer for a few days during the month of March, with the highest and lowest range during the same period: 8th of March, at 6 o'clock, in the morning, 39°; at 2 o'clock, same day, 58°; 12th day, 41° minimum, 71° maximum; 13th day, 62° minimum, 76° maximum; on the 19th day, a severe white frost; on the 25th day, 64° minimum, 84° maximum; lowest range, during the month, 34°,—highest, 84°. This was truly kept with the thermometer in the shade.

From the above you will at once see it is perfectly impossible to keep the thermometer in the green-house at a steady range for a week together, I might almost say for twenty-four hours. The thermometer one morning at sun-rise, out of doors, will stand as low as 29°—at 2 o'clock, same day, will range as high as 60°. Last February I knew the thermometer, in the middle of the day, as high as 78° in the shade; two mornings after as high as 64°, and might not be lower than 50° for three or four days. Then, for four or five days, it differs from extreme heat to extreme cold almost every six hours; the gardener might go to bed, and think all safe, with the thermometer at 64° out of doors, and every appearance of steady

weather, perhaps be tempted to leave his green-house sashes down; next morning, by day-light, he actually finds it freezing.

The above is a sketch of the winter difficulties. The summer is not got over so easily, for the gardener has to enumerate the following, as some of the obstacles to the well-being of his plants:—*Intense heat* and drought; as an instance of the *burning heat* of the sun, I will relate the following: The latter part of last April I was erecting a shed for summering my plants; a carpenter's steel and square, which lay in the sun, I laid hold of to use, but was compelled to let it go, and that quickly, and had to poke it into the shade to cool, before I could handle it with comfort to my fingers. Another obstacle is the rain; when it comes it falls in a perfect torrent, and generally accompanied with tremendous wind. Another is the astonishing quantity of insects, from the locust as long and as large as my finger, (called here the big grasshopper,) down to the least of all in size, but greatest in quantity, and most mischievous, the red spider: I might, I believe, with propriety say, every piece of decaying wood, in or on the surface of the ground, breeds and swarms with them. The last difficulty I will mention is the *fact*, that there is an indefinable something, in the climate or atmosphere, that will, in a greater or less degree, unnerve the most energetic and ambitious gardener. I know my own resolution is occasionally most severely tried.

Now for the substance of what my own experience has told me is the only correct method, by which you can possibly keep a healthy appearance on your plants in this latitude.

Green-house department.—In the winter keep your plants as hardy as possible; but remember, during severe *cold winds*, that you had better keep your house a little close, rather than admit too much of the *wind*, as it seldom lasts more than twelve hours at a time. In dry times syringe abundantly, and pick off all decayed leaves; if you have not a canvass or covering upon the top of your house, by which you can readily shade a part or the whole of your glass if necessary, I find it very advisable to blaze or blotch a considerable portion of the glass on the roof, to break the rays of the sun, or else you will, in mid-winter, have your green-house thermometer range as high as 90°, or even 96°, with all the air your windows and sashes will enable you to admit. The latter part of March you will frequently be enabled to leave your sashes down all night. You cannot, with *perfect safety*, put all your plants out of doors, until the latter part of April; when put out they should be placed under a shed, open on *all sides*, but covered on the top so as to keep off pelting rains and burning sun; and the pots

should all be buried to the rim. On the south-west side, about ten feet on a parallel with the shed, if a fence, building, or belt of shrubbery does not stand near, it would be advisable to erect a high trellis-work for vines or ornamental creepers. This is to prevent the *evening* sun from striking under the shed upon the plants, for the practical gardener must have found out that one hour's *western* or evening sun will dry up and burn the foliage of his plants much, *very much*, more than when exposed to the sun from rising until twelve o'clock of the day, and after that time shaded.

Although it is so necessary to water and syringe the foliage of plants in the summer season, it should always be done in the evening; for if deferred until the morning, the plants will not have time to absorb the moisture; the current of air is not sufficient to dry up the water thrown upon the foliage before the sun gets up: the consequence then will be, that the leaves of many of your plants, and particularly your choicest pelargoniums, will be literally parboiled. The oldest growers in Mobile of this favorite plant frequently say to me, "I cannot keep some of my geraniums during the summer." Upon my bringing this parboiling fact to their notice, they universally admit the truth of it. The only way to prevent this mischief in stormy weather is, to be about before the sun is up, and shake, and even blow the water off and out of the cup-leaved and hairy varieties. There is another great enemy to pelargoniums in the summer season, in the shape of a small green caterpillar, which worms itself into the leading shoot, eats out the young leaf, and very frequently tops the shoot, and sometimes buries itself an inch or more in the young succulent wood. This caterpillar is at first so small, and exactly the color of the foliage, that it almost requires the eyes of Argus to discover the destroyer.

Whilst writing this article I am induced to state what plants have flowered with me, or are still in flower. They are as follows:—*Acàcia*, two varieties; *Aloe*, two, and *Gortèria* one variety, both very fine; Amaryllis, of several varieties, most of them *very fine;* Alstræmèria tricolor, now in bloom, but sickly; Arístea màjor. The Azàlea índica, of five varieties, I never saw finer. The Burchélla speciòsa, for these six weeks past, has been covered with its orange-colored blossoms; two varieties of *Cáctus*, the speciocíssimus shows for blossom; Callothámnus villòsa but poorly, being a small plant; the *Cálla* in great splendor; the Cinerària cruénta and petasìtes; *Cyclamen*, of varieties; one variety of Antholyza, very fine; Didymocárpus Réxii; Eránthemum pulchéllum, which

every one from the prairies declares to be very abundant there in the fall. Eùconis punctàta now shows very finely for bloom; the richness of color in the bractæ of the *Euphórbia* Poinsétt*ia* was universally admired, although so small in dimensions, owing to recent importation; Gardèn*ia*, two varieties; the Gloxín*ia* cándida now has nineteen full blown blossoms and some flower buds on it; the G. speciòsa is in a forward state; the Gesnèra rùtila is just opening with a blossom spike of two feet four inches from the rim of the pot; the G. prasinàta and Douglás*ii* are in a forward state for bloom. Four varieties of *Hibiscus Rosa* sinénsis, in great splendor; the double varieties of *Jasmìnum Sámbac*, with variety trifoliàtum and Tuscan; Justíc*ia* speciòsa, Lìnum trígynum, Lophospérmum scándens, Maurándy*a* Barclay*àna*; *Nèrium* spléndens; impossible that a finer specimen, as regards the size and richness of its bloom, could be shown. *Plumbàgo* capénsis and *ròsea*, the latter I never saw so fine as it was a short time since; some varieties of *Oxalis* have been very fine, the Bowiè*ii* still in bloom; the pelargoniums are now nearly over, but obtained universal admiration for profuseness of bloom. I think none equalled the variety Lord Brougham; that delicate variety grandiflòra, with the Fair Maria, is still in beauty; *Rhododéndron ròseum*, the umbel large, but color, I thought, quite too pale to call it a fine specimen; Ruélla formòsa has expanded a few blossoms. My roses, owing to the circumstance of its being one of the driest springs almost ever known here, and having been turned out, and that into perfectly *new ground*, have not done well, as yet. The Tigrídia conchiflòra and *Gladìolus* psittacìna have bloomed splendidly; *Verbèna Melindres*, Aublèt*ia*, Tweedie*àna*, and new shrubby pink, have been very fine; the two first varieties are natives of the prairies of this State; the last variety, when it first expanded its blossoms, was quite fragrant, but is now destitute of odor; Volkamèr*ia* japónica, now in fine bloom; Watsòn*ia* hùmilis, though poorly; the *Lychnis* coronàta is still in great beauty, and I hope will seed well; the *Dictámnus* fraxinélla is blooming well; the Passiflòra Kermesìn*a* has just opened its two first purple or shaded crimson blossoms, and is very rich and fine; Eugèn*ia* austràlis is not so fine as I had it last year.

I have probably been rather lengthy in my communication, but was desirous to render it intelligible to the novice in the science, as well as to the oldest practitioner; and, should you desire it, I would, in a short time, remit you some further communications upon the proper seasons for propagating plants in this section, and hints for the amateur gentlemen of the

south; as well as the only certain plan my own practice has discovered, by which the gardener or amateur can calculate upon getting his flower seeds even to appear above ground.

I am, gentlemen, yours, truly,

GILBERT R. ROTTON.

Mobile, May, 1839.

ART. III. *Some Remarks on the cultivation of the* Viola grandiflòra, (*Pansy.*) By S. WALKER.

IN the last number of your Magazine you gave your readers to understand, that an article on the treatment of one of my *pet* flowers might be expected at an early day. Since my former article on the pansy, (see Vol. I, p. 17,) I have raised many thousand seedling varieties, some of them large and very fine, as it regards shape, color and size. I have also cultivated some of the best varieties by layers, pipings, and by a division of the roots, with varied success.

My mode of cultivation and treatment of the pansy is as follows, viz:

Seedlings.—I prepare a suitable piece of ground, in a cool situation, by having it well spaded over, and turning in at the same time some well rotted manure, and after raking it over, I sow the seed some fine dry day, from the 1st to the 20th of July; I again rake over the surface lightly, and then roll or tread in the seed. [We have heard many complaints of the failure of pansy seed to grow; and the whole of them may be attributed to the simple fact, that the earth is not pressed down firmly upon the seed when it is planted. Make the earth fine, and be careful to beat the surface of the soil gently with the back of a spade, and the seed will vegetate freely.—*Ed.*] The top of the soil is again made even by applying the back of the rake. In from twenty to thirty days the plants will be up, and in October or November, some of them will show buds and flowers: at this period I prepare the beds I intend to flower my plants in, by having them well dug up and richly manured; the young plants are then transplanted into rows; the rows are twelve inches apart, and the plants in

the rows ten inches from each other. By the first of June, in the following year, when the plants will be in their best state, the flowers will nearly, if not quite, cover the whole surface of the bed. From the largest and best shaped and richest colored flowers I collect my seed, and, having prepared my soil, and sown the seed as above stated, another crop of seedlings is produced. This is my treatment of the plant as a *biennial.*

Layers.—Any fine variety which it may be desirable to increase, I sometimes propagate by layers. This may be performed at any time during the spring and summer months. I treat them as you would a pink or carnation layer, and they will readily take root.

Pipings.—Take the ends of the plants that are well ripened, cut below the third or fourth joint, according to their length and strength, making the cuttings about the length of your fore finger, which place into a small cup of soft water, until you have all the cuttings or pipings prepared of that variety; place some six or eight pipings round the edge of a No. 2 pot, in such a way that the top of the cutting may be even with the edge of the top of the pot; place a little fine white sand at the bottom of the cuttings, and fill up the pot with light soil mixed with some little sand; place them under a hand-glass in some cool shady situation, if done in the summer, or plunge the pots into a cold pit if potted as late as October or November; in the latter case the plants will be rooted and in flower by April. This last method is the best way to obtain fine plants from the old and choice varieties. The roots of an old plant may be divided successfully in April, or the latter end of September. Upon the approach of cold weather, the beds are protected with a slight covering of leaves, or coarse strawy manure.

A word on the properties of a good pansy, and I have done.

Shape.—The plants, on their outer edge, should be as near a circle as the character of the flower will permit, and should form a circular flower; or, in other words, the petals should be so formed and arranged, that the flower, when covered in its centre with a silver dollar, or any other round substance, its petals should present an equal width of petal all round the edge of the dollar or other round substance covering it. The edge of the petals should be smooth as if cut with a knife, and the flower should project from the plant on a stem five to six inches in length, presenting a flat surface, and standing erect.

Color.—On this point there is a great diversity of taste and opinion. The colors in this class of plants are very ex-

tensive, often blending into each other by the most delicate shades and tints. Those of a bright character and rich velvet color are preferred; a well shaped large pure white variety is but seldom produced, and is deservedly considered fine.

Size.—The larger the flower, the more valuable the variety, provided it has the important qualities of good shape and fine colors; otherwise, no matter how large the flower, the plant is of little value; and, on the contrary, a flower measuring upwards of one and a half inches across the petals, having good shape and fine colors, may be classed among the fine; those that reach two and a half to three inches across the petals, and possessing all the other good properties before named, may be classed as superior flowers, and rather among the best and choicest varieties.

Roxbury, June, 1839. S. Walker.

Art. IV. *Fancy Trellises for training Plants.* By the Editor.

From time to time, in our previous volumes, but more frequently in late numbers, we have called the attention of our readers to the importance of training many varieties of plants upon trellises, and the beauty they possess when handsomely trained up. The fine family of verbenas are all well adapted for training to trellises, particularly the Tweedie*ana*, chamædrifolia, &c. In parlors there is no object which our collections can boast, that will so well repay cultivation as the verbenas. The petunias are another class whose elegance, when growing in pots, (for we speak of pot culture, in connection with training on trellises,) cannot be estimated, unless their procumbent and slender stems have some means of supporting themselves upon a trellis. Lantana Selow*ii*, the kennedyas, tropæolums, Manett*ia* cordifolia, and many other plants, would be objects of much more interest, if properly cultivated and made to exhibit their flowers to good advantage.

Trellises are easily made of the common split rattan, and of almost any shape which the taste or fancy of the maker may desire. The expense of the stock is a mere trifle, and a few leisure moments are sufficient to enable any one of the least

mechanical turn to make one. For small plants a flat trellis may be made, which will answer very well until the plants get larger and require more space, when one like the annexed engraving (*fig.* 13,) may take its place, at the same time repotting the plant into such a size as it is desirable to have it remain to bloom; as the size of such trellises prevents their being afterwards easily shifted. The stems should be trained upon the lowest part of the trellis first, so that every part may be covered with foliage; tie the shoots with very fine bass matting.

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Such trellises as the above may be made without any other tools than a common awl, a penknife, and some small copper wire, or fine strong twine. First cut out the main rod, which should be about two feet long and half an inch in diameter; on this should be fastened a cap made of a circular piece of wood, about half an inch thick and two inches in diameter; around the edge of this cap should be made twelve holes, in which to insert the same number of small rattans, which form the trellis. At the base should be a circular piece of whole rattan, in which should be made twelve holes at equal distances, corresponding with those in the cap, in which to insert the base of the small rods: two bars should pass through the main rod at diagonal lines, and have their ends inserted into the whole rattan, to make that firm and strong enough to support the whole frame. The small rattans should then be put in; then finish off by running around the trellis four small rattans in circles, to which should be fastened with fine strong twine, or, what is neater, small copper wire, each small rod at equal distances; so that the whole may resemble in form the annexed engraving.

Oval, globular, or any other form of trellis, may be as easily made, but we have had them of all these shapes, and think that

they possess less beauty than such as we have described, and which we have found to give the most satisfaction to those who have seen them.

In a late number of Loudon's *Magazine* we have noticed that plants have been exhibited trained to trellises similar in shape, but made of wire, and have commanded universal admiration. The plan is rather new and novel, and deserving of general imitation.

Art. V. *Budding hardy Roses in June.*

By a Subscriber.

The two or three last seasons I have budded, from the 20th of June to the 15th of July, on the Boursault rose, against a western wall, the Austrian sweet briar, the Pimpernell, and the common single yellow roses, which flowered in the following May; and the double white, and some more choice French roses, on the same stock, which flowered in June; also the same roses on the Noisette, Common Blush, and Four Seasons' stocks in the open border, which do equally well, though later; and the Primrose rose, or old double yellow, (which so rarely blossoms) on the same stocks, promises now to expand its buds.

The buds should be protected from the sun by a covering of paper, for eight or ten days. If they fail, there is yet time enough to replace them; if successful, they will shoot one or two feet during the season, and will bear the winter, as will those which are afterwards put in, and advance only one or two inches. By commencing thus early, and budding through the season, you have every chance of success in our variable climate.

This practice may be common enough, (though not within my knowledge,) to render this communication of no value to your Magazine. A Subscriber.

Brookline, June 17, 1839.

[The above is from an amateur gentleman, who has succeeded better than any other cultivator, in the vicinity of Boston, in flowering roses in great perfection the first season after *budding*. We recommend the trial of this mode by every lover of roses.—*Ed.*]

ART. VI. *Method of flowering the Cliánthus puniceus, as practised by Mr. Sinton, gardener to Gen. Patterson, Philadelphia.* Communicated by G. WATSON, M. D.

THIS splendid shrub, which has been very recently introduced to our gardens, has flowered but once, to our knowledge, in this country. Mr. Sinton, gardener to Gen. Robert Patterson, of Philadelphia, having the past spring been successful in blooming a plant, we desired our friend and correspondent, Dr. Watson, to induce Mr. Sinton to detail, through our pages, his mode of treatment; or to inform us himself, if convenient, what peculiar system was pursued to bring the plant into bloom.

No plant with which we have ever been acquainted seems to be so liable to the attacks of that pestiferous insect, the red spider, as the Cliánthus. We have found it almost impossible to keep them off, and many amateurs as well as practical gardeners, with whom we are acquainted, inform us that they have found the same trouble in the management of the plants. So badly have they been attacked, that, in some instances, the plants have been thrown out of a collection, although they had been procured at the expense of two or three dollars each. It seems, from the experience of Mr. Sinton, that the only obstacle to overcome is the red spider, and that, if the plants are free from their fatal depredations, only ordinary treatment is necessary to its successful growth and flowering.

The plant under Mr. Sinton's care is planted within the green-house, and is trained up to one of the pillars: last summer every care was taken to keep it clear of the red spider, but without success. In the fall, when the new leaves came out, he persevered by washing *every leaf* with a sponge, regularly, so that he completely subdued them; he continued to pay the most unremitting attention to the plant, in order that they should not get hold again; by great diligence he succeeded. The past spring it began to form its flower-buds, and a profusion of blossoms were produced. At the present time the plant is covered with healthy and luxuriant foliage, and is making a rapid growth. The wash used with the sponge was soap and water, as well as tobacco juice; but these probably effected but little: to Mr. Sinton's continued care alone can the success be attributed.

Philadelphia, June, 1839.

ART. VII. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Floricultural Intelligence. Seedling Camellias.—Fine seedling camellias continue to be annually produced in considerable numbers. In our last, the descriptions of five very fine new varieties, raised by an amateur gentleman in Washington, D. C., were given, and we have been promised an account of three or four exceedingly fine ones, which flowered the past spring in the collection of Mr. T. Dunlap, near Harlem, New York. Some notice of Mr. Dunlap's seedlings will be found in our I, p. 244, and the same plants are now coming into bloom. One, which he has named imbricàta Dunlápii, is said to be a most splendid variety. Mr. Dunlap has kindly promised to send us some account of all the finest.

Alonsòa élegans is the name of a beautiful new species of this pretty and easily cultivated genus. Unlike the incisifòlia and the other species, its habit of growth is robust and erect, the foliage larger and stronger, and the flowers more than twice the size, and of a deep rich orange, inclining to a scarlet. It is a fine plant, and, although we have had it under our care but little time, yet we think we can discern in its habit a character which will render it well adapted for growth in parlors, where it will form, along with the Lechenaúltia, a brilliant object. Young plants turned into the border singly, and trained up neatly to a small rod, painted green, or planted in clumps or

patches, would present a gay appearance all summer. It is readily cultivated.

Clématis Siebòldi is now flowering in the collection of the Hon. John Lowell. It is one of the fine species introduced by Dr. Siebold, from Japan. We have previously noticed it (Vol. IV, p. 335.)

Correa longiflòra.—This is the name of a new kind, lately raised, making another addition to this limited genus. It is stated to be a beautiful species.

Verbenas.—The following new verbenas are advertised in the London periodicals, viz: *V.* var. Pylándsia, formòsa, spléndens, Wárdii, and new large crimson.

Antirrhìnum caryophylloìdes.—This splendid variety of the snap-dragon, has lately flowered in great perfection, at Mr. Walker's; the whole spike of flowers, which was very strong, being as finely striped as the most beautiful carnation. The plant does not always produce variegated flowers, but occasionally all red or all white. We have a plant in our collection, but it flowered last season without showing any of its true character. It is worthy of a place in every garden, if it should produce a spike of its variegated flowers but every other year.

*Camélli*a *japónica* var. *Louis Philippe*, which we noticed some time since, (Vol. IV, p. 252,) is figured in the *Horticultural Journal.* It is a nearly single flower, with only one outer row of large petals, and two inner ones of small size, the centre filled with petadoid stamens, in the way of dianthiflòra. The color is a deep rich red, like corállina; though a showy plant in a large collection, it scarcely possesses merit enough for a choice one. (*Hort. Jour.*)

New Striped Camellia.—Messrs. Chandler, of Vauxhall, the growers of the beautiful variety which bears their name, and many others equally fine, exhibited, at a late meeting of the London Horticultural Society, a new striped camellia, which was one of three imported from China a short time since. It is said to be a fine plant, and similar to *C.* var. tricolor: a premium was awarded Messrs. Chandler for the same.

Five new seedling camellias were exhibited at the meeting of the Horticultural Society, April 2, by Mr. Steele.

Pimelèa hispìdula, a beautiful species, resembling somewhat the P. ròsea, has flowered in Mr. Hogg's collection. We saw it in the early part of June, when it had three or four umbels of flowers expanded. It is a plant which should be in the possession of all lovers of Cape plants.—*Ed.*

Erica rùbens, one of the most exquisite of the whole of this lovely group, is now (June 20th,) in full bloom in the choice collection of Mr. Towne, and will probably continue in beauty for some time. The corols are small, of an oblong form, of that delicate pale rose or pink which is to be found in the E. pubéscens; and the whole plant, from the surface of the soil to the tip of the plant, is covered with numberless blossoms. Its habit of growth is erect and tolerably strong, and the plant we saw under Mr. Towne's care appeared to possess all the qualities of the best species. This will be followed by the *E.* ramentàcea, which Mr. Towne thinks will excel the former. Many other species are in bloom, and a fine treat is afforded in a display of several summer flowering sorts.

Art. VIII. *Notes on Gardens and Nurseries.*

New York, June 8th.—Mr. Hogg's Nursery. Since our visit to Mr. Hogg's last season, he has made several accessions of new plants, many of which he brought out with him when he returned from London last autumn. Not many of these were now in flower, but the stock has been rapidly increased, and young plants are to be readily procured of nearly all the finer kinds. The plants were all removed from the houses, with the exception of a few new geraniums, and as usual, at this season, we saw but little besides these which deserve any particular note.

The hardy roses were now nearly in their splendor; several days of cool and rainy weather had tended to retard their blooming somewhat, and a few hours' brilliant sunshine was wanting to open a fresh display of blossoms. Mr. Hogg has a fine collection of roses, budded as standards, and three or four hundred, standing together in parallel beds, formed a delightful show. We had not the opportunity to take the names of the varieties, but among them we observed many of great beauty: that splendid hybrid variety, Rivers' George IV, the branches almost reclining upon the ground, from the weight of the numerous buds and blossoms, was among the most conspicuous.

Mr. Hogg's collection may be considered as one of the best around New York.

We were particularly pleased with several very pretty yellow roses, seedlings of Mr. Hogg's; one of the number was peculiarly fragrant, and also a well formed flower, second only to Harrisònii. None of the kinds are yet named, but we hope Mr. Hogg will designate them in some way that they may be better known and introduced into collections. The herbaceous plants looked well, and many of them were flowering finely. The pæonies were in full beauty. A large bed of *V*erbèna multífida was exceedingly showy.

The Agàve americàna, under Mr. Hogg's management, which we have before alluded to, after suffering considerably from the effects of the cold weather during the winter, has taken a start, and made eight new leaves of a large size in the short space of fourteen days; the plant now appears better, and will probably make as many more leaves in about the same time. If it continues to grow so rapidly, it will, ere long, attain a flowering size. The plant had only a frame of boards, with a few sashes for the covering, erected around it, during winter, and there was no means of making a fire to warm the interior.

In the several frames to which many of the smaller greenhouse plants had been removed, we noticed some of the new verbenas raised by Mr. Buist, viz: *V.* Eyreàna and intermèdia; the former is a beautiful addition to the tribe, and is the lightest colored of all, except the *V. teucroìdes*, being a pale pink; the umbel is well shaped, and remains in beauty some time; in habit it resembles the Tweedieàna: we recommend it as one which no collection should be without. In the open garden we also saw the *V. teucroìdes* (álba of Mr. Buist,) and the Tweedieàna grandiflòra. The former is a fragrant and fine species, although the white is not quite so pure as we could wish it to be; towards evening the odor from the expanded umbel of flowers is so powerful as to be easily perceived at some yards distance: the latter plant was not, that we could see, superior to the Tweedieàna.

It is astonishing to look back and see the rapid increase of new species and varieties of this tribe; only a year since, when we were here, Mr. Hogg could enumerate but six or seven kinds, including two which he raised himself; since then several species have been introduced, and nearly a dozen varieties raised in Britain and this country; indeed, we may look upon the family of verbenas, as constituting a more brilliant feature in our gardens, green-houses, and parlors, than any other which

has been introduced for many years. Commencing with the beautiful and odorous new white one, the *V. teucroìdes*, and ending with that fine purple variety, the *V.* Arraniàna, we have all the intermediate shades of pink, rose, crimson, and scarlet; presenting, when planted together, a display of colors found in but few classes of flowers.

The geraniums have been reduced to but barely a sufficient number to replenish the stock for another year, and we found now only a few in bloom; but as these were, most of them, very fine new kinds, brought out by Mr. Hogg last fall, and not yet sold out, some account of them will be more acceptable to our readers: we should remark that the plants were past their meridian of bloom, and therefore seen by us under rather unfavorable circumstances; the following are the kinds:—Beauty of Ware, rose, fine form, and deep spot; Celestia, fine pink, with dark pencilling; Sphinx, pale rose, light pencilling; Rosa, similar to Diomede, but finer; Amelia, rose, with large dark spot; Conqueror, rose, with dark spot; Village Maid, bright pink, fine; Belladonna, Gem, Tam O'Shanter, Speculum mundi, Hector, Lord Hill, Mrs. Sweet, and some others, were also fine.

O'xalis floribúnda, displaying an immense number of rose-colored flowers, was exceedingly showy. It is a plant which should be added to all choice collections; opening its flowers during May, June and July, it must be ranked as the best of the spring and summer flowering ones, and a fit companion to the *O.* Bowièi, whose much larger, equally numerous, but brighter-hued corols, take the place of the floribúnda as soon as the latter has terminated its flowering season. We might mention, now, while the subject is upon our mind, that a few bulbs of the *O.* Bowièi should be potted in the latter part of July, or early in August, for blooming in September. Mr. Hogg has a new species of *S*álvia, of a remarkably robust and vigorous habit, which he procured in London, but without name.

The whole of the nursery we found in good condition, and such as must elicit praise from those who prefer to see a nurseryman neat and tidy about his grounds, rather than that neglect and confusion should meet the eye.

Astoria, G. C. Thorburn's Nursery, June 9th.—We found less to admire here, on our present visit, than during our tour last season. The stock of geraniums, which was then second to no other in the country for beauty, has been reduced to a mere handful, and scarcely half a dozen kinds of any merit were in flower. *V*erbèna incisa and Tweedieàna in pots were one blaze of flowers; the former being a showy kind. In the open

ground several round beds were planted with these two verbenas, and they were now flowering finely, and presented a gay appearance. The roses, of which there are here many fine sorts, were in full flower.

The propagation of the dahlia, at this season, engrosses all the care and attention of Mr. Mackintosh, and the grounds had not yet been put into order since last year; however, the space in front of the house had been newly laid out, and, on each side of the main walk, from the entrance, cut up into diamond and other forms; one side of the walk is to be wholly devoted to dahlias, and preparations were now being made to plant them out. If the season proves favorable, (and it is to be hoped it will,) the display of dahlias, next autumn, will exceed any thing of the kind ever seen. Mr. Thorburn has one of the finest collections. Here, as well as with all the nurserymen, the propagation of the *Mòrus multicaúlis* was going on.

Country Residence of W. L. Rushton, Esq., Jamaica, L. I. —In the beautiful village of Jamaica, on the main road to Rockaway, is situated the villa residence of Mr. Rushton, comprising, in extent, eight or ten acres of land. The house is built and finished in the Grecian style, and stands back from the road a sufficient distance to allow the space in front to be laid out in a handsome style. This has been recently done by Mr. McCandlish; the old arrangement not having been such as to gratify Mr. Rushton's taste, nor to make the best disposition of the ground. There is now a carriage drive from the main entrance; about half way to the mansion it branches off, and between the two walks and the house is a large space filled with fine trees and perennial flowering plants. These, in the course of a year or two, will make a beautiful appearance, and when the vacancies, of which there are several, are filled up in the summer with the choicest dahlias, an elegant display will be made, which will render this spot one of much interest. A belt of trees borders the ground on the main road, and another, passing from the road directly across the garden, as far as the rear of the house, is intended to serve as a screen to separate one portion of the garden from the other. The carriage drive, passing by the front entrance to the house, is continued around the back part of the garden to the stables in the rear.

Mr. Rushton has, the past spring, secured the services of Mr. McCandlish, an excellent gardener, and things, though in much confusion when he entered upon his duties, now look in good order, and will, in the course of the year, present an entirely different aspect from what they have done. Passing around the garden, we did not see a great deal worthy of very

particular notice: additional labor required upon some portion of the garden, which is planted with *Mòrus* multicaúlis trees, has divided his time in such a manner, that not so much has been accomplished as would otherwise have been. Mr. Rushton is quite an amateur, and adds many of the new plants which are annually introduced: we saw the new verbenas in flower, and the *V. teucroìdes* (álba of Mr. Buist,) lost none of its beauty by a second inspection. The garden in the rear of the house is laid out in squares, with straight walks crossing at right angles, and is planted with a good assortment of fruit trees, grape vines, &c. &c. We may have occasion, at some future time, to describe this more fully.

The green-house adjoins the mansion, forming a narrow wing on the south side, and is entered from the parlor. It is the whole length of the house, and about eight feet wide: the opposite side of the house has a wide piazza, of the same dimensions as the green-house; and both the green-house and piazza are covered in front with blinds, and the view from the front is the same on each side. The stage for the plants is entire, and occupies the whole space between the entrances. There was not much remaining in it now but geraniums, of which the collection is rich, and embraces a large number; among others we saw the following, in fine flower: Ontario, Diomede, Fair Maria, Hericartiànum, Dennis's Flagrans, Yeatmaniànum, Statira, Blue Beard, Albicans, Dennis's Perfection, Capt. Cook, Whèeleri*i*, Megalanthum, Nimrod, and many others, some under numbers, the names not having been attached. Epiphyllum splendìdum and Ackermán*ii*, and Cèreus Jenkinsòn*ii*, the two latter in full flower, made a fine show. The oranges, camellias, &c. had been removed out into the open air.

One thing we noticed, with which we were much pleased; this was the distribution of a great number of the Maltese vases on the margins of the walks, both in front and in the rear of the house; some of them were filled with verbenas, which had just commenced flowering: a tall broad vase, elevated on a pedestal, directly in front of the rear entrance to the house, had a fine effect. We only wish to see this style generally imitated by all amateur gentlemen.

Mr. Rushton's place is yet new, but a great deal has been done to make it what it now is, and much yet remains to be accomplished: it will, in a few years, be one of the finest residences on the island. Mr. Rushton contemplates several improvements, which will be great additions to the grounds.

MISCELLANEOUS INTELLIGENCE.

Art. I. *Foreign Notices.*

FRANCE.

The Vines of France.—We find the following excellent, though rather lengthy article, in the *Horticultural Journal*, from a correspondent. As it contains the best description of the celebrated departments which are mentioned that we have ever read, we present it entire. The varieties of the grape in France are almost numberless. The national collection in the garden of the Luxemborg, at Paris, contains five hundred and seventy varieties, arranged according to the color and form of the grape. The article is worthy of an attentive perusal.

"*Perpignan.*—The vines generally planted are of three varieties, viz: the Grenache, which gives sweetness; the Carignan, for color; and the Mataro, which yields the quantity. The vines are generally planted either on the plain or on a gently inclined slope; but when there is a slope, the exposure is always to the south. The soil is loose and stony, the stones *quartz*, of various colors and shades. The distance at which the vines are planted is always four feet, and the *quincunx* is preserved with the greatest possible exactness. The ground is ploughed twice a year, that is, immediately after the pruning, which takes place in November, and in spring, after the vines have given shoots from eight to ten inches in length. On both occasions it is first ploughed in one direction, and then cross-ploughed. It receives no other labors during the year, and in summer, such is the strength of vegetation generally among the vines, that few weeds make their appearance, the ground being almost covered with the vine shoots. The cuttings are then put down in holes, made by an iron bar or dibble, and left to shift for themselves. Under this treatment, it requires six years before the vineyard is so well established as to yield a crop.

"For the planting of the Muscat grape, of Frontignan, which also requires six years to come to maturity, a hole is dug for each plant, eighteen inches deep, by eighteen inches long and twelve wide, and the cuttings are laid horizontally into this trench, bending up the extremity where the plant is to grow. This produces a greater number of shoots from the roots. The crop is nearly double to that of the ordinary vineyards. The stocks are all extremely low, not more, in general, than six inches from the ground; but so well is the pruning managed, that all the shoots are nearly vertical—stakes or props are thus quite unnecessary, and are never used. The number of knots or buds left in pruning is from three to six, according to the strength of the plant. They are universally pruned in the spur fashion. There is no fear, by this method, of the worms finding their way to the heart of the stock unless it is bruised or broken, and not by any close pruning of the new wood. The average produce of these vines is six barriques (hogsheads) per hectare, or about one hundred and forty gallons per English acre.

"*Rousillon.*—The finest quality of Rousillon red wine is produced in the environs of Collioure, near Port Vendré. The soil is richer

than in the neighborhood of Perpignan. The road from Collioure winds from hill to hill along the shore. The hills are exactly similar in form and structure to those of Malaga; a shale or schist, with a slaty gravel, plentifully mixed through the soil. The hills in the neighborhood of the town are planted with great regularity and beauty, in terraces from six to eighteen feet wide, according to the slope of the hill. The terraces are made to follow the different curves taken by the hills, and are divided by channels to allow of the passage of the water. In planting these hills they break up the ground only to the depth of eight or nine inches, and as they take out a great number of stones, the depth of the soil remaining is not more than six inches. They then bore a hole in the loose rock with a bar of iron, and thrust in the plant to the depth of twelve or fifteen inches. A *hectare* of middle-aged vines is here worth one thousand francs (£40.) The greatest expense is in the first plantation, for it is universally necessary to build a series of terraces to support the soil. The distance of the plants is from three to four feet, and the pruning is in every respect similar to that of the vines of the plain. The varieties chiefly cultivated are the Grenache and the Carignan. The vines are never manured. The wine sometimes remains in the fermenting vat so long as thirty days. Like the wine of the plain, it is seldom drank in its pure state, but is sent to Paris, with an addition of from seven and a half to ten per cent. of brandy, in order to be mixed with the lighter wines of Burgundy and Orleans, to give them strength and color. The wine of Casperon, which is celebrated as a *Vin de Liqueur*, is the produce of a farm under one of these hills. It is nothing more than a mixture of brandy with the unfermented juice of the grape. After the grapes (of the Grenache kind) are very ripe, they are gathered and allowed to dry a few days in the sun; they are then pressed, and the juice is put into a cask, where it is mixed with one third to one half of its own bulk of brandy. The brandy prevents the fermentation, the liquor retains the sweetness and flavor of the fruit, and this is the *Vin de Liqueur* of Casperon, which has acquired a great name in the south of France. The irrigated land is worth one thousand five hundred francs, about £60, per hectare; the vineyards not more, in general, than one third of that sum.

"*Rivesaltes* is famous for producing the first sweet wine of France. It is situated in the middle of an irrigated plain, about four miles from Perpignon. The vineyards are on the extremity of the plain, where there is a dry granite soil; and on that point which separates the meadow land of Perpignon from that of Rivesaltes it is so thickly covered with stones of various colored quartz, as to make it difficult to tread upon it. It many places where the vines appear to grow with great vigor, and to have attained a great age, the soil is of such a nature as would be considered by many absolutely sterile. The pruning here, as elsewhere, is universally in the spur fashion; from three to seven or eight knobs being left on each vine, according to its strength. The stocks are generally close to the ground. They never think of trenching the soil before planting; but after hoeing it in the ordinary way, they make a hole with an iron dibble, and thrust in the plant, where the vines are manured with strong stable dung. The Muscat is the grape commonly cultivated. The wine is made as follows: The grapes are allowed to hang upon the vines till they are so ripe that they begin to shrink; they are then cut, and left on the ground under the vines for eight or ten days, unless the weather should prove unfavorable; after which they are pressed, and the juice

is put into a cask, leaving the bung out. About a month after this it is drawn off to a fresh cask, which is prepared by burning a match, not of sulphur, but strong brown paper, steeped in the strongest brandy. The Muscat wine of Rivesaltes sometimes brings the proprietor three hundred francs, the charge of one hundred and eighteen *litres* (bottles), when it is only one to two years old. In filling up a vacant space, when they cannot find a shoot on any of the neighboring vines, long enough to reach the spot, they take the longest shoot there is and lay it in a circular form round its own stock. The following year they raise it, when, with the shoot it has produced, they can not only reach the spot to be filled, but have, by this means, a strong plant to fill it.

"*Montpelier.*—The whole country from Baziers to Montpelier, on both sides of the road, is covered with vineyards. The hills are covered with olive trees, intermixed with vines, but the plains with vines only. The vine is cultivated even in the alluvial plains, and the immense size of some of the stocks, with the vigor of their numerous shoots, proves that this plant is no enemy to a rich soil. The wines of this district are almost universally converted into brandy. The soil, in some places, resembles the abarizas of Xeres; but on trial it is found to be argillaceous, and not calcareous. Notwithstanding the great luxuriance of the vines, and the strength and length of their shoots, still no supporters or props are used, and they spread as they rise. In the Botanic Gardens of this city, one of the finest in France, there is a collection of five hundred and sixty varieties of vines.

"The road from Montpelier to Nismes and Marseilles lies through a well cultivated country, producing chiefly vines and olives. The wine is more used for the table than for distillation. There is a mixed cultivation of vines, olives, and corn, alternating in rows of different widths; and the vineyards are also very generally planted with olive trees.

"*Roquevaire.*—The road almost every where proceeds among steep acclivities, which are so cultivated that it has the appearance of a garden; and the same field frequently bears at the same time a triple crop: first, is a triple or quadruple row of vines, then an open space from six to twelve feet wide, under corn and vegetables; lastly, there is, with every third row of vines a row of olives, and often mulberries. This part of the country is celebrated for its dried raisins, almonds, figs, and other fruits, which are sent to Paris. There are no less than sixty-seven varieties of figs cultivated in the Department of the Bouches des Rhone.

"*Hermitage.*—This wine is one of the most celebrated in France. Its mode of making is very simple; as the *must* flows from the press, it is conveyed to the casks, where it is suffered to remain to ferment, from five days to a month, according to the strength of fermentation, the casks being always kept full to permit the scum to escape. When the first fermentation is decidedly finished, the wine is drawn off into a clean cask, which has been previously sulphured. This is the whole process of making the white wines of Hermitage. They are more or less sweet, according to the proportion of sweet and dry grapes which have been united in producing them. This is the finest white wine, and will keep for upwards of a hundred years, improving as it gets older. The finest clarets of Bourdeaux are mixed with a portion of the finest red wine of Hermitage, and four fifths of the quantity of the latter are thus employed. The 'Hill of Hermitage'

is so called from an ancient hermitage, the ruins of which are still in existence near its top. It was inhabited by hermits till within the last hundred years. The hill, though of considerable height, is not of great extent; the whole front, which looks to the south, may contain three hundred acres; but of this, though the whole is under vines, the lower part is too rich to yield those of the best quality; and a part near the top is too cold to bring its produce to perfect maturity. Even in the middle region, the whole extent does not produce the finest wines. There is a belt of calcareous soil, which crosses the ordinary granitic soil of the mountain, and it requires the grapes of these different soils to be mixed, in order to produce the finest quality of hermitage. They possess a considerable portion of lime. A good deal may also be attributable to the selection of plants. The best red wines are made exclusively from one variety, named Ciras, originally brought from Shiraz in Persia, by one of the hermits; the white varieties are the *Roussette* and the *Marsan*. The labor bestowed on these vineyards is immense. On their first plantation, and every time the plantation is renewed, the soil is dug to the depth of four and a half or five feet. In most places it is also supported by terraces. Whenever a vine is observed to be weak, or to yield a poor crop, it is dug out, and its place supplied by a *provin* from the strongest vine in its neighborhood. A trench, of about two, or two and a half feet deep, is opened between it and the nearest vine in the adjoining row. The stock is carefully bent down till it is laid flat along the bottom of the trench; a quantity of dung is next put over it, and then some soil. The stock by this process becomes the root of two distinct vines, and their connection is never destroyed. Provided horse or sheep dung only is used, there is no danger of giving the wine a bad flavor; the contrary is the case if the dung of cows, or especially pigs, is used.

"The vines seldom last more than thirty years, and would not last that time were they not taken from young vines of five or six years old. They are planted at the distance of only two and a half feet from each other. In general there is only one mother-branch, and one shoot (very seldom two) is pruned to use the shoot of the season; on this shoot are left from three to eight buds, according to its strength, and from eight to ten bunches is the average produce of each vine. They yield from two hundred and ten to two hundred and sixty gallons per English acre.

"*Burgundy.**—The plants in this district are very close and feeble. They open a small furrow with a spade only one spit, of about

"* The system of *provignage* employed in this province, as well as Champagne, in the cultivation of the vine, is rather interesting. It is as follows: Suppose a small portion of ground to be annually planted with vines. At the end of ten or a dozen years, a number of the plants, in the portion first planted, become weak and worn out; these weak plants are removed, and their places filled by *provens* (shoots) from their stronger neighbors; but these provins are not mere layers which leave the stock exactly as before. The whole space of ground, generally the breadth of two rows of plants, is dug out to the depth of about two feet; the old stock is then laid down flat in the bottom of the trench, and the branches, that is, the wood last produced, are twisted and bent into the places where the voids are to be filled. The stock is thus converted into the root of two or three different plants; it throws out fibres from every side, which henceforth yield the nourishment to the plants, and the old root dies off. By this means young colonies of plants are introduced, which are afterwards employed in peopling their neighborhood, when they have acquired sufficient strength. The *provignage* extends irregularly over the whole vineyard, but most, or all, of the plants are thus buried and renewed once in twelve or fourteen years; and thus the whole is in a

twelve inches wide, at the bottom. The furrows are two and a half feet apart, and the plants placed in them at the distance of fourteen or fifteen inches; the lower end of the plant is placed across the bottom of the furrow, and bent up at one side, a quantity of dung is placed above, and then the soil is covered in, which finishes the plantation in December. After these vines are three years old the strongest of them is selected to fill another row, between each of the present rows, by the system of *provinage*, the same as at Hermitage. The soil is light, and mixed with stones; near Chagny at Beaune it is of a rich brown loam, and some is slightly calcareous. The department, through its fertility in corn as well as vines, is justly called the *Cote d' Or.* The large plant will yield upwards of one thousand gallons per acre.

"*Chambertin* and *Vougeot.*—The land under vines is generally very much subdivided throughout France, but here in particular, as five or six proprietors often divide among them a piece of ground not exceeding an acre. The vineyard of Chambertin does not extend more than fifteen to twenty acres, which is subdivided. The soil varies extremely, even in the distance of a hundred yards; that nearest the road is of a brown loam, full of gravel and very friable. The gravel consists of small broken pieces of the whitish limestone, of which the hill is partly formed. At the upper part it is of a light-colored clayish looking soil, with a subsoil of marl, and abundance of small shells. Both of these soils strongly effervesce with an acid, but the light contains a greater proportion of lime. The vineyard of Clos Vougeot formerly belonged to a convent, and is about forty-eight hectares, or one hundred and twelve and a half English acres in extent. The soil is nearly the same, and in other parts of a pure clay, of a dark yellow color, without any admixture of calcareous matter whatever. The average produce of twenty years is about three and a half hogsheads annually per English acre. The red wines will fetch from twelve hundred and fifty to fifteen hundred francs the hogshead, whilst the white seldom rises above six hundred franks (£24.) The wine of ten or twelve years old is bottled, and sold at the rate of six francs the bottle. They never manure the vines.

"*Champaigne.**—The cultivation of the vine is nearly the same throughout this province. The annual produce is from four hundred

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constant state of bearing (the provins yielding a crop the first year), and it is seldom necessary to introduce young vines. All the small proprietors manure their vines with strong stable dung, both from horses and cows, without distinction.

"* The closeness of the plants in this province is even more remarkable than in Burgundy. If it were possible to keep the vineyards fully furnished with plants, there would be one for each eight or nine inches in length, by six or seven in breadth. The mode of *provignage* practised in Burgundy, is most particularly realized here. Every year an addition is made to the bottom of the vineyard of a certain number of plants, and the whole of the vines are in a state of continual progression, being buried, and by that means carried twelve or fourteen inches up the hill every third year. The process is, of course, not regular, for in every place there are plants in each stage of the progress which they pass through. According to the number of the voids that are to be filled, the branches of the stock that is buried are from two to four or five. On each of these branches, when pruned in the spring, are left two buds; these buds produce branches or shoots, which bear fruit the first year. The next spring three buds are left upon the higher, and two upon the lower of the two shoots, and the spring following they are pruned to bear shoots corresponding to the number of voids to be filled in their vicinity, for their turn to be buried has again arrived. By this means a supply also of rooted plants is obtained, when required; but when these rooted plants are cut off, and planted out, they never bear fruit till the third year, and it is believed the roots never die. They frequently trace them to a very great

and forty to five hundred and thirty gallons per English acre. One thousand one hundred gallons have been known to be yielded in a few instances where the plants have been well manured. The depth of soil before reaching the chalk on the hill of Ay, is in the most places from ten to fifteen feet; near the top it is more argillaceous and stronger than towards the bottom. The vineyards throughout France are all situated more or less in calcareous soils; there is, in some instances, a mixture of the granite which causes the hermitage to be so renowned. The soils producing the best dry wines are invariably the calcareous, not only in France, but Spain, Portugal, Italy, &c."

Polygònum tinctòrum.—The French are directing their attention to the cultivation of this plant as an article of agricultural produce, for the extraction of indigo, as a coloring matter, which answers equally as well. Considerable has been said about it in the French agricultural publications, and several experiments detailed, from which it appears that the plant will form as staple an article as the beet sugar, or the production of silk—two branches of agriculture, to which the French are devoting great attention.

In a late number of the *Annales d' Agriculture Francaise* is a notice of the cultivation of the polygonum, from the pen of M. Farel, member of the agricultural society of Herault, and well known as a horticulturist. The writer has grown the plant since 1837, and with good success: last year he had increased his stock of plants to three thousand. The polygonum is an annual, and is cultivated in beds, growing to the height of three or four feet. The plants were gathered in August and in September, and the writer has obtained as splendid indigo as was ever seen. The article is too long to be fully given, but M. Farel gives the following estimate of the product and net profit of an acre:—

	francs.
Cultivation of an acre of land	600
Gathering of leaves, at two francs every hundred kilogrammes, on 80,000 kilogrammes an acre	1600
Labor, for obtaining the fecula, at 2 francs the 100 kilogrammes of fresh leaves	1600
Expense per acre	3800
Produce of indigo, of one half for 100 on 800 quintals of leaves —400 kilogrammes at 14 francs per kilogramme . .	5600
Gain per acre	1800

Equal to nearly one hundred dollars per acre. This estimate, owing to the price of labor, &c., is not a sure guide to the growth of the plant in this country; but we hope some of our enterprising agriculturists will try experiments to test its value. (*Hort. Jour.*)

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length, but never disturb them, always burying the others above them. The manure is always added to the plants which have been buried; a handful of earth is first put over the plant, and the manure above. They are, however, extremely cautious as to the quality of manure. In some places they employ dung from the farm-yard, mixed with soil, but in general it is only strong soil from the valley below, mixed with ashes, and other amendments of a mild description. The vines suffered severely from the severity of the winters 1829–30, and 1837–38.

"It may be seen from the above article that the vine may be cultivated nearly in any soil with advantage, and no doubt will, if persevered in by the horticulturalists of New South Wales, Australia, and New Zealand, be most productive, as both soil and climate are suitable for its growth."

ENGLAND.

Mr. Groom's Exhibition of Tulips.—The private view of Mr. Groom's collection of tulips took place on Thursday, at Mr. Groom's gardens, at Walworth. The coldness of the weather, during the last week, though it has retarded the growth and full expansion of the flowers, has not affected their general health; they are in the finest possible order, and in a day or two will be in the full exuberance of beauty. The principal bed, indeed the best which forms the exhibition, contains nearly two thousand tulips, all of the rarest character, and all superb specimens of their various sorts. The effect upon the eye of so many vivid yet delicate colors, is delightful. There is nothing tawdry in this display—the coloring is by "Nature's own hue and coloring hand," and is too well blended and harmonized to offend. In a word, a more beautiful exhibition cannot be produced. Some of the tulips are of great worth. There is one, the "Nourri Effendi," for which the grower has been offered one hundred sovereigns. The "Louis XVI." is also a very costly flower. There are several specimens of the "lac," one of the gems of tulip beds; the "Fabius," the "Rembrandt," the "Polyphemus," &c. the names of which are familiar to the "fancy," but a mystery to the public. It is generally allowed that this collection surpasses any thing of the sort in Holland, the elysium of tulip growers: there is certainly nothing like it in England. Notwithstanding the badness of the weather on Thursday, the exhibition was attended by a great many fashionable people, and there were many amateurs of floriculture, who came considerable distances to inspect and admire the flowers.—*London paper.*

The Rohan Potato.—In the *Quarterly Journal of Agriculture* is a notice of this celebrated potato, by Mr. G. Kimberly, who was probably one of the first to introduce it into England. From this article we extract the following, which confirms all that has been said of this remarkable production:—

"Having heard from some friends then travelling on the continent, of the above-mentioned potato, and having subsequently read the above account, I was induced to try, by every means in my power, to obtain a few for seed, which I did without success: however, in the autumn of the year 1836, I was informed by friends then living in the vicinity of Paris, that they had occasionally purchased potatoes in Paris which weighed upwards of ten pounds each, for which they gave one *franc;* that they purchased it as a treat, and that, cut in slices of about two inches thick, it boiled well, was very farinaceous or mealy, and of fine flavor. The gentleman who wrote me this account of the potato, having left the neighborhood of Paris for Spain, previous to his writing, I was at a loss where to obtain some seed, and I applied to one of the first houses in London, to try, through their agents in Paris, to get me a few of the potatoes, and after considerable delay I obtained two small tubers, with the information that they were very dear, and difficult to get.

"About this time I had a friend arrived at Paris to spend the winter, one whose active mind I knew would be rather stimulated than deterred by any difficulty arising in obtaining what I wished. He at once kindly undertook, if possible, to procure me some Rohan potatoes for seed; and after a great many inquiries, a most diligent search, and considerable expense also in the purchase, he obtained and sent me, in a small basket, sixty moderate sized tubers; these I compared

with the two tubers I had already received, and found them on inspection to be exactly the same sort: these tubers, though they arrived late in the planting season of 1837, I immediately planted as before described; but being under trees they suffered severely from the dry weather; yet the stems were eight feet high, and the produce was twenty-four bushels, full measure, and some of the tubers very large. My object, however, being to know what they would produce cultivated with the common field culture, I ploughed in the twenty-four bushels, with a moderate quantity of manure in rows, four furrows apart, or about thirty-six inches, on the 10th May last, 1838, without any other preparation than was bestowed on several acres of potatoes in the same field; they again suffered from the dry weather, indeed to such an extent did my whole crop appear to be injured, that I had given up the hope of any satisfactory result; and I found, by reference to my day book, it was not till the night of the 10th of June, and the morning of the 11th, that we had any rain sufficient to lay the dust. We took up the Rohan potatoes October 18th, and the crop was very large: they much amused the persons taking them up, and other observers, by their extraordinary size and produce—many of the tubers weighing from two and a half to three and three quarters pounds; they are very farinaceous and delicately flavored; and I have no doubt, cultivated on good land and in the way mentioned, they would reach the size specified. Of this we may, however, rest assured—and I can recommend them as yielding the most abundant produce, under ordinary cultivation—that the produce is fit for the table of the most fastidious person."—*Quart. Jour. Ag.*

Art. II. *Domestic Notices.*

An Exhibition of Roses and cut Flowers, for Premiums, took place at the Conservatory attached to the Public Garden at the foot of Beacon street, on Tuesday, the 25th of June, and was continued until the evening of the 27th. The weather was delightful during the whole period, and the number of visiters, consequently, very large. In addition to the fine collection of plants belonging to the garden, which is well worth seeing, the rich collection of fine roses, and cut flowers of all kinds, contributed by many of the amateurs and gardeners in the vicinity, was an inducement for all to improve the opportunity to visit the Conservatory. Independent of the interest which the proprietors may have in getting up such a show, to make the garden better known, we think the taste for flowers will be elevated and increased by such displays. We should like to see them more frequent, and we trust that the liberal amount to be awarded as premiums on the occasion, will be the means of encouraging amateurs to renewed exertions.

The flowers were arranged so as to show to good advantage. In the extensive saloon, on each side, was a circular stand filled with roses from the collection of Mr. Aspinwall. Passing through this into the

Conservatory, on the outer side of the walk, around the large central stage, was a stand for flowers, occupying a complete circle, and exposed to the full view of every visiter. This was filled with cut flowers, and a brilliant display was made. The contributors were Messrs. Aspinwall, T. Lee, Hovey & Co., S. Walker, Wm. Meller, W. E. Carter, Messrs. Winship, S. R. Johnson, A. Bowditch, and some others. The following is a condensed account of the exhibition:—

From A. Aspinwall, an extensive collection of splendid roses, embracing a numerous variety. From T. Lee, Esq., some fine plants, viz: *Kálmia* latifòlia, clarkias, *Chrysèis*, *Phlóx Drummóndii*, roses, &c. and a few dahlias. From S. Walker, a splendid collection of seedling pinks, embracing the following which have been named:—Othello, Col. Wilder, Estelle, Mary Louise, and Walker's Claudius; also, fine pansies, roses, phloxes, *Antirrhìnum caryophylloìdes*, and *pictum*, campanulas, phloxes, pæonies, *Œnothèra macrocárpa*, &c. and handsome bouquets. From Hovey & Co. two large bouquets. From Messrs. Winship, a large collection of cut flowers, embracing a great variety of hardy perennial shrubs, &c., spiræas, larkspurs, roses, *Alstrœmèria psittacìna*, Cèreus speciosíssimus, &c. &c. From William E. Carter, of the Botanic Garden, beautiful specimens of *Pæònia* albiflòra var. *Hùmei*, fràgrans, and *Whitlèji*; also, roses, sweet scabious, annual chrysanthemums, &c.

From A. Bowditch, bouquets, Cèreus speciosíssimus, Dennis's Perfection geranium, *Verbèna Tweedieàna*, &c. From S. R. Johnson, a large collection of hardy and tender roses, the latter including most of the fine ones exhibited at the Saturday meeting previous of the Massachusetts Horticultural Society. From Mr. Meller, seedling pinks and pansies, dahlias, a beautiful specimen of the white Unique rose, together with bouquets, and other flowers.

The award of premiums was not made in season to appear in this number, but it will be given in our next.—*Id.*

New Verbenas.—Our correspondent, Dr. Watson, has sent us the descriptions of five *new* seedling verbenas, raised in Philadelphia by Messrs. Mackenzie and Buchanan, florists, and Mr. R. Kilvington, gardener to William Lloyd, Esq. We have been under the necessity of deferring the article until our next number. The varieties of this family, all the products of our own enterprising horticulturists, will soon outnumber those of our transatlantic friends.—*Ed.*

Cèreus grandiflòrus.—A plant in the collection of Mr. Leathe, Cambridgeport, has produced three flowers, and two or three more will expand early in July.—*Id.*

Dahlias.—We congratulate our friends, and all lovers of this splendid flower, upon the prospect of a fine blooming season. So far, the plants have made a vigorous growth, and present that healthy aspect which is ever the characteristic of a flourishing state. Insects are not so numerous as they were last summer; and, unless excessively hot and dry weather overtakes them soon, there is not the least doubt but that there will be a more magnificent display of blooms than was ever seen in this country before. We shall keep our friends informed of the state of the plants.—*Id.*

The Madame Hardy Rose is one of the most exquisite white roses we have ever seen; the pureness of its color excels all other white roses. We have had it in flower the past month, and recommend it as one of the finest roses in cultivation.—*Id.*

New Geraniums and Carnations.—Mr. Donald, of the Public Garden, received per the steamer Great Western, on her last trip from

Bristol to New York, some fine new geraniums and carnations in very excellent condition, particularly the former. The varieties are some of the newest, and we are happy to learn that the efforts of this establishment are so early directed to the introduction of fine plants, and that the geranium should be among the first which they should attempt to procure. We have no doubt but that the plants, under the management of Mr. Donald, will be grown in such vigor as to produce a beautiful bloom the ensuing spring, and thus afford the public an early opportunity of viewing the finer varieties of this much admired flower. We have not learnt the names of the kinds.—*Id.*

Pæònia Póttsii.—This beautiful pæony has flowered in the vicinity of Boston, the present season, for the first time, in the garden of Mr. John Richardson, of Dorchester. Mr Richardson is an enthusiastic amateur, and has been the first to flower many beautiful new plants. *Pæònia* Póttsii has, however, we believe, together with the splendid *P.* edùlis var. Rèeves*ii*, previously bloomed in the garden of Mr. F. Putnam, of Salem. Both are valuable additions to collections.—*Id.*

Chrysèis crócea and *califórnica*, from seeds self-sown, are now (June 10th,) two of the most magnificent objects in the flower garden. We have a bed about ten feet square, the plants in which spring up early in April, and they have now, although great quantities have been thrown out, covered the whole of the ground, and present, on clear days, with a brilliant sunshine, a carpet radiant with gold. We know not an annual which so well repays cultivation as both of the species of the chryseis. The plants spring up readily from self-sown seeds, and flower from June until frost, though they look rather shabby after the middle of August: a sowing, however, made any time in May or early in June, will come into bloom in July, and continue to flower abundantly until November. A light soil and dry situation, in a fully exposed aspect, suits them best. Whoever should once look upon a bed when the golden flowers are glittering under the rays of the mid-day orb, would never be without a patch or two filled with the plants. If the lamented Douglas had introduced but these two species, during his whole journey to the Columbia, his labors would have been well repaid. Fortunately, however, there are numerous annuals, whose beauty comes but little short of the chryseis, and whose presence serves to commemorate the name of their adventurous discoverer.—*Id.*

Mr. Wales, of Dorchester, favorably known to amateurs and gardeners in the vicinity of Boston, as an excellent cultivator of plants, is now on a visit to England, having sailed in the steamer Liverpool, to purchase plants and acquire information relative to the practice of horticulture. He will probably bring out some new and fine plants. We hail the navigation of the Atlantic, by steam vessels, as affording us the means of enriching our gardens with all the choice productions which the enterprising gardeners of England, under the patronage of her nobles and wealthy gentlemen, have, within a few years, been so successful in raising. There is not scarcely a plant, but what may be, if properly packed, brought alive and in good condition in the steam packets. Heaths, carnations, and other plants, which it has been found impossible to procure alive by the packet ships, which average twenty-five days' passage, will, no doubt, come safely during a confinement of only fourteen days in the steam ships.—*Ed.*

*Psidium Cattley*ànum.—A plant of this fine species of guava is now producing fruit in the collection of Hovey & Co. There are more than four dozen fruit upon the plant, which is above six feet high,

nearly as large as walnuts; it is, we believe, the first time it has borne in the country.—*Ed.*

Blight in fruit trees prevented.—Our horticulturists may be prepared to express their delight at the astonishing fact, that the blight,—that dreadful malady, the scourge of the fruit cultivator,—is no longer to be feared. Mr. Russell Comstock, of New York state, has discovered an infallible method of not only preventing it, but of stopping all kinds of disease, of whatever kind, natural to fruit trees. So much success has attended his efforts, that a tree, thirty inches in circumference, that had been divested of its bark, except a narrow strip less than an inch in width, has been restored to life and vigorous growth, and bore fruit the past season! This is certainly an age of improvement. The only bar to Mr. Comstock's preventive ever becoming of general use is, that he asks rather too high a price for divulging the secret; which is said to be at the rate of *half a dime* per capita upon the whole number of persons comprising the population of the United States—equal to $750,000! He intends, we believe, to memorialize Congress upon the subject, and the propriety of purchasing his right, that the nation may be benefitted alike. We certainly should have no objection to paying our portion of the amount demanded, or a very much larger sum, but we should first prefer to see the method fully tested. We must acknowledge, although we can relish a little that is marvellous, that Mr. Comstock's system has too much the appearance of *humbuggery* for our belief. We are not among those who are ready to ridicule every new project; but so universal a remedy for all diseases of trees, and in particular for the blight, which has puzzled the skill of our most scientific men to prevent, seems altogether too absurd to deserve serious attention.—*Id.*

Horticultural Society in Brooklyn, N. Y.—A Horticultural Society has been formed in the city of Brooklyn, and an exhibition of plants took place on Thursday, the 16th of May; the meeting was very well attended, and the display of flowers very good for the season. Our friends in Brooklyn have promised us an account of the exhibition, drawn up by Mr. Halsey, the Corresponding Secretary. Brooklyn contains a great number of amateurs, and we hope that the Society will go on in a flourishing condition.—*Ed.*

Maryland Horticultural Society.—The annual exhibition of this Society was held in Baltimore, in the early part of June. A report of the exhibition has been kindly sent us, but we have no room for its insertion in this number. It was got up in good style, and the number of contributors was large. Premiums were awarded, and the whole passed off to the delight of the public and the gratification of the Society. We shall notice the report in our next.—*Id.*

Mr. Buist, of Philadelphia, has, we learn, sailed for London in one of the packets from that port, and will spend two or three months in visiting the nurseries throughout the kingdom. He will, probably, bring out with him many new and fine plants. The communication between the two countries is now so complete, that a tour across the Atlantic is considered but little more difficult of accomplishment, than one between the cities of Boston and Philadelphia was, a few years since.—*Id.*

Art. III. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society was held on Tuesday evening, the 18th instant, the President in the chair.

The Committee on Vegetables awarded the following premiums at the Society's intermediate meeting, on the 29th of May last, viz: for the best early cabbage, grown in New Jersey, to George Robinson, gardener to Horace Binney, Esq.

For the best early turnips, grown in New Jersey, to Jacob Amor, Camden. The Committee recommended them to special notice, being remarkably fine.

For the best early peas, grown in Pennsylvania, to William Chalmers, gardener to Mrs. Stot, Turners Lane.

For the best early cabbage, grown in Pennsylvania, to Philip Reilly, gardener to Simeon Gratz, Esq.

They also awarded an honorary premium to Mr. Chalmers, gardener to Mrs. Stot, for some very fine beans.

In the absence of the Committee on Fruits, they also awarded the premium for some fine strawberries, to Andrew Patton, gardener to Mrs. Kohne, Turners Lane.

Some fine Naples radishes were exhibited by John Dougherty, gardener to Atsom Furnes, N. J.

The Committee on Plants and Flowers awarded the premium this evening, (the 18th,) for the best six varieties of pinks, to Mr. Hobson, Kingsessing, and for the best American seedling pink, (Emeline,) also to Mr. Hobson.

The premium for the best display of plants, in pots, was awarded to Messrs. Mackenzie & Buchanan, they having exhibited Combrètum purpùreum, Ixòra coccínea, Fúchsia fúlgens, in fine flower, the first ever exhibited at the Society's rooms; Ornithógalum aúreum, Nierembérgia filicaúlis, Calceolària Majoriàna supérba, C. integrifòlia and varieties; Pelargònium spéculum múndi, statìra, purpùreum cœrùleum, diademàtum supérbum, tricolor màjor, and Dennis's Perfection; Gloxínia grandiflòra, G. speciòsa, G. candìda, and some seedlings, fine large flowers, and color pale lilac; Erìca ventricòsa, E. curviflòra rùbra, Lechenaúltia formòsa, Calàdium tricolor, Gardènia rádicans, Verbèna fúlgens, Kilvingtònia, Binneyàna, Watsònia and ròsea, seedlings, very fine; V. Drummóndii, Eyreàna, and a large box full of twenty-three varieties of carnations, some of them very superior.

The premium for the best bouquet was awarded to William Chalmers, gardener to Mrs. Stot, Turners Lane.

An honorary premium was awarded to Hirst & Dreer, for a fine basket bouquet of indigenous plants.

The Committee on Vegetables awarded this evening, (the 18th,) the Society's stated premiums for this month, to the following competitors, viz: for the best lettuce grown in Pennsylvania, to George Esher, Ridge Road. For the best carrots grown in New Jersey, to George Robinson, gardener to Horace Binney, Esq. For the best early cauliflowers grown in New Jersey, in the open ground, to James McKee, gardener to Charles Chauncey, Esq.

For the best bush beans grown in New Jersey, to Adam Price.

For the best early beets grown in Pennsylvania, to Charles Canover, gardener to Thomas C. Rockhill, Esq.

For the best cherries, (amber,) not less than three pounds, to Geo. Robinson, gardener to Horace Binney, Esq., very fine.

For the best early beets, grown in New Jersey, to George Robinson, gardener to Horace Binney, Esq.

For the best early turnips grown in Pennsylvania, to Albinas Felton, very fine.

For the best bush beans grown in Pennsylvania, to Charles Conover, gardener to Thomas C. Rockhill, Esq.

For the best artichokes, to Philip Reilly, gardener to Simeon Gratz, Esq. For the best early potatoes, to George Esher, Ridge Road.

For the best tomatoes, to William Chalmers, gardener to Mrs. Stot, Turners Lane.

For the best display of vegetables, that evening, to Robert Meston, gardener to Mrs. Roland, he having exhibited carrots, beets, lettuce, early cabbage of various kinds, onions, peas, beans, potatoes, cucumbers, and peppers.

An honorary premium was awarded to him for some fine new imported cabbage, in full head, raised from seed sown the latter end of March, and cut on the 20th of May, called the Devizes. The other, Early Bristol, sown at the same time as the above, and cut on the 18th of June, in fine head.

The premium for the best display of fruit, was awarded to Mr. Chalmers; having exhibited strawberries of sorts, red and white currants, &c. &c.

James McKee, gardener to Charles Chauncey, Esq., exhibited lettuce, cauliflowers, beets, early cabbage, and some very large lemons.

George Robinson, gardener to Horace Binnney, Esq., exhibited beets, carrots, early cabbage, and some fine amber cherries.

Andrew Patton, gardener to Mrs. Kohne, Turners Lane, exhibited lettuce, beets, potatoes, May Duke, and Bleeding Heart cherries.

Daniel Reilly, gardener to Pierce Butler, Esq., exhibited potatoes, Coss lettuce, early cabbage, peas, beans, red currants, raspberries, and cherries, of sorts.

Philip Reilly, gardener to Simeon Gratz, Esq., exhibited onions, artichokes, early cabbage, turnips, beans and cherries.

Mr. Chalmers, gardener to Mrs. Stot, exhibited Mazagan beans, potatoes, artichokes, and tomatoes.

George Esher, Ridge Road, exhibited potatoes, beets, early cabbage, Coss lettuce of great size, onions, cabbage lettuce, and squashes.

Joseph Cook, gardener to George Norris, Turners Lane, exhibited egg plants.

Charles Kenworthy exhibited white currants and the potato onion.

Charles Conover, gardener to Thomas C. Rockhill, exhibited some large specimens of Walker's Rambler cucumber, lettuce, beets, beans and early cabbage.

Albinus Felton exhibited Coss lettuce, very fine turnips, carrots, beets, and Swiss chard.—*Yours, G. Watson, Philadelphia, June 21st*, 1839.

Art. IV. *Massachusetts Horticultural Society.*

Boston, Saturday, June 1, 1839.—*Exhibited.* Flowers:—From Ezra Weston, Jr. and Francis Parker, Esqs. specimens of uncultivated native plants, viz:—Arethùsa bulbòsa, Kálmia angustifòlia, Sarracènia purpùrea, Nùphar ádvena, Hypóxis erécta, Trifòlium praténse, Vaccínium resinòsum, Láthyrus palústris, Íris versíclor, Rùbus triviàlis, &c. From S. Walker, a collection of pansies in great variety.

The exhibition to-day was especially designated for the exhibition of pansies for the Society's premiums. The only competitor was Mr. Walker, to whom the judges awarded the following premiums, viz:

A premium of five dollars for the best display, to Mr. S. Walker.

A premium of two dollars for the second best display, to Mr. S. Walker.

A premium of three dollars for the best seedling, to Mr. S. Walker.

The judges appointed were Messrs. E. M. Richards and J. L. L. F. Warren.

Fruits:—From J. L. L. Warren, one box of Royal Scarlet strawberries, of good size.

Vegetables:—From W. G. Stearns, Esq., Cambridge, fine specimens of forced cucumbers. From Mr. Warren, fine Southgate cucumbers.

The Committee on Vegetables, through their chairman, submitted the following list of vegetables, for which premiums will be awarded:—

Asparagus:—Earliest and best in open ground, . .	$4 00
Beans:—Large Lima, two quarts, shelled, ...	3 00
Beans:—Earliest and best dwarf, shelled, two quarts, . .	2 00
Brocoli:—Four heads, ...	3 00
Beets:—Twelve roots, earliest and best, ...	2 00
Carrots:—Twelve roots, earliest and best, ...	2 00
Cabbages:—Earliest and best, six heads, ...	2 00
Cauliflowers:—Finest and heaviest of the season, four heads,	3 00
Cucumbers:—Best pair before 1st Saturday in July, . .	4 00
Celery:—Two roots, earliest and best, ...	2 00
Corn:—For boiling, earliest and best, one dozen, ...	2 00
Lettuce:—Finest six heads in the season, ...	2 00
Peas:—Earliest and best, one peck, ...	3 00
Potatoes:—Earliest and best, one peck, ...	3 00
Parsnips:—Twelve roots, best, ...	2 00
Onions:—Twelve finest, ...	2 00
Rhubarb:—Six species of the best, ...	3 00
Squashes:—Finest and earliest summer, six in number, .	2 00
Squashes:—Largest and best pair, *winter*, ...	3 00
Tomato:—Finest specimens, one dozen, ...	3 00
	$53 00

The Committee will also award premiums for specimens of new kinds, for extra productions, or for decided improvement (with proof) in the system of culture of those vegetables most useful and necessary.

June 5th.—Exhibited. Flowers:—From Wm. Oakes, Esq., Ipswich, specimens of native plants as follows:—*Lysimàchia* thyrsifòlia, *Senèci* obovàtus, Convallària boreàlis, *Lupinus* perennis (three varieties,) all of them beautiful, and the pure white variety extremely so: Erióphorum allìnum, *Vibúrnum* oycóccus. From S. R. Johnson, a variety of China roses, including the Jaune Déspréz, Taglioni, Lamarque, Agrippìna, &c.; also a variety of hardy roses, among which were Harrison's Yellow, Duroc, Parma, red and yellow Austrian, and others. From Messrs. Winship, a fine specimen of Chimonánthus virgínicus, and a very large and showy bouquet of flowers. From J. Towne, a beautiful plant of *Èrica* rùbens, one of the prettiest of the tribe; also, Epiphyllum Ackermánii and Lechenaúltia formòsa, both very superior plants. From T. Lee, a choice collection of plants, viz: a single red rose, with beautiful pinnated foliage; found in Waltham, and introduced into the garden of Dr. Jackson, of that place; Mr. Lee has called it, in consequence, the Beaver Brook rose; also, Double Macartney, Yellow Noisette, Harrison's Yellow, and other roses; a variety of annuals in beautiful bloom, as follows:—Clárkia, both varieties, purple and white, yellow sweet Sultan, perennial lupins, Nemóphila insignis, Chyrèis cròcea, a very dark variety of *Phlóx* Drummóndii, and Kálmia latifòlia and angustifòlia, *Vibúrnum* sp., together with a specimen of the Countess of Mansfield dahlia. From William Kenrick, bouquets. From William Mason, pinks, &c. From Hovey & Co. bouquets. From S. Walker, bouquets. From Hon. J. Lowell, two fine bouquets, containing a great variety of green-house and garden flowers, among which we saw Alstrœmèria tricolor, calceolarias, Clématis Siebòldii, Brugmánsia lùtea, Cèreus speciosíssimus, *Verbèna* Tweediedna, &c.

From S. Sweetser, a large number of cut flowers of geraniums, embracing, among several not named, the annexed kinds:—Adelina, Admiral Codrington, Blue Beard, Countess of Plymouth, Charles X, Duchess of St. Albans, Diadematum supérbum, Diomede, Dennis's, Gen. Washington (Boll's,) Gen. Mina, Hericartiànum, Lady Mary, Lady Macbeth, Mrs. Sweet, Man of Ross, Nimrod, Pennyànum, Pennyànum major, and Spéculum múndi, with fourteen other sorts, without names attached.

Fruits:—From Rufus Howe, Dorchester, Early Virginia strawberries, very handsome.

Vegetables:—From W. G. Stearns, Esq., Cambridge, very excellent forced cucumbers.

It was decided by the Committee on Flowers, that the exhibition of roses and pinks, for premium, should take place on the next Saturday, the 22d, and the chairman was so directed to issue a notice.

June 22d.—Exhibited. Flowers:—From E. Weston, jr. and F. Parker, Esqs. a variety of uncultivated native plants, viz:—Ligústrum vulgàre, *Vibúrnum* dentàtum, Cucùbalus *Bèhew*, Rosa rubiginòsa, *R.* macrántha, *Cistus* canadénsis, *Apárgia* autumnàlis, *Solànum* dulcamàra, Azàlea viscòsa, Kálmia latifòlia, and angustifòlia, *Antirrhinum* canadénse, *Cynoglóssum* officinàle, Achillèa *Millefòlium*, and Potentílla norbègica. From Wm. Oakes, Esq. Ipswich, beautiful specimens of native plants, viz: Hudsònia tomentòsa, Arenària peploìdes, *Glaux* marítima, *Láthyrus* marítimus *Oxalis* violàcea, *Iris* versícolor, and virgínica, *Ranúnculus* sceleràtus, *Splachnum* ampullàceum, *Orobánche* uniflòra, &c.

From A. Aspinwall, a most splendid collection of roses, containing from one to two hundred varieties, and remarkable for their size and

brilliancy. We could not ascertain the names of but few of them, but they embraced nearly all the same kinds heretofore exhibited; the number of cut blooms must have been upwards of five hundred. From S. R. Johnson, a fine collection of hardy and tender roses, the latter exceedingly fine specimens, and the names of which are as follows:—Lamarque, a fine variety, Jaune Déspréz, Madame Déspréz, Morea, White China, White Tea, (?) Parisian Belle, Agrippìna, Charles X, Noisette Fellemberg, Montezeuma, Monthly Cabbage, Taglioni, &c. From Rufus Howe, Dorchester, a very good assortment of roses, and two bouquets.

From Hon. John Lowell, cut flowers of Cèreus speciosíssimus, and Jenkinsòn*ii*, and Epiphyllum splendìdum; the latter very much resembling E. Ackermán*ii*, but a little larger flower; it is a fine species: also, *A*rum díscolor, *C*lématis Siebòldi*i*, *Hibíscus r*òsa sinénsis, &c. From T. Lee, Esq., dahlias, roses, *Phlóx* Drummónd*ii*, Chrysèis cròcea, Gaillárd*ia* aristàta, Collòmia coccínea, Clárkias,&c.; also, a beautiful specimen of *R*hododéndron catawbiénse, and two varieties of Kálmia latifòlia. From S. Walker, a great number of seedling pinks, some of them very fine; pansies, roses, bouquets, &c., and a specimen of the *A*ntirrhìnum caryophylloìdes, the splendid new variegated snap-dragon: it is a sportive variety, and oftentimes flowers all one color; the present specimen was, however, as variegated as the finest carnation.

From C. Hovey, Lowell, native plants, viz: Kálm*ia* latifòlia and *O*rchis grandiflòra, the latter fine specimens. From John Hovey, bouquets. From William Kenrick, bouquets. From Hovey & Co. large bouquets. From Mr. Meller, a variety of fine pinks, geraniums, pansies, roses, and bouquets. From Messrs. Winship, a fine large bouquet, containing a great assortment of flowers.

Fruits:—From Hovey & Co. two boxes of seedling strawberries, the same kinds which they have shown the two previous years. They were larger than any which have been exhibited this season. There were two kinds, marked A. No. 2, and B. No. 1; the former is a remarkably large strawberry, possessing all the qualities of a first-rate fruit; the latter not so large, but equally good in every other respect. From J. L. L. F. Warren, two boxes Methven Scarlet, and two boxes of Warren's Seedling Methven strawberry, the latter resembling its parent so much as scarcely to be recognized as a different kind: of its qualities we have no knowledge; also one box of monthly strawberries. From J. S. Ellery, Brookline, one cluster of black Hamburgh grapes.

The award of the judges for the premiums on roses and pinks was as follows:—

Roses:—For the best display of flowers, a premium of ten dollars to A. Aspinwall, Esq.

For the best twenty-four varieties, a premium of five dollars to S. R. Johnson.

For the best twelve varieties, a premium of three dollars to Rufus Howe.

For the best twelve Chinese and other tender varieties, a premium of five dollars to S. R. Johnson.

Pinks:—For the best display, a premium of five dollars to S. Walker.

For the best six varieties, a premium of three dollars to S. Walker.

For the best seedling, a premium of three dollars to William Meller.

The judges appointed were Messrs. J. E. Teschemacher and Joseph Breck.

Art. V. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Chenangoes, per barrel,	1 50	2 00
Chenangoes, per bushel,	75	—
Eastports, per barrel,	3 00	—
Eastports, per bushel,	1 00	—
New potatoes, per bushel,	2 00	—
Turnips:		
Common, per bushel,	37½	50
New, per bunch,	8	12½
Onions:		
Red, per bunch,	5	8
White, per bushel,	1 50	2 00
New white, per bunch,	3	4
Beets, per bushel,	75	1 00
New do. per bunch,	8	10
Carrots, per bushel,	75	1 00
New do. per bunch,	8	10
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	2	3
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, each:		
Early York,	6	8
Cauliflowers, each,	12½	25
Lettuce, per head,	2	4
Spinach, per half peck,	8	10
Young Turnips, per half p'k,	6	8
Peas, per bushel,	75	1 00
Peas, per half peck,	12½	17
Asparagus, per bunch,	10	12½
Rhubarb, per pound,	4	5
Beans, string, per peck,	50	1 00
Beet tops, per peck,	12½	17
Squashes and Pumpkins.		
Squashes:		
Winter crook-neck, pr cwt.	3 00	4 00
West India, per cwt.	3 00	—
Pumpkins, each	12½	25

Pot and Sweet Herbs.	From $ cts.	To $ cts.
Parsley, per half peck,	25	37½
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6
Fruits.		
Apples, dessert, new:		
Common, per barrel,	5 00	5 50
Common, per bushel,	1 00	—
Russets, per barrel,	5 50	—
Green Gooseberries, per q't,	12½	17
Strawberries, per quart:		
Old wood,	20	25
Methven scarlet,	37½	50
Early Virginia,	25	37½
Cherries, per quart:		
White,	12½	25
Black,	10	20
Grapes, per pound:		
White sweetwater:	1 00	—
Watermelons, each,	37½	50
Currants, (green,) per quart,	8	—
Blueberries, per quart,	20	25
Cranberries, per bushel,	3 00	4 00
Cucumbers, each	12½	25
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	75
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—
Filberts, per pound,	4	—
Castana,	4	—
English walnuts, per lb.	5½	6

Remarks.—A month of continued cool weather, accompanied with frequent showers, though not by any very heavy storms, has prevented crops from making that rapid advancement which they usually do in June. We may, however, congratulate the farmer and the gardener upon a season which will bring them rich harvests, and the public upon their being supplied with every thing in good abundance.

Corn, throughout New England, looks rather backward, but if a favorable July should succeed, there will be but little fear of more than an average crop. Potatoes never promised better.

Since our last there has been a fair supply of all market productions. Old potatoes have been dull and heavy, and rather a drug: this was owing to holders of large quantities keeping them back too long, with the expectation of getting the very high rates at which they have sold all the winter; some of the new crop have come to hand this week, and of very fair appearance; they will be abundant in a week or two. Old turnips are gone, but new ones are fine and large. New onions plentiful. New beets and carrots have been received the past week, of good size. Radishes very good, and the market overstocked. New cabbages have come in just as the last of the old crop have gone. Cauliflowers are received of handsome size. Spinach nearly done. Peas have been received in considerable abundance, and prices have been moderate all the month; Marrowfats have come to hand for the first time to-day, and commanded good prices. String beans, from New York, have been plentiful at our lowest quotations; this week, however, those from the vicinity have been brought in, and sold quickly at the highest. Rhubarb, from the lateness of the season, and a scanty supply, notwithstanding the quantity of green gooseberries, has advanced considerably. Squashes are about gone, except West Indias.

The stock of apples is about exhausted: a few russets, and common sorts only, remain; no new ones have been received yet. Strawberries have been tolerably abundant, though the weather has been such as to render them less sweet than ordinarily. Cherries are plenty, but much poorer than usual. Green currants and gooseberries in quantities. Watermelons, from the West Indies, sell pretty readily. Forced sweetwater Grapes have just come in, and are taken at our quotations. Cucumbers much more abundant than at the time of our last report, as they are now brought in from the open ground. Of Pine-apples an unusual stock, there having been several arrivals of large lots the past fortnight: they have been rather green, and poorer than usual.—*Your's, M. T., Boston, June 27th*, 1829.

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape vines will continue to need good attention. If the clusters are not all thinned, let it be done immediately, if berries of good size are wanted. Continue to syringe, and, as the grapes swell up, give the border a good watering with liquid manure if convenient.

Grape vines in the open air should be taken good care of: tie up all the branches that are wanted for another year, and cut away all lateral shoots that are not wanted to fill up. Syringe occasionally if the weather should be dry.

Strawberry beds should be kept clear of all weeds, and if the runners are not wanted to make new plantations, they should be cut off.

Plum trees may be budded the latter part of the month.

Fruit trees, in pots, which were forwarded in the green-house, had now better be plunged in the border.

FLOWER DEPARTMENT.

Dahlias.—In all the month of June the dahlias have probably been planted. So far they look well, and indicate a favorable season of blooming. They should be now well attended, if good blooms are desired. Give frequent hoeings and water, if the month of July should prove dry. Stake all the plants as fast as they attain any size, as a sudden wind might snap off the plants close to the root. Keep them trimmed of all superfluous laterals.

Geranium cuttings may yet be put in with good success.

Erica cuttings may be put in, although a little earlier would have been as well.

Verbenas, in pots, will need shifting again, if they have been grown strong. They may be turned into the border, where they make a fine show.

Chrysanthemums will now be growing rapidly, and they should be well watered.

Biennial and perennial plants, from seed sown last month, should be transplanted into beds or the border.

Carnations should be propagated by layers this month.

Pinks should be increased by pipings.

Pansies may be multiplied by pipings. The seeds may be sown now for a spring crop.

Cactuses not removed from the green-house to the open air, should be taken out as soon as possible.

Cuttings of Lechenaultia formosa may be now put in with success.

Pimelea decussata, rosea, &c. may now be increased by cuttings of the new wood.

Oxalis Bowiei may be repotted, for flowering, the latter part of the month.

Chinese Primrose seed should now be sown to raise a new stock, as the old plants flower poorly the second season.

Rose bushes may be propagated by layers, with good success. Now is the time to bud as recommended in a previous page of the present number.

Camellias not yet removed from the green-house, should be taken out as soon as possible.

Young plants of Trevirana should be repotted this month.

VEGETABLE DEPARTMENT.

Celery plants transplanted into beds last month, as directed, should, about the twentieth of this, be removed into shallow trenches. Prepare the soil well, and make it rich.

Turnips, for a winter crop, should be sown this month.

Pepper plants raised in boxes, in a hot-bed or frame, should be planted out in a good rich soil.

Turnip-rooted beets may be now planted for winter use.

THE MAGAZINE

OF

HORTICULTURE.

AUGUST, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *On the Propagation and Cultivation of the Quince Tree.* By J. W. RUSSELL.

THE quince is a very beautiful tree when in flower, and, when the fruit is ripe in autumn, highly ornamental. It derives its name from *Cydon*, a town of Crete, famous for this fruit; whence its generic name *C*ydònia.

The trees are easily raised by layers, or by cuttings, taken from the tree in April. Select a shady place in order to plant them in rows, at about a foot apart from each other, and about four inches from plant to plant in the rows; spread over the surface of the ground rotten leaves, or manure, when the planting is finished, which will keep the ground from sudden drought; also, water occasionally, if there should be a continuance of dry weather.

The year following, those that are well-rooted may be planted out in May, and those that are not should remain another year. They may also be propagated by budding or grafting; and these trees will bear fruit sooner, and are generally thought to be more prolific, than those raised by any other method.

The best sort for planting is the *Portugal*, being highly prized for baking or stewing. It is of a fine purple color when dressed, and is much better for marmalade than any of the other varieties. The oblong or pear quince, and the apple quince, are also cultivated for family use; but the Portugal sort is in the greatest repute, either for cooking or preserving.

The quince tree may be pruned much in the same way as you would prune an apple tree, taking care to cut out all the old diseased and dead wood, and the cross branches in the middle of the tree, which injure each other by friction. Old trees are very apt to have rough bark; when this is the case, it should be shaved off with a draw knife, and the stems washed over with soap-suds and tobacco water. The trees will thrive in almost any kind of soil, but grow the best in a deep loamy soil, with rather a moist bottom.

The quince tree also makes excellent stocks, on which to graft pears, in order to obtain dwarf trees: for this purpose they may be propagated by cuttings put in as before recommended. The trees may be budded the second or third year, according to the growth they have made.

This fruit is but little cultivated, and, in consequence, always commands a high price in our market: it is as easily grown as any other fruit, and does well in situations where other kinds of fruit trees will not thrive. A little more attention to their cultivation, and a very handsome profit could be realized from a limited piece of ground.

Yours, J. W. Russell.

Mount Auburn, Cambridge, July, 1839.

Art. II. *A notice of five new varieties of Verbenas, with a brief description of each.* By Dr. G. Watson, Philadelphia.

To the amateur and florist, the production of a new hybrid, or the introduction of a new plant, is hailed with delight, more especially when that plant is attainable by all, and of easy cultivation. Ever since the introduction to our gardens, of the *Verbena Tweedieana*, a great deal of interest has been created in this family of plants: and well there may be; for there is certainly no flower that beautifies the open border, or decorates the parlor window, in a greater degree than the different verbenas, with their profusion of blossoms of every tint and hue, throughout the season.

To the many fine varieties which have already been raised,

either in our own gardens, or introduced from England, and which have now become very generally cultivated, we have the pleasure of adding five more, of distinct and peculiar beauty, and worthy of a place wherever the *V.* Tweedie*àna* is grown. Messrs. Mackenzie & Buchanan have raised four of them, which are not excelled by any of the previously known kinds.

I do not think it requisite to enter into a minute and particular botanical description of these seedlings, as the whole tribe are much alike in general appearance; I shall therefore confine my remarks, which will be brief, to notices of their characters as flowers, as follows:—

Verbèna fúlgens.—As the name implies, this is a fine and brilliant color, (a fac simile of the well known and brilliant Lobèl*ia* fúlgens:) the spike of flowers is large, and the individual flowers of good size; the habit of the plant is strong and vigorous, and a remarkably free flowerer.

V. *Binney*ana.—Maroon, very distinct: the corymb of blossoms and the flowers large, and the plant a free bloomer. It is named in honor of our worthy president, Horace Binney, Esq.

V. *Watsòn*ia.—A fine purple variety, with a large corymb of blossoms; broad and full petal, and a free flowerer. The enterprising young men who have grown this, have thought fit to honor me by attaching my name to this beautiful variety.

V. *ròsea.*—Quite different from any other, and is what would be properly called a cherry red. It has a beautiful silky petal, with a large corymb of blossoms, which are plentifully produced; habit good. This, and the three preceding ones, were grown by Messrs. Mackenzie & Buchanan.

V. *Kilvingtòn*ii.—A vigorous and rapid grower, of a very free flowering habit: the spike of flowers is large, and the color pink; it appears to be a seedling of the common hardy one of the gardens. Raised by Mr. Kilvington, gardener to Mr. Lloyd.

The above description will convey to your readers some idea of their beauty and value. They are certainly valuable to every flower-garden, as they are each strong and vigorous growers, free flowering plants, and of decided and distinct colors. Messrs. Mackenzie & Buchanan have some others, but not of sufficient beauty to deserve naming.

Yours, respectfully, G. Watson.

Philadelphia, June, 1839.

ART. III. *On the Cultivation and Treatment of the Lechenaúltia formòsa.* By the EDITOR.

AMONG the great number of plants which adorn the numerous collections which abound throughout the country, and which embrace nearly all the finest tribes yet known, there are but a very few plants whose constitution and habit are of that character which will enable them to become denizens of the parlor, without in such a degree obstructing and checking their growth, as to render them unsightly and disagreeable, rather than pleasing and desirable, objects. The close and confined air of rooms—the high temperature at which they are kept, especially when the rooms are heated with anthracite coal, or the entire house by furnaces—and the want of fresh and pure air, so important an agent to the health of the vegetable, as well as the animal, creation,—are the repeated causes of most of the failures which have taken place by those who have made attempts to adorn their parlors with beautiful or fragrant flowers, in order that somewhat of the beauty and freshness of summer may be continued through our long and dreary winter.

But the list of plants, though selected from thousands of species and varieties, whose vigor is but slightly affected by close confinement, and whose beauty continues to enrich the casement during the dreary season of winter, in nearly the same splendor that they are seen in the free air, is exceedingly limited. The number, as yet, whose habits are found not to suffer greatly, is so small, that not that variety is afforded which is so desirable by every lover of flowers. What one cultivates with great care, should repay the trouble by an array of beauty greater than is found in such plants as require but little labor. Undoubtedly many plants may be cultivated in such a situation which at present are not; but careful cultivation, close attention, and some skill, are necessary coadjutors to those who would ever rise above mediocrity in parlor management.

We have strayed away somewhat from our subject, and have almost been induced to give it another caption, and offer some hints upon the growth and treatment of plants, in rooms, at length. But, as we have named a plant, whose value and exquisite beauty all will admit, who have ever seen it, we believe that a few hints upon the proper mode of its management will be acceptable.

The lechenaultia is, as has probably been inferred from the above remarks, one of those plants which seems capable of sustaining its health and beauty when under parlor cultivation, and is, in consequence, doubly valuable on this account, though it has other good properties which few plants possess, viz: it is a slow growing plant, and does not, in consequence, attain, in one season, such a height that the plant must be thrown away for the want of the room it may occupy the next; the foliage is fine, a pale green, somewhat heath-like, and it is almost a perpetual bloomer, our plants having been continually in bloom for twelve months: the flowers are of a deep orange color, and hang in profusion among the tiny foliage, and oftentimes make a dazzling display. In the green-house the lechenaultia is one of the gayest ornaments during winter, and in the parlor it loses less of its beauty than almost any other plant, unless we except the geranium, that we are acquainted with. In its double capacity to withstand cultivation, it should be found in every collection, however small, and we trust that the few hints upon its cultivation which we shall give, will be the means of rendering it better known and appreciated.

The lechenaultia is a native of New Holland, and was introduced into England as long ago as 1824, but did not find its way into our gardens till some three or four years since. It is figured in Sweet's *Flora Australia*, p. 26.

The plants are grown from cuttings similar to a heath: these should be taken off in the month of June or July, and should be about an inch long, with the wood slightly firm or ligneous at the base; prepare them by cutting off the leaves half way up the cutting, with much care, and take off the base immediately under the bud, and they will be ready for insertion in the cutting pot. This should be prepared by placing at the bottom a large handful of coarse potsherds, and on these a few finer ones; then put in sandy peat enough to reach to within one and a half inches of the top, level it, and after settling the soil, by a few raps of the pot on the potting bench, add an inch of pure sand; insert the cuttings with great care, and syringe or otherwise water the plants as they need it. The best situation for the cuttings is in an old cucumber frame, with an exhausted heat: here they will root readily, especially if covered with a bell-glass: if no such frame is at hand, set them in any shady situation, until they show signs of growing.

In the course of six weeks, and perhaps less, the cuttings will generally be found growing; they should then (and before if they need it) be potted off singly into thumb pots, shaking the sand carefully, but completely, off the roots; after remaining

in these till September, they are repotted into the next size, (No. 1;) they soon after commence blooming, and continue to throw out a succession of flowers. Heath soil, with about one third sand mixed, we have found best for young plants when first potted off.

As the plants increase in size, they will need the addition of a very small quantity of loam to the peat, in order to render it more retentive. The third potting should be made between January and May, according to the growth the plants have made. After this the plants will only need an occasional potting every year, and will become splendid specimens covered with blossoms.

In the administering of water, some care should be taken. Always keep the soil moist, but never deluge it at any time, so as to saturate the soil: on the contrary, do not let the earth become too dry, as neglect in this respect is as fatal to the lechenaultia as it is to the heath. Keep the pot washed clean, that the superfluous moisture may be the more readily thrown off.

As the plants begin to grow, they should be tied up to small neat sticks, painted green, and, by proper thinning and cutting away of the shoots, a beautiful bushy plant may be made. The plants need occasional pruning, to keep them in good form.

The situation in the green-house should be as near the glass as possible, especially when the plants are small: this prevents them from running up weakly, and makes them stout and ruddy; when they have acquired a season's growth, this is not so important. In the parlor it should have an airy and sunny situation, where it will bloom abundantly.

In the summer, when removed from either the green-house or parlor, the plants should not be left wholly to take care of themselves; for although not by any means difficult to grow, they must not be treated with the same inattention as the geranium and other tenacious lived plants, which are left, oftentimes, contrary to what good judgment would dictate, wholly to the vicissitudes of the weather, the depredations of insects, &c. One heavy and long continued rain would give a check to the lechenaultia, which it would take a long period to recover from, if indeed it ever returned to a healthy condition. It should be allowed an exposed situation, where it will receive the morning sun, and where it can be sheltered from severe storms. In green-houses, perhaps, it would be as well not to remove the plants at all, especially if they can stand in a situation where they will receive the benefit of the air, admitted both night and day. But we should not recommend its confinement in rooms in the summer.

We have thus been somewhat minute; for although the amateur may not need such precise information, there are many of our readers who will profit by our remarks. It is, in fact, in the little peculiarities of treatment where lie all the success of cultivation, not only in this, but in many other plants.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Floricultural Intelligence.—New work on the Camellia.—M. L'Abbe Berlèse has issued the prospectus of a new work on the camellia, entitled *Iconographie du genera Camellia*, or a collection of the most rare and beautiful varieties, painted from nature, in the conservatory of the Abbe Berlèse, by M. J. J. Jung. To contain an exact description of each flower, and observations upon the cultivation and growth of every plant, by the Abbe Berlèse.

The Abbe Berlèse states in the prospectus, that the publication of his *Monographie*, which has now been published two years, has obtained a rapid and flattering success, which has proved how much such a work was desired by horticulturists of all classes. The edition is now wholly exhausted, and its

success has strengthened him in the project which he has conceived for continuing his observations upon the camellia, and encouraged him to proceed in describing all the admirable varieties which have, by the aid of a new art,—artificial impregnation,—enriched our gardens.

At present a new project has been suggested by the numerous admirers of the camellia: owing to the infinite number of old and new varieties, some beautiful and some only mediocre, amateurs are plunged in embarrassment in their choice, and rely upon a complete and correct work to aid their judgment in selecting such varieties as will prolong their pleasure during the fugitive epoch of their flowering.

The work will consist of accurate drawings of the finest and rarest varieties of this beautiful genus. Certain that there does not exist any work similar to such as he has commenced, and seconded by the happy efforts of that distinguished artist, M. J. J. Jung, the Abbe Berlèse has resolved upon commencing the enterprise. The talent exercised by M. Jung has given the color of life to the Abbe's technical descriptions, while the same precision and exact grandeur is preserved of one of the most brilliant productions of nature. M. Jung has constantly visited the Abbe's conservatory, during all the flowering season of the plants, and has studied them under all their aspects, and then designed, colored and retouched the drawings. The work will have the double advantage of guiding amateurs in their choice, and of decorating the saloons with a fashionable work, which will contain the most beautiful flower of Asia, while it records the progress of science in Europe. Desirous to satisfy the impatience of horticulturists, the Abbe proposes issuing the first number; his zeal and his plan are well known: but it is necessary that a certain number of subscriptions should be obtained before the second number is issued. So far the subscriptions have been made under the most favorable auspices.

The work, when completed, will contain figures of three hundred of the most choice, selected from six hundred varieties; and will be chosen for their rarity, beauty, and elegant habit.

Each number will contain two plates, large folio size, with one page of descriptive text on the same sized sheet, and a printed cover.

The flowers will be lithographed and colored by two of the most excellent artists in Paris. One hundred and fifty copies, first subscribed for, will be retouched by M. Jung.

The text will be accurate, and very precise; and will consist

of a detailed description of the plants, their grandeur (port,) and the flowers. The cultivation and habit of each variety will be appended; the exposure of the plants and the means which are employed to render them vigorous and bloom abundantly; in fine, to give all the information which the author is possessed of in relation to the camellia.

The work will appear in weekly numbers, at the price of three francs (about 50 cents,) each part.

Since the above was written, we have had the pleasure of looking at a specimen of the work, and we shall do but justice when we say that it is got up in good style, and will form a valuable assistant to the amateur in the choice of kinds, and the management of the plants; while it will make a volume worthy of being found in the parlor of every gentleman.

The Abbe Berlèse has sent Mr. Wilder a few copies of the work, and desired him to receive subscriptions. Mr. Wilder will, we presume, show them to any one who is desirous of becoming a subscriber, and would be glad to transmit the names of at least a dozen to the Abbe Berlèse.

Since the publication of Chandler & Booth's *Illustrations*, there has been nothing of the kind which will compare with this, and we recommend it to the patronage of our friends.

Strelitzia angústa.—This magnificent species of the noble strelitzia tribe is about to display its blossoms in the fine collection of Col. Perkins. We have often noticed the plant in our annual visits to this place, and our readers are probably aware that there is not another of any size in the country. Mr. Cowan, the gardener, informs us that there are now (July 20,) two flower spikes, advancing slowly, and promise a gorgeous show about the middle of August. This species has not bloomed, we believe, in England, except in the splendid collection of the Messrs. Loddiges, of Hackney, from which place the present plant was purchased. It has been under the care of Mr. Cowan for some years, and now, for the first time, shows any signs of flowering. We trust that all amateurs will embrace the opportunity to see it, when in full splendor, as it may not bloom again for some time. The plant is of large stature, and attains the height of twenty or more feet in its native clime. We shall endeavor to give some description of it when in flower.

Coreópsis diversifòlia.—This is a new and very pretty species, and a great addition to our list of annuals. The plant is of rather dwarf habit, not attaining much over a foot in height; somewhat branching, and the flowers produced in abundance. The petals are of a very bright yellow, and the flower similar

to that fine perennial species, the C. lanceolàta. It grows freely, with neat foliage, and is well adapted for planting in masses, and, in this respect, has a greater claim than the C. tinctòria, which grows too tall and vigorous for small flower-beds.

Oxyùra chrysanthoìdes—Another very fine annual, growing about eight or ten inches high, with delicate yellow flowers, resembling the annual chrysanthemum, but far more delicate and beautiful. The leaves are linear, pinnate, and the flower stems rise from the foliage, and display themselves to good advantage. It is a desirable plant, and a fine companion to the Coreópsis diversifòlia, above noticed.

New Verbenas.—In looking over the last number of your Magazine of Horticulture, my attention was called to an article from Dr. Hooker's *Botanical Miscellany*, in which it is stated, there are described twenty-four species of verbenas, of which only four or five of them have, as yet, been introduced in collections; as this interesting plant is attracting very great attention among amateurs, and deservedly so, I am induced to give you an account of some new varieties or hybrids, exhibited by Samuel Feast, one of our indefatigable nurserymen, before the Horticultural Society of Maryland, which have elicited a great deal of praise from that body, and which, no doubt, will be interesting to many of your readers.

He exhibited twenty-eight varieties: twelve or fifteen are very distinct and splendid; some of a deep claret, royal purple, various shades of pinks and purples, dark and light scarlets, and others approaching to maroon; the heads and clusters of many of them are larger than any we have seen as yet. He has many more that have not yet flowered, from which he may still expect to obtain something new.

Great credit is due to Mr. Feast, for his perseverance in crossing the old varieties so successfully. He had but the Arraniàna, pulchélla, Aublètia, Tweediedna, and *Melindres* màjor, last season, and from them he has produced the above: his object was, to get the different colored varieties to stand the winter, with the pulchélla, which he is yet to prove.—*K.*, *Baltimore*, *July*, 1839.

New Seedling Roses.—Mr. Samuel Feast, of this city, has been very successful in raising many valuable seedling roses, among them a very superior multiflòra, which he has named the Caradori Allan. This is the best rose that has ever been exhibited before the Society: it is large, bright pink, of globular shape, buds very large, and flowers in clusters; the wood is very strong, leaf large, and will grow from ten to fifteen feet in

a season; it is perfectly hardy. Plants will not be for sale until next spring.—*Yours, K., Baltimore, July* 10, 1839.

New bulbous and orchideous Plants.—Mr. Feast has lately obtained from the mountains of Brazil and the botanical garden at Rio de Janeiro, a large collection of orchideous plants, with gesnerias, gloxinias, crinums and amaryllis, many of them apparently new; also, the *Araucària* brazilièna, Acrocòmia sclerocárpus, Artocárpus incìsa, and integrifòlia, (bread fruit;) Córd*ia* sebestìna, Gómphia illicifòlia, Oreodóxia règia, Plumiè*ra* álba and rùbra, *Vanilla* planifòlia, several specimens of Caryophyllus aromáticus (or clove,) and different varieties of palms.

The orchideous plants must contain from one hundred and fifty to two hundred varieties. They are all doing well at present: he contemplates putting up a house for them this summer. Any hints from your readers may perhaps be useful to him in your next number.—*Id.*

Dicotyledonous, Monopetalous, Plants.

Campanulàceæ.

ROELL*IA* L.

élegans. An herbaceous perennial; growing a foot high; with deep blue flowers; appearing in May; increased by seeds and cuttings; grown in sandy loam; introduced in 1838. Pax. Mag. Bot., Vol. VI., p. 27.

"In no subject that we have before had the satisfaction to figure, do we remember to have seen so much real elegance and simple beauty. Whether in the general contour of the plant, the precise and pleasing conformation of its parts, or the attractive color of its pretty blossoms, it is a truly delightful object, and forms an exceedingly ornamental feature of the stove." The plant is erect in its habit, symmetrically branched, and the flowers are produced singly in the axils of the leaves upon all the terminal shoots; they are of a brilliant and intense blue, and profusely clothe the plant.

The situation best suited to its growth is the stove, and the peculiarity of treatment as follows:—Pot in a sandy loam, with a trifling addition of heath mould; make use of small pots, without actually crowding the roots. Give moderate quantities of water, except in the autumn and early part of winter, when it should receive less. Give the plant an airy situation, where it will also enjoy all the light admitted. In February it will commence flowering, when it should be repotted if necessary.

The drawing was taken from a specimen in the collection of the Messrs. Young, of Epsom. (*Pax. Mag. Bot.*, Mar.)

Gentiàceæ.

LASIA'NTHUS (from *lysis*, dissolution, and *anthos*, a flower.)

Russellià*nus* Drummond The Duke of Bedford's Lasianthus; a green-house plant; growing from one to two feet high; with deep blue flowers; appearing in autumn; introduced in 1835; increased by seeds or cuttings; grown in rich loamy soil; a native of Texas. Pax. Mag. of Bot., Vol. VI., p. 31.

Considerable has been said respecting this plant, and we scarcely take up any of our foreign periodicals, without seeing it mentioned. But, much as its merits have been extolled in various publications and by eminent individuals, all expectations have been realized. An erroneous impression of its beauty has been prevalent among some amateurs, but this has arisen solely from the fact, that another species, introduced from Jamaica, and of no beauty, has been mistaken for the Russell*iànus*, and in many instances sold for the true plant.

The plant grows about a foot and a half high, with a stem somewhat branched; leaves ovate and veined; flowers deep blue, very large, and produced in panicles. The whole habit neat and showy. Seeds were introduced by Mr. Drummond, who collected them in San Felipe de Austin, Texas. It flowered first in England, in 1837.

So short a period has elapsed since its introduction, that not much is yet known respecting its management. It is feared that it will not stand out in the open border in England: it flowers very late, and seems to require an increased temperature when about blooming. It may be wintered in the greenhouse, and easily excited to grow, by being placed in the hothouse, where it would bloom early in autumn. It should be grown in a "rather rich, loamy soil, slightly elevated in the pot, and perfect drainage," to have it flourish. Water carefully at all times, and particularly in winter. The plants are grown from cuttings or seed, and flower the second or third year. It will be a fine acquisition. (*Pax. Mag. Bot.*, March.)

Gesneriàceæ.

GESNE*RIA*

Dougl*ásii* var. verticillàta. *Paxt.* A stove plant; growing a foot high; with orange and yellow flowers; appearing in May and June; increased by cuttings; grown in light loam, heath mould, and rotten manure; introduced in 1836; a native of Rio. Pax. Mag. Bot., Vol. VI., p. 29.

One of the most showy and beautiful of the pretty tribe of Gesnerias; a tribe but little known in our gardens, and too little appreciated. The introduction of several new kinds, within a few years, has brought the whole of them to greater notice.

The present subject is an exceedingly striking variety. "It is greatly superior to G. Dougl*ásii* in habit, in foliage, and in the size and beauty of its flowers. The hue of its blos-

soms is not brilliant, but it is delicate, and of various shades, while the numerous spots or streaks render it still more attractive. The dense clusters or whorls in which they are produced, the long, slender, red peduncles on which they are supported, and the fine showy crimson petioles and veins of the leaves, all tend, in some measure, to heighten the appearance of the plant, and multiply its claims to attention." From the drawing, which is well done, this description is not exaggerated. The whorl of flowers, containing from fifteen to twenty, makes an imposing appearance.

The roots are tuberous, and the cultivation the same as for the different species. The only thing to observe in the growth of all is, to let them have a season of repose, when they will shoot up strong and vigorous flower stems. A dry place in the green-house is the best place to winter them. Light loam, heath mould, and rotten manure, the greater proportion of the first, is a good compost. Cuttings taken off with a piece of the root, grow readily. (*Pax. Mag. Bot.*, March.)

Art. V. *Notes on Gardens and Nurseries.*

Garden of O. Johnson, Esq., Lynn.—July, 1838. We have not had the opportunity of visiting this fine place since the month of August, 1837, nearly two years ago. Since then things have considerably changed, and the grounds, which we fully described at that time, appear in fine condition. Notwithstanding the numerous showers and moderate rains, which have fallen almost incessantly since the latter part of May, the garden presented a specimen of neatness rarely seen. We wish our amateurs would emulate Mr. Johnson's example; and, instead of having their minds wholly occupied with the subject of new and rare things, devote themselves somewhat to the better cultivation of such plants as they already possess, and to the beautifying and ornamenting their grounds, that they make them perfect specimens of taste and neatness.

Another year the garden will be considerably enlarged by the addition of upwards of an acre of excellent land directly in the rear. Next season, when the fence will be removed, and the new ground taken in, some alteration will be made in the

garden: all the vegetable department will be carried back to the new ground, and in both the fruit and flower gardens changes will be effected. Mr. Johnson has also some idea of erecting another grapery, with a green-house connected.

In the flower garden we found a brilliant show of verbenas, particularly of the Tweedieàna, about a dozen plants of which, turned into the border, were covered with a profusion of flowers: we have not seen so showy a mass of this desirable plant. The plants were turned out rather early, and have, in consequence, made a rapid growth; a small neat trellis is put down, upon which some of the strongest shoots are trained, which show to better advantage. We cannot too strongly urge the introduction of this plant into every garden.

Patches of our favorite flower, the Chrysèis cròcea, were profusely laden with their golden petals, and side by side stood the Nemóphila insignis, two little patches of which contrasted singularly with the former. Mr. Johnson shows a cultivated taste in thus selecting plants of prostrate or procumbent habit, for they do not grow woody and gross, but, on the contrary, are generally slender and delicate. In small flower gardens, cut up into narrow beds, the beauty and effect of all low growing plants would be lost amid a miscellaneous mass of all sizes, overgrowing and shading those of dwarf stature: but as they are now planted, the beds have the appearance of carpets composed of all shades, from the azure tint of the nemophila to the vermilion hue of the verbena.

The dahlias, of which Mr. Johnson has a good collection, having added several of the best this year, were yet small, and had not commenced blooming, excepting some of the older kinds, as the Red Rover, Countess of Liverpool, &c., which were full of good flowers. In August and September a fine bloom may be anticipated.

Passing into the grapery, the vines in which have now acquired such a size as to produce a fine crop, we were surprised to see the excellent condition of the fruit. The vines have been entirely under Mr. Johnson's care; and though but a mere novice in their cultivation, particularly in forcing, they would have been creditable to older and more practised hands. Desirous of procuring part of the crop a little in advance of the natural season, Mr. Johnson had a glass partition put up the past year, to divide the house, and a very small flue built, running only round the front and ends of the compartment. In this the fires were made in January, and the first blossoms were open early in April, and the first grapes cut from the same vine on the 4th of July. The grapes in the succession house are

swelling rapidly, and show some fine clusters. The varieties of grapes cultivated are the black Hamburgh, white sweetwater, Muscat of Alexandria, and the Zinfindal; the latter a fruit which should be more extensively grown. It was introduced, we believe, a few years since, by S. G. Perkins, Esq., a gentleman who has long and successfully cultivated the grape. It is of German origin. The bunches are considerably larger than the Hamburgh, with tolerably large shoulders, and a fair sized berry. It is at least a fortnight earlier than the Hamburgh, sets very freely, colors exceedingly well, and is a superior flavored grape. We have cultivated this variety some time, and have recommended it to many amateurs, all of whom have been highly pleased with the fruit.

Mr. Johnson is incessant in his attention to his garden, and spends a great portion of his time in keeping it in order. In the treatment of his grapes, for his own amusement, he has kept a diary of the progress of the vines, from the first moment of their budding out until the present period. It is a complete record of their progress, from day to day, and contains a fund of useful notes to the amateur, detailing as it does, many particulars, which practical men, taking it for granted every body knows, think not worth mentioning when giving their mode of cultivation. We have requested Mr. Johnson to send us a copy, and we doubt not that the interest he takes in horticulture will induce him to communicate any thing in his power which will promote its advancement.

Belmont Place.—Mr. Cushing's. It is some time since we have noticed this fine place. We now only hastily walked through the flower garden and the range of houses.

In the garden we found rather a scarcity of blossoms; the roses had just gone, and, excepting a few herbaceous plants, little remained. The native rhododendrons, kalmias, azaleas, &c. have flowered very well, and a few umbels, of the fair and delicate *R.* máximum, were yet to be seen. The roses have been fine; but that destructive insect, the slimy grub, had now devoured nearly every leaf. Is there no remedy for this pestiferous insect? and cannot some method be discovered to extirpate them? We fear that manual labor alone is the only sure preventive. Mr. Johnson, of Lynn, has tried this method upon a few rare varieties, and they have suffered but little. The bushes should be looked over every morning, and every worm destroyed; by doing this one or two successive seasons, they would soon be decreased in such a ratio that their attacks will not be noticed. Mr. Haggerston had tried various methods, but has not succeeded in preventing their depredations.

On the border of the grapery, vineries, &c. was a whole row of the new dark coreopsis, and the blossoms presented a brilliant show; another of mignonette filled the air with its delightful odor.

Entering the range through the retarding house, we were struck with the lateness of the vines: they were just now advancing their flower-buds, and will not be in full bloom until about the first of August, which will be six weeks later than the others. The wood is very strong, the clusters large, and a good crop will be produced. Mr. Haggerston promised us a diary of his experiment last year, and we shall endeavor to procure it in the course of the present volume. In the next house the grapes were coloring; and in the succeeding one a crop was coming on without any heat.

In the conservatory nearly every thing was removed; some fine oleanders were in beautiful bloom. We here saw, for the first time, the Poinciàna in flower; two small seedling plants, each having a cluster of blossoms. On the rafters the Wistària Consequàna was throwing out a second crop of flowers.

Continuing through the next division to the pine stoves, we found here, under a tropical temperature, the pines swelling off in great excellence. Some black jamaicas were exceedingly large and fine; a great number of fine fruits have been cut, but those now ripening have the advantage of a hotter season, and will mature better than those in the early part of the year. The grapes were all cut. Among the plants in bloom, we noticed Ipomæ'a paniculàta and insignis; Combrètum purpùreum, just beginning to bloom; Ipomæ'a Horsfàlliæ, budding; the hibiscuses are perpetually in flower.

The same good order and neatness prevailed throughout the grounds, for which the place is so well known. Mr. Haggerston informed us, however, that he had never known a season when he had found so much difficulty in keeping things in order; the continued rains, starting the weeds into growth, washing away the soil, or beating down the foliage and flowers, have kept the men constantly employed.

The Public Garden.—The work of preparing the garden is now progressing rapidly. A neat fence has been erected on Charles street, and the main walk and the border laid out all round. The Dahlias are put into the ground, and some of them have commenced flowering already. Several patches of verbenas are also splendid. Temporary cages for the birds, both large and small, have been put up, and already the garden presents quite a cultivated aspect. We shall notice it again.

REVIEWS.

ART. I. *Boston Journal of Natural History. Published by the direction of the Boston Society of Natural History.* Vol. II. No. 2. 1839. pp. 160.

WE have brought before the readers of this Magazine the present number of the above publication, because it contains, among several very valuable scientific articles, two of especial merit, and as referable to the subject of its own contents. We allude to a beautiful and poetical account of the fruits of Cuba, by the Rev. F. W. P. Greenwood, and to an article on the Lichenes of New England, by Edward Tuckerman. But these in their order. Of the first, more than thirty species of native and introduced and gradually acclimated tropical fruits are enumerated and described, not so much in botanical language and scientific idiom, as by a plainer and more pleasing manner. He observes, "Some difficulty I have had in identifying the objects of my examination by their common names. These are different in different islands, and in different parts of the same island; just as, among ourselves, dewberries at the south are blackberries at the north. In some cases the same name is applied to essentially different fruits, which is sadly perplexing. But I have put down all the synonymes which I could gather and which I thought worthy of a place, and I have no doubt of the general accuracy of my catalogue." p. 205. We could wish that our pomologists and florists would act on the above excellent hint and observation of the writer, to put down *all* the synonymes to be gathered, and then we should be soon relieved from the perplexities and loss of time and money of numerous worthless incorrectly named plants and fruits.

Of *Achras Sapòta*, the sapotilla or sapodilla, called by the Spaniards Nispero, he says,—

"The tree is quite handsome. Its leaves are leathery, glossy, lanceolate, growing in thick tufts. The blossoms are white, bell-shaped, with an agreeable perfume like that of fresh apple blossoms. The fruit is esteemed by some to be the best fruit which the island produces, though I should place it below two or three others." p. 207.

The peculiar enlarged peduncle (footstalk) which supports the nut of the cashew, (Anacárdium occidentàle) is termed incorrectly, by some, its fruit. Of this the negroes are said to

be fond, and "it is esteemed healthy. Grainger calls it, in his poem,

'Thrice wholesome fruit in this relaxing clime.'

It may be thrice wholesome, but, for my own part, I did not care to taste it twice. Once was enough; for it drew up my mouth so that I could hardly open it again. Considering, therefore, the somewhat troublesome qualities of both nut and pulp, I should conclude that it is a much better fruit to look at than to eat. It is proper to add, however, that the pulp makes a good sweetmeat." p. 209.

The luscious and tropical pine-apple, (*Ananássa* satìva) is described as a plant in appearance "low and ragged; its long thorny leaves warn you to be careful in your approaches. There are several varieties. A kind grows wild in Cuba, which is highly scented and flavored, but very acrid, and seldom eaten, except in some prepared form. The golden-yellow, sugar loaf kind, when fully ripe, is as healthy as it is exquisite. We very seldom get the imported fruit in any thing like perfection; it is either a poor sort, or gathered unripe." p. 210.

Among the several kinds of Citrus, mention is particularly made of the shaddock *C*itrus decumàna, growing to a great size, and of equal beauty. "The tree which bears it, is spreading in its form, and when thickly laden with its glittering and gigantic fruit, is a magnificent sight to behold." p. 222.

To the gorgeous and elevated group of palms belongs the cocoa, so useful to man in the employment of its various parts, whether in the fruit or the tree itself. "The trunk of the cocoa rises to a height of fifty or sixty, and sometimes even ninety feet, of an uniform thickness. At the summit of this trunk is a waving tuft of dark green, glossy, pinnate leaves, from ten to twenty feet in length, like gigantic plumes; and just under this tuft are suspended the nuts in long bunches, of all ages and sizes. The trunk easily supports their weight; for though slender, it is very tough and strong, being composed of hard fibres, closely compacted together. When the sea or the land breeze is passing through a group of these trees, and the light is glancing from the leaves, which are all alive and trembling for joy, and the nuts are clattering on their stalks almost articulately, it is something to contemplate by the hour, and to be repeated by the memory through a lifetime." p. 223.

Besides these, familiar notice is taken of the following, as interesting to the horticulturist as to the botanist. They are *Anòna* muricàta, *A.* squamòsa, *A.* reticulàta (custard apple,) *A.* cherimóya, *A.* glàbra, Artocárpus incisa and A. integrifò-

lia, Cárica *Papàya*, Chrysophyllum cainìto, *Citrus aurántium*, *C.* Bigarádia, *C.* Limétta, *C.* Limònum, *C.* lùmia, *C.* *Médica*, *Còcos* crispa, *Jambòsa* vulgàris, *Lucùma* mammòsa, *Mammèa* americàna, Mangifera indica, Mùsa sapiéntum, M. paradisiaca, Passiflòra sp., *Pérsea* gratissima, *Psidium* pomiferum, *P.* pyriferum, *Pùnica* granàtum, *Tamarindus* occidentàlis, Theobròma *Cacào*.

We conclude in response and sympathy, considering it a "great privilege in being permitted to behold the luxuriant forms of vegetation which Providence has allotted to a tropical clime. We have in our colder region no tree, which can give any idea of the wonderful grace of the cocoa-nut tree; and the oranges hanging amid dense and glossy foliage all the year round,

'Like golden lamps in a green night,'

offering to the thirsty lips their fountains of delicious and healthy liquid,—are a glory with which our orchards can hardly vie."

Pass we on to the next article, and whoever of botanical research has looked into the cryptogamia of our country, and especially of Massachusetts, will readily appreciate the zeal and labor of the lichenist before us. On the old and stately elms of Cambridge,—upon the time-stained rocks and stones by the way-side,—on sands and in forests green,—rare and most curious lichens, identical with those of high Alpine atmospheres and latitudes, have been collected. Beautiful, too, are these overlooked and neglected vegetable forms! Far more curious in their economy, and in many instances quite as useful, whether in the healing science, or in the arts and even luxuries of life, than groups and thousands of plants and flowers, culled by the botanist and cultivated by the florist. Microscopically minute are some, and conspicuously large and singular are others. Brilliant in golden or crimson tints are several, and plainly elegant are most. Besides the collection of a plentiful supply of specimens in this immediate vicinity, Mr. T. has frequently visited the White Mountains in quest of his subjects. In discovering the locality of Parmélia stygia: he says,—"Standing here on an elevation of nearly six thousand feet, I gathered the lichens of St. Gothard and Ben Nevis. Nor were inspiring memories wanting of him, who made Lapponian Alps poetic ground, as on the rocks and little patches of sedgy pasture of Mount Washington I hailed the forms that he discovered and illustrated. And this I felt was no unworthy enthusiasm. The eloquent words of Garden came back with freshened force upon my mind, and with him I said, It is 'our duty to our

fellow-creatures, which obliges us, as members of the great society, to contribute our mite towards a proper knowledge of the works of our common Father.'"

Mr. Tuckerman has done no trifling services to the Cryptogamia of New England, and we are sure that such efforts will be appreciated by every lover of natural science. Let the society, from whose papers we have selected these materials, continue to contribute to its advancement, and we wish it all success.

PHYSIS.

ART. II. *Journal of the Essex County Natural History Society.* Vol. I. No. 2. pp. 107. Salem, 1839.

THE second number of the *Journal* of the Natural History Society of Salem is before us, and, like that of its sister society in this city, which has just been noticed, it contains several valuable and interesting articles.

The efforts of this young and flourishing Society are well directed. In the descriptive notices, as much of the technicalities of science are done away as is compatible with the object of conveying a correct description. The plain and familiar style of the articles is another step to the popularizing of the study of Natural History, and inducing many to interest themselves in the subject, who might otherwise shrink from the task by the abundance of apparently unmeaning words, which the more zealously devoted are too apt to introduce into their descriptive papers. So far as can be with propriety, it is desirable that this should be done away with, and thus one of the greatest obstacles to the progress of science removed.

In this number there are several papers upon various branches of the science. The first is entitled, "A particular notice of some of the shells found in the limits of Essex County," and is by our correspondent, Prof. Russell. It is written in the plain and lucid style of the author, and divested of every attempt at mere learned descriptions; its object being simply to familiarize the shells which are found within the precincts of Essex County alone.

The third article is a sketch of the geology and minerology of Essex county, by William Prescott, Esq.; but being con-

fined to these two objects, contains but little which would immediately interest our readers.

The next paper is by Professor Russell, describing two new species of mosses, viz :—*Polytrichum incarnàtum*, found in Chelmsford, Middlesex County; and *P. boreàle*, a native of Coos Co., N. H.

An interesting notice of the peeping frog, whose early and cheerful notes the author denominates "the voice of spring," follows this. To us the shrill peep of the frog conveys more music than the sweetest winged visiter of spring. It falls upon our ear in gladsome tones, telling us that the frost-bound earth is again free, and that spring—lovely spring—has again returned.

"Natural Science, so forbidding to most minds by its systems, is happily relieved by its poetry. Who, unmoved, can listen to the voice of spring—to the song sparrow—to the blue bird, and even to the little peeping frog? And what are these emotions, which fill the soul with gladness, but the poetry of Nature—of Life? The human mind is inquisitive. It wishes to know more and more of the objects—the beings which afford it pleasure. Many of our race have received delight from even the hyla, who knew nothing of the creature save its voice. Spring after spring it has saluted their delighted ears, from every fen and morass, like a fairy sound, telling them that 'the winter has past—the time of the singing of birds is come.'"

Another and more useful paper to the reader is a notice of several rare plants, by Professor Russell. Cladònia uncialis, a new species, is described as growing in Hingham, Plymouth county.

Since the first number was issued in 1836, the Society has continued to explore the geology and mineralogy of the county. "A valuable group of native birds has been provided for its ornithology. The conchology of our ocean shores has been regarded. Nor has our botany been overlooked. Beautifully dried plants, both of the phanerogamous and cryptogamous orders, and also prepared fruits and seeds, will be found in their proper compartments. Attention to the mammalia, reptilia and fishes, as also to comparative anatomy, has been on the increase. Some rare and valuable works have been added to the library. Rich donations have been made by correspondents, in foreign specimens. The floral exhibitions have maintained their usual and proper position. The Society's Hall has been ever open to the inquiring and curious; and it

is still the wish of the Curators and others, that the public may feel itself interested in a free and liberal invitation to a participation of its advantages."

The Floral Exhibitions of the Society have been given, and those of the present season will be presented in the course of the volume.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Hybridization of the Cèreus speciosíssimus with the C. grandiflòrus.—Cacti are much sought after for rare forms, and many of these are the most grotesque; in fact, they are now so common that there is scarcely a house, in which any attention is paid to the cultivation of flowers, where some species are not found. The most common varieties found are the Cáctus speciòsus, or the C. speciosíssimus, or some which are raised from these. Horticultural science has already produced many splendid varieties of C. speciosíssimus, but much more remains to be done, and he suggested trying experiments between Cèreus speciosíssimus and one of the most magnificent flowers which had been introduced into this country for one hundred and fifty years, the Cáctus grandiflòrus, or night-blowing cereus, had been singularly neglected. The flower was most magnificent, being often a foot in diameter, and under careful treatment was free, its production from seed being pretty sure, as the seed ripened well. Now there was little doubt but that pretty varieties might be obtained from it, and more advantageous to its possessors in the time of flowering, which was now said to be at midnight, although it in reality commenced at about six o'clock. It would be worth trying experiments between this and C. speciosíssimus, both belonging to the same sub-order. Whether also an union might not be made with the melo-cacti, by placing on them the larger flowers of speciosíssimus or opuntia; or whether physical differences of growth would prevent it; but so much had been effected by man, that it was advisable to try even where the physical differences might be great. (*Prof. Johnson's Lecture before the Royal Society of Horticulture.*)

Geographical distribution of the Cactùceæ.—The cacti display curious evidence that their position has not been altered since the creation of organic being on the surface which they inhabit, a most striking circumstance of interest both to the student and the geologist. They are wholly confined to the meridianal parts of America, from 30° S. to 40° N. latitude; and they there occupy the same position as the succulent euphorbias in Africa and Asia; and they negatively seem to prove, that ever since their production, the Atlantic Ocean was a barrier between them. We have said that they are wholly

confined to America, but there are some exceptions, as four or five species are found in the Canaries and Valdive islands, on the coasts of Africa, and the opuntia is also found on the shores of the south of Europe. It is cultivated in the island of Sicily, where it is the first that is planted in the fields of lava, for wherever a fissure or breakage is seen in the rocks, there they plant one; and the roots pushing break it further open, and thus mechanically aids in the formation of future soil. Although these have been considered by some as natives of the south of Europe, growing upon a sandy soil, it is yet far more probable that, as they are exclusively natives of the West Indian islands and the continent of Africa, seeds of these have been accidentally wafted to these positions from the opposite shores,—the same as the seeds seen by Columbus drifting from the coast of America, and which confirmed him in the existence of that continent, which his fondest hopes so soon after were realized in the discovery of. (*Id.*)

ART. II. *Foreign Notices.*

ENGLAND.

Double Azalea indica.—Mr. Smith, of Norbiton, has many hybrid varieties of the rhododendron, and, among others, a very splendid white one; but his seedling Azàlea índica are more than usually interesting. He has one beautiful double flowering variety, larger than any of the known sorts, and a very abundant bloomer. We have seen nothing more striking in the whole tribe. (*Gard. Gazette.*)

Fúchsia fúlgens, the new and splendid species, bears a berry not unpleasant to the taste; but the rarity of the plant has rendered the seed too valuable to those who have raised it, to swallow it. (*Id.*)

The London Horticultural Society held their anniversary meeting on May 1st. The receipts of the past year were £6039, and the expenditures £5664—leaving a balance of nearly £400. The Society are now erecting a new conservatory, of large dimensions, at Chiswick. The Duke of Devonshire was elected President. (*Id.*)

Dahlia challenge.—Mr. Case, the grower of Case's Striped Perfection dahlia, has challenged Mr. Mortlock, the grower of Mortlock's Beauty of Hyde Vale, to show four blooms of that variety against the former, for the sum of £5, under certain restrictions; and, in return, Mr. Mortlock challenges Mr. Case, £10 against £5, to show half a dozen blooms, on the 25th of September next. (*Id.*)

The Royal Society of Horticulture and Agriculture are about opening a new garden at Chiswick. The first exhibition was to take place in May. (*Id.*)

Hóya coriácea.—A new species of this fine genus has been introduced under the above name, and is said to be nearly parasitical in its habits, and difficult of propagation. The description of the flower is not given. (*Id.*)

New Swan's Egg Pear.—The Chaumontel Swan's Egg was raised from the seed of the Chaumontel, impregnated with the pollen of the Swan's Egg, by John Williams, Esq., of Pitmaston: it was a middle sized obovate fruit, with a short stalk, a large open eye, a russet skin, and a rich sugary flavor. Mr. Williams stated that it bears well as a standard, and will be in season in the end of October; the tree grows with upright branches, like the Swan's Egg. The other was a very small, roundish, obovate pear, raised from the seed of the Green Chisel and pollen of the Pose d'Auch: it does not appear to possess merit of the first kind, the flesh, though sugary, being rather gritty. Mr. Williams found it to succeed admirably on a north wall, where it ripens about the end of September, succeeding the Jargonelle.—(*Gard. Gazette.*)

Van Mons Leon Le Clerc Pear.—The variety known by this name, and raised by M. Leon Le Clerc, of Laval, is a fruit of an oblong form, about four inches in length, and nearly three inches in diameter; the eye is shallow, small, but open; the stalk rather more than an inch in length, moderately strong, and inserted obliquely; the skin yellowish, every where profusely sprinkled with brown, which, near the stalk, amounts to a sort of russeting. The flesh is yellowish white, buttery, and melting, with a very rich sugary flavor. It proves a pear of first-rate excellence, combining the properties of large size, handsome appearance, and rich flavor. Should it attain equal perfection in this climate, it will be surpassed by none in its season, which will probably be the beginning of December.—*Id.* [It is not probably known that there are two varieties under this name, both of which have been sold for one and the same thing. We shall notice it in our next annual report of new fruits, and give also a history of the pear—*Ed.*]

CUBA.

Indigenous and acclimated fruits of Cuba.—In a preceding page will be found an interesting review of the *Journal of the Natural History Society* of Boston. We were just preparing a notice of the same, when the kind attention of one of our correspondents relieved us from the duty. We had intended making somewhat larger extracts from this beautiful article, by the Rev. Mr. Greenwood, on the fruits of Cuba, than those already given; and, as we have marked them, we shall here present them to our readers, under the impression that they will be read with a great deal of pleasure. Very little is known, beyond mere botanical description, of the many tropical fruits; and an article, at once so extended and so beautifully written, giving, indeed, the only good account of these fruits that has ever met our eye, we have thought would be read with the same absorbing interest with which we have perused them. If travellers were often to give the same attention, either to the fruits or plants of such localities as they might visit, much more would be known respecting them than mere botanical descriptions.

Besides the extracts in the review, the remarks on the following kinds, which are worthy of introduction into stove collections, will be found exceedingly interesting:—

"Anòna *cherimòlia.*—The *Cherimoya* is a large, clumsily shaped fruit, irregularly conical, having the pointed end opposite the stalk; that is to say, the reverse of that of the pear. Some specimens are nearly globular.

"When ripe, the skin of this fruit is yellow, with or without a blush of red. Cut or break it open, for it is quite soft, and you come to a white, creamy pulp, filled with black seeds, resembling those of the watermelon, smaller, but not so flat. The consistence of this pulp is that of a soft custard, or a rich and smooth ice-cream; and it tastes as much like an ice-cream, very slightly flavored with strawberry, as any thing I can think of, though I do not mean to say that it is as good. By some, who have eaten the cherimoya in South America, it is vaunted as being superior to the pine-apple. Others, however, who have also eaten it there, do not think so much of it, and assert that a fine pear is to be preferred to it. Very probably it is better in certain parts of South America than in the West Indies, but to compare it any where with the princely pine-apple must be nonsense. It is, nevertheless, as I have seen and tasted it, a luscious fruit, of which one may easily become fond. It is eaten with a spoon, the skin of the fruit forming the custard-cup; and there is more food in one fruit than any but a hungry man would care to eat at once.

"The tree is about the size of a peach tree, and the foliage is also like the leaves of the peach, and exhibits the scattered appearance which is common to the Anona genus. The fruit stalk is thick and fleshy."

"*Cárica papàya.*—The *Papàya*, or *Papaw*. This is but an ordinary fruit for eating, but it grows in a picturesque manner, and belongs to a plant which in several respects is quite remarkable.

"The tree has a straight, slender trunk, marked with parallel rings or scores, like many of the palms, and rises to the height of about twenty feet. At the top, is a broad tuft of palmated leaves, resembling those of the Palma christi, or castor bean, very large, and held by long stiff footstalks, which branch out horizontally, like the sticks of an umbrella. Immediately under this canopy, just where the footstalks diverge from the tree, the fruit, of the shape and size of cantelopes, are clustered regularly and closely round the trunk, to the number of twenty or thirty, and packed together like a bunch of grapes. Grainger compares the cluster to a necklace. The tree grows very rapidly, and the trunk is spongy and hollow, so that in some of the islands it is common to say of a specious, hypocritical person, that he is 'as hollow as a papaw.'

"When ripe, the fruit is yellow, or yellow striped with green, and smooth on the outside. The flesh is also yellow, like a muskmelon, and tastes like a poor specimen of that fruit, or like a ripe cucumber. The interior contains a large quantity of oval seeds, of the shape of pepper-corns, rough, black, and tasting like pepper-grass, or the seeds of the nasturtium. The male and female flowers grow on separate trees, and it is therefore only on the female trees that fruit is to be found.

"The papaw flourishes in both the Indies. St. Pierre gives it a conspicuous place in his tale of Paul and Virginia; causing his heroine to plant some of its seeds, one of which produces fruit in three years. Grainger characterizes it in his poem, as the

> '—— quick papaw, whose top is necklaced round
> With numerous rows of parti-colored fruit.'

"But the most remarkable circumstance connected with this tree, is the property ascribed to its juices of acting powerfully on animal matter, so as to make tough or newly killed meat perfectly tender. It is asserted, on good authority, that this singular effect is produced

by washing the meat with the milky juice, or by mixing a portion of the juice with the water in which the meat is to be boiled, or even by hanging the meat on the tree, and thus exposing it to its exhalations. Living animals, moreover, are intenerated by eating the spoils of this persuasive and affecting plant. 'Even old hogs and patriarchal cocks and hens, if fed upon the leaves and fruit, are made in a few hours as tender as young pigs and pullets.' So says Burnet, in his 'Outlines of Botany.' The juice has been preserved and sent to Europe, where it has been subjected to chemical analysis, and found to bear a close affinity itself with animal matter; as is the case also with some of the fungi.

"I was unacquainted with these facts when in Cuba, and therefore did not verify them, and do not state them on my own responsibility; but I have no reason to call them in question."

"*Chrysophyllum cainito.*—It is called by the Spaniards *caimito*, and by the French *caimite;* a pretty name, which ought to supersede the English *Star-apple.* It belongs to the order Sapotaceæ, and, like its congeners, the Achras and Lucuma, abounds in a milky juice.

"The tree is spreading, and of a moderate size. The leaves are dark green above, and downy beneath. The flowers are in small bunches, of a purple hue.

"It is one of the handsomest of fruits, both without and within. One of the varieties is of a regularly conical or top shape, the stalk being at the large end or base of the cone; with a smooth, polished, dark purple skin; about the size of a large apple. The skin, though tolerably thick, is tender. If you cut through the fruit transversely, there is the figure of a star in the centre or core, just as there is, only less decidedly, in our apple and pear; and from this appearance it has derived its English name of *star-apple.* Broad, plump, black seeds, flattened on the sides, with a scar as in the sapotilla, regularly disposed, and surrounded by a tough gelatinous substance, form the nucleus of the central star.

"Nothing can be richer than the appearance of the pulp itself. It consists of innumerable fibres, of a sumptuous purple color, intermingled with veins of a thick white cream, which is continually oozing out. It may be likened to a mixture of strawberries and cream, and, though it possesses not the high flavor of that compound, it is very pleasant, sweet and good. But it should be eaten fully ripe, in order to be properly appreciated.

"I have described the purple conical variety. There is another variety, which is like it in all respects, except that it is globular instead of conical in form. I have also seen too varieties, one of which is globular, the other conical, which have a green skin and a white pulp, and are smaller than the purple varieties. There may be other varieties still, some of which may deserve to be ranked as species."

"*Citrus aurántium.—Naranja* in Spanish; *Orange* in French and English. All sweet oranges are reckoned by botanists as varieties only of this one species. It is not indigenous in Cuba, but the variety which grows there, and which goes under the name of the Havana or Cuba orange, is one of the very finest of its kind. It is to be remarked, also, that of this variety there are sub-varieties; so that in an orange grove, where all the fruit is rich and sweet, there will probably be two or three trees which will be your favorites, on account of the superior flavor of their produce. Observe, too, that the blossom end of an orange, or end opposite the stalk, is the sweetest; and where this fruit is in such plenty, that quantities are decaying un-

der the trees, you can well afford to eat only the blossom end, and cast away the rest.

"The orange, certainly, has not so high and exquisite a flavor as the pine-apple; but its sweet and healthful juice is so abundant and so refreshing, its retains its spirit and soundness so long, and offers itself so liberally to all classes, in all climates, that I am disposed to think it the most valuable, not only of West Indian, but of all fruits."

"*Jambòsa vulgàris, or Doméstica.* The Spanish name is *Manzana de rosa,* or *Poma rosa;* the French, *Pomme Rose,* or *Jam-rose;* the English, *Rose apple.*

"The tree is one of the most beautiful in Cuba, large and spreading, affording a fine shade. The leaves are ample, oval, pointed, firm and glossy. The blossoms are large, white, and of pleasant odor, and their stamens are so long and numerous that they look like tassels. They are gigantic and fragrant myrtle blossoms.

"The fruit is round, or oval, and carinated; has a smooth skin, and is cream-colored without and within. The pulp is of rather a firm consistence, sweet to the taste, and possessing a decided odor of roses, from which last circumstance it derives its common name. It contains one or two seeds. These are round, with a rusty coat and a green meat, which is also of a rosy fragrance, but is said to be poisonous, or at least very unhealthy. The fruit is eaten when fresh, and, though it is palatable, is regarded as being somewhat indigestible. When preserved, it is quite nice, and as innocent as most preserves are.

"The fresh fruit I did not see; but the tree and blossoms I have often seen and admired. It is of the natural order Myrtàceæ, and was formerly included under the genus Eugenia. The generic term Jambòsa is derived from the word *Schambu,* or *Jambu,* which is the Malay name for the fruit."

[*To be continued.*]

Art. III. *Domestic Notices.*

Prospects of the season in Georgia.—Although we have had an unusual drought, fruit has been fine, and the prospect still good. Peaches are now becoming ripe, and are abundant; apples and early pears are two weeks in advance of last year.—*Yours, M. A. W., Athens, Ga., July* 12, 1839.

Cereuses in bloom.—My Cèreus grandiflòrus had four flowers open at once last night; and one night last week C. trigònus had no less than thirteen out at once: several nights it had from four to six, and it still continues to put out buds. C. tetragònus is also in bud for the first time with me.—*Id.*

Dahlias have flowered and are splendid this year. The prospect is, that they will do so the whole season.—*Id.*

Silk culture in Georgia.—There are many engaged in the cultivation of the *Mòrus* multicaúlis, in this vicinity, and the few people just around me are sanguine in the success of the enterprise. They are building cocooneries, and making arrangements to go ahead. Upwards of two hundred pounds of cocoons have been made this year

by a few persons in this village, and they are now feeding a second crop, (second generation of worms;) some have wound up in four weeks' feeding. I am perfectly satisfied that, in this region, there can be no safer investment of capital than in the silk culture.—*Id.*

Horticultural Exhibitions to take place in September.—The Pennsylvania Horticultural Society will hold their annual exhibition at the saloon of the American Museum, corner of Ninth and George streets, Philadelphia, on the 18th, 19th and 20th of September next.

The Horticultural Exhibition of the Burlington Lyceum will be held on the 25th and 26th of September next, at their hall, in Burlington, N. J.—*Yours, T. H., Burlington, July*, 1839.

The Horticultural Society of the Valley of the Hudson will hold its second Autumnal Exhibition in New York, on Thursday, the 12th of September. An account of its Spring Show will be found in another page.

The Massachusetts Horticultural Society will hold its Annual Exhibition in September, (probably between the 13th and 20th;) but the day is not yet decided upon.—*Ed.*

Fine Cauliflowers.—We have received from the farm of C. J. Wolbert, Esq., two immense cauliflowers. The circumference of the largest, when divested of its leaves, is two feet seven and three quarter inches; the other, two feet five and a half inches. We make a public notice of these vegetables, because we think that good will come from a general knowledge of the fact, that such articles may be raised in the open air. Mr. Gregory Lee, who has the general superintendence of Mr. Wolbert's whole farm, assures us that these cauliflowers were raised in the open garden, without shelter, or any artificial aid whatever. We ask the attention of our friends in the country to this fact, and suggest to them, if the fact itself does not suggest, the propriety of trying to make one of the finest vegetables in the world common in our market, and so cheap as to be within reach of all who like it.—*U. States Gaz.*

[We have received a communication from Mr. Lee, on the management of the plants which are noticed above; but as it came too late for insertion in this number, it will appear in our next.—*Ed.*]

Art. IV. *Retrospective Criticism.*

Errata.—In our June number, during our absence, one important error occurred, viz:—page 206, thirteen lines from the bottom, for "*grass*" read "glass," which essentially alters the meaning of the paragraph.

Horticulture in Washington, D. C., (in answer to D. Buist, p. 194.)—I regret that my humble endeavor to give you better information on the state of horticulture, in this vicinity, has called down upon my devoted head the wrath of two very redoubtable personages, who speak long and loud in your May number, (page 194.) Of the one of these who signs himself "One who knows," I shall only remark, that one may know the truth without possessing honesty enough to tell it; and that, as my own proper signature is affixed to my communications, I cannot condescend to a controversy with any writer who

is so conscious of unfairness, as to be afraid to append his own proper name to his statements.

As to the other, Mr. David Buist, he admits that there were plants in the other collections, worthy of being placed in his brother's collection, and they were certainly worthy of being mentioned in your first notice of this place; but Mr. D. B. seems to be surprised that those who possessed these plants should have preferred money to the plants. Now did not his brother buy them for sale and for profit? Certainly; for it is his business? Why, then, the idle nonsense about Mr. W. Buist's generosity and disregard of money? In making the above admission, Mr. D. B. proves that, which I desired chiefly to show in my first letter, viz., that there are other and older establishments in this city and vicinity than Mr. Buist's.

But Mr. D. B. says, that "Mr. Buist's was the first hot-house establishment in this city or vicinity." Now it may be a nice point for him to distinguish a hot-house from a green-house, but no "One who knows," and is really honest and impartial enough to speak the truth, will deny that J. Douglas, sen. had kept a house covered with glass, in which house he kept and bloomed as tender plants as have ever been cultivated here. But this is all a matter of little moment. It was first asserted in your Magazine, that "Mr. B. had introduced many fine specimens:" you were silent about all others, leaving the inference that they had done nothing; this I desired to correct; this is the true issue, and this issue Mr.B. dare not meet with a denial.

D. B. says, that I do not question "the truth of your statement, that Mr. B. had introduced many fine things, but thinks that you were not prompt enough in saying that he introduced many also, and fearing that his fame might not be spread, he determined to blow his own trumpet." Did he not know, when penning his letter, that there was as much difference between J. Douglas, Sen., and J. D., Jr., as between Mr. Buist, and D. B.; and that if it was reprehensible in me to defend my father's interests, it was at least improper for him to eulogize his brother, with whom he lives, and with whom he is so intimately associated in the business of floriculture, that you cannot praise one, without "blowing the trumpet of the other;" but as for my thinking that you were not prompt enough to notice my father's establishment, I can assure you that I attached no blame to you, but was sure that you knew, of your own knowledge, nothing of the matter, but that you had relied on the statements of interested or jealous persons, who had not scrupled to abuse your confidence.—*I remain, yours, John Douglas, Jr., Washington, D. C.. June,* 1839.

Mr. Buist's collection of camellias.—(In answer to the Editor.)—I beg to correct a few mistakes you make at pages 232 and 233. My last communication was dated 26th February, instead of 26th April (as you have it;) also, you did not see Camél*lia* var. Travérs*i* mutábilis in bloom with me last winter. It is not, however, a new plant with me, for I have had it over two years in my collection, neither is it high priced, being under $5.—It has been for sale these eighteen months past.

It is unfortunate that you frequently make hasty assertions, without *data* for it; and more so in endeavoring to detract from others, in order to represent yourself. *I am Sir, yours, R. Buist, Philadelphia, June 15th,* 1839. [The error alluded to in the date was made in our absence, from a supposed mistake. The insertion of Mr. Buist's remarks was deferred, on account of our not having time and room to reply before.—*Ed.*]

ART. V. *Horticultural Association of the Valley of the Hudson.*

The Second Semi-annual Exhibition of the Horticultural Society of the Valley of the Hudson was held at Stanwix Hall, Albany, on the 25th and 26th of June.

The committee could scarcely have been more fortunate in the selection of a suitable exhibition room, as the lofty domical apartment, measuring seventy feet from the floor to the ceiling, and of corresponding width, when filled with fine exotics, plants, fine fruits and beautiful flowers, redolent with delightful odors, from the gardens of many of the members, afforded a truly charming *coup d'œil* to the eye of the spectator.

On entering the hall, the rich groups of verdure which encircled it, composed of the most beautiful exotics, afforded the finest possible back ground to central tables, where the numberless bouquets of choice cut flowers and the finest specimens of early fruit were exhibited. One side of the apartment was devoted to the display of the many excellent and well grown vegetables. One hundred and forty superb bouquets of cut flowers decorated the chandeliers, the columns and various other parts of the room; and during the second day of the exhibition the numerous company of visitors assembled were entertained with the performance of a fine band of music. The middle of the central table was occupied by a beautiful "*Temple of Flora,*" from the Albany Nursery, the floor of which was paved with dahlias and other fine flowers, the columns enwreathed with a variety of phloxes, and the dome covered with a rich variety of roses and Paisley pinks. Among the most striking of the fine green-house plants, were some magnificent Roman myrtles, orange and lemon trees, with a great variety of other fine specimens from the Manor House, Albany, which were kindly contributed by Mrs. S. Van Rensselaer. We also noticed a very large specimen of *Yúcca* gloriósa, ten feet high, with equally fine specimens of the India rubber tree (*Ficus elástica,*) Fúchs*ia* grácilis, and Pròte*a* argéntea. The oriental cypress of the Levant, the vandìn*a* doméstica of China, and the fragrant jasmines of the south of Europe, were also conspicuous for their size and beauty. An admirable variety of fine vegetables was contributed by the horticulturists of the counties bordering the Hudson, as well as from the neighborhood of Albany. Gentlemen distinguished for their zeal in horticultural and rural improvement were present from nine of the different river counties, all of whom expressed the warmest interest in the future prospects and success of the Society. The early period at which the first semi-annual exhibition is held, necessarily prevents a large show of fruits, the autumnal exhibition being more especially devoted to pomology; but the cherries, strawberries and melons sent were highly deserving commendation.

At the meeting of the members, on the evening of the 25th, the annual election of officers of the Association took place; when the Hon. Edward P. Livingston, of Clermont, Duchess Co., was chosen President; A. J. Downing, Esq. of Newburgh, Corresponding Secretary; Theodore Allen, Esq. of Hyde Park, Recording Secretary; and William Thorburn, Esq. of Albany, Treasurer. A Vice President was also elected for every county on the river, and executive committees for each place where it is proposed to hold exhibitions.

The next autumnal exhibition of the Association will be held in New York on the 12th day of September next, when contributions are solicited from every section of the Valley of the Hudson.

The following contributions were made to the exhibition:—*From Mrs. S. Van Renssellaer*, Manor House, Albany, *Euphórbia* splèndens, Pròtea argéntea, eight feet high, Lagerstrœ'*mia* indica, Diósma ericoìdes; heaths, several fine species; *Ficus* macrophyllus, *F.* elastica, *Dáphne* variegàta; several beautiful geraniums; a number of fine large orange trees, loaded with fruit, of different varieties; *Jas*mìnum, of different sorts; a large century aloe; *Yúcca* glorìosa, Fúchs*ia* grácilis, calceolarias; splendid myrtles, &c. &c., all in pots. Also, beautiful bouquets of cut flowers, roses, pinks, &c.; also a basket of ripe melons, the finest cucumbers, two varieties of strawberries, very large gooseberries, &c. All these were of the finest description, and reflect credit upon Mr. Leonard, the gardener at the Manor House.

James Wilson, Albany.—Luxemburgh moss rose, scarlet moss rose, white moss, Village Maid; La Turturelle, and Wellington roses; two varieties new petunias, twelve varieties fine heart's-ease, a splendid plant of Fúchs*ia* globòsa, and a fine new South American calceolaria, in full bloom; one large orange tree, loaded with fruit, with many other green-house plants, and blooms of the following dahlias: Purple Perfection, Globe White, Liberty, Durant's Invincible, Rose Imperialis.

E. Holbrook, Hyde Park.—Bishop's orange strawberries, four and three quarter inches in circumference; Keen's seedling, and Hautboy's do., all of large size; Whitesmith, Crown Bob, Rifleman, and other gooseberries, extra fine; four fine heads cauliflower; eight heads early York cabbage; Newcastle, early, and Egyptian kidney potatoes; fine ripe tomatoes; red top turnips; large early carrots; blood beets; and a fine bouquet of cut flowers.

Josiah Williams, Poughkeepsie.—Two cucumbers, twenty-one inches in length.

J. Buel & Co., Albany Nursery.—A beautiful variety of fine roses, pinks, &c., tastefully interwoven in the form of a temple of Flora. Also, a great number of plants, in pots, among which the following geraniums, in full bloom, were conspicuous, viz:—Mary Queen of Scots, Dennis's Perfection, Macranthon, Diomede, Juliet, Lafayette, Wheelerii, Americanum, Adelina, Yeatmanium, Ferronia, Capt. Cook, &c. &c. Also, a great variety of cut flowers, among which were splendid specimens of the different Chinese pæonies, double white, blush, and rose scented; fine specimens, in pots, of Sollya heterophylla, Lantàna Sellòwii, Fúchs*ia* Thompsòn*ia*, *Ne*rium splèndens, Crássula coccínnea, *Cytisus* argéntea variegàta; *Erica*, many species; Bouvárd*ia* triphylla, *Myrtus* flòra plèno. Also, twelve stalks of Giant rhubarb, which weighed, without the leaves, twelve and a quarter pounds.

Edward P. Livingston, Clermont.—Extra fine ripe melons; six very beautiful lemons. Fine specimens of the white oxheart cherry, with a beautiful bouquet, composed in part, of superb carnations, scarlet zinnias, and fine varieties of roses.

Theodore Allen, Hyde Park.—Extra fine gooseberries and cauliflowers, stalks of rye eight feet long, and a variety of fine vegetables, consisting of lettuce, rhubarb, potatoes, turnips, beans, and fine melons.

Messrs. Downing, Botanic Nurseries, Newburgh.—Specimens of the following cherries, viz., Yellow Spanish, China Heart, Black Tartarian, Downer's late Red, American Heart, and Transparent. Also, a variety of fine hardy roses, among which were Pallagi, Village Maid, Chatelaine, George IV., La Cerisette, Dianthiflora, Princess Louise, Felicite perpetualle, Madame Despres, Moss of Moss, Hybrid blanc, Roi des Hybrides, &c. A beautiful specimen of Amaryllis, with eight fully expanded flowers; bouquets of *Verbèna* Tweedie*àna* and T. màjor, *Datùra* arbòrea, several sorts of pansy, and cut specimens of the following geraniums, viz., Dennis's Perfection, Speculum mundi, Miller's Adonis, Sir John Broughton, Queen of Pixies, &c. Dahlias:—Conqueror of Europe, and Lilac perfection.

Dr. Wendall, Albany.—A fine fig tree, eight feet high; *Aùcuba* japónica, and several varieties of geraniums in pots; four fine cucumbers.

J. R. Stuyvesant, Hyde Park.—Very fine cauliflowers; also, excellent specimens of early potatoes, beans, cabbage, and tomatoes, with a fine bouquet of cut flowers.

Mr. Fowler, Albany.—A few select dahlias, with several bouquets of cut flowers, *Verbèna* Tweedie*àna*, and Ranunculus marigolds.

Mrs. Forsyth, Albany.—A beautiful bouquet of roses.

Alderman Peters, Newtown, Long Island.—Fine White Heart cherries.

Mr. Duane, Schenectady Co.—Prairie grass from the Mohawk Flats, eight feet two inches high.

Francis Bloodgood, Albany.—Methven strawberries, four inches in circumference, green peas, and cucumbers.

J. P. De Witt, Fishkill Landing.—Extra fine Mayduke cherries, and some fine early beans.

Thos. Turner, Albany.—A bouquet of beautiful dahlias and moss roses.

Charles Gilchrist, Albany.—A specimen of Archduke cherries, beautiful dahlias, and other cut flowers, and six cucumbers.

Alex. Walsh, Lansingburgh.—A table of silk worms feeding; filberts, of last year's growth, sea kale, Keen's Seedling strawberries, Duke cherries, early potatoes and cucumbers, mushrooms, seedless berberry, and a variety of cut flowers, among which were Paisley pinks, Feathered hyacinths, *Delphínium* grandiflòrum, Campánula *persicæfòlia* plèno, *Spiræ*'a filipéndula plèno, *Hòya* carnòsa, *Aconìtum* napéllus, &c. Vegetables: potatoes, fine cucumbers, early York cabbage and turnips, with a specimen of a new fodder plant, called 'Esparsette.'

A. P. Heartt, Troy.—Plants in pots, new prolific Lime, Myrtle orange and Sweet orange, all in fruit; also, a splendid variety of cut flowers, roses, pæonies, &c. &c.

George W. Warren, Troy.—Three fine lemons, in pots.

William Thorburn, Albany.—Three Seven Years' pumpkins, grown in 1837, perfectly sound; also, some fine Paisley pinks, in pots; seeds for sale by him.

John B. Hudson, Albany.—Six heads very large Early York cabbage, and some beautiful heads of Sicily lettuce.

John Crawford, New Scotland.—Stalks of rye, eight feet one inch in length.

T. McBride, Albany.—A dish of large Whitesmith gooseberries.

J. Whalon, Albany.—Fine lettuce and cucumbers.

Theo. Roessle, Albany.—One bunch celery, one bunch onions, four heads lettuce, and a wreath of double curled parsley.

Alderman Bancroft, Albany.—Fine specimens of wax flowers, executed by his daughters.

Sidney Chapin, Albany.—A fine pine-apple, growing upon its natural stalk.

The Society cordially invite all persons resident in the Valley of the Hudson, who feel an interest in the improvement of our horticulture, to contribute specimens of fruits, vegetables, flowers, and farm products, of every description, to the Autumnal Exhibition, to be held on the 12th of September next, in the city of New York.—*A. J. Downing, Cor. Sec'y, Newburgh, Orange Co., July*, 1839.

ART. VI. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society was held on Tuesday evening of the 16th inst., Gen. Robert Patterson in the chair.

The Committee on Plants and Flowers awarded the following premiums at the Society's intermediate meeting, on the 3d inst. For the twelve best carnations, to Messrs. Mackenzie & Buchanan. For the best American seedling carnation, to William Carpenter, Crescentville, Philadelphia Co., named Carpenter's Conqueror. Robert Kilvington exhibited twenty varieties of very fine Picotee carnations. There was a fine display of cut flowers, and a beautiful bouquet, exhibited by Mr. Chalmers, gardener to Mrs. Stot; likewise a fine specimen of Cirrhæ'a fúsco lùtea, in full flower, and Alstrœmèr*ia* Hòoker*ii*.

The Committee on Fruits and Vegetables awarded the following premiums, viz: For the best half peck of bush beans, grown in Pennsylvania, to Philip Reilly, gardener to Mr. Gratz. For the best three quarts of raspberries, to Daniel Reilly, gardener to Pierce Butler, Esq. For the best two quarts of red currants, to Andrew Paton, gardener to Mrs. Kohn, Turners Lane. For the best quart of white currants, to Robert Meston, gardener to Mrs. Roland. For the best two quarts of black currants, to William Hobson, Kingsessing. For the best early corn, to Adam Price, Burlington, N. J. An honorary premium was given to Andrew Paton, gardener to Mrs. Kohn, for some very fine white Alpine strawberries. Gregory Lee, gardener to Charles Wolbert, Esq., exhibited a cauliflower raised in the open ground, measuring three feet one inch in circumference divested of its leaves, weighing eight pounds. William Chalmers, gardener to Mrs. Stot, exhibited red, white and black currants, tomatoes, bush beans, carnations, pinks, double and single, &c. &c. Philip Reilly, gardener to Mr. Gratz, exhibited red and black currants, and beans. Daniel Reilly, gardener to Pierce Butler, Esq., exhibited raspberries, beans, cauliflowers and gooseberries. Samuel Cooper,

Turners Lane, exhibited some fine red and black currants. Mr. Kenworthy exhibited some very large gooseberries. Robert Meston, gardener to Mrs. Roland, exhibited red and white currants, beans, transparent peas, and ten varieties of gooseberries, viz: Crown Bob, (twenty-four berries weighed half a pound,) Golden Nectar (fifteen berries weighed nine and a half ounces,) Red Warrington, Red Potterfield, Neal's White Rose, Green Gascoigne, Haywood's Incomparable, New Iam, and Cystal. The fruits were superior to any that have ever been exhibited in the Society, especially the red and black currants.

The Committee on Plants and Flowers awarded the premium for the best display of plants in pots, on the evening of the 16th, to Alexander Parker, he having exhibited *Eugènia myrtifòlia*, *E. oleifòlia*, *Hòya carnòsa*, *Ardísia crenulàta* and *solanàcea*, *Sempervìvum arbòreum*, *Nierembérgia filicaúlis*, *Ornithógalum arábicum*, *Aloe grandiflòra*, *Gloxínia speciòsa* and *álba*, *Crássula perfoliàta*, *Mùsa paradisìaca*, *Stapèlia grandiflòra*, *Hibíscus ròsa sinénsis*, var. *lùtea*, *Lophospérmum scándens*, *Maurándya Barclayàna*, *Fúchsia grácilis*, *Agapánthus umbellàtus* and *variegàtus*, *Hemerocállis cærùlea*, *Clématis verticillàta plèna*, *Piper mèdia*, *Thèa Bohèa*, and *vìridis*, *Myrtus piménta*, *Illícium parviflòra*, *Tabernæmontàna coronària*, *Heliotròpium peruviànum*, *Volkamèria japónica*, *Vínca ròsea*, *Hydrángea horténsis*, *Eucòmis punctàta*, and *striàta*, *Gardènia rádicans*, *Menzièsia polifòlia*, *petúnias*, &c. &c.

The premium for the best bouquet, to Wm. Chalmers, gardener to Mrs. Stot, Turners Lane. The committee make honorable mention of a fine bouquet of indigenous plants, exhibited by Robert Kilvington. Mr. Chalmers exhibited *Lantàna Selòwii*, *Ornithógalum aúreum*, *Calceolària* of different kinds, *Vínca ròsea* and *álba*, *Ardísia crenulàta*, two pots *Amaryllis*, and *Cirrhæ'a fúsco lùtea*, a fine epiphyte.

The Committee on Vegetables awarded the following premiums: For the best tomatoes, to Charles Canover, gardener to T. C. Rockhill, Esq. For the best carrots, to Andrew Paton, gardener to Mrs. Kohn, Turners Lane. For the best cucumbers (Walker's Long Green,) to William Sinton, gardener to Gen. Patterson. For the best squashes, to Joseph Hurst, gardener to Mr. Hanson, Germantown. For the best early corn, grown in Pennsylvania, to Daniel Reilly, gardener to Pierce Butler, Esq. For the best egg plants, to William Chalmers, gardener to Mrs. Stot; and for the best display of vegetables that evening, to the same, he having exhibited drumhead cabbage, orange and horned carrots, beets, artichokes, purple and white egg plants, tomatoes, squashes, potatoes, Swiss chard, lettuce, three different kinds, and two dozen ears of sweet corn. An honorary premium was given to Charles Conover, gardener to Thomas C. Rockhill, for some very fine large peppers. Likewise an honorary premium was awarded to Daniel Reilly, gardener to Pierce Butler, Esq., for some fine Garabauza Spanish peas, being the first ever exhibited before the Society. Great doubts were expressed when the peas were distributed in the Society, that they would not come to maturity in this part of the country; but the fine mature state of these exhibited by Mr. Reilly, sets that matter at rest: he has a fine plat of them, and gave them no other care than the other kinds. It is one of the finest of the pea family, used either in the green or ripe state. I speak *feelingly* on the subject, as I had a dish of them.

The Committee on Fruit awarded the following premium: For the best apricots, to Charles Conover, gardener to Thomas C. Rockhill, Esq. For the best gooseberries, to Charles Kenworthy. For the

best display of fruit, to Alexander Parker. The Committee would make honorable mention of a fine bunch of black Hamburgh grapes, weighing twenty-four ounces, exhibited by Messrs. Watt & Ritchie, Monument Cottage Garden. Charles Conover, gardener to T. C. Rockhill, Esq., exhibited tomatoes, cucumbers, beets, squashes, peas, cabbage, rhubarb, beans, peppers, carrots, and some fine apricots. Philip Reilly, gardener to Mr. Gratz, exhibited tomatoes, cucumbers, squashes, pears, the Early Catherine and Early Butter, and egg plants. Andrew Paton, gardener to Mrs. Kohn, Turners Lane, exhibited carrots, salsify, German greens, onions and apricots. Charles Kenworthy exhibited apricots and gooseberries. Ritchie & Dick exhibited some fine dahlias. Daniel Reilly, gardener to Pierce Butler, Esq., exhibited squashes, early corn, cabbage, and the Garabauza peas. Joseph Hurst, gardener to Mr. Hanson, Germantown, exhibited apricots, squashes, and some fine Swiss chard. Alexander Parker exhibited pears, of different kinds, apples (Early Red Streaks,) and the Keyser plums. Isaac C. Hatch, N. J., exhibited some fine Winter Blush apples, of last year, apples of this season, and some of the Keyser plums.—*Yours, G. Watson, Philadelphia, July* 19, 1839.

ART. VII. *Massachusetts Horticultural Society.*

Saturday, June 29th, 1838.—*Exhibited.* Flowers:—From John Towne, beautiful plants of Roélla ciliàta, and *Ericà rùbens*, and ventricòsa supérba; both superb specimens: the plants were almost grown to perfection. From E. M. Richards, a fine assortment of Sweet Williams. From S. R. Johnson, a large number of roses, and three or more varieties of pæonies. From T. Mason, several dahlias, among which were, Juliet, Conqueror of Europe, Rosa superba, &c. From S. Walker, pinks, bouquets, &c. From Hovey & Co., bouquets. From William Kenrick, bouquets. From Messrs. Winship, a large bouquet. From J. L. L. F. Warren, dahlias and bouquet. From J. Hovey, bouquets.

Native plants:—From William Oakes, Esq., a variety of native plants, of the following species:—*Orchis* grandiflòra, Pyrola chlorántha, *Vibúrnum* lantanoìdes, *pyrifòlium* and *acerifòlium*, Hottòn*ia* inflàta, Linnæ*a* boreàlis, *Acer* pennsylvànium and Corallorhìza multiflòra. From E. Weston, jr. and F. Parker, Esqrs., Kálm*ia* latifòlia, Cymbídium pulchéllum, Arethùs*a* ophioglossoìdes, Salsòla sálsa, *Láthyrus* marítimus, *Nymphæ*a odoràta, Hudsòn*ia* tomentòsa, *Hypéricum* perfòlium, *Crotalària* sagittàlis, Mitchél*la* rèpens, *Verbáscum* Thápsus, Andrómed*a* polifòlia and *Cnicus hórridus*.

Fruits:—From J. L. L. F. Warren, Amber Heart, or Belle de Choisy cherries, and Methven scarlet, and Warren's Seedling Methven strawberries. From Mr. Vose, the President, fine specimens of black Tartarian cherries, Methven Scarlet and Wood strawberries.

From Hovey & Co., Lee's Favorite, and two kinds of Seedling strawberries, marked A, No. 1, and A, No. 2. The A, No. 1, were superior to any thing ever seen in the Society's room, both for size and beauty.

July 6th.—Exhibited. Flowers:—From T. Lee, Esq., specimens of *Rhododéndron máximum*, *Campánula persicæfòlia*, Bourbon and Ayrshire roses, carnations, calceolarias, fuchsias, *Cymbídium pulchéllum*, &c. From S. R. Johnson, a fine assortment of China roses, carnations, &c. From T. Mason, bouquets. From Messrs. Winship, a large and showy bouquet. From S. Walker, beautiful pinks and bouquets. From William Kenrick, bouquets.

From the Hon. P. C. Brooks, a cut flower of *Magnòlia* macrophylla, a most splendid specimen, the flower nearly a foot long. From Hovey & Co., bouquets. From W. Meller, carnations, roses and bouquets. From J. Hovey, bouquets. From J. L. L. F. Warren, a few dahlias.

Native Plants:—From William Oakes, *Asclèpias phytolaccoìdes*, *Gèum stríctum*, *Cálla palústris*, *Ròsa nítida*, *Orchis grandifiòra*, *Hottònia* inflàta, *Lycópsis arvénsis* (cultivated,) *Hórdeum jubàtum*, and *Rhododéndron viscòsum*, and *R. glaúcum*. From E. Weston, Jr. and F. Parker, Esqrs., *Rhododéndron máximum*, *Lílium philadélphicum*, *Aster misa*, *Sambùcus canadénsis*, *Epilòbium angustifòlium*, *Convólvulus sèpium*, *Cálla virgínica*, *Pyrola rotundifòlia*, *Córnus álba*, *Hieràcium venòsum*, &c.

Fruits:—From S. Downer, beautiful specimens of Downer's late red and white Tartarian cherries. From Mr. Vose, the President, English Black Heart and white Bigarreau cherries. From R. Manning, Salem, mottled Bigarreau, Bigarreau a gros fruit blanc, cherries, very handsome. From O. Johnson, Lynn, fine specimens of Zinfindal grapes, well colored and ripened. From T. Mason, white Antwerp raspberries. From B. V. French, Elton cherries. From Hovey & Co. three boxes of Seedling strawberries, marked A, No. 1, surpassing those exhibited at the last meeting; five boxes had previously been picked from the bed, which is about ten feet long by two and a half feet wide; the plants set out in the spring of 1838.

Vegetables:—From Hovey & Co., two heads of fine lettuce. From S. Pond, rhubarb, very good. From J. Hovey, twelve fine heads of lettuce. From E. Sayers, potato onions.

July 13th.—Exhibited. Flowers:—From S. Walker, pinks, carnations, double *Chrysèis* and bouquets. From E. Breed, dahlias. From J. S. Ellery, Esq., Brookline, a variety of dahlias and a beautiful bouquet. From S. R. Johnson, roses and carnations. From J. Hovey, carnations and bouquets. From W. E. Carter, carnations. From W. Meller, handsome poppies, carnations, Ne plus Ultra dahlia, and bouquets. From Messrs. Winship, a large showy bouquet. From J. Towne, elegant specimens of *Erica ventricòsa supérba* and *ramentàcea* and *Fúchsia globòsa*. From W. Kenrick, bouquets. From T. Lee, *Oxyùra chrysanthoìdes*, *Potentílla Hopwoodiàna*, *Rhéxia marylándica*, *Stìpa spléndens*, *Rhododéndron máximum*, &c. From Hovey & Co. bouquets.

Native plants:—From William Oakes, *Magnòlia glaúca*, *Calopògon pulchéllus*, *Prìnos lævigàtus*, *Vaccínium frondòsum*, *Pogònia ophioglossoìdes*, *Lythrum hyssopifòlium*, *Lílium philadélphicum*, *Lobèlia Claytònia* and *Convallària trifòlia*. From E. Weston, jr. and F. Parker, *Andrómeda paniculàta*, *Pyrola rotundifòlia*, *Verónica scuttellària*, *Lysimàchia stricta*, *Arethùsa ophioglossoides*, *Cálla vir-*

gínica, *Vaccínium* macrocárpa, *Orchis* grandiflòra, *Hypéricum* perfoliàtum, &c. &c. From J. E. Teschemacher, *Lysimàchia* stricta, Campánula amplexicaúlis, Lygòdium palmàtum, Lunària vulgàris var. pelòr*ia* and Thysanocárpus runcinàtus; all cultivated.

Fruits:—From Dr. Adams, cherries. From J. G. Thurston, Lancaster, fine gooseberries. From J. Hovey, gooseberries. From S. R. Johnson, gooseberries, From O. Johnson, black Hamburgh grapes. From J. S. Ellery, black Hamburgh and Sweetwater grapes. From T. Mason, white and red Antwerp and Franconia raspberries: the latter very fine.

Vegetables:—From S. Sweetser, fine early Turnip Blood Beets.

It was announced that the Carnation Show would take place next week.

July 20th.—Exhibited. Flowers:—from Messrs. Winship, a variety of cut flowers, embracing carnations, phloxes, passion flowers, Hòy*a* carnòsa, Y*ucca* filamentòsa, *Cimicifuga* fœtida, Tradescánt*ia* virgínica, double oleander, blue bells, &c. From Jos. Breck & Co., Dwarf Rocket and Napolitan larkspurs, and carnations. From D. Macintyre, geraniums, dahlias, and Echinocáctus Eyriès*ii*. From T. Lee, *Asclèpias* tuberòsa, Rose hibiscus, and a superb specimen of *Lilium* canadénse. From Hovey & Co., splendid Double Rocket larkspurs, and bouquets.

From S. Walker, bouquets and cut specimens of double chryseis, carnations, pinks, phloxes, &c. From J. Hovey, carnations and bouquets. From Misses Sumner, pinks and carnations. From Wm. H. Cowan, carnations. From Wm. E. Carter, fine carnations, water lilies, *Rhododéndron* maximum, and bouquets. From Wm. Meller, fine carnations, dahlias, pinks, poppies, marigolds, and bouquets. From T. Mason, pinks, carnations, and dahlias. From W. Kenrick, bouquets. From S. R. Johnson, carnations, double pomegranates, &c. &c.

Native Plants:—From Wm. Oakes, Goodyèr*a* rèpens, *Asclèpias* obtusifòlia, *Vaccínium* dumòsum, Woòds*ia* ilvénsis, W obtùsa, *Asplènium* ebenèum, and trichómanes, Aspídium marginàle, *Adiántum* pedàtam, Lycopòdium annotínum, dendroídeum var., complanàtum Gaulthèr*ia* hispídula (in fruit,) *Sarracèn*ia purpùrea, Xylósteum ciliàtum (in fruit,) and *Trifòlium* arvénse, and procúmbens.

Fruits:—From P. Dodge, Esq., early admirable peaches, raised in pots, very fine. From R. Milne, Portland, fine large forced peaches. From T. Allen, Salem, fine Royal George peaches, and black Hamburgh and Royal Chasselas grapes. From O. Johnson, Lynn, black Hamburgh, and Zinfindal grapes, very handsome. From J. Tidd, black Hamburgh and Sweetwater grapes. From Dr. Wm. Eustis, white Sweetwater and black Hamburgh grapes. From J. Hovey, Crown Bob gooseberries, and currants. From T. Mason, Franconia and red and white Antwerp raspberries, the former very large and fine. From J. L. L. F. Warren, gooseberries. From S. Walker, several kinds of gooseberries. From Wm. Kenrick, four boxes gooseberries.

The exhibition of carnations for the Society's premiums took place to-day, and the award was as follows:—

For the best display of carnations, a premium of five dollars to Messrs. Mason.

For the best six carnations, a premium of three dollars, to Wm. Meller.

For the best seedling carnation, a premium of three dollars to Wm. Meller.

The judges appointed by the chairman of the flower committee were Messrs. J. Breck, and C. M. Hovey.

Art. VIII. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes, new:		
Chenangoes, per barrel,	1 25	1 50
Chenangoes, per bushel,	50	62½
Common, per barrel,	1 25	1 50
Common, per bushel,	50	62½
Turnips, new, per bunch,	8	12½
Onions:		
Red, per bunch,	5	8
White, per bunch,	3	4
Beets, per bunch,	8	10
Carrots, per bunch,	8	10
Parsnips, per bushel,	75	—
Horseradish, per pound,	8	12
Radishes, per bunch,	2	3
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, each:		
Early York,	3	6
Savoy	6	—
Cauliflowers, each,	12½	25
Brocoli, each,	10	20
Lettuce, per head,	2	4
Rhubarb, per pound,	4	5
Peas, per bushel,	1 00	—
Peas, per half peck,	17	—
Beans:		
String, per half peck,	20	25
Shelled, per quart	12½	17
Tomatoes, per dozen,	20	25
Corn, per dozen,	12½	17
Celery, per root,	6	8
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37½
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes:		
Summer crook n'k, pr doz.	10	12½
Summer bush, per doz.	10	12½
Autumnal Marrow, per lb.	4	5
Fruits.		
Apples, dessert, new:		
Common, per barrel,	3 50	5 00
Common, per bushel,	1 50	2 00
Gooseberries, per quart,	12½	17
Strawberries, per quart:		
Old wood,	20	25
Grapes:		
Black Hamburgh	1 00	—
White sweetwater:	62½	75
Watermelons, each,	12½	20
Currants, per quart:		
Red Dutch,	6	8
White Dutch,	8	—
Raspberries, per quart,	25	37½
Blackberries, per quart,	20	25
Whortleberries, per quart,	8	10
Pears, per half peck:		
Junceating	20	25
Jargonelle,	37½	50
Green Chisel,	37½	—
Apricots, per doz	25	—
Peaches, per half peck,	50	—
Plums, per quart:		
Green Gages,	25	37½
Cucumbers, per doz.	8	12
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—

Remarks.—Since our last report, the weather has been exceedingly favorable to vegetation. There have been frequent warm and genial rains, and we know not the time that we have seen vegeta-

tion advance more rapidly than it has during the present month. The country, indeed, never presented a richer and more verdant scene; the earth is clothed with a vivid green, and the coming harvest must be a rich one to every cultivator. There is scarcely a crop but what is maturing well. The market productions are excellent, and supplied in unusual quantity, and at moderate prices for the season.

Potatoes have grown well, and produced a heavy crop; already those of very fine quality are selling at our quotations, and the prospect is of a great fall crop. Turnips of prime quality are rather scarce. No Onions yet, only by the bunch. Fine Beets and Carrots are plentiful. In Cabbages there is not yet a great deal done; some Savoys, the first of the season, have come to hand this week. Cauliflowers tolerably plenty, good, and prices low. Rhubarb most gone; very little doing in it now. Peas are yet plentiful. String Beans abundant; shelled have just come to hand. Corn very plentiful for the season. Tomatoes are brought to the city from New York, and command our quotations. The first Celery of the season has been brought in this week. Of Squashes there is no supply except the summer varieties, of which there is a good stock; a few Autumnal Marrow, from early vines, have come to hand this week.

Of fruits there is a much greater variety and a better supply of all kinds, than at the time of our last report. Apples are not remarkably fair; but they are brought from New Jersey. Strawberries are all gone, except a few of the English wood. Grapes tolerably plenty, and very good. Watermelons most gone, what remain are poor. Currants abundant. Raspberries are rather scarce; the demand has however, been good, and prices quite high: market gardeners who grow fruit for the market should introduce this fruit very generally into their gardens, as it commands a much higher price, and is as easily grown as other kinds. Blackberries, and other sorts of berries, are brought in freely. Pears are so abundant as to be quite a drug; they have been brought in from New York in great quantities. Apricots have just come in. Peaches are quite plentiful; they are however, brought from New Jersey, and very inferior; good forced Peaches have been sold at $6 per dozen. Plums from New York. Cucumbers are received in numerous quantities. Lemons and oranges the same. Pine-apples have been very plenty, but the stock of prime ones is poor. In all sorts of nuts the market is about the same. —*Yours, M. T., Boston, July* 27, 1839.

HORTICULTURAL MEMORANDA

FOR AUGUST.

FRUIT DEPARTMENT.

Grape Vines will now need attention; give good quantities of air, but shut up the front sashes early; syringe twice a week; keep the vines well thinned of all rambling shoots, and lay in the next year's bearing wood in its proper place.

Grape Vines, in the open air, should be attended to, and be properly trained up and pruned out. Syringe occasionally, to prevent mildew.

Strawberry Plants, for forcing, should be taken up immediately, if not done before; select the strongest roots, and put them in No. 2 pots, in rich soil.

Strawberry beds may now be made and planted with good success. Manure the ground well, and make it fine and rich before planting.

Plum Trees should be budded this month.

Peach Trees may also be budded this month.

FLOWER DEPARTMENT.

Dahlias.—The weather has been fine so far, and the plants look well; keep them clear of weeds; stake all the plants, and if dry weather ensues, water freely over the foliage and at the roots.

Roses may be budded this month.

Geranium cuttings, put in early in June, may now be potted off.

Verbenas will need repotting again.

Chrysanthemums should be topped now, and kept well watered.

Orange and Lemon Trees may now be budded with success.

Carnations should be laid if not already done.

Pansy seed may be sown this month for late flowering.

Stockgilliflower seed may be sown now for late flowering.

Mignonette should now be planted for flowering at Christmas.

Hydrangeas may be propagated this month.

Oxalis Boweii bulbs should now be potted.

White Lilies should be taken up and separated this month, and replanted or laid away till October.

The Double Pyrethrum should now be increased from cuttings for winter flowering.

Camellias should have a good supply of water, and repeated syringings.

Cuttings of Ericas, Lechenaultia, Pimelea, &c. put in last month, should receive due attention.

Green-house plants of all kinds should be repotted, the latter part of this month.

VEGETABLE DEPARTMENT.

Celery Plants transplanted as we directed into small beds, should now be set in prepared trenches for blanching.

Turnips for a winter crop should be sown.

Spinach should be sown for a spring crop.

White Onions for spring use should now be planted.

Rhubarb roots may be transplanted now, and new beds made.

THE MAGAZINE

OF

HORTICULTURE.

SEPTEMBER, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Some Remarks upon several Gardens and Nurseries, in Providence, Burlington, (N. J.,) and Baltimore.* By the EDITOR.

HAVING recently made a short visit to several gardens and nurseries in the cities above noted, we have prepared a few remarks from our memoranda, with the hope that while they will record the progress of horticulture, they will also contain some incidental hints which may be beneficial to the amateur practitioner. It is some time since we gave the results of our last tour, and we have now been unable to visit many places which it would have given us great pleasure to notice in our pages. We trust, however, that we shall, in time, be enabled to give to our readers some account of every garden of any note in the country.

Our first visit was to some of the gardens in the city of Providence, R. I. Very little has, as yet, been accomplished in this place; and there appears to be but little taste diffused among the inhabitants for gardens and gardening; with some few exceptions, there are a much less number of fine gardens than may be found in many small towns in the vicinity of Boston. Within the past year, more attention has been awakened upon the subject, and we hope that the example of those who have already improved their grounds, will be emulated by others who have ample means to do so. Part of the city is well located for handsome residences, and a few examples of

highly cultivated grounds are, we think, only wanting to immediately enlist the wealthy in the laudable effort to diffuse a proper taste among the inhabitants.

Garden of Capt. B. W. Comstock, Arnold Street.—Aug. 14th. It is but a short time since this garden was laid out. Capt. Comstock is a great lover of plants, and has erected a small green-house, which he intends to fill with plants. The ground around the house is limited, but we found it well filled with a great variety of annuals and perennials, *Verbèna Tweedieàna, teucroìdes*, &c.; petunias and similar showy plants ornamented the border with their innumerable flowers. In a fine piece of ground belonging to the garden, on the opposite side of the street, we found a good collection of pears, embracing many of the best kinds, such as the Duchess of Angouleme, Urbaniste, &c. It is the intention of Capt. Comstock to erect a grape house the coming year, fifty or more feet long; there are now but two or three in the city, and those of small size. The cultivation of the grape can only be effected with good success under glass in the city, and every grapery erected will tend to increase and render more general the cultivation of this delicious fruit.

Residence of Mrs. Ives.—Aug. 14th. This garden is one of the oldest in the city. It comprises a square of about two or three acres in extent, which is well filled with fruit trees of various kinds, many of which have now attained to a large size. The ground is laid out into quarters, with middle and outer walks edged with box.

One of the finest specimens in the garden is a tulip tree, upwards of fifty feet high, and more than twenty-five broad at the base: the tree formed a perfect pyramid, and was clothed with branches and foliage from the base to the top. We doubt whether there is a finer cultivated specimen in the country; in the spring, when in bloom, it was one of the most ornamental objects imaginable. There are large specimens of other common shrubs, but none of particular note.

Passing into the green-house, which is small, we noticed several very pretty specimens of cactuses, and two or three species of stapelias, the latter in flower. Of other plants the collection is limited. This garden might be made one of the most beautiful in the city; the situation is elevated, and the ground falls from the house in a gradual, though very small slope. Very few improvements have been made for several years past. Mr. Dagleish has the management of the whole.

Amateur Garden of Capt. Townsend.—We were unfortunate in not finding Capt. Townsend at home; and this we

regretted, as he has, in a small grapery, one of the best crops of fruit that we have ever seen. The house is about fifty feet long, and part of the vines are planted in the border inside, and trained up the rafters, and the others up the back trellis. The Royal Chasselas grapes excelled any in size that we have seen. Capt. Townsend is quite noted for his fine crops and beautiful fruit, and has experienced much success in the growth of the vines.

In the garden we saw a fine crop of melons, and several large vines covered with a heavy crop of Isabella grapes. Capt. Townsend does not appear to be much of an amateur in flowers, and we found only a few annuals and perennials in the borders.

Nursery and Flower Garden of Mr. Dagleish.—Mr. Dagleish formerly lived in the vicinity of Boston, and removed here some time since to establish a nursery and garden; but the encouragement has not been so great as he had been led to anticipate. The space occupied by Mr. Dagleish's nursery is upwards of half an acre; on it are two green-houses, into which he has introduced grape vines, with the hope of producing a fair crop for the market. They have been planted two years, and are making good bearing wood for the next season.

In the open ground we found here some of the new kinds of verbenas, petunias, &c. A great number of young Chinese primroses, raised from seed, had just been potted off. This is a plant which, though only a year or two since, a great favorite, seems to have been suffered to go out of our collections, as if its merits did not entitle it to a place there: this should not be; it is one of the prettiest plants for green-house as well as parlor growth, and its purple and snowy blossoms appear in the depth of winter, when few others are in flower. Many cultivators complain of the difficulty of procuring the seed: we have never found any trouble. The plants should be removed into the open air, where the wind and bees may have free access to the blossoms, and they will seed readily. If retained in the green-house, the plants are shy in producing seed, and very few can be obtained. Mr. Dagleish is an industrious and enterprising man, and we hope that the amateurs in and around the city will give him their patronage.

There are one or two nurseries of fruit and ornamental trees, of some extent, in the neighborhood of the city, and a few other gardens; but those we have mentioned are the more noted ones at present existing.

[*To be continued.*]

Art. II. *On Trellis and Trailing Plants.* By X.

The late improvements in the style of parlor plants may be considered a happy prognostic of the success and continuance of this branch of floriculture. Much has been said in praise of the verbenas, and certainly there is no group so well entitled to praise. Their comparative diminutive size, and facility of flowering—their elegance of growth and delicacy of foliage—the varied tints, and even distinctive colors,—render them an especial attraction to even the most careless and incurious observer of flowers. Two or three varieties at this moment, blooming in our windows, have elicited universal admiration; and, though blossoming like the flower of Gray, in a region where

"Full many a flower is born to blush *unseen*,"

and where a taste for such silent monitors of duty as these stars of the earth are, is greatly to be wished for; yet our little proteges, despite the supposed uselessness of house plants, claim and obtain something more than a passing notice.

But it is not our intention to dwell on these elegant and new plants, as much has been already written, and with better effect than we could produce, although we would essay a few words on another, and that a small family of pretty flowers, admirably adapted to grace the windows of our dwellings with their perpetual bloom, and to become the subjects of the careful and tasteful management of the trellis. We allude to the Maurandyas. We well remember, some dozen years since, the pleasure we enjoyed in seeing the little M. *antirrhiniflòra*, whose profuse flowering covers the luxuriant and twining stems; and when afterward were introduced to its more delicate corolled sister, M. semperflòrens, whose roseate bloom is true to its trivial name, we considered it no mean addition to greenhouse or flower border; but when the superb seedling of Barclay came into notice, whose large deep blue personate blossoms and fair green foliage, and more luxuriant growth, points it out as the most desirable, we only thought that our predilection to the Maurandyas was most happily strengthened by the manner through which we became acquainted.

As trellis plants, the Maurandyas are peculiarly appropriate. The three species would ornament any one's collection, and amply repay all his efforts to train them into a fanciful form. They are a good companion to the verbenas by way of

contrast; and their adaptation to pot culture,—very soon producing flowers, and continuing for weeks and months in beauty, and bearing the scissors or the knife with great chance of improvement to their appearance,—are all concomitant in producing a good effect. Nor do they suffer from occasional neglect, as do many of our most beautiful plants, for nature has taught the flexible petiole or leaf-stalk to firmly embrace any object to which it comes in contact; and the deprivation of water for a period exceeding its usual time of imbibition, is not attended with those fatal effects so apparent in many flowers.

For out-door cultivation, the Maurandyas are admirably adapted to training on pyramidal trellis work, in the centre of a bed composed of the dazzling and prostrate verbenas. Growing with a rapidity second only to them, the flexible shoots of Maurandya may be made to climb a considerable structure in a few weeks, and, like its more brilliant companions too, a considerable frost is requisite to overcome its propensity to flower. Winter, even in the first days of December, has been known to overtake M. Barclay*àna*, so tenacious was it to yield, to that gloomy monarch, a triumph of the seasons, which Flora assumes.

We presume that our readers may smile at our enthusiastic suggestion, to pay some regard to that little *weed*, which daringly and fearlessly hangs its tiny corols of purple from many a high battlement and mouldering church-tower, in Old England,—the threadlike stemmed *Linària* cymbalària; but, despite their expected ridicule, we venture to declare that, properly grown in the form of a trained or trailing plant, it would find many admirers. We never see it in a green-house, during the winter months, without a passing admiration, and, for our own part, we candidly confess our preference of it to many a *new* and *rare* tropical exotic, extolled and valued because new and rare. Like the other species of the genus *Antirrhinum*, to which it formerly belonged, the present is peculiarly a plant for scanty nourishment and drought. In the upright fissure of a wall we have noticed an elegant mass of its small leaves and smaller flowers, where scarcely a moss would find subsistence. Time was, when the thread-like stolones of *Saxífraga* sarmentòsa, commonly known under the false appellation of Otaheite plant, might be seen pendant from almost every casement, and no mean appearance did it afford: but it falls to the lot of vegetables, as of humanity, that fashion reigns among their ranks, and, in consequence, the natural pendant development of many is banished, to give place to the more

constrained style of training. With many plants this is a decided improvement; for example, with the verbenas and petunias: but we think that a happy combination of both should obtain.

Who, for instance, has not admired the almost perennial beauty of Lobèl*ia* bicolor, or the careless manner of *A*ster tenélla, or the pretty mode of Lantàna Selòwii? Russél*ia* *j*úncea, though beautiful when trained, is not inelegant when in a trailing state; and even the minute *L*inària cymbalària, or ivy-leaved snap-dragon, is not an unworthy though humble companion, and deserving a quiet corner of the shelf appropriated to creeping plants. The free, unrestrained, natural elegance of plants is, to the eye of refined taste, always the most attractive. Who would think of tying into a constrained position the grotesque *C*áctus flabelliformis? and, although it is against the rules of good gardening to permit the weak-growing plants to suffer for want of artificial support, yet, to obviate the appearance of stiffness, an artificial style is adopted, and the picturesque is employed to amuse the eye, and render nature subservient to art. Thus tree roses are very fine in their way, yet the painted stick for support is no additional ornament, but a convenience. The careless and flexible shoots of some other more luxuriant variety will engage the notice as a combination of nature and elegance. We would not depreciate, however, the signal merit which floriculture has obtained in rendering its subject so attractive, by the occasional novelty of some new style; although, to us, a flower has its intrinsic merit, whether in simple elegance, or artificial and combined effect. X.

Art. III. *On the cultivation of the Cauliflower, as practised on the farm of C. J. Wolbert, Esq., at Frankford, near Philadelphia.* By Mr. Gregory Lee.

Having met with unprecedented success in bringing the cauliflower to the highest state of perfection, by the same simple process of cultivation as the cabbage, and with the hope of stimulating others to "go and do likewise," I am induced to lay before you an extract from my garden diary:—

"Purchased the seed of Messrs. Landreth & Co.; sowed it

broadcast Sept. 19th, 1838, in a bed of common garden mould.

"October 26th, removed the plants into a cold frame of the same kind of mould.

"April 10th, 1839, transplanted them into the open garden.

"May 29th, cut for the use of the family."

These noble plants stood in the open garden, undaunted, and, with their neighbors, the cabbage, patiently endured "the pitiless pelting of the storm."

My success is fully demonstrated by the following statement of the circumference of six *heads* of the flowers, wholly divested of their leaves.

	Circumference.	Weight.
No. 1 . . .	3 feet 1 inch . . .	8 lbs.
No. 2 . . .	2 feet 7¾ inch . . .	
No. 3 . . .	2 feet 6¾ inch . . .	
No. 4 . . .	2 feet 6 inch . . .	
No. 5 . . .	2 feet 5¾ inch . . .	
No. 6 . . .	2 feet 5½ inch . . .	

The circumference of the largest flower, as it stood in the garden, and taken at the *extremity of its leaves*, was 13 feet 7½ inches.

I continued to cut abundance of fine flowers, from May 29th to the middle of July.

With this I send you some remarks by the Editor of the *United States Gazette*, who examined some of the plants on the 15th of last month. [This appeared in our last number, p. 308.]

My object, in this instance, is publicity, especially as flowers of this immense size *can only be obtained from fall plants.* I am a subscriber of yours, and I shall feel a pleasure in communicating and corresponding with you upon the subject of horticulture.

I am, gentlemen, respectfully yours,

GREGORY LEE.

Frankford, near Philadelphia, July 31st, 1839.

[Mr. Lee will receive our thanks for the above communication, and it will give us great pleasure to hear from him often through our pages. Practical articles are of real value, and, unless professional men come forward readily, and give their methods of cultivation, horticulture will make but slight advancement. We trust that other cultivators will not only adopt Mr. Lee's plan of growing this excellent vegetable, but

will imitate his example, by giving to the public the success which may attend their method of cultivating every plant, fruit or vegetable, which will render them easier attainable by all.—*Ed.*]

ART. IV. *On changing the color of the flowers of the Hydrangea.* By J. D. W. WILLIAMS, Esq., Elm Hill, Roxbury.

WHAT is there more beautiful and cool to look upon, of the flower kind, than the hydrangea? Placed in the shady piazza, or window, it seems to luxuriate with you in the cooling breeze of the hot summer's day; participating and communing with you in the luxury of light, shade and air. Why! it will cool you, after a warm walk, to look upon its large bright trusses of flowers, contrasting with the broad deep green foliage. Then let me suggest to those of your readers, who may delight in this beautiful plant, how they may make it sport its colors, showing some very beautiful blending of shades.

For several years past, I have been studying to effect this: some of my friends have suggested the watering of the plants with soap-suds, from the time the buds begin to expand; others, a mixture of peat ashes, or the ashes of pitch pine, with the soil; the soap-suds produce a luxuriant growth and large flowers; and the ashes only cause some very slight change in the coloring of the petals: others, again, have advised some peculiar compost, in which the plants should be grown.

My own experience convinces me that the best compost, for the growth of the plant, is, one half rich garden loam, one fourth old hot-bed manure, and one fourth coarse sand, the whole to be well mixed together. The plants should stand in a situation where they will only receive the morning or evening sun for an hour or two. When the buds begin to expand, or after they have half opened, the plants should be watered with water, in which has been dissolved saltpetre and oxide of iron, in the following proportions:—to a table spoonful of saltpetre and a half a one of oxide of iron add one pail of water; these should be well stirred together, and the whole allowed to stand exposed to the atmosphere a day or more, or until it has acquired a temperature of 70°.

I am fully satisfied with the very beautiful variety of coloring which this fine plant produces, under this mode of treatment, and am pleased to communicate this to your readers, hoping that they may meet with the like success; and if they will inform us, in return, of any thing which will effect any other changes in the tints of the blossoms, they will oblige all who love the Hydrángea horténsis.

Yours, JOHN D. W. WILLIAMS.

Elm Hill, Roxbury, July 26, 1839.

ART. V. *On the cultivation of Mignonette for winter and spring blooming.* By the EDITOR.

PROBABLY no plant is more universally esteemed, and generally cultivated, than the mignonette. With the French and English gardeners it has been a favorite for a long time: in this country, however, it has not, until within a few years, been an object of common growth, nor is it at the present period so well known as it should be, except in the immediate vicinity of our large cities.

The mignonette is a native of Egypt, and was introduced into Britain about the year 1754; but it has become so generally diffused, both there and in France, that it has become in a degree naturalized. It is not long since, that we read, in some foreign periodical, an account of its growing upon the walls of an old ruined chateau, in the neighborhood of Paris, springing out from every crevice where the seed could obtain a lodging place, and literally covering the walls with its odorous blossoms. In the Paris *Marché aux Fleurs* thousands of pots of it are annually sold, and the window of the peasant, as well as the saloon of the opulent, is decorated throughout the season with pots of this favorite plant.

The mignonette is of remarkably simple growth in the open ground, and when once the seeds are planted, it will retain possession of the soil, springing up from self-sown seeds, and flowering early and abundantly every season. Successive sowings in May and July will afford a constant supply of neat and compact plants, filled with flowers. In rich moist soil the plants grow luxuriantly and spread out widely, but have a very

scanty display of flowers: it is in a dry and rather hard soil that they show themselves to the best advantage; for in such a situation they bloom early, and, without spreading out their recumbent branches too far, are, at the same time, overloaded with blossoms. Those cultivators, therefore, who would have the plants in the greatest perfection, should select the driest spot in the garden, and sow the seeds thickly. But it is for the production of good plants for flowering in the winter, that we commenced these remarks.

To bloom the mignonette in good perfection from the decay of the out-door plants in the autumn, until the return of the flowers in the spring, it is necessary that there should be two successive sowings, viz. one in August, for blooming about Christmas, and another in September, for blooming from February till May.

Select for the purpose as many No. 2 pots as there are plants wanted; fill them with a compost mixed in about the following proportions, viz. one half good light loam, one quarter leaf mould, and one quarter coarse sand. First give the pots a good drainage, for the health of the plants depends much on this; then fill them up to within half an inch of the rim, giving the pot a slight rap to settle the soil well; level the surface, sow the seed thickly, and cover it with about an eighth of an inch of the same compost. A frame (an old cucumber bed will answer,) should then be ready to receive the pots; set them so that they will not be far from the glass, and give a gentle watering; put on the sashes, and shade with a mat in the middle of the day, if the sun is too powerful, until the plants are well up. Give water cautiously and in small quantities, as the plants will damp off if they are kept too wet. Thin out the plants, leaving only three or four in a pot.

In the month of November or December, according to the mildness of the season, the plants should be removed to the green-house or parlor: in the former place they should be placed on a shelf within two feet of the glass, and if nearer they will thrive better. Water should be given sparingly, and when the plants get up an inch or two, the tops of each should be pinched out in order to make them branch well. They will now grow slowly, and early in January will come into bloom. In the parlor they should be set as near the window sash as possible, and in the most airy part of the room.

When the plants have done blooming in the spring, they may be turned out into the border, where they will throw out new branches, and make good plants for bloom all the summer. We tried this method last spring, and at this moment

the plants are now before us, flowering as profusely as seedlings of this year. When they are turned out, they should be cut down nearly to the soil.

The only requisites to be observed, in pot culture, are a good drainage, light soil, and careful watering.

Art. VI. *Notes on Gardens and Nurseries.*

Country Seat of Col. T. H. Perkins—Aug. 1st. Since last autumn there has been but few additions or alterations upon the grounds. The trees and shrubs and perennial plants, however, which are planted in the rear of the old range of fruiting houses and adjoining the lawn, have since last summer made a fine growth, and now present the appearance of having been planted out three or four years. Mr. Cowan has taken much pains to enrich this part of the garden, and he has effected his object to the best advantage. The walks are well filled with gravel, thoroughly rolled down, and the borders are kept in the highest state of cleanliness: the flowers are not suffered to go unpruned, or to recline upon the surface, but are neatly tied up as they require it. In a year or two, this part of the grounds will be the most attractive.

In the old fruit garden, between the two ranges of glass, some slight alterations are to be made, and Mr. Cowan has already laid down two of the quarters to grass. The other two are, we believe, to be treated in the same manner, reserving only a border on each side of the middle walk.

The other garden is well filled with flowers and fruit. Two large plantations of raspberries, the Franconia and the white Antwerp, were bearing to such a degree as to render it almost impossible to pick the fruit as fast as it ripened. The land here is most capitally suited to the growth of this fruit, and we have never seen plants in a more flourishing condition. The Franconia, in particular, were remarkably strong, being about eight feet high, and filled with strong laterals bending almost to the ground with the weight of fruit. This variety is altogether the best for general cultivation, and should be in the possession of every one who admires this fruit. Its abundant bearing alone, setting aside its other good properties, are suf-

ficient to entitle it to a situation where good fruit is desired. Mr. Cowan has a new kind which he received from Edinburgh, and which he values highly. It is similar in color and form to the Franconia.

To show the extent to which forcing is to be carried on, Mr. Cowan has prepared, and is now preparing, upwards of six hundred pots of Keen's Seedling strawberries, a variety which he prefers to any other. These are to go into the new house built year before last, and mentioned by us in our last volume.

In the open ground we found the rock work covered with a variety of petunias, verbenas, &c., and several large patches of the two verbenas, *V. chamædrifólia* and Tweedie*ána*, were beautiful. Mr. Cowan has an immense number of carnations, and among them some of great beauty: they were now just going out of flower.

Passing into the houses, we saw but little, except the quantities of fruit with which the rafters were covered. The season has not however, on the whole, been so favorable as usual: in one of the compartments Mr. Cowan was much troubled with the mildew; but he succeeded in subduing it, though not without the sacrifice of some of the crop. The fruit on the vines in the green-house was partly cut, but there had been a great crop. In the peacheries the trees present the same healthy and vigorous growth that they always do, and they are now fruiting well. Mr. Cowan succeeds admirably in his treatment of the trees trained to the trellis under the rafters, and we shall endeavor to describe it at a future time. They have now reached the top of the house.

In the kitchen garden Mr. Cowan has commenced some alterations; a new walk is to be laid out, and the ground to be appropriated to the production of all kinds of fruits and vegetables, gradually removing them from the limited space in front of the houses, that the latter may be wholly devoted to ornamental purposes. Mr. Cowan preserves the most complete order and neatness in every part of the grounds.

Brooklyn, N. Y.—Aug. 15th. A short visit among some of our friends here, has enabled us to offer a few brief remarks.

Residence of N. J. Becar, Esq. It is a refreshing treat to walk through the well filled and highly kept garden of Mr. Becar; and the eye finds more treasures for it to rest upon, in this enclosure of half an acre or so, than in ten times that quantity allowed to run wild by neglect, as is often the case; too many cultivators, who possess a few gems, flatter themselves that they have sufficient to please at all times,

and to make up for a thousand defects in the general features of the grounds.

The grass plats in Mr. Becar's garden contain several different shaped figures, which are filled with verbenas and petunias, flowering abundantly. The marble vases are removed from the green-house, and are filled with the *Verbèna chamædrifòlia*, Tweedie*àna*, and incìsa. They stand in the centre of the grass plats, and give a finished aspect to the whole garden. The dahlias are growing well, though not yet much in bloom. The camellias and other green-house plants look well, and are budded finely for another year. Bignò*nia* grandiflòra, standing in the open border, was flowering splendidly. It seems to be hardy here, needing only a little protection the first or second year, until it assumes some size. It is one of the most gorgeous creepers, and it is to be regretted that it cannot be made to endure our winters farther north. The tree roses in Mr. Becar's garden are, by far, the largest we have ever seen, and have flowered elegantly. The only protection he gives them is simply winding the stems with straw.

Mr. Becar's garden is one of much interest, in summer or winter, and the amateurs of Brooklyn must be gratified to find among them one so zealous in the pursuit of the science of horticulture.

Residence of J. A. Perry, Esq.—Mr. Perry continues to add to his structures every year. This we are glad to hear: his situation is a noble one, and, with ample means, we are happy to see him improve it to such good advantage; it will stand at the head of all others in the neighborhood of the city.

He has now just commenced the erection of a house for palms and other large growing tropical plants; it is to be about sixty feet by thirty, and twenty-six high, and will connect the whole range, being built between the conservatory and hot-house. When finished, our readers may expect a full description of the whole.

The plants in the hot-house look healthy and vigorous, and have made so great a growth since last fall, that there is not room for them. The banana has grown rapidly, and attained to the top of the house: the *Cò*rypha, *C*hamæ`rops, and other palms, have made many new fronds, and when in a more roomy place, will show to better advantage.

Mr. Paulsen showed us a plant of *Euphórbia* hexagònus, upon which he had grafted the beautiful *E.* splèndens: it appears to have united readily, and the scion has already started to grow. We see no reason why the succulent species of this genus may not be grafted with the same facility as the cactus

tribe. *E.* hexagònus is a much stronger grower than the spléndens. The A`gave americàna, which we have before noticed, is growing finely, and has made several new leaves. Poinciàna Gilliès*ii*, a very elegant species, was in full bloom.

In the open ground the plants looked well, and the dahlias were just coming to flower. Mr. Paulsen, the gardener, appears to feel much interested in the improvements which Mr. Perry has proposed. He has promised us an account of all the additions and alterations.

Multiflora Garden.—Mr. Maynard. This garden is quite a favorite resort to the ladies of Brooklyn, and Mr. Maynard has laid it out in good taste, and keeps it in fine order. Since our visit, two years since, the trees and shrubs have acquired considerable size.

Mr. Maynard cultivates a great number of dahlias, as these are the principal ornament of the garden in summer and autumn. They have not yet flowered much, but promise well as soon as the nights are cooler. The ailanthus tree, which is a great favorite around New York, is cultivated by Mr. Maynard, and he sells a large number every year. It is one of the finest shade trees, and flourishes well in the neighborhood. Farther north, around Boston, it is apt to be killed by the severe frosts, particularly when young. We also saw a number of Isabella grape vines, of good size, ready for sale. The city of Brooklyn is increasing rapidly, and the fine gardens attached to many of the residences bespeak a growing taste for plants and flowers.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Why are Florists' Flowers neglected?—[The following article we find in the *Horticultural Journal*, and though not exactly applicable to this country, nevertheless contains some hints which may be of advantage even to our own amateurs. As young as we are in the practice of horticulture, the same neglect begins to show itself which is so much complained of in this paper; and we trust that the perusal of it will tend to impress every one, who has the promotion of the science at heart, with the importance of union and action in all societies formed for its advancement.—*Ed.*]

"If we knew how to infuse a little spirit into the growers of Florists' Flowers, we should set about it in good earnest: for it is morti-

fying to see the most splendid of all the garden beauties neglected; and nothing can be more obvious than the falling off which we have to deplore. Whence can this neglect arise? We are almost ashamed to own our conviction is strong, that one of the causes is—idleness. Another, perhaps, is the want of an example among those whose influence used to be great, and would again be so if used. A third is, the want of proper encouragement from those who can afford to promote so good an object. A fourth, and, perhaps, the last we shall mention, may be the general depression, which limits the means of the working classes.

"The first cause—idleness—seems very apparent; for those flowers which require the most trouble to cultivate in perfection, are the most neglected; and this fact may be observed by every body. For instance, the pink—a flower beautiful in itself, possessing properties which render it a favorite with every body; the perfume is exceedingly fine, its symmetry conspicuous, the means of raising seedlings are easy, and the capacity for improvement is great; but to grow them well requires care, attention, application and perseverance; and these are, we presume, too much for ordinary people. It is not many years since this flower was grown by many enthusiasts, who maintained that it was the best of all florists' flowers. And it was no uncommon thing to find a dozen very fine stands in a show room. Why should it not be so again? The Metropolitan Society of Florists have before now actually given their head prize to a single stand, exhibited without a competitor, and such a stand as would have been excluded altogether, according to the strict rules of showing. This is mischievous, for it renders men careless; and it is much to be regretted that many who have been willing to pay three half crowns for their share of the prizes exhibiting for such as were very inferior, have fallen back when better prizes were offered for very trifling entrance fees; another proof that it is idleness is, that the same people may be found eagerly cultivating subjects not half so beautiful, merely because they are less trouble. The second cause—the want of example among those whose influence would be useful—is almost a modification of the first; for it is idleness which operates with those whose neglect is so conspicuous, and who must take the lead to prevent the total abandonment of the fancy. The third cause—the want of encouragement—is very apparent; for it is not merely offering prizes that will cause a flower to be cultivated; there must be a sort of emulation to excel excited before the prizes will be valued beyond their intrinsic worth, and without this the trial will be confined to the mere mercenary growers, who would take no more interest in growing a pink than in growing a cabbage, and who simply calculate whether the prize will pay them for their time and trouble.

"The encouragement required is from persons who usually take the lead in such things, and who will attend the shows and descant on the properties of old flowers, and discuss the merits of new ones; who will sit down and dine with the showers, attend their meetings, and give, by their personal presence, that sort of countenance which can alone excite men to trials of skill. This, and this only, will set the florists' flower fancy upon its legs again; for it has tumbled down, and is likely to remain in its present grovelling condition, until a regular stir is made. The fourth, and most important of the causes, may be probably traced to the altered condition of the working classes, to whom belongs the larger portion of the credit due for the improvement of this beautiful class of garden productions. This is to be deplored; but even this could

be counteracted greatly by the encouragement which the more wealthy could give, if they pleased, by taking up the cultivation themselves—by liberally purchasing whenever the less fortunate could sell. But of late, those who could afford to cultivate and encourage the fancy flowers have sadly neglected the cause. We will not mention names, but there are many who will take to themselves this reproach—that they who have been, and perhaps still are, enthusiasts themselves, are not seen at the only meetings where such matters are discussed—that they have gradually withdrawn themselves from the associations formed for such purposes—and that some, who could well afford to double and treble their former subscriptions, have confined themselves to the cold-hearted payment of their annual stipend, and others have gradually withdrawn altogether. Now, whether we look to the interest which such meetings as we have described possess in themselves—to the rational recreation which they encourage—the emulation they excite, or the benefit which society at large derives from the promotion of floriculture,—this is every way to be regretted. Who is there can attend a meeting which once boasted all the choice spirits of the age, all the enthusiasts of the fancy, and not lament all its defalcations by death, and the deficiency of those to whom scores have looked up with respect, and whose examples have been followed by very many who have been by them first led into the fancy? Business is the excuse; a fair one enough if nobody valued their company or their conversation, but a most insufficient one, if the importance of what they neglect be considered for a moment. Those who desire to promote any object which comprises a large share of public good, should recollect that men value active zeal far beyond mere liberality. There is not a man, whatever may be his circumstances, but would go farther to serve one who asks him to partake of any thing with him, than he would another who threw him a shilling. It is the mixing with their fellow-men that does the good, not the contributions of the sovereigns; the one is valued because it cannot be bought, the other is valued only for its amount. A man may possess great liberality, and volunteer vast *money services*, and they will be appreciated; but another may throw in his mite with the rest, and, by joining in their social meetings, confer that which cannot be sufficiently valued; and this is the person who does the good. This, however, all applies generally to the fancy. We have only talked of the pink,—next to this flower for trouble, and consequent neglect, is the carnation; then the auricula, the ranunculus, and the tulip: the same argument applies to the whole in different degrees. The auricula shows are over, except such as may be made up out of the ordinary way, and how forcibly the foregoing observation applies to such shows as we have had! The tulip shows are coming on—will the same argument apply? How many stands will be cut for the Hampton exhibition? A solitary half dozen, perhaps. Persons who will cut flowers for an exhibition, in which the sight of the blooms will be confined to their own dinner table, will begrudge the time, trouble, or flowers, or perhaps all three, that must be given up for an exhibition, where the flowers are to be seen by hundreds! And this cannot be the way to promote a fancy which is tottering for want of countenance and support! And what, let us ask, is the first effect of all this neglect? Why, a reduction in the price of tulips, a lessening of the demand, and a consequent diminution in the value of every man's collection. Is this desirable? Ought not all the old growers to rally round the young ones? Ought the resources, the energies, the means, or the interest, to be divided by one half the professed friends going one way, and the other half the other? Ought they who were the first to sup-

port a society for the advancement of a particular object, to neglect its interests, and abandon its meetings, after many have become members on their invitation? Surely this one species of discouragement is enough to account for one half the indifference with which men look at the fancy. Who can wonder at the apathy of the growers in general, when they are openly neglected by the growers in particular? We have looked, year after year, with regret at the growing indifference of the best cultivators; and we have deplored the splitting of large societies into smaller ones, from a conviction that the cause suffers.

"Nothing could contribute so much to the advancement of this branch as the association of all classes of growers in one Central Society, and their attendance at occasional meetings. Nothing has tended so much to disparage the interests, weaken the energies, and destroy the emulation of all the friends of science, as the establishment of little coteries, which draw off the attention of many leading promoters. There are some seceders who can well be spared, men who are neither useful nor ornamental; but there are others, who, in their new-fangled schemes, should not forget old associations, and whom we should like to see giving up an occasional hour for the benefit of the younger fanciers, and affording them the advantage of their experience and their conversation. We should like to see the florists' flowers taken up as they ought to be, and we believe the day is not far off, when some of those who might almost claim to be the fathers of the fancy, instead of withdrawing from the circles in which such subjects are discussed, will join again the society of those who still cultivate their favorites, and participate in the animated discussions which characterized the enthusiasts of former days." (*Hort. Journal.*)

Product of Potatoes.—A communication from Sir George Stearns Mackenzie, Bart., upon the results of some experiments he had made upon the cultivation of the potato, was read at the London Horticultural Society, stating that the first experiment related to the difference in productiveness, between the point, the middle and the base of a potato. Three different varieties were taken, and every eye but one was carefully removed from the sets. The results were,—

	Point.	Middle.	Base.
No. 1 produced	4 lbs.	4 lbs. 6 oz.	3 lbs. 8 oz.
No. 2 produced	5 lbs.	6 lbs. 3 oz.	3 lbs. 8 oz.
No. 3 produced	5 lbs. 8 oz.	7 lbs. 8 oz.	7 lbs. 8 oz.
Total,	14 lbs. 8 oz.	18 lbs. 1 oz.	14 lbs. 8 oz.

It, therefore, appeared that eyes from near the point and base of a potato, should be rejected by the planter, and the middle eyes only used. In another experiment exactly the same quantity of the tuber was taken with a scoop from each of the above three sorts, so that each set formed a hemisphere of about half an inch in diameter. Under these circumstances No. 1 yielded four to nine ounces; No. 2, two to four ounces; the result of No. 3 was considered doubtful. (*Hort. Jour.*)

Epilobium hirsutum.—W. Taylor, F. L. S., finds that the down of the seeds of this plant, which, when the pods are mature, is found in considerable quantities, is useful in stuffing pillows, cushions, &c., and may be spun into thread, with or without an admixture of cotton. (*Gard. Mag.*)

Art. II. *Foreign Notices.*

ENGLAND.

*Camélli*a *japónica Prátti*i.—This variety, known as a seedling of Mr. Buist's, is noticed in the *Florist's Magazine*, where it is stated that it is in the possession of Messrs. Low & Co., of the Clapton Nursery. It is described as of a beautiful rose color, the centre of every petal being beautifully pencilled with white: the flower possessing great depth of petals, which are rounded and well set, and is quite equal to the double white. (*Florist's Mag.*)

Protecting duty on fruit.—The London fruit salesmen and fruit growers of the kingdom are about memorializing the Lords of the Treasury for the enactment of a law, imposing a duty on foreign apples, pears, &c. In 1819 the duty was four shillings a bushel on apples, and seven shillings and six pence on pears; but this was subsequently reduced to an ad valorum of five per cent., which is, in reality, only a nominal duty of about two pence per bushel Under this law the raising of fruit has been a poor business for several years: a protecting duty is demanded, in order that the French, with a much more favorable climate, may not overrun the market with their productions. (*Hort. Jour.*)

Doryánthis excélsa.—This magnificent plant has flowered in England the present summer. Early in May the plant, which belongs to the fine collection of G. Glenny, Esq., had thrown up a flower stem eighteen feet high. It was then removed to a house erected, on purpose, twenty-six feet high. It was there visited by a great number of amateurs. (*Hort. Jour.*)

Garden of the Royal Society of Agriculture and Horticulture.—The series of fetes for the present season will be conducted at Stafford House, Chiswick, just four miles and a half from Hyde Park corner. Here has been constructed a splendid show-room; a flower-hall, for the display of horticultural productions, and capable of holding several thousand people, independently of the gardens and tents which will surround it. The parade down the middle of the room, independent of the tables, will be five yards wide and fifty yards long. The extraordinary exertion required to get this room built in time, and to plant after some fashion the surrounding space, may be but estimated by the fact, that three or four weeks ago the whole walled space of three acres comprised a decayed orchard, from which three hundred cankered trees of large size have been grubbed up, and a heap of ruins, from which a thousand load of bricks and timber have been removed, yet already one-half the ground is lawn and pleasure garden, and the other in a forward state of preparation. The advantage of possessing these gardens, and for the future holding the shows there, needs no comment. The frontage to the road is a hundred and eighty feet, which will give a noble carriage sweep, and ultimately will be the site of a splendid entrance. But for all the purposes of pleasure gardens and a *fete champetre*, the premises will be complete this spring. Of the fetes themselves, it may be said from experience, that however attractive horticulture may be, the mind will tire of it in less than five hours, and these fetes provide against it by various entertainments, which are acceptable to those who have viewed the plants and flowers. Balloons were last year

adopted as a relief, and various amusements which wile away the hours. The musical arrangements include those of Royal Horse Guards (Blue,) and the Cold-stream Guards. In all probability Mr. Green's balloon will ascend from the lawn each day; and although this is a sight any body may have for a shilling elsewhere, there are hundreds who do not like mixing with shilling company. Tickets are already issued to nearly five hundred families connected with the nobility. It is expected to excel altogether the fetes of last year.—*Court Gazette.*

CUBA.

Indigenous and acclimated fruits of Cuba.—We continue our extracts from the article referred to in our last, upon the fruits of Cuba.

"*Lucuma mammosa.*—One of the order of the Sapotaceæ, and formerly an Achras. It goes by several names, among which are *Sapote*, *Mammee Sapote*, *Mamey Colorado*, *Bully-berry*.

"The tree resembles others of the same order. The fruit is of a conical form, covered with a rough, thick, brown skin or rind; looking like the entire meat of a cocoa-nut, deprived of its husk and shell. The pulp is of a very dark orange or flame color, granular, rather soft, but not juicy, tasting like a pretty good common musk-melon. In the midst of the pulp is a long, boat-shaped seed or stone, sharply pointed at both ends, of a mahogany color and high polish, except where this color and polish is interrupted by the rough scar, which occupies about a third of the surface, from end to end. The whole size of the fruit is from three to six inches in length, and from two to three in thickness. Sometimes there are two seeds in one fruit, always polished and beautiful, and of large size.

"There is, I believe, a variety of the Sapote, which is oval, and not conical. But I describe the fruit as I saw it in the market of St. Jago, where it is quite common.

"*Mammea Americana.* This fruit, as its name imports, is a native American. It is commonly called the *Mamey of St. Domingo.* The French also call it *l'Abricot de St. Domingue;* and by the English it is often termed the *Mamey Sapote.* If the unlearned Europeans who go abroad and settle in foreign countries, had not by nature a beautiful way of confounding natural objects together, they would never have thought of bestowing the same name on this fruit which they give to fruits of the Sapotaceous family, which but distantly resemble it. The Mamey is classed with the Garciniaceæ.

"Among the umbrageous fruit trees, the Mamey takes the first place. It is a grand leafy pyramid, attaining the height of sixty or seventy feet, and presenting an aspect at the same time regular and luxuriant. The leaves are quite large, nearly a foot in length, of a long oval shape, dark green, leathery, polished and shining. The trunk is stout, and gives excellent timber. No one can behold this tree, towering in the fruit garden, without a sentiment of respect. Grainger, speaking of those trees which will best exclude

'With their vast umbrage the noon's fervid ray,'

pays a due tribute to this majestic plant, while he notices a native superstition concerning its fruit.

'Thee, verdant mamey, first her song should praise;
Thee, the first natives of these ocean isles,
Fell anthropophagi, still sacred held;
And from thy large high-flavored fruit abstained

With pious awe; for thine high-flavored fruit
The airy phantoms of their friends deceased
Joyed to regale on. Such their simple creed.'

"Large and high flavored the fruit certainly is, but much too solid in its texture, one would think, to be proper food for 'airy phantoms.' It is noble in its size, as large as a shaddock, or as one's head, globular, with a protuberance or mamelon at the end opposite the stalk, and covered with a russet skin. The pulp is of a close and firm consistency, like that of our quince or cling-stone peach, and of a yellow color. The flavor also resembles that of the peach, though it is more aromatic. It is eaten in its fresh state, but more commonly as a jam or marmalade, in which form it is one of the most exquisite of preserves. Rogers, in his 'Voyage of Columbus,' introduces, more poetically than Grainger, the idea of the natives respecting the fruit-eating shades of their friends.

'There odorous lamps adorned the festal rite,
And guavas blushed as in the vales of light.
There silent sate many an unbidden guest,
Whose steadfast looks a secret dread impressed;
Not there forgot the sacred fruit that fed
At nightly feasts the spirits of the dead,
Mingling in scenes that mirth to mortals give,
But by their sadness known from those that live.
There met as erst, within the wonted grove,
Unmarried girls and youths that died for love!
Sons now beheld their ancient sires again,
And sires, alas, their sons in battle slain!'

The Spanish author, however, Peter Martyr, quoted by Rogers in a note, makes the Guanabana, and not the Mamey, the favorite food of spirits. 'They eat of the fruit called Guanàba.'

"In the centre of the fruit is a stone or seed, of size corresponding to the fruit, brown, and very shaggy. Within the rough shell is a large meat, of the peculiar bitter taste of the peach-stone meat, but more delicate, which is much used for the flavoring of noyeau, and other cordials. Sometimes there are two of these stones, and sometimes three.

"*Mangifera Indica*, or *domestica*.—The celebrated *Mango* is now quite common in Cuba, though it was introduced from the East Indies not many years ago. Grainger never mentions it in his poem, which is proof that he never saw it, for it is not a fruit to be passed over. Hughes, in his History of Barbadoes, speaks of a young tree which had just come into bearing, as of a great novelty in that island, and gives a plate of it, which is barely tolerable. I have seen young men who have told me, that, within their memory, the mango was a scarce fruit in Cuba, being sold in the market for a *medio*, or the sixteenth of a dollar a-piece. The same money will now buy almost any quantity you may want to eat. The climate and soil of the country have agreed with the trees so well, that in some places they have multiplied spontaneously into groves and even forests, and they bear in the greatest profusion.

"The tree is one of the most beautiful of fruit trees. The leaves are long, lanceolate, polished, hanging in dense masses of dark green foliage,—so dark, that the orange trees look quite light by their side. The trunk is sturdy, and the branches spread equally, giving a full, regular, rounded form to the whole tree, which is about the size of a healthy and well grown apple tree.

"The blossoms are small, whitish, or with a red tinge, growing in upright spikes. When the fruit is formed, the spikes are reversed

by its weight, and the mangoes appear among the leaves in long pendent bunches.

"While the fruit is young, its color is a fresh and lively green, which is a treat to one's eyes. When it ripens, it generally turns yellow, and looks like a first-rate egg-plum, only twice as large. Some of the varieties are yellow, with a red blush on one side, and some hardly part with their green. The flesh is of a bright yellow, and quite juicy. The juice is thick, creamy and luscious, and, together with a rich sweetness, possesses a peculiar aromatic flavor, resembling that of turpentine, which in some species is so strong as to be disagreeable to the uninitiated. This thick juice composes nearly the whole of the fruit, which may be sucked away into the mouth, so that nothing but the stone and a mass of fibres will be left. The stone is long, compressed, boat-shaped, without polish, irregularly grooved, and covered with hairs or fibres, which penetrate the fruit, and cause it to adhere closely.

"There are a vast many varieties of this fruit in the East Indies, and there are several in Cuba. The French names of some of them are, *Mango filandreux*, *M. savoneux*, *M. abricot*, *M. cœur*. Of these the *Mango cœur*, or *Heart Mango*, is much the best, and is also one of the largest. It is more delicate, and has less of the turpentine flavor than the others. It derives its name from its shape.

"Though the mango tree is so ornamental, and its fruit is so fine, it is thought by some planters to be for their interest not to suffer it to grow on their estates. The trees, they say, shade their coffee, and the fruit is prejudicial to the health of their negroes, who are very fond of it, and apt to eat it immoderately. With regard to the coffee, it is a pity, indeed, if a few bushes cannot be given up for the sake of the shade and ornament which the mango affords; and, with regard to the negroes, it is held by other planters that the fruit is good for them, and does them no manner of harm. I suspect that the whole question of benefit or hurt, depends on the moderate or immoderate use of the fruit.

"*Musa.*—Two species of this genus, the *Musa sapientum*, or *Banana*, and the *Musa paradisiaca*, or *Plantain*, are cultivated in Cuba, as in most tropical countries. The Spanish name for both the banana and plantain is *Platano*, while the French name for both is *Banane*. It is common, however, in the latter language, to distinguish the banana by calling it *Figue Banane*, and to designate the plantain by the term *Grosse Banane*. The Spaniards, according to La Sagra's catalogue, apply the term *Platano hembra* to the plantain, and *Platano Guineo* to the banana. Some botanists regard them as varieties only of the same plant, and not distinct species. However this may be, it is convenient to speak of them as distinct species, and there are certain slight marks which distinguish them from each other. The stem of the *M. sapientum*, or banana, is spotted with purple; that of the plaintain is uniformly green. The fruit of the banana is smaller and more delicate than that of the plantain, though perhaps the latter is more in request as an article of food.

"This fruit is occasionally seen in our market, and is more common in the markets of the cities to the south of us. It is not necessary, therefore, that I should describe it, farther than by saying that it is of a long oval shape, somewhat curved, pointed at the ends, of a yellow or purplish color when ripe, and of a sweet luscious taste. The outside skin readily peals off lengthwise, and the rich pulp then presents

itself, of the consistence of butter. It is eaten raw, or cooked in various ways.

"The stem of the plant is not woody, but consists of the footstalks of the former leaves wrapped round each other, and it rises to the height of twelve or fifteen feet. The leaves are very large, of a long oval form, five or six feet in length, and of a beautiful green. The middle rib of the leaf is tough and strong, but the rest of its substance is thin and delicate, and is easily torn by the wind alone, in a direction of right angles with the rib.

"The manner in which the food is developed is quite interesting. From the midst of the leaves, and at top, appears a large, smooth, purple cone, hanging down gracefully at the end of a stalk. The flowers are all wrapped up in this cone, which consists of a large number of closely packed spathes. By and by the uppermost of these spathes disengages itself from the rest, curls up, and discloses a row of three or four long blossoms, with the young fruit of each beginning to form. While this row of fruit is tender, the spathe remains hanging over it like a roof; but when the fruit has acquired some size and strength, the protecting spathe drops off, and the next in order rises up, with a similar row of young fruit, over which it stands in the same watchful attitude, till it also drops off, to be succeeded by another. When one circle of fruit is completed, another is commenced below, and in due time another; while the common stem around which the fruit is disposed, grows constantly longer, and the cone of spathes is constantly diminishing in size, till it is all unfolded, and a monstrous bunch of bananas is finished, which seldom weighs less than twenty or thirty, and sometimes as much as seventy or eighty pounds.

"Of all kinds of vegetable nutriment, the banana is perhaps the most productive and most easily raised. After a plant has produced its bunch of fruit, the stem is either cut, or is suffered to wither and fall on the spot. In the former case, it is good fodder for cattle; in the latter, it is good manure for the young shoots which have been springing from the root, and which are soon ready to bear fruit in their turn. From these shoots or sprouts the plant is propagated.

"There are several varieties both of the plantain and the banana. The banana which comes from Tahiti is among the very best. The East India name for the genus is *Pisang*.

"This fruit is not forgotten by Grainger.

> 'A wholesome nutriment bananas yield,
> And sunburnt labor loves its breezy shade:
> Their graceful screen let kindred plantains join,
> And with their broad vans shiver in the breeze.'

"*Passiflora.*—The seed vessels of several species of the Passiflora, or Passion flower, are palatable fruits in countries where they come naturally to perfection. This fruit is called *Grenadillo* or *Passionario*, by the Spaniards, and *Grenadille* by the French; which name has been also adopted by the English, with a slight difference in termination, who call it *Granadilla*. The Spaniards of South America, however, and perhaps also of Mexico, give quite a different name to this class of fruits, terming them *Parchas*.

"With one species of granadilla I became well acquainted, for it grew just by my window. The plant, which was, I believe, the *Passiflora quadrangularis*, was a most luxuriant vine, clambering over a wild orange tree, and so completely enveloping it as hardly to suffer a twig to make its appearance. Its growth was so rapid, that it could almost be seen, and, as it grew, it threw out fresh flowers;

while hanging about in all parts of this natural arbor was the fruit, in all its several stages up to ripeness, when it was of the size of a cantelope melon, say seven or eight inches by four. It was of an oval form, smooth like an egg plant, and of a yellowish-green color when ripe. Within a tender rind a quantity of blackish seeds swim in a transparent mucilaginous pulp, of a rather pleasant sub-acid flavor. This pulp is made into a refreshing drink, when mixed with sugar-syrup and water; but without preparation it was not much to my taste. Surrounded as I was by other and better fruits, I hardly ever thought of reaching forth my hand to this.

"Grainger pays a due compliment to the ornamental character of the plant.

> 'The muse might teach to twine the verdant arch,
> And the cool alcove's lofty roof adorn
> With ponderous granadillas.'

"The Passion flowers give their name to the natural order Passifloraceæ, and are nearly allied to the gooseberries and currants.

"*Persea gratissima*, formerly *Laurus Persea*.—No fruit enjoys a greater wealth of names than this; and therefore it is rich in more senses than one. It is the *Alligator Pear* of the English, which name Alligator is only a corruption of the *Avocato* or *Aguacate* of the Spanish, or *Avocat* of the French. It is also called the *Vegetable Marrow* by the English, a name which well designates its quality. In Peru and Mexico it is most commonly called *Palto* or *Palta;* and Grainger gives us yet another, which he says is the Indian name, when he terms it in his poem the 'rich *Sabbaca*.' But in another place he employs the more usual appellation.

> 'And thou green avocato, charm of sense,
> Thy ripened marrow liberally bestow'st.'

"The tree is of middle size, and looks so much like our sassafras tree (Laurus sassafras,) that it might easily be mistaken for it at a little distance. In this resemblance it is true to its family connection; for it is one of the laurels, and is therefore closely allied with the sassafras, as well as with the bays, the cinnamon, and the camphor.

"The fruit looks like a very large, long pear. It is of two or three varieties, red, purple and green, of which the green is the best. The pulp is yellow, and of a firm but very rich and delicate consistence. 'When ripe,' says Grainger in a note, 'the skin peels easily off, and discovers a butyraceous, or rather a marrowy-like substance, with greenish veins interspersed. Being eat with salt and pepper, or sugar and lime juice, it is not only agreeable, but highly nourishing; hence Sir Hans Sloane used to style it Vegetable Marrow.' It was once thought to be worth a voyage from Europe to the West Indies to taste of this fruit; but now, its ancient fame is somewhat diminished, though it is still considered a great delicacy. It seems to have the character of a vegetable rather than a fruit, and is more highly appreciated by some palates than by others.

"As the Aguacate does not ripen till summer, I had not the opportunity of giving it a trial. I saw many of the trees, however, and some specimens of the fruit which had attained a large size.

"Imbedded in the pulp is a large rough seed or stone, the juice of which stains a violet color, and is sometimes used for marking linen.

"*Psidium*—Of this genus, which is of the natural order Myrtaceæ, two fruit-bearing species are commonly mentioned as belonging to Cuba, the *Pomiferum* and *Pyriferum;* the fruit of the former being shaped like an apple, and that of the latter like a pear. It is the

Guava, or, as it is variously written by the French and Spanish, *Guiava*, *Gouyava*, *Guayaba*, *Goyabe*, &c.

"The tree is small, looking something like our cherry tree when young; though the leaves of the guava are larger and longer than those of the cherry, and more thinly scattered on the tree. It is natural to Cuba, and is of a pertinacious life, covering and usurping the ground on which it is permitted to settle. The wood is close-grained, heavy, clothed with a smooth, reddish colored bark. The blossom is white, and resembles a plum or cherry blossom, or, more nearly still, a large myrtle flower.

"The fruit which makes such a fine and celebrated jelly, is not so very desirable in its natural state, though by some it is esteemed. I happened to see but one species, but of this one I saw many specimens. The fruit was nearly round, and, when ripe, of a greenish yellow, resembling more nearly a ripe lime, as I thought, than either an apple or a pear. It was so like a lime, both in shape and color, that, at a little distance, I should easily have mistaken it for that fruit. It had a tender rind, about a quarter of an inch thick, within which was the pulp, of a pink hue, crowded with small, triangular, yellowish seeds. The flavor of the fresh fruit is like that of the jelly made from it, but much more powerful, so that one of them, cut open, will scent a large room. Grainger has but a line and a half to spare for it.

> 'A wholesome food the ripened guava yields,
> Boast of the housewife.'

"The name Psidium is from the Greek *Psidion*, which was the ancient name for the pomegranate, to which the guava has some resemblance. There is a wild guava, P. *montanum*, the fruit of which is small, and not fit for food.

"*Punica granatum.*—Tho *Pomegranate* grows well in Cuba, but is a native of the old world. It flourishes abundantly on the northern coasts of Africa, especially in the Carthaginian district, from which country it derives its generic name. The ancients called it *Malum Punicum*, or the Carthaginian apple. Its specific name appears in the English *Pomegranate*, or apple full of seeds, and also in the French *Granade*, and the Spanish *Granada*.

"The tree, or bush, is common in our green-houses, and the fruit is now and then to be seen in our market. I will only say of the former, that it resembles in appearance, as it is also naturally allied with, the bushy plants of the order Myrtaceæ; and of the latter, that it is round in form, terminated with a tall and deeply cleft coronet, and full of small seeds which are enclosed separately in portions of a transparent red pulp, firm, glistening like rubies. These grains furnish a refreshing juice, in which sweetness and acidity seem blended in equal proportions. I have seen the plant occasionally in the city of St. Jago, lighting up some small yard with its fresh and varied beauty, and also flourishing here and there on a plantation walk. The ripe fruit, sometimes bursting and disclosing its gems, the shapely green fruit, the rich red blossoms, all hanging together on the slender pensile stems of the bush, form one of the pleasantest of garden sights.

"*Tamarindus occidentalis.—Tamarindo*, the *Tamarind*. I have employed the specific name *occidentalis*, because it has been adopted by late botanists to distinguish the West Indian tamarind. As it seems to differ, however, from the Tamarindus indica, or East Indian tamarind, in no other respect than merely having shorter pods or fruit, it hardly deserves to be esteemed but as a variety of that species.

"It is one of the Leguminosæ, and the tree has all the appearance of a fine, spreading acacia. It grows fast, and yet is long lived, and its wood is hard and durable.

"The fruit is a pod, like a full, ripe pea-pod, with a thin crisp, russet skin or shell, which covers a reddish brown pulp, and shining, mahogany colored seeds, which are embraced by a net of tough fibres, proceeding from the fruit-stalk. The pulp seems to need no preserving process, for when fresh it has all the appearance of a marmalade. When eaten directly from the tree, its sugared acidity is agreeable to the palate and refreshing to the senses. Steeped in water, it furnishes a cooling and grateful drink in fevers. The old writers are loud in its praises, and ascribe to it, together with its real good qualities, properties which it can lay but slight claim to. The least that Lemery says of it, is, that 'it allays by its sharpness the too great motion of the tumors, abates feverish heat,cools and quenches thirst, strengthens the stomach, creates an appetite, resists vomiting, and cuts tough phlegm.' At any rate, it is pleasant and innocent, and it is so commonly to be met with in our shops, that there is no want of opportunity to test all the virtues it may have.

"The beauty of the tree is increased by its blossoms, which hang in bunches, with red and yellow petals, and of an agreeable fragrance.

"Grainger informs us in a note, that its name in Arabic is *Tamara*, and that its fruit is good in sea-sickness. He thus instructs his muse to celebrate it:

> 'The tamarind likewise should adorn her theme,
> With whose tart fruit the sweltering fever loves
> To quench his thirst; whose breezy umbrage soon
> Shades the pleased planter, shades his children long.'

"And another, and far higher poet, in that strange and beautiful romance of 'Thalaba,' introduces the maid Oneiza proffering a draught of tamarind water to the guest of her father's tent, unconscious that this guest is a concealed sorcerer.

> 'The damsel from the tamarind tree
> Had plucked its acid fruit,
> And steeped it in water long;
> And whoso drank of the cooling draught,
> He would not wish for wine.
> This to the guest the damsel brought,
> And a modest pleasure kindled her cheek,
> When, raising from the cup his moistened lips,
> The stranger smiled, and praised, and drank again.'

"The following curious account of the derivation of the name Tamarind, is from Burton's Outlines of Botany: 'The date, called *Tamar* by the Arabs, being their most common and valuable fruit, other important fruits have been called dates, or *tamars* likewise, with some distinctive epithet adjoined. Hence the one in question received the name of *Tamar-hendi*, the date of India, whence our word *Tamarind*. Ignorance or neglect of this circumstance led botanists to add *Indica* as the specific name, to a generic one in which the habitat of the plant already was included.' Considering, therefore, that *Tamar-indus Indica* is a 'vile pleonasm,' Burton proposes to call it *Tamarindus orientalis*, in distinction from the *Tamarindus occidentalis*.

"*Theobroma Cacao.*—This is the plant which produces the *Cacao*, or Chocolate-nut of commerce; and it is important that the true spelling and pronunciation of the word should be attended to and preserved, in order to prevent the confusion arising between this and

the coco or cocoa, which is as different a fruit as possible. The nut from which chocolate is made, is the *cacao*, and not the coco; and the tree which bears it, instead of being one of the palms, is classed among the mallows, and is connected with the cotton shrub and tree, the linden, and other plants of that type.

"The tree is of rather small size, with large, long, oval pointed leaves, strongly ribbed, often assuming a dark purple color. The flowers are small and star-shaped. The fruit is of a long oval form, pointed at the end, ribbed like a muskmelon, and bearing some resemblance to a small specimen of that fruit. When ripe, its rind is yellow. Cut it open, and you come to a soft, white, spongy, pulp, of a rather pleasant sub-acid taste, which separates wholly from the rind. The valuable seeds are wrapped up carefully in this pulp, in separate envelopments, in considerable numbers, and are of a lively red color before they are dried, when they turn to a duller hue, which is well known as chocolate color. A specimen of the fruit which I opened contained thirty-eight of these seeds.

"A singularity, with respect to this fruit, still more marked than in the case of the guanavana, is, that it grows out directly from the bark of the large branches or trunk, hanging thereto by a short, fleshy stem. I have seen it clinging to a stout trunk, within a foot or two of the ground, without a twig or a leaf near it.

"It is unnecessary for me to say any thing of the value of the cacao. When first discovered by Europeans, it was greeted with boundless eulogy, of which its generic name, Theobroma, signifying *food for the gods*, is a standing testimonial. In Mexico, and parts of South America, the people could hardly live without their chocolate, or *chocolatl*, which is the Mexican word; and it is calculated by Humboldt, in the year 1806, that twenty-three millions of pounds of the cacao were imported into Europe, the greater portion of which was used in Spain. Chocolate is nothing more than the cacao seeds bruised or ground into a paste, and sweetened and flavored according to the fancy of the manufacturer and demands of the consumer." (*Bost. Jour. of Nat. Hist.*)

FRANCE.

Progress of Horticulture and Agriculture in France.—The great annual sitting of the Royal and Central Society of Agriculture took place last month at Paris, before a very crowded assembly. The Minister of Public Works, Agriculture, and Commerce, the Count de Gasparin, delivered the oration, usually spoken on the occasion: he treated pretty fully of the different branches connected with the labors of the husbandman, which the last year saw distinguished by more than ordinary success, and marked by circumstances of unusual interest.

M. Soulange Bodin then read a report; from which the following are extracts:—

Madder.—The advantages which must arise from the cultivation of this plant in the departments immediately about Paris, have been ably summed up in a work lately written by M. Battereau Danet. In it a calculation of the expense and amount of the various experiments hitherto made have been clearly detailed. He estimates the profit at about 100 francs per hectare greater than what the common produce of the country could yield. These calculations are the more encouraging, as, in several experiments made by M. Chevreul with the madder produced near Paris, and that of Avignon and

Alsace, the former was able to sustain with advantage a comparison for lightness, color, and durability. The agriculturist it is who must now consider if he can conveniently cultivate this plant in justice to his other crops. Those who can will find, it is presumed, the profit arising from it exceedingly great.

Polygonum Tinctorium.—The anticipations of the French horticulturists respecting this plant are declared to be premature, for so far as is at present ascertained, it cannot maintain a contest with indigo from India. "You are aware," says the report, "that the *polygonum tinctorium* contains within its leaves, an indigo, which, brought from China through Russia, in France has been thought equal to that of India. M. Louis Vilmorin, the younger, who last year presented the Society with a specimen of the indigo produced from this plant, has continued to lay before it accounts of his experiments, and to expose specimens of the indigo which he extracted by different processes. You have also had presented to you specimens of stuffs died with the indigo. M. Jaume St. Hilaire has lately taken two pieces of cloth, one dyed with the best indigo of Bengal, and the other with that of which I now speak, and has exposed the two for fifteen days to the influence of the rain, sun, and wind; but the result proves that the world has been too hasty in announcing from mere experiments in the laboratory, that the *polygonum* can replace the produce of India. It undoubtedly contains a greater quantity of coloring matter, but no mode of extracting it hitherto discovered can be used in a manufactory. The fine indigo which M. Louis Vilmorin has presented was only obtained by means of a double operation, which served at the same time to extract it and to purify it; but nothing has yet been established to prove that this *modus operandi* can be advantageously used on a grand scale.

The Tea-tree.—Whilst waiting for the return of M. Guillemin, whom the government has sent to Brazil to procure seeds and plants of the tea-tree, we have only to express our wishes for his success. News was received in January from this gentleman. He states, that he observed in the garden at Rio Janeiro 12,000 plants in full bearing, and he was on the point of setting out for the province of St. Paul, where the number is still more considerable. He mentions that it succeeds exceedingly well in that country, and that half the tea consumed there proceeds from Brazil itself. He paid particular attention to the mode of preparing the leaves, and can now prepare them himself. Every thing leads us to suppose that the exertions of this gentleman will be crowned with success.

Milking Qualities of Cows.—Whilst learned men were thus, by microscopic observations, ascertaining the qualities of infected milk, a simple farmer of the south came forward to speak on conjectural grounds of the milking qualities of cattle. He asserted that, by mere external examination of the animal, he could determine long beforehand, on the existence, the nature, and even the continuance of the milk. M. Guénon in fact declares that he can class, with the greatest precision, all cows of every kind, so as to declare the quantity of milk they give each day—the quantity they shall give at a future period, and predict the duration, more or less extended, of its production in the animal. At M. Guénon's request, numerous experiments, directed by himself, have been made by the agricultural societies of Bordeaux and of Aurillac, and at Paris, at Grignon, and at Rambouillet, also in the department of Seine-et-Maine, and by the Agricultural Society of Rosoy. The total of the experiments

made by M. Guénon, and reported on by M. Yvart, presented a fifth of erroneous declarations. The characters on which M. Guénon founds his judgment exist in every individual of the bovine race, and are easily distinguished, and even measured, in all their forms and gradations. The important matters to ascertain would be, first, their character, and the value attributed to them; and next, if the observations of the discoverer are conformable to them in every instance—for it must be acknowledged that the exceptions were in sufficient number to make the rule itself a matter of doubt. However, the mark is undoubtedly novel, and if it has, up to this, passed unperceived in theory, it is not unreasonable to admit it in practice; and as the importance of the discovery, if well founded, is evidently great, the gentlemen appointed to investigate the matter, thought it their duty to recommend the government to encourage, as much as possible, the experiments of M. Guénon, in order to ascertain generally the value of his secret, for he made known his mode of judging to the committee alone. (*Hort. Jour.*)

Art. III. *Domestic Notices.*

Large Turnip-rooted Beets.—I have turnip beets, raised from seeds sown March 19th, which now measure, in circumference, one foot ten inches!—*Respectfully, yours, Gregory Lee, Frankford, near Philadelphia, July* 31, 1839.

Seedling Verbenas.—Mr. Wales, of Dorchester, who is now absent in England, has raised upwards of a hundred seedling verbenas, principally, we believe, from the seeds of *V.* Tweedie*àna:* there are not, however, any varieties which are more remarkable for beauty than their parent, or, in reality, worthy of being named. With the new kinds which have made their appearance for the first time this season, the *V. teucroìdes* and Eyre*àna*, there will be a great chance, by proper and judicious impregnation, to procure numberless forms and colors. We look forward to the period, when the varieties of this tribe will outnumber even the vast quantity of geraniums, and when they will be more universally cultivated and admired, as out-door ornaments, than any other plants.—*Ed.*

Striped dahlias.—The skill of English florists has already produced a dahlia as striped as a carnation. A new variety, called the Striata formosissima, was exhibited last season, at many shows near London, and has been added to our collections the present year, as has probably been noticed, in the catalogues of the principal growers. By a reference to our report of the Massachusetts Horticultural Society, in another page, it will be seen that Messrs. Wilder and Hovey & Co. have each exhibited blooms. Like other parti-colored varieties, it is somewhat sportive in its colors. Those shown by Mr. Wilder were, each, very regularly striped, while *one* of those exhibited by Messrs. Hovey & Co. was almost entirely self-colored, having only two or three striped petals in the whole flower. This variety is a

free grower, and, from present appearances, an abundant bloomer, and if only one half of the flowers should be striped, it will be a very desirable kind from its great singularity, differing so much as it does from the self-colored and edged varieties. We shall notice it again. —*Ed.*

The Albany Horticultural Society hold their annual meeting in the city of Albany, on Wednesday, the 18th of September. The list of premiums to be awarded for various garden productions has been sent us, from which we perceive that the Society propose distributing upwards of one hundred and thirty dollars in prizes at the above meeting, in the following manner, viz: seventy-two dollars for flowers, thirty-three for fruits, and twenty-six for vegetables. We annex the list of the prizes for flowers and fruits:—

Flowers:—The first premium for the 25 best dahlias,	$20.
The second premium for the 25 next best dahlias,	15.
The third premium for the 25 next best dahlias,	10.
The fourth premium for the 25 next best dahlias,	5.
The fifth premium for the 25 next best dahlias,	3.
Best design for a centre ornament for centre table, made of flowers,	5.
Second best design for a centre ornament,	3.
The first premium for the best bouquet of flowers,	2.
The second premium for the next best bouquet of flowers,	1.
For the greatest variety bouquet of flowers,	3.
For the finest specimen green-house plant in pot,	2.
For the greatest assortment of plants in pots,	2.
For the greatest assortment of heartsease,	1.
Fruits:—The first premium on grapes, two largest bunches,	5.
The second premium on grapes, two next in size,	3.
The first on peas, one dozen best varieties,	5.
The second on peas, one dozen next best varieties,	3.
The first on apples, one dozen best varieties,	5.
The second on apples, one dozen the next best varieties,	3.
The first on plums, best varieties,	3.
The second on plums, next best varieties,	2.
The best dozen peaches,	2.
The best dozen nectarines,	2.
The best dozen quinces,	2.

Discretionary premiums will be awarded on horticultural productions thought meritorious by the committee. Competition open to *all the States.*

We are glad to see this Society adopting the liberal plan of allowing their exhibitions to be open to all who are disposed to contribute, whether members or not: by not restricting the competitors to the mere limits of the Society, we believe that many will contribute who otherwise would not. The annual shows of every society in the country should be open to amateurs and gardeners throughout the whole Union. This Society, together with the Horticultural Association of the Valley of the Hudson, is doing much towards the advancement of gardening in the fertile region of the Hudson, and we trust that their united efforts will cause other portions of the State to emulate their example.

Our correspondents in Albany will not, we hope, forget to send us a correct account of the exhibition.—*Ed.*

The Maryland Horticultural Society in Baltimore, the Columbian Horticultural in Washington, D. C., the New Haven Horticultural Society in New Haven, and the Charleston Horticultural Society in Charleston, S. C., each held annual meetings in September, last year. We have had no notice of the time of their meeting this season, but presume they will each hold an exhibition this month, and we would request our correspondents to send us as accurate reports as possible of productions displayed.—*Id.*

Edgings for flower borders.—Will you please to inquire of your numerous readers, for the best edging for a parterre, and inform one who is now suffering from a gross border or edging? and oblige *Yours, an Amateur, July*, 1839. [The best edging that we can recommend for this purpose is box, properly set out, and kept neatly clipt. Some recommend the Dwarf stone-crop, as making a pretty border; but we prefer box.—*Ed.*]

P*hlóx Drummóndii* has flowered from seed in about eight weeks. The variety is a beautiful rosy purple, with a dark stellate eye, and seems to be identical with the *P.* var. carnéscens of the English seedlings. As a delicate, and at the same time somewhat durable flower, it is finely adapted to cultivation in pots, and contributes no mean quota to the ornamental series of in-door floriculture. Grown in a rich but light compost, and plentifully supplied with water, it seems to thrive with a luxuriance which is observable in all the rest of this family of plants, when proper care is taken in their cultivation.—*J. L. R.*

Natural vegetation in sand.—It is usual for us to associate with sandy tracts the idea of sterility. To the most arid spots, however, the botanist is indebted for some of his most interesting subjects. To say nothing, at this time, of the gorgeous and grotesque groups of plants indigenous to the deserts of the tropics—the sandy wastes and plains of our own State, where, from careless and negligent culture, the upper soil has been expended, and a substratum of almost pure silex is laid bare,—are productions to a degree of luxuriance scarcely appreciable to the ordinary glance. The blue perennial (*Lupìnus* perénnis) particularly delights in such soil, succeeded by the tall purple Blazing Star, (*Liàtris* scariòsa;) and then comes *Polygònum* articulàtum, so delicate and heathlike, while milky sunspurge (*Euphórbia* helioscòpa) and a wiry grass or so, and the golden Hudsònia tomentòsa and H. ericoìdes, all aid to render, not absolutely barren, the depauperated soil. On the sea-shore more singular plants abound, such as the prickly stemmed Salsòla caroliniàna, the sea burdock (*Xánthium* strumòsum,) the Arenària *peploìdes*, of an almost anomalous form in the difference between its thick, clumsy, succulent leaves and stems, and the delicate, pretty contour of most of the other species; beautiful varieties of *Datùra* Stramònium, some of extraordinary size, may be found on the very ocean's margin, while the rank Lovage (*Ligústrum scóticum*,) and not a few fine golden rods and asters wave their yellow heads and starry blossoms in close proximity to the salsiferous breath of the sea, and on the junction of siliceous and vegetable soils.—*R.*

O*rchis fimbriàta*—or fringed orchis, has been abundant and very fine in the meadows of this vicinity. We recommend its culture, especially in those situations which can command the banks of a stream or of a pond. Transplantation of all the orchideous plants of our swamps and meadows succeeds perfectly when they are in flower, as the tubers seem capable at that period of enduring a change; they

having made provision, by the growth of new roots, for the exigencies of the next season.—*Chelmsford, Aug.* 14.

The American harebell, (Campánula rotundifòlia,) is growing in profusion near by, and decking, with its pendant and carelessly hung flowers, the picturesque banks of the Merrimack. We could wish that some one fond of the cultivation of our native flowers would try to bloom it in winter, by an introduction of plants into the greenhouse. We feel sure that it will be found to surpass many a denizen of those structures, more generally grown and of questioned beauty. —*Chelmsford, Aug.* 16.

A second Exhibition of Cut Flowers, for premiums, took place at the Conservatory of the Public Garden, on Thursday, July 4th. A great number of bouquets were exhibited, together with numerous specimens of pinks, roses, pansies, &c. &c. We were not present, and are not enabled to give the names of the exhibitors.—*Ed.*

Cèreus nicticaùlis.—A new species, under this name, has been imported from London, by J. W. Boot, Esq. of Boston. It is similar in habit and general aspect to the C. grandiflòrus, but is said to produce a more beautiful flower. The plant is yet small.—*Ed.*

The Twelfth Annual Fair of the American Institute will be held at Niblo's Garden, on Monday, October 7th, and will continue open until the 11th, on which evening a Silk Convention will be holden at the same place. The Anniversary Address will be delivered on the evening of the 10th. Contributions from exhibitors will be received on Thursday, Friday, and Saturday, previous to the exhibition. This fair will be exceedingly interesting to all agriculturists, as there will, probably, be a large number of labor-saving agricultural implements exhibited. The ploughing match, for the trial of ploughs, on Thursday, the 5th instant, will probably take place before this notice meets the eyes of our distant subscribers. But the results of the trial will be given in the *Journal* of the Institute.—*Id.*

The Brooklyn Horticultural Society.—This new Society will hold an exhibition the latter part of September, or early in October. We were promised a list of the officers of the Society, with an account of its first exhibition, which, we are informed by our friends, was exceedingly good; but it has not yet been received. Before our December number appears, however, we hope to be able to present the same. The Society have been fortunate in calling to its head N. J. Becar, Esq., a gentleman who is greatly devoted to gardening pursuits. The Vice-Presidents are also gentlemen who are deeply interested in horticulture. Another season, when perfectly organized, much good may be expected from its labors.—*Id.*

The Agàve americàna, which we have noticed once or twice, in the collection of Mr. Hogg, and which he attempted to preserve through the last winter, by merely protecting the plant without peat, has, we learn, died since our visit to his place in June.—*Ed.*

Beet Sugar in Michigan.—We may soon expect to be supplied with the "sweets of life," from the prairies of the west. The people of Michigan are more extensively engaged in the Beet sugar business, than any other part of the Union. Several companies have been formed for the purpose, which have planted large quantities of beets, and some wealthy individuals are planting largely on their own account. The Hon. Lucius Lyon, of Ionia county, came to this city a few weeks since, and purchased at the Rochester Seed Store over *three hundred pounds* of sugar beet seed, together with machines for sowing and cultivating them. Mr. L. informed us that

he intended to plant *one hundred and fifty acres* of beets, and to erect suitable buildings, and apparatus for an extensive sugar manufactory. He expressed the fullest confidence in the success of the enterprise, and has sent to France for an experienced workman to superintend the business. We wish Mr. L. complete success, and hope he will send us an account of his operations next fall. (*Genesee Farmer.*)

Annual Exhibition of The Massachusetts Horticultural Society.—The Committee of Arrangments have decided to hold the Annual Exhibition on Wednesday, Thursday, and Friday, the 25th, 26th, and 27th of September.—*Ed.*

Encouragment to the Silk Cultivation by Horticultural Societies.—The Maryland Horticultural Society, aware of the importance of the encouraging the culture of silk, and deeming "in its most important part, at least a branch of Horticulture," have offered the following premiums to be awarded in 1839:—

For the best parcel of Cocoons, not less than five pounds, a Silver Cup, of the value of $10 00

For the best parcel of *Raw* or *Reeled Silk*, not less than one pound, a Silver Cup, of the value of . . . 10 00

For the best parcel of *Sewing Silk*, not less than half a pound, a Silver Cup, of the value of . . . 10 00

For the best specimen of *Silk Hosiery*, *Vesting*, or *Handkerchief*, a Silver Cream Jug, of the value of . . 20 00

It is required, specially, that the articles entered for competition, shall be of the growth and manufacture of the state of Maryland, or District of Columbia, during the year 1839,—and that they be exhibited at the fall show of the society, which will be held September 25th, of the present year.—*Ed.*

Art. IV. *Retrospective Criticism.*

Errata.—On page 301 of the last number, fifth line from the top, "incarnàtum," should read "*incurvàtum;*" and for "new species," on the sixteenth line from the bottom of same page, read "*new variety.*" The reader is requested to correct these with his pen. P. 295, eight lines from the top, for "larger" read "*longer.*"

Art. V. *Pennsylvania Horticultural Society.*

The stated meeting of the Pennsylvania Horticultural Society was held on the evening of the 20th instant, the President in the chair.

At the intermediate meeting, on the 3d of August, the following premiums were awarded by the committees:—For the best six heads

of Swiss chard, to William Chalmers, gardener to Mrs. Stot, Turners Lane. For the best early apples, (Bevan's Favorite,) to Isaac H. Hatch, Camden, N. J. For the best early peaches, (Early York,) to Joseph Hatch, Camden, N. J.

Joseph Hurst, gardener to Mr. Hanson, exhibited Swiss chard and some fine white Portugal and Strasburgh onions, raised from seed sown last April. Alexander Parker exhibited Bolmar Washington, and red Egg plums.

The Committee on Plants and Flowers awarded the premium for the best display of plants in pots, on the evening of the 20th, to Robert Buist, he having exhibited Fúchs*ia* globòsa, Echevèr*ia* grandiflòra, *Amaryllis Johnsòni* and *A. gigántea*, Chiròn*ia* grandiflòra, Blæ'r*ia* ericoìdes, *Erìca* mammòsa, *E.* vulgàris and vàgans, Metrosidèros semperflòrens, Lophospérmum grandiflòra, *Mímulus Harrisònii*, Ixòr*a* crocàta, Gardoquì*a* Hookèr*ii*, Solànum *jasminoìdes*, Alstrœmèr*ia* acutifòlia, Nierembérg*ia* filicaúlis, Thunbérg*ia* alàta var. álba, Læ'lia ánceps, five distinct varieties of phloxes, from the seed of the *P.* Drummónd*ii*, and some cut flowers of very fine zinnias, and China pinks.

The premium for the best bouquet, to Robert Kilvington, and an honorary premium was awarded to the same, for some fine specimens of indigenous plants, viz: *Liàtris* scariòsa, and two others, Lobèl*ia* cardinàlis, Botrychium *fumarioìdes*, and B. obliqum, &c.

William Chalmers, gardener to George Pepper, Esq., exhibited Witsèn*ia* corymbòsa, Manétt*ia* cordifòlia, and *Pancràtium* speciòsa, three very fine specimens. William Chalmers, gardener to Mrs. Stot, exhibited a fine species of Maxillària.

Alexander Parker exhibited Eugèn*ia* *myrtifòlia*, Lantàna cammàra, Leonòtis leonùrus, Ardísia crenulàta, petunias, purple and white, Nierembérg*ia* filicaúlis, Lagerstrœ'm*ia* índica, Passiflòra cærùlea, Ròch*ea* falcàta and oblìqua, Hòy*a* carnòsa, *Crìnum* americànum, *Hibíscus ròsa* sinénsis, Lobèl*ia*, speciòsa purpùrea, *Vínca ròsea* and álba, Jasmìnum azòricum, Plectránthus fructicòsus, Swainsòn*ia* galegafòlia, *Gloxín*ia speciòsa and álba, *Heliotròpium* corymbòsum, Malvavíscus arbòreus, and three stapelias.

The Committee on Vegetables awarded the premium for the best display of vegetables, to Charles Conover, gardener to Thomas C. Rockhill, Esq., he having exhibited onions, white Portugal and Strasburgh, tomatoes, cabbages, carrots, egg plants, Snap beans, sweet corn, squashes, potatoes, okra, Lima beans, and plums.

The Committee on Fruits awarded the premium for the best figs (Celestial,) to William Sinton, gardener to Gen. Robert Patterson. Alexander Parker exhibited the Seckel, the Musk spiced, the Bergamot, the Late Catharine, the Butter and the premium Bergamot pears, the Imperial Violet, the red, Parker, large Natural, and his Clean Stone Damson plums, besides some fruit of the *Córnus* mácula, and Maiden's Blush apples. Mr. Helmuth, Spruce street, exhibited some very fine nectarines.

Hurst & Dreer exhibited one hundred and ninety blooms of very superior dahlias. We noticed Hancock's Hero of Tippecanoe, Buist's Mrs. Rushton, Widnall's Reliance, Lady Dartmouth, Queen Supérba, and the Marquis of Northampton, as something very superior; indeed, the whole were very good, and made a fine appearance. —*Yours, G. Watson, Philadelphia, Aug. 21st*, 1839.

The Society have issued their circular, announcing that the Exhibition will take place, and have also appended to the same a list of the premiums to be awarded, as follows:—

For the best Grapes, native, not less than six bunches,	$5 00.
For the next best Grapes, native, not less than six bunches,	4 00.
For the next best Grapes, native, not less than six bunches,	3 00.
For the best Grapes, foreign, raised in the open air, not less than 4 bunches,	5 00.
For the next best Grapes, foreign, raised in the open air, not less than 4 do.	4 00.
For the next best Grapes, foreign, raised in the open air, not less than 4 do.	3 00.
For the best Grapes, raised under glass, not less than 4 bunches,	5 00.
For the next best Grapes, raised under glass, not less than 4 bunches,	4 00.
For the best Peaches, not less than one peck,	5 00.
For the next best Peaches, not less than one peck,	3 00.
For the best two dozen Peaches,	3 00.
For the best bushel of Peaches,	10 00.
For the next best bushel of Peaches,	5 00.
For the best Seckel Pears, not less than one peck,	5 00.
For the best Butter Pears, not less than one peck,	5 00.
For the best Pears of any other variety, not less than one peck,	5 00.
For the best Apples, not less than one peck,	3 00.
For the next best Apples, not less than one peck,	2 00.
For the best bushel of Apples,	5 00.
For the next best bushel of Apples,	3 00.
For the best Quinces, not less than half a peck,	3 00.
For the best Nectarines, not less than one dozen,	3 00.
For the best Water Melons, not less than three,	5 00.
For the next best Water Melons, not less than three,	3 00.
For the best Water Melons, raised in Pennsylvania, not less than three,	3 00.
For the best Nutmeg Melons, or variety thereof, not less than three,	3 00.
For the best Potatoes, not less than half a bushel,	3 00.
For the best Sweet Potatoes, not less than half a bushel,	3 00.
For the best Onions, not less than four dozen,	3 00.
For the best Cabbage, not less than six heads,	3 00.
For the next best Cabbage, not less than six heads,	2 00.
For the best Red Cabbage, not less than six heads,	3 00.
For the best Carrots, field culture, two dozen.	3 00.
For the best Lettuce, not less than six heads,	3 00.
For the best Endive, blanched, not less than six heads,	3 00.
For the best Salsify, not less than two dozen,	3 00.
For the best twelve varieties of Dahlias,	5 00.
For the next best varieties of Dahlias,	3 00.
For the best American Seedling, Parti-colored Dahlia,	3 00.
For the best American Seedling, Self-colored Dahlia,	3 00.
For the best Pyramid, or other figure formed of cut flowers,	15 00.
For the next best Pyramid, or other figure formed of cut flowers,	10 00.
For the best Bouquet,	5 00.

Amounting to upwards of one hundred and eighty dollars. We anticipate a very splendid exhibition.—*Ed.*

Art. VI. *Massachusetts Horticultural Society.*

Saturday, July 20th, 1839.—The Society transacted some business at this meeting, and proceeded to appoint a committee for the purpose of making suitable preparations for the Annual Exhibition, to be held in September. The following gentlemen were appointed a General Committee of Arrangement:—

Samuel Walker, Isaac P. Davis, Thomas Lee, William Oliver, L. P. Grosvenor, Marshall P. Wilder, Edward M. Richards, John

L. Russell, William T. Eustis, Ezra Weston, Jr., Robert Treat Paine, J. E. Teschemacher, Benjamin B. French, Samuel Downer, John Towne, Otis Johnson, David Haggerston, William McLellan, Robert Manning, J. M. Ives, Charles M. Hovey, M. P. Sawyer, Joseph Breck, Cheever Newhall, William Kenrick, Jonathan Winship, Henry Sheaf, Ebenezer Putnam, Samuel R. Johnson, S. Sweetser, J. C. Howard, P. B. Hovey, J. L. L. F. Warren, William E. Carter, John A. Kenrick, J. W. Cowan, J. W. Russell, Rufus Howe, Samuel Pond; and the Committee are authorized to add to its number, if found desirable.

A Special Committee, to decorate the hall, was also appointed, consisting of the following members:—

Samuel Walker, L. P. Grosvenor, William Oliver, M. P. Wilder, James E. Teschemacher, William Kenrick, E. M. Richards, David Haggerston, S. R. Johnson, J. L. L. F. Warren, C. M. Hovey, J. W. Russell, William McLellan, Rufus Howe.

A Committee was also appointed to make a report on the flowers, fruits and vegetables exhibited, and upon the labors of the Society for the present year. The following gentlemen compose this Committee:—

J. L. Russell, S. Walker, E. M. Richards, William Kenrick, J. L. L. F. Warren, A. D. Williams.

July 27th.—Exhibited. Flowers:—From Messrs. Winship, a variety of very handsome carnations, and a large bouquet. From Hovey & Co. bouquets of flowers, and specimens of Coreópsis diversifòlia, Oxyùra chrysanthoides, and white and dark purple candytufts. From S. R. Johnson, pinks and carnations. From John Hovey, hollyhocks, carnations and bouquets. From Wm. Meller, very fine carnations, sweet peas, dahlias, and bouquets. From Messrs. Mason, carnations and dahlias. From S. Walker, a beautiful specimen of *Aconìtum* variegàtum, and elegant bouquets. From M. P. Wilder, three dahlias, viz. Striàta formosíssima, Cheltenham Rival, and Sulphùrea élegans. From J. S. Ellery, a large bouquet. From William Kenrick, bouquets. From Misses Sumner, bouquets. From J. L. L. F. Warren, double oleanders, dahlias, calceolaria, marigolds, coreopsis, carnations, *Plumbàgo* capénsis, &c.

Fruits:—From T. Allen, Salem, black Hamburgh and white Chasselas grapes, and Royal George peaches. From B. V. French, Heath's Early Nonsuch apple. From Mr. Skilton, Charlestown, apricots. From J. S. Ellery, Miller's Burgundy, white Chasselas, and black Hamburgh grapes. From John Hovey, fine gooseberries. From A. D. Williams, currants. From J. L. L. F. Warren, tomatoes.

August 3d.—Exhibited. Flowers:—From T. Lee, Coreópsis semiplèna, Sabbà*tia* chloroìdes, Coreópsis *ròsea*, *Silène* Tenòri, Lobèl*ia* cardinàlis, *Asclèpias* tuberòsa, (beautifully grown specimens,) Gerárd*ia* quercifòlia, roses, &c. From Madam Eustis, Roxbury, handsome carnations. From S. Walker, very handsome bouquets. From Messrs. Winship, a large and showy bouquet. From M. P. Wilder, the following dahlias:—Countess of Liverpool, Sulphùrea élegans, Prima Donna, and Striàta formosíssima. From J. Hovey, bouquets. From Rufus Rowe, bouquets. From Hovey & Co., bouquets. From J. L. L. F. Warren, dahlias, verbenas, marigolds, fine clusters of the *Nèrium* splèndens, and bouquets. From John Towne, the following fine plants in pots:—Bouvárd*ia* triphylla, Fúchs*ia* grácilis, (six feet high, and in full bloom,) Erythrìna crista-gálli, Gloxín*ia* speciòsa, *Plumbàgo* capénsis, Menzièsi*a* cærùlea, *Erica* verticillàta and cinèrea.

Fruits:—From O. Johnson, Zinfindal and black Hamburgh grapes: these specimens were handsome, the berries large and well colored. From A. D. Williams, beautiful white and red Dutch currants. From J. L. L. F. Warren, Juneating pears. From Mr. Rundle, apricots. From Mrs. C. H. Jones, apricots. From J. Chandler, Marblehead, Roaring Lion, and other sorts of gooseberries. From E. M. Richards, the following varieties of early apples:—Early Harvest, Williams's Favorite, Curtis's Early Striped, red Juneating, Sopsavine, and red Astracan.

Vegetables:—From J. L. L. F. Warren, China Dwarf beans, and tomatoes.

August 10*th.—Exhibited.* Flowers:—From S. Sweetser, a cut flower, of the lovely Echinocáctus Eyriêsii. From D. Macintyre, a beautiful flower of Widnall's Juliet dahlia. From M. P. Wilder, dahlias, viz: Sunbury Hero, Marquis of Lothian, Striàta formosíssima (two blooms,) Prima Donna, Sir H. Fletcher, Sulphùrea élegans, Reliance and Anna Augusta Broadwood. From Hovey & Co., a flower of Striàta formosíssima, entirely self-colored, with the exception of a few spots of white; also, bouquets. From W. Kenrick, bouquets. From S. Walker, Sunbury Hero, and Mrs. Ashley dahlias, verbenas, pansies, and fine large bouquets. From S. R. Johnson, beautiful balsams and pinks. From T. Lee, Coreópsis ròsea, Sabbàtia chloroìdes, Orchis fimbriàta, Asclèpias tuberòsa, a handsome species of Tropæ'olum, Noisette roses, gerardias, &c. From J. Hovey, bouquets.

Native Plants:—From William Oakes, Sabbàtia chloroìdes, and chloroìdes var. álba, Coreópsis ròsea, Polygala rubélla, Asclèpias tuberòsa, Drósera tenuifòlia, Lycopòdium alopecuroìdes, and Stàchys hyssopifòlia, all from Plymouth. The Sabbàtia is, we believe, almost peculiar to this locality; it is one of the most beautiful of our native plants, and should be cultivated in our gardens. The variety álba is rare and delicate, but less showy than the rosy blossoms of its parent. From G. Gilbert, Esq., Boston, Sabbàtia chloroìdes, Coreópsis ròsea, Polygala rubélla, Gnaphàlium margaritàceum, Crotalària sagittàlis, Asclèpias tuberòsa, and Stàchys hyssopifòlia, all from Plymouth. Several specimens of various plants, from E. Weston, Jr.

Fruits:—From E. M. Richards, the following varieties of apples: Sops of Wine, Early Harvest, Early Bough, red Astracan, Williams's Favorite, Colville d' Ete, Summer rose, red Juneating, Curtis's Early Striped, Sugar-loaf pippin, and Benoni, all very fair specimens for the season, and several of them in good eating, as we can *confidently* state, Mr. Richards having made us a present of the whole of this collection. From O. Johnson, very fine specimens of the white Muscat of Alexandria and black Hamburgh grapes, the berries on the cluster of the former much more thickly set than are usually seen. From T. Mason, red and white Antwerp and Franconia raspberries. From the Hon. John Welles, peach apricots, from a tree imported from France: Mr. Welles offers to give scions to any cultivator who wishes to procure this fine kind.

Vegetables:—From J. L. L. F. Warren, specimens of a very small variety of corn, called the Tit Bit: the ears were not more than four or five inches long; but it is said to be a good eating and early variety.

August 17*th.—Exhibited.* Flowers:—From J. L. L. F. Warren, dahlias and other flowers. From M. P. Wilder, dahlias of several handsome varieties. From W. E. Carter, dahlias, and a white seedling phlox of much beauty. From Messrs. Mason, dahlias. From Hovey

& Co., bouquets. From John Towne, three or four fine species of heaths in superb bloom. Dahlias were also presented by Messrs. Howe, Walker, and others.

Native plants:—From Wm. Oakes, *Apios* tuberòsa, Gerárd*ia* glaúca, *Liàtris* scariòsa, Rudbéck*ia* lasciniàta, *Solidàgo* canadénsis and flexicaúlis, *Spiræ'a* álba, var. with rose colored flowers, *Aster* acuminàtus, *Solidagnoides*, and conyzoides, Eupatòr*ium* pubéscens, *Cinna* arundinàcea, Scutellària lateriflòra, *Actæ'a* álba var. fruit with slender peduncles, *Vibúrnum* dentàtum in fruit, and *Apocynum* androsmæflòrum. From E. Weston, Jr., and F. Parker, Esqrs., *Linum* virginiàna, Clématis virginiàna, *Apios* tuberòsa, Scutellària lateriflòra, Prenánthes álba, Gerárd*ia* marítima, *Solidàgo* lævigàta, *Liàtris* scariòsa, Gerárd*ia* glaúca and pediculàris, *Verónica* novaboracénsis, *Hedysàrum* canadènse, Monárd*a* allophylla, Eupatòr*ium* verticillàtum.

Fruit:—From O. Johnson, fine specimens of black Hamburgh grapes, From B. V. French, River, Sopsavine, Early Harvest, and Kentish Fillbasket apples. From S. Pond, Burnet pears. From D. Burnet, of Southboro', also, Apricot plums and Catalonian plums, from his own growth. From Messrs. Mason, fine bunches of white Chasselas, or Sweetwater grapes. From A. D. Williams, handsome specimens of the Williams' apple. From J. Deane, Mansfield, three kinds of apples and peaches. From P. P. Spalding, Lowell, Spalding's seedling apple. From Prof. J. L. Russell, a native Sweeting apple.

Vegetables:—From J. L. L. F. Warren, common red and yellow, and small yellow tomatoes.

Aug. 24.—*Exhibited.* Flowers:—From S. R. Johnson, Balsams, and fine varieties of tender roses. From Jos. Breck & Co., asters, zinnias, Chinese pinks, Nigellas, Salpiglossises, and three varieties of *Phlóx* Drummónd*ii*. From M. P. Wilder, dahlias, viz. Rival Sussex, Striata formosíssima, Birmingham Victor, Maria Edgeworth, Reliance, Prima Donna, and Countess of Liverpool. From S. Walker, the following dahlias:—Hero of Tippecanoe, Unique, Quilled Perfection, Premier Glory, Sir Robert Peel, Don Carlos, and William Cobbett; also splendid bouquets and cut flowers. From A. Bowditch, *Verbèna* Tweedie*àna*, Arran*iàna* and *teucroìdes*.

From Hovey & Co., the following dahlias, viz: Striàta formosíssima, Unique, Mrs. Rushton, Alpha, Glory of the West, Sir H. Fletcher, Phalanthus, Purple Perfection, Premier, Nimrod, Lord Liverpool, Rienzi, and Beauty of Kingscote; also *Gladiolus* floribúndus, and bouquets. From William Kenrick, bouquets. From William Meller, asters, balsams and bouquets. From William Oakes, Red Rover, Mrs. Rushton, Sulphùrea élegans, and Countess of Liverpool dahlias. From D. Macintyre, Suffolk Hero, Rival Sussex, and Mrs. Rushton dahlias. From J. Hovey, bouquets. From T. Lee, fine specimens of *Hibíscus Mánihot*.

Native Plants:—From William Oakes, Collinsò*nia* canadénsis, Lobè*lia* cardinàlis, Clèthra *alnifòlia*, Goodyè*ra* pubéscens and rèpens, *Apios* tuberòsa, *Orchis* blephariglóttis, Lechè*a* racemulòsa, *Ranúnculus* réptans and filifórmis, Sàlix pedicéllans, Eupatòr*ium* ageratoides and *Córylus* rostràta. From E. Weston, Jr. and F. Parker, *Polygala* sanguínea Gerárd*ia* marítima, *Aster* mìser, *Cistus* canadénsis, *Hypéricum* virgínica, and other specimens.

Fruits:—From E. M. Richards, a variety of apples, among them the red Juneating and Benoni. From S. R. Johnson, green Gage plums. From S. Pond, Italian Damask and Royal de Tours plums. From R. Manning, Orleans, Early Orleans, Drap d'Or and Wheat plums; also Bloodgood and Skinless pears. From O. Johnson, beurré bon marum

pears. From J. L. L. F. Warren, Bingham plums and figs. From B. V. French, Garden Royal, and Alexandria grapes. From J. Deane, fine early peaches, pears and plums.

Vegetables:—Tomatoes, from J. L. L. F. Warren.

Art. VII. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Chenangoes, per barrel,	1 00	1 25
Chenangoes, per bushel,	50	—
Common, per barrel,	1 00	1 25
Common, per bushel,	50	—
Sweet Potatoes, per bush.	1 50	2 00
Turnips, per bushel,	50	—
Onions:		
White and yel., per bush.	1 00	—
Red, per bunch,	5	8
White, per bunch,	3	4
Beets, per bushel,	50	62½
Carrots, per bunch,	4	—
Horseradish, per pound,	10	—
Radishes, per bunch,	2	3
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Early York,	50	75
Savoy	50	75
Drumhead,	75	—
Cauliflowers, each,	12½	25
Brocoli, each,	10	20
Lettuce, per head,	2	4
Peas, per bushel,	1 00	—
Peas, per half peck,	17	—
Beans, shelled:		
Sieva, per quart,	12½	—
Lima, per quart.	20	—
Tomatoes, per half peck.	12½	—
Corn, per dozen,	8	10
Celery, per root,	6	8
Peppers, per pound,	3	—
Cucumbers, for pickle, pr h'd	17	20
Mangoes, per dozen,	25	—
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37½
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes, per pound:		
Winter crook neck,	2 00	—
Autumnal Marrow, per lb.	2 00	—
Canada crook neck,	2 00	—
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 25	2 50
Common, per bushel,	1 00	—
Porters, per bushel,	2 00	—
Crab apples, per peck,	50	—
Pears:		
Eng. Catherine, pr half pk.	31	—
Cushing, per half peck,	50	—
Common, per half peck,	25	—
Bartlett, per dozen,	25	50
Plums, per quart:		
Green Gages,	37½	—
Bolmar Washington,	25	—
Common,	12½	—
Damsons, per half peck,	50	—
Melons, each;		
Watermelons,	12½	20
Cantelopes,	20	25
Minorcas,	17	20
Grapes, per pound:		
Black Hamburgh	75	—
White sweetwater:	50	62½
Blackberries, per quart,	17	—
Whortleberries, per quart,	10	—
Peaches, per half peck,	50	—
Cucumbers, per doz.	6	—
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	—
Pine-apples, each,	12½	25
Chestnuts, per bushel,	2 00	2 50
Walnuts, per bushel,	3 00	—
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—

Remarks.—August has been a month of fine weather, and though, perhaps, rather dry, has, nevertheless, brought forward crops with much rapidity. Without any extremes of heat or cold, or wet or

drought, there has been an evenness of temperature not generally experienced in "dog days." In consequence of such a favorable season, the supply has continued to be abundant.

Of Potatoes, the prospect now is, that there will be an immense crop: prices already range low, and we understand that growers in Maine have advertised to contract for less than half the prices of last season. The new Rohans are coming on well, and the product and quality promises to be equal to the most extravagant expectations; Sweet are tolerably plentiful at fair prices. Turnips now come to hand by the bushel. Onions are not yet very abundant. Beets are plentiful. Carrots, as yet, only by the bunch. Horseradish is yet small. Cabbages come in well now, and some fine Drumheads have been received. Brocolis, of fine size and beautiful appearance, are abundant. Some Peas are yet to be had. Shelled Beans are exceedingly plentiful for the season: there has not been so large a quantity of Sievas in market, in August, for the two or three past years: prices are very moderate. Tomatoes are now received in quantities from the vicinity. Corn abundant and good. Celery comes to hand of very fair quality. Cucumbers for pickling, and Peppers, plentiful. In Squashes there has been a great reduction in prices: Autumnal Marrows are fine, this season, and there will be an enormous crop: Canada Crooknecks also come in early this year.

Fruit, with the exception of apples, may be said to be very abundant: of apples, the crop is not large, and those of fine quality command a good price. Some fine Porters have been bought as high as five dollars per barrel: the winter supply must, necessarily, be limited. Plums in great quantity mostly from New York. Pears now begin to come in freely: Bartletts are small this year. Peaches sold now are almost entirely of New Jersey growth, and large quantities are daily received from thence: the markets of Boston New York, and Philadelphia are fine outlets to the superabundant produce of the well tilled farms in that region. Watermelons are plenty at our quotations. Grapes continue about the same. Currants are all gone. Blackberries are rather abundant. Cucumbers rather slow at quotations. Of Oranges and Lemons a fair supply. —*Yours, M. T., Boston, August 28th*, 1839.

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape Vines, in the grapery, will now be ripening off their fruit. Give now great quantities of air during the day, and if the nights are cool, draw up the sashes. Be careful to lay in the new wood with regularity, and take off all superfluous laterals and straggling shoots. All syringing should now be dispensed with.

Strawberry beds may yet be made and planted with success. Plants for forcing, taken up last month, should be duly and properly watered. If there is not a sufficient quantity taken up, good plants may yet be potted safely. Keep the runners cut off as they spring out.

Budding may yet be performed on peach trees. Plums and other fruit trees, budded early in August, will need to have the bandages slightly loosened.

Peach Trees, fig trees, and other fruit trees in pots, should be removed to a cool and shady situation, if they are intended for early forcing.

FLOWER DEPARTMENT.

Dahlias.—During August, the plants have advanced rapidly and made a profusion of new wood, though with a less proportion of buds than they should. The prospect, however, is fair for a good supply of flowers the latter part of September. Continue to water freely if dry weather ensues. Trim the plants well without fear of cutting away too much.

Roses may yet be budded, though rather late. If the stocks run freely it may be done with success.

Chinese and other tender rose cuttings may be now put in.

Geraniums, propagated from cuttings now, make fine plants for spring flowering.

Camellias will need frequent syringing: inarching may be yet performed; plants needing repotting may be removed with safety now. Watch the seeds, so that none may be lost.

Tulip and hyacinth beds should now be prepared, by digging and renovating, for planting out the bulbs in October, or early in November.

Mignonette should be sown in pots now, as we have in another page directed.

Stock seeds may be now sown for spring flowering.

Pink pipings, put in in the early part of August, should be removed to the beds, where they are to remain.

Verbenas.—A good stock should now be procured, to provide against loss during the winter: lay the shoots into small pots, and they will root in a fortnight or so.

Chrysanthemums should be watered freely, and occasionally with liquid manure.

Oxalis Boweii should now be potted.

Petunias, for cultivation in pots, should now be grown from cuttings: the plants will flower early in spring.

Pansy seed sown last month will now be up. Thin out the plants to proper distance, and destroy all weeds.

Ranunculuses do better planted this month than later.

Bulbs, of all hardy kinds, may be potted, but not with so good success as later.

Green-house and stove plants need considerable care now; repot such as need it.

Cuttings of Ericas, and similar plants, put in in July, should now be potted off in light sandy peat.

Cactuses should be carefully watered; cuttings may be put in, and grafting performed now.

Plants for forcing should be taken up as soon as possible.

VEGETABLE DEPARTMENT.

Celery should be earthed up as fast as it grows.

Lettuce for a spring crop, to be preserved in frames, should be sown now.

Cauliflower seeds may be sown now for a spring crop.

Spinach may be sown now.

THE MAGAZINE

OF

HORTICULTURE.

OCTOBER, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Some Remarks upon several Gardens and Nurseries, in Providence, Burlington, (N. J.) and Baltimore.* By the EDITOR.

(*Continued from page* 223.)

IN our last we concluded our remarks upon the gardens, which we had the pleasure of visiting in Providence, and we should not omit the opportunity of acknowledging our thanks to Capt. Comstock, for his kindness in introducing us to the places we visited.

Leaving Providence in the rail-road cars for Stonington, and passing over that barren portion of country laying along the Connecticut shore of Long Island Sound, we arrived at the latter place in time to visit a fine residence in this ancient town. From the appearance of the village there is nothing which would lead the traveller to imagine that gardening had made much progress here; for, like the farming in that portion of the State, through which the rail-road passes, and which conveys at once an impression of the poverty of the soil, as well as the absence of all improved methods of cultivation, one would not be led to suppose that any thing worth noticing existed. We should not have done so ourselves, had we not been kindly furnished with a letter to a gentleman who resides near the village, and an inspection of whose garden agreeably disappointed us. That our readers may know what is doing

almost upon the sandy shore of the Sound, we are gratified in being able to offer the following remarks.

Residence of Charles Phelps, Esq., Stonington, Conn.—Aug. 15th. About a mile from the village, on the road to East Stonington, is situated the residence of Mr. Phelps. It stands on the rise of a hill, and the lands attached slope gently off to the south. From the house there is a fine view of the village, the harbor, and the Sound, on the south, and of the well wooded country on the north.

The grounds consist of several acres; but it is only within a few years that Mr. Phelps has given much attention to their improvement. There is a scarcity of trees around the house, and the garden is, consequently, somewhat exposed to the winds and storms; but in time this will be remedied by the planting of forest trees and shrubs. The flower garden contains about a quarter of an acre, in front of the house, and between that and the road, and is walled in on the north and west side. It is tastefully laid out in small beds, edged with box; on the north side stands a moderately sized green-house, about forty feet long. The collection of plants is not yet large, but will be gradually increased. Mr. Phelps was having the old brick flue removed, in consequence of its smoking, and we advised him to have its place supplied with hot-water pipes, in connection with one flue to run lengthwise of the house.

In the garden we found a good assortment of dahlias, which were blooming tolerably freely, and a variety of annuals and perennials in full bloom. The kitchen garden stands on the easterly side of the houses, and is an enclosure of an acre or so, walled in on all sides. In it we found a variety of vegetables growing, together with strawberries and other fruits, Isabella grapes, &c. The soil is here quite different from what it is nearer the village; it is deeper, and consists of a good yellow loam.

It is Mr. Phelps's plan to erect, the coming winter, a grapery about one hundred feet long, on the northerly side of this garden, against the wall, which will form the back. He expects to have it in readiness to plant out the vines early in the spring, and, as the border will be well prepared, they will make a rapid growth. On the back wall it is intended to train a few peaches. The whole, when completed, will be the finest grapery in the State. It is highly gratifying to find the cultivation of the vine extending so rapidly. Mr. Phelps expressed himself highly pleased with the cultivation of the grape around Boston, and looks forward to the time when he will endeavor to imitate us. It is with great pleasure that we chronicle these

improvements; but we hope that they are only some of the earlier ones, denoting the great change which will eventually take place throughout the country. We hope to have an occasion to notice Mr. Phelps's grapery at length, when it shall have been completed.

Burlington, N. J.—Passing through New York, and visiting several gardens there which we have previously described, we continued our journey south through New Jersey, and tarried at Burlington, where we were desirous of viewing some of the fine gardens which exist here, and of learning something of the progress which horticulture is making in the State; presuming that this could be best judged from an inspection of the gardens in Burlington: of this we shall speak in our retrospective view of the present year; and we now pass on to make some remarks upon the gardens which we had the pleasure of seeing.

Residence of Horace Binney, Esq.—Aug. 17th. On the bank of the Delaware river, just below the steam-boat landing, stands the beautiful residence of Mr. Binney, President of the Pennsylvania Horticultural Society. The grounds attached to the house are separated by one of the streets of Burlington, running parallel with the river in the rear of the house; and bounding on this street is the pleasure ground and flower garden, embracing nearly an acre; and across the street, opposite, is the kitchen and fruit garden, occupying a similar extent of land.

The flower garden is nearly a square, and is laid out with one main circular walk, running round the whole, and a border for flowers on each side; the centre forming a lawn scattered over with several large fruit trees. In the border we noticed many very pretty annuals and perennials, and some dahlias. Several large orange and lemon trees, with fruit, were interspersed among the shrubs on the borders, and assisted to enrich the appearance of the garden. Mr. Binney is not, probably, a great amateur, as we did not find many of the more rare and choice flowers and plants, but only the old established and well known sorts.

The kitchen garden is well kept, and a great variety of vegetables are grown. There is a long range of pits, nearly a hundred feet, used for forcing cucumbers, melons, &c. and for wintering brocolis, cauliflowers, &c. which are grown to great perfection; Mr. Robinson, the gardener, having obtained the premium the past spring, for the best cauliflowers exhibited before the Pennsylvania Horticultural Society. We saw here a few hills of that valuable variety of corn, the Chinese; it was beginning to ripen, and probably, ere this, has been cut and

gathered; on many of the stalks we counted three ears. There is a good collection of pear trees in the garden, and some large Seckel trees, which were overloaded with fruit.

A green-house and grapery attached to Mr. Binney's place would make it complete; Mr. Robinson, the gardener, keeps every thing in fine condition, and we were much delighted to find such a specimen of gardening to exist here.

Residence of Charles Chauncey, Esq.—Nearly adjoining Mr. Binney's, and situated on the same street, is the residence of Mr. Chauncey. It is in most all respects very similar to Mr. Binney's, and, like his, the kitchen garden is separated from the flower garden by the same street. Mr. James Mc Kee is the gardener.

The flower garden and lawn is laid out simply with one principal circular walk, and the ground is well filled with fruit and ornamental trees. The border contains a good display of flowers, together with a very fine assortment of dahlias. Mr. Hancock's Hero of Tippecanoe was the only one which displayed any flowers.

The kitchen garden contains a range of pits one hundred feet or more long, used for the same purposes as those of Mr. Binney. A good collection of fruit trees take up a portion of the ground, which is filled with vegetables of various sorts.

The two residences have many features in common, which render any further description unnecessary. We should like to see a little more zeal animate the owners of such places, in order that the grounds might be made more ornamental and attractive to the amateur, by the addition of all the new plants which are annually introduced into our collections. Viewed simply, however, as summer residences, without making any claim to amateur gardens, by high keeping they are rendered neat specimens.

Nursery of Mr. Thomas Hancock.—About two miles from the city we visited the nursery of Mr. Hancock. It is not, probably, much known to our readers around Boston, with which place he transacts but little business; but in Philadelphia and Baltimore, to which cities he sends large quantities of trees, his establishment has a good reputation.

To amateurs and lovers of the dahlia Mr. Hancock's name is familiar, from the reputation which his seedling dahlia, the Hero of Tippecanoe, has acquired, and to him growers of this beautiful flower are much indebted; for he has, each year, grown a large number of seedling plants, in the hopes of procuring superior flowers. The variety just named is excelled by but few flowers, and may indeed be said to be the best American

seedling self-colored dahlia yet produced, and equal to any of the best English varieties of the present year: and this is saying much for the flower.

The whole grounds comprise an extent of upwards of one hundred acres of land; part only of this is occupied as a nursery. Besides raising trees, Mr. Hancock has a large plantation of peach trees, and one or two apple orchards, for the purpose of raising fruit for the Philadelphia and New York markets; many acres are covered with corn, and the remainder let out to farmers in the neighborhood for tillage.

In the nursery, which is yet only in its commencement, Mr. Hancock does not strive to cultivate all the varieties of fruit which are named in the lengthy catalogues of many nurserymen, but rather reduces the number of kinds, selecting the choicest, and grows a great number of each. His catalogue is now before us, and we find enumerated about fifty apples—twenty-five pears—thirty peaches—twenty plums, &c. &c. together with a considerable variety of ornamental shrubs and forest trees. It is in apples and peaches that Mr. Hancock appears to possess the best stock; his variety of pears being yet quite limited. The quantity of peach trees annually sold amounts to upwards of twenty thousand. Some idea may thus be formed of the cultivation of this fruit, both in New Jersey and the adjoining States of Pennsylvania, Delaware and Maryland. Plums are yet very scarce, owing to the difficulty of procuring good stocks.

Desirous of noticing the mode of cultivation applied to nurseries, we walked through every part. We found it to differ only from the method practised in New England, in placing the rows at such distances that a cultivator may be run between them for the purpose of tilling the ground. Seedling stocks are planted in rows four feet apart, and young trees are set about the same distance. Much labor is saved in this way. In nurseries, however, near our large cities, where land is dearer, perhaps closer planting and more hand labor would be the most advantageous.

Among the apples, Mr. Hancock esteems the Hagloe crab, originally imported by Mr. Cox, as it sells readily from its fine showy appearance and large size, notwithstanding it is rather a dry fruit. We tasted a native apple, grown on the grounds, which possessed good qualities enough to deserve cultivation.

The cultivation of the peach is very extensively carried on in New Jersey, for the supply of the great markets of Philadelphia and New York; the rapidity of transportation by

rail-road, bringing almost every portion of the State within a few miles of either city. Mr. Hancock has a plantation of seventeen acres, and from it he expects to pick nearly two thousand baskets, or about fifteen hundred bushels. The land on which the trees grow, would not, without the aid of a great deal of manure, yield much more than five bushels of corn to the acre. The trees are set about twelve feet apart each way, and the ground is ploughed and harrowed, to prevent the growth of weeds, &c. In this way, the peach proves a valuable crop.

Leaving the nursery, we walked into the flower department, near the house. Mr. Hancock has now a small green-house, and a very pretty collection of cactuses, having just made a beginning; but it is now his intention to build a fine range, eighty feet long, to be divided in the centre, one compartment for tropical plants and for forcing, and the other for a green-house, the whole to be heated with hot water. This project he was in hopes of being able to carry into execution this fall. In dahlias, Mr. Hancock is a great cultivator and amateur; one of his seedlings has given him much credit as a judge of a good bloom. The longer summers of New Jersey enable the plants to acquire larger size, and gives them a much better chance of displaying their flowers: one practice for obtaining late blooms is followed here successfully, which would be attended with a complete failure in New England; this is, the cutting of the plants down to the surface of the soil, or to a good side shoot, on or about the first of August. By October, they will have grown up, and the blooms are said to be large and fine: with us, frost would overtake the plants, and prostrate the new growth, ere they had attained any thing like a flowering age. The general collection of dahlias is fine, and we noticed plants of Striata formosissima, Lady Sondes, President, Ne Plus Ultra, Hope, &c., &c. The dahlias, we regret to say, at nearly every place we visited, have not done well this year; there appears to be a great scarcity of flowers.

On the farm, Mr. Hancock has a large field of the China corn, of which so much has been said, and a large patch of the valuable Rohan potato. The field of corn was the best we ever saw, and proves that this variety is one of great value to the farmers of the Middle and Western States. It is too late to ripen a crop with certainty, in the colder and shorter summers of New England, but is sufficiently so for any latitude south of New York. The Rohan potatoes promise a great crop.

Besides his seedling dahlias, Mr. Hancock has turned his attention to improving the potato, by means of raising new seedlings. He went into the field, and showed us one of his varieties. It was planted side by side with the Chenango, but its produce was more than one third greater. The potato is flattish, and formed somewhat like the Chenango, with a white, smooth skin, but few eyes, and these only slightly raised above the surface of the potato. In its eating qualities, he thinks it as much surpasses the Chenango as it does in its productiveness. In addition to the whole, there is a fine lot of *Mòrus* multicaúlis trees growing, and in good condition.

It is but a few years since Mr. Hancock took hold of the place, and, with many difficulties to contend with, he has succeeded in bringing the land into a rich and flourishing state. Lime, leached ashes, and marl, are the substances mostly used for manuring. Every part of the nursery was in good order, and all the budding, grafting, &c. is done under his immediate inspection, in order to prevent the gross mistakes which are too frequently made through the negligence of inexperienced persons, and those who are unacquainted with fruits. Mr. Hancock finds the demand for fruit trees increasing every year, and it will be his endeavor to have his nursery so well furnished with all the newest and best varieties, that orders may be executed with accuracy, and to the satisfaction of all purchasers.

Messrs. Cheney's Farm, and Silk establishment.—We should not be pardoned, were we to omit noticing the great establishment of the Messrs. Cheneys, who have, within two or three years, purchased a large farm on the border of the Delaware river, a short distance from the populated part of the city, and entered zealously into the growth of the *Mòrus* multicaúlis, for the purpose of procuring food for the silkworm, and with the intention of producing large quantities of silk. Around Burlington it has been stated that the inhabitants were multicaulis mad, so deeply have they engaged in the cultivation of this most valuable tree. We have ourselves great faith in the silk enterprise which is now agitating the public mind; and therefore, though some may ridicule the growth of the Morus, and designate the present excitement, in regard to the tree, as a humbug, we still believe that other portions of the country will yet see that the farmers and citizens of Burlington, in cultivating this tree so extensively, and reaping therefrom a rich reward, have acted with greater foresight and judgment than their neighbors.

But the Messrs. Cheneys do not intend to confine their operations solely to the growing of the multicaúlis and raising of

silk; the manufacture of sugar from the beet—another subject now engrossing the minds of American farmers, and by some thought more favorably of than the production of silk,—will be one of their principal objects. Nor is this all: the cultivation of the vine, with a view to produce wine, will receive a due share of attention. Two of the Messrs. Cheneys have travelled in France, and inspected their cocooneries, beet sugar manufactories, and vineyards, and they are confident that each and all may be made sources of as great comparative profit to the American farmer as they have been to the cultivators of France. We wish them every success in their enterprise; and, as the results of all their operations will be given to the public in their *American Silk Grower*, a periodical which they publish, at the low price of a single dollar, we trust that every one will avail himself of their information, and turn it to good account.

Connected with the farm, Messrs. Cheneys have a greenhouse over one hundred feet long: this was originally erected to grow the *Mòrus* multicaúlis, in order to force them along, that larger trees might be secured. As the trees have now become sufficiently numerous to dispense with this method of increasing them, the house is now to be converted into a grapery. Some of the vines are already growing, and the remainder will be planted in the spring.

The quantity of multicaúlis grown here this season, including the Alpine, Dandole, Canton, &c. is some twenty acres or so, all in fine condition, and numbering many thousand. Messrs. Cheney have also a patch of the Rohan potato. About four acres are devoted to the growth of sugar beet.

The Messrs. Cheneys have fed a great number of worms with much success: at the time we visited them they had finished their winding. Another season they will feed an immense number of worms. We shall endeavor to notice, from time to time, the progress which they make in the cultivation of the grape, and the manufacture of sugar and silk.

Nursery and Flower Garden of Mr. McKee.—This is a new place, commenced since last fall. Mr. McKee has a small seed store, connected with his garden. The store fronts on the main street, near the steam-boat landing, and the garden extends in the rear, containing upwards of half an acre.

There is a small green-house attached, but the collection is yet small. Mr. McKee has some few camellias, very good plants: he also has a variety of good geraniums and a tolerable collection of roses. A large number of dahlias were planted out, but they had not yet bloomed much.

Such a place as Mr. McKee's is, we should think, wanting in the city; and, as he appears industrious and deserving, we hope he will receive a due proportion of patronage.

Philadelphia, Aug. 22d.—We paid a passing visit to some of the fine gardens in this city, each of which, with one exception, have been before noticed and described in our previous volumes; the one we have referred to has been rather recently established; and, although we have spoken of it incidentally, we have not yet said much of its extent and character. We refer to the

Nursery and Flower Garden of Mackenzie & Buchanan.—This garden is situated in Spruce street, two or three squares above Broad. It fronts upon the former street upwards of a hundred feet, and runs back about the same depth, forming a square. On the west side, and facing the east, there is a green-house, about eighty feet long; on the north, another facing the south, sixty feet and upwards; and preparations are making to put up, the ensuing fall, another house on the east side, facing the west, of the same dimensions as the one on the opposite side of the garden; the ground will then be enclosed on three sides, with an area in the centre for the garden. The sashes were already completed, and the house was to be speedily commenced.

It is now only little more than two years since Mr. Mackenzie left Lemon Hill, at which place he was gardener four or five years, and commenced business for himself at this place; he soon afterwards connected Mr. Buchanan with him in trade, and at the present time, they have a fine collection of plants, already filling two large houses so completely, as to render it necessary to erect another, to prevent the plants from suffering from being too crowded.

The collection consists of a large number of fine geraniums, roses, camellias, and green-house plants in general, all propagated and raised by their own hands. They also possess the whole stock of seedling chrysanthemums raised by Mr. Kilvington, and noticed by us last winter. Mr. Mackenzie has raised some good seedling dahlias, and is known as one of the best cultivators of plants in Philadelphia. Mr. Buchanan, his partner, is, also, an excellent botanist and propagator, and, together, they manage their business in a successful, and, we doubt not, profitable manner.

An account of some of their seedling verbenas has been already given in our pages by our correspondent, Dr. Watson. These we now saw in bloom, and they are each and all most desirable plants. *V.* Binney*ana* is a dark maroon, and very

superb. Mr. Buchanan showed us plants of the *V. teucroïdes*, *Eyreàna*, and others, which had been fertilized with the new varieties, in order to produce some novelties another year; and we have no doubt their labors will be crowned with success.

The practice of turning both green-house and hot-house plants out of the pots into the open ground during summer, is much more practised here than around Boston and New York; and we think the system attended with good results, with some classes of plants, especially in this climate and further south. We saw here the *Hibiscus rosa sinénsis*, growing as rapidly as a currant bush, turned out of the pot; but this would not be the case in the vicinity of Boston. Our summers are not so long, nor the heat so regular and continued, and the nights are much cooler: so much so is this the case, that strong old plants of the same species, plunged in the border in the open air, have changed the color of their foliage to a sickly hue, and nearly stopped growing. With many green-house plants it may be safely and judiciously done; but to adopt the same course as they do in Philadelphia and Baltimore, would be very injurious to the plants. We would urge all amateurs and cultivators to practise this system.

Messrs. Mackenzie & Buchanan are adding to their collection all the new and fine plants that are worthy of cultivation. They have also many seedling geraniums and camellias of their own, and will spare no pains to render their establishment equal to any other in the city. It is yet scarcely commenced, and we trust that their endeavors to deserve patronage will not be made in vain.

Baltimore, Aug. 24th.—During the fall of 1838, some time in November, we visited this city for the first time: we had heard considerable of the gardens and nurseries in the neighborhood, and it was our intention, from the desire we have to learn how fast horticulture was progressing, to have made a visit to all of the most noted; but winter set in earlier than we had anticipated, and our stay in the city was exceedingly short, and we, unfortunately, could not find the opportunity to visit but one single garden. Regretting this as much as we did, it was not convenient for us to remain; and we resolved to improve the first occasion which our time would allow to make another visit, with the hope of being able to see nearly all worthy of remark.

Gardening in Baltimore, though it has made some progress, is but yet in its infancy. Commercial affairs appear to engross the attention of the mass of the citizens, and the more wealthy have, as yet, devoted but little time or expense to the

embellishment of their gardens. In this respect Baltimore may be compared to New York. But there is now dawning a better taste for rural pursuits. Within the precincts of the city, but remote from the din and bustle of business, there are situations which would afford the most beautiful gardens in the country. Baltimore is peculiarly favored in this respect; and is unlike either Philadelphia, New York or Boston, in which cities there is no such available land to be found, or any which embraces such favored localities for garden spots, combining varied and magnificent views. When the same wealth is employed in gardening here which has been lavished in Philadelphia or Boston, Baltimore may be proud of her standing in the horticultural world, and almost dispute the palm with any of her sister cities. But we shall say more upon this subject at another time; we have but barely space now to describe, briefly, the places we visited.

Nursery and Flower Garden of Samuel Feast.—This nursery is situated in Franklin street, near its termination, so far as it is at present graded. Mr. Feast was formerly established at the corner of Lexington and Saratoga streets, only a short distance from Baltimore street; but he was obliged, from the growing population, to remove where land was less valuable, and to be had in greater quantity. Mr. Feast, however, still retains a lot on the corner of the streets where his garden stood, and has commenced erecting a building, where he intends to open a store, in connection with his nursery, for the sale of seeds, bouquets, plants, &c.

The nursery contains, we should judge, four or five acres: it is well elevated, and falls away to the east and south in a gradual slope, just sufficient to carry off all superfluous water, and not endanger the plants by the washing away of the earth. The soil is a retentive loam of good depth, and well suited to the purposes of a nursery. There are two green-houses attached, one large but rather old, built in the form of a lean-to against the dwelling-house, and a detached one for cactuses and camellias, which has lately been put up. The plants were at this time all in the open air, except the cactuses and a few camellias, which were undergoing the process of inarching.

The same system of cultivation cannot be applied to plants here, which succeeds in a more northern latitude. The summers are considerably longer, the heat more oppressive, and the sun's rays more powerful, materially changing the climate: thus, in June and July, plants require great care, to prevent them from being completely destroyed by the dry air and scorching sun: every pot must be plunged in the open ground,

and not remain exposed: a few hours' neglect would prostrate them at once. The gardener has to exert great diligence throughout the summer. The winters are very mild, but the variableness of the summer is trying to all kinds of pot cultivation.

Mr. Feast has long given his attention to the raising of various plants from seed, and has been very fortunate in producing a great number of good varieties: roses, camellias, azaleas, and cactuses are tribes to which he has devoted the most attention. We saw several beds of seedling roses, the plants all growing in the open ground, and many of those in bloom were very fine: we saw one exceedingly small one, and this called up in our mind the Master Burke variety, which Mr. Feast raised some time since, and which is noticed in our III., p. 129. On inquiry for this, Mr. Feast informed that he had lost it: indeed, it was too minute and fragile to exist: the flowers, he assured us, were not much larger than the head of a pin, and the whole bush could be covered with an egg-shell. All attempts to propagate it failed: so great a curiosity, it is a matter of regret that it could not have been preserved.

The number of seedling camellias is very large, and some have already flowered which possess much merit; the coming winter several additional ones will expand. The quantity of seedling azaleas is very great, and though not now the season to see them in bloom, we have been informed by our friends that there are a good number of varieties, which are valuable additions to this showy and freely cultivated family. Mr. Feast's seedling cactuses are numerous, and three or four that he has selected from the mass are superb: he has now a great number of seedlings of the present year, and, among them, some which were grown from seeds of the Cèreus speciosíssimus impregnated with the C. grandiflòrus; from them he expects something novel and fine.

In looking over the cactuses, Mr. Feast called our attention to a new feature in grafting this tribe, to facilitate their early flowering from seeds; and this was, that the little seedlings, as soon as they had fairly developed their cotyledons, were used as *scions*, and inserted, with a slight cleft, in the stock of the triangulàris; in a few days they begin to grow, and in one season attain a larger size than those remaining on their own roots do in twice that period. We saw seedlings grafted in this manner last fall, which were now large plants, sufficiently strong enough to bloom in the spring. Mr. Feast's collection of Cacti is large, and he has many undescribed and unnamed species from South America; among them is one producing its

flowers wholly on one side. In the house with the cactuses we noticed the orchideous plants just received; most of them are in good condition.

The green-house and hot-house plants were so scattered about in various situations, that we had not much of an opportunity to see them. Mr. Feast grows his plants exceedingly well, particularly the azaleas, which were clothed with foliage. We saw here the Artocárpus incìsa, a new gloxinia, and a new Alstrœmèr*ia*, all introduced from Rio Janeiro; Carolíne*a* prínceps and insígnis, raised from seeds, were a foot high or more; a species of *D*áphne, producing its flowers at the axils of the leaves, as well as in a terminal head, and difficult to increase; Russéll*ia j*úncea, with its leafless branches, hanging gracefully over the pot, but completely clothed with its beautiful corols, was a fine specimen. The new verbenas of Mr. Feast have been noticed by one of our correspondents, (p. 290.) We saw several of them in flower, and they are pretty additions to the already extensive list: one deep rosy pink variety exceeded in delicacy even the select Eyreàna. Mr. Feast has not yet named them. There were many other things worthy of notice, but we have no space to extend our remarks.

In the garden there are many fine specimens of shrubs, roses, &c. Magnòl*ia* conspícua stands out here without having the smallest shoot injured by the frost: Mr. Feast has a plant fifteen feet high, which was one sheet of blossoms last spring. A new shrub, from the Rocky Mountains, bearing a reddish berry, and which appears to be a species of *R*hámnus, was a showy object. Herbemont's musk cluster rose is a magnificent variety, flowering profusely all summer, and growing with wonderful rapidity. The dahlias had just commenced flowering, but the collections around Baltimore contain but few of the newest sorts.

Mr. Feast is a zealous cultivator, and deserves great credit for his assiduity in raising new plants. We hope he will find a good reward in the rapid sale of the objects to which he has devoted so much of his time in producing.

Residence of Dr. T. Edmonson, Jr.—The beautiful demesne of Dr. Edmonson is just beyond Mr. Feast's garden, and occupies the whole rise of land forming the crown of the hill. It slopes off in all directions, and stretches into the valley on the east side, and up again on the adjoining hill, comprising, in its whole extent, some five hundred or six hundred acres. But all this is not devoted to a garden. It is principally pasture land, and under farm tillage, only a portion in the immediate vicinity of the mansion, of three or four acres, forming the flower

garden. From all parts of the elevated portion of the ground the views are magnificent and extensive. In the foreground lays the city, and beyond stretches out the harbor and bay; and on the north and west a rich and fertile country is spread before the eye. Altogether it is one of the finest situations, and combines more natural advantages, than any we have ever visited.

Attached to the garden is a green-house, hot-house and conservatory, with a blank roof in the old style: this is made use of to preserve a number of large old lemon and orange trees. Dr. Edmonson possesses a good collection of camellias, and has many seedlings. Among the hot-house plants are several fine specimens: Mùsa rosacæ'a was in bloom; Gardènia amæ'na, a species not common, was blooming freely. Several large specimens of Eriobótrya japónica, *Jambòsa* vulgàris, &c. have each borne an abundance of fruit.

The garden was newly laid out the past spring, and the whole ground was trenched to the depth of three feet. Dr. Edmonson is an amateur with considerable zeal, and has made himself familiar with horticulture in all its branches, and he has set a good example to all who are forming gardens. Unless the soil is remarkably deep and fertile, the first operation should be to trench and manure it well. We found a variety of dahlias coming into flower, and an immense number of seedling phloxes, of which a few were very fine. The asters, verbenas, and other flowers were blooming freely.

We should have been pleased to have made a longer visit here, but our time would only allow us to take a hasty survey of the place.

Nursery and Flower Garden of Mr. John Feast.—Mr. Feast's nursery is on West Lexington street, nearly a mile from the centre of the city. It is not of large extent, embracing, perhaps, not above an acre or two. He has, however, three green-houses and a stove, and is about erecting another range on a piece of land which he has purchased in the rear.

We called upon Mr. Feast a year ago, and saw his plants, which were then in the houses, and intended to have noticed them soon after: but being prevented from doing so, we let it remain until we could have a chance to describe it with the others. His collection of camellias is quite extensive, and it embraces some fine seedlings. There was in the stove a fine collection of orchideous plants, and one or two then in flower. Mr. Feast cultivates a great number of geraniums. The cactuses were in fine order, and there are several species cultivated.

In the garden there was a good show of dahlias, though of the older sorts. From some reason the newer and choice kinds do not command a price sufficient to warrant the nurserymen in adding them to their collections annually: this certainly does not speak well for the taste of the amateurs of our sister city: scarcely any of the most rare and celebrated kinds, grown around New York and Boston, are to be found growing in the commercial or amateur gardens here.

The climate is not favorable to the dahlia, and this may have discouraged amateurs from attempting their growth; the hot and dry summers are prejudicial, and the plants throw up but few flowers, growing in the same stunted manner that they did throughout the country generally, in the summer of 1838. The first of July is adopted by some growers as the time to plant out, for if set out previously, they are sure to suffer from the intense heat of June.

Mr. Feast has in connection a seed-store, where he furnishes vegetable and flower seeds, fruit trees, shrubs, &c. in any quantity.

Garden of Gideon B. Smith, Esq.—Mr. Smith is well known to the public as a pioneer in the silk enterprise, which is now attracting so much attention. He was among the first to introduce the *Mòrus* multicaúlis into the country, and from that period, some twelve or more years since, he has been unwavering in the opinion that this country would eventually become a great silk-growing nation. It was through his perseverance that many of the early cultivators were induced to enter into the growth of the tree; but there seems to have been but little known of this variety, or its value as food for the worm, until within three or four years, since which time there has been an active demand for it throughout the Union. Had Mr. Smith continued to increase and cultivate the tree, he would have realized a fortune (which he is fully entitled to, for his laudable efforts to spread information in regard to the tree,) in the sale of them at the handsome prices of last season. He has spared no exertions to impress upon the minds of farmers, and others, the importance of growing the tree, with a view to raising silk; and after many years have passed away in discussing the merits of the tree, rather than in real trials of its superiority over the Italian, it must be a source of great gratification to see his anticipations about to be realized. But we have indulged in these remarks too far, and return to speak a few words relative to Mr. Smith's garden.

It is a small spot attached to his house, and contains but a few shrubs and plants. But the most noted of these is Her-

bemont's musk cluster rose, which we have before named. It was raised from seed by the late Mrs. Herbemont, of Columbia, S. C., and sent by that lady to Mr. Smith some time ago. It is a most rapid and vigorous grower, the shoots attaining the height of ten feet, and terminated with clusters of *over a hundred buds.* It is perfectly hardy in the climate of Baltimore, and it remains in bloom all summer. Unfortunately it is very difficult of propagation, and it will therefore be some time before it will be generally found in our gardens. On the plant in Mr. Smith's garden there were four or five new suckers, covered with clusters of buds nearly ready to expand. An Isabella grape vine is worthy of notice; it is trained to the piazza, and, though only three years old, has extended nearly forty feet, and is maturing a large crop of grapes.

The old tree of the Mŏrus, the *first* cultivated south of New York, we saw growing here, and it had made shoots twelve feet high this season. It has ripened fruit this season, and Mr. Smith has raised seedlings from it which are precisely like the parent. Mr. Smith has so limited a space, that he has no opportunity to grow many plants, and though receiving great numbers from abroad, as well as seeds, he is compelled to place them in the hands of his friends for cultivation.

We only regretted that we could not inspect the Clairmont nursery, a few miles from the city, belonging to R. Sinclair, sen. It contains a great collection of trees, and we hope, ere long, to have the opportunity of noticing it at length.

ART. II. *On the propagation, cultivation, and general treatment of the Epacris.* By JOHN TOWNE, Esq.

THE E′pacris, which, for beauty and elegance, is not surpassed by any other tribe, seems to have escaped the notice of the admirers of pretty plants; at least it has not fallen to my lot to meet with any practical directions for their cultivation. Being a great admirer of this most interesting family of plants, I employ a leisure moment, in the attempt to describe the method which I have followed in the propagation and cul-

tivation of them ; with the hope, that it may stimulate others to try, particularly as I can assure them, that, in the course of practice which I have pursued, I find no more difficulty in the cultivation of them, than I do in the cultivation of most hardy green-house plants ; and they are certainly as easily propagated.

I am aware, however, of the difficulty of communicating to others, all the simple minutiæ necessary in practice ; for it is difficult, when a subject is placed immediately before us, to make others see it in the same light as we might view it ; and more difficult to give such instructions, as to lead others to pursue precisely the same manipulation that we might follow. In cultivation, I have pursued that course, which the nature of the plants seemed to point out, as most congenial to their habits, without regard to the practice of others, and I had no reason to complain of my success. It is a misfortune, that many practical, and even experienced, cultivators, follow without variation, a certain routine of practice, not considering whether the course they are pursuing, is congenial with the nature and habits of the plant ; hence, failures in the cultivation of certain species often take place, merely for want of a little observation and a few experiments.

There has, I believe, been over twenty varieties of the E'pacris introduced into the collections in England; many of which are justly celebrated for their graceful forms and most splendid flowers. As yet, but few of those varieties have been added to the collections of this country ; but I hope soon to see them all ornamenting our green houses. I have, in my small collection, eight varieties of this choice plant, to wit: E'pacris grandiflòra, impréssa, campanulàta rùbra, palludòsa, nivàlis, heteronèma, variábilis, and pupurascens.

It has generally been supposed, that this class of plants was difficult of propagation and cultivation. I have found it far otherwise. All the above varieties strike freely from cuttings, and the growth of most of them, in a single season, is truly astonishing. Cuttings of several varieties, which were planted in March, 1838, are now, Sept. 1839, some of them, over four feet high, and handsome bushy plants, which will flower splendidly this winter. Cuttings planted in March last, are now one foot high, above the top of the pots, and growing like weeds. This may seem incredible, but they are living witnesses, and I shall be happy to show them to any one, who may have the curiosity to call and verify the truth of my remarks.

The months of February, March and April, I consider the best periods for planting cuttings; or as soon as good wood can be obtained for the purpose. When put in early, they generally strike root in about two months; sometimes they require a longer period, but, in most cases, they may be potted off so as to make a fine growth before winter. When put in late in the season, they do not, in general, strike so freely, and require, with me, a longer time to take root. I have had them do well, however, when planted as late as August, but the instances are rare. When equally convenient in every respect, I prefer the dark of the moon to put in cuttings; that is, the period from the full to the next new moon: not that I am a superstitious observer of moons, but it is a fact well established, that plants have their seasons of rest, and I have observed that they grow more vigorously during the two first quarters of the moon than they do in the two last quarters. I do not mean to infer that there is any more than a partial suspension in the growth of the plants, but it is during this partial season of rest, that I consider the most favorable time to take off cuttings. Eight inch bell-glasses being a convenient size, select pots for the cuttings large enough to admit the glasses freely inside the rim. Fill the pots two thirds full with broken pots, or pounded soft brick; then fill the remaining third with a compost of three parts of moderately fine sand, and one part of peat soil, well compounded together, leaving the pots just even full, when hard pressed down and well watered, which is necessary to complete the preparation.

Select the cuttings from the ends of the branches, after they have made a new growth of one or two inches; take them off so as to leave half an inch of the old or last year's wood on the cutting. With a sharp knife remove the leaves from the base, up, for one inch or more; then take off the bottom immediately under a joint or leaf, making a drawing cut with the knife, slightly sloping downward, so as not to injure the bark where the cut is made.

Thus prepared, proceed immediately to insert the cuttings in the pots; make the holes for their reception with a small dibble or little round stick tapered handsomely to a point; plant the cuttings from a half to one inch deep, according to their size, and about the same distance from each other, and press the soil firm round the cutting; give a gentle watering with a fine rose watering pot, and immediately cover with the bell-glasses. Set the pots in a cool part of the green-house, where they can receive as much light as possible, but no sun. *I* never give bottom heat.

For the first four or five weeks remove the glass as seldom as possible; and never, except to water, and wipe the damp from the glasses when it collects upon the inside; and this should be done in the morning before much air is admitted to the house, or in the evening after the air is taken off. Care must be taken to keep the compost constantly damp. It must never be suffered to get dry. After the first four or five weeks, the glasses may be removed every evening, and remain off for five or ten minutes: this may be practised till the cuttings strike root, which will be indicated by their commencing to grow. As soon as this takes place, the glasses may be kept off a longer period, gradually increasing the time for some days, when they may be suffered to remain off during the night, and placed on in the morning, with one side raised a little, so as to admit a small portion of air. When the cuttings have made a growth of one inch or more, they may be potted off into thumb pots of the smallest size, preserving as much of the soil about the roots as possible.

The compost for the first potting should be two parts peat soil, and one part sand; put plenty of drainage at the bottom of the pots, say from half to one inch deep of broken pots, or soft bricks pounded. Place the plants, after potting, in a cool, shady place, in the house or out of doors, keeping the soil about their roots constantly damp, but not saturated with water. For the second, and all subsequent pottings, use sandy peat soil, and always use a large quantity of drainage at each repotting. By sandy peat, I mean a black, sandy soil, more properly called savannah soil, containing vegetable decomposed matter and sand, about in the proportion of three parts vegetable matter and one part sand. This soil may be obtained in almost any direction about Boston, and generally in the proper proportion; but when it cannot, well decomposed leaf mould, or sand, may be added to make it conform to this mixture. *I* always repot whenever the roots begin to mat round the sides of the pots, without regard to the time of year. Hence, repot at all seasons; for old plants, however, I consider one potting in the year amply sufficient, and the month of March the most proper time to perform the operation. They require very small pots, in proportion to the size of the plant, and it is a common error to overpot them, that is, to use too large pots. In repotting, remove the old drainage, but no soil from about the roots of the plant. The soil in the pots should always be kept moist, for if once suffered to get dry, no art can restore the plant. It is a good rule in watering, to give sufficient to admit a portion to pass off through the bottom of the pots; for where

plenty of drainage is used, there is little danger to be apprehended in giving too much water.

The E'pacris, being indigenous to the mountainous parts of New South Wales, has led many cultivators to suppose that they are capable of enduring a great degree of drought; but this is certainly an error, when the plants are confined to the narrow limits of pot culture. This fatal error is probably the principal reason why so many failures have taken place in their cultivation. They seem to have lost sight of the fact, that, in their native locality, the roots are at liberty to penetrate deep into the earth in search of moisture, and that the ground around them is covered with leaves and other vegetable matter, which retains the moisture, and protects the roots from the scorching heat of the sun. In this climate, where we are subjected to the extremes of heat and cold, it is necessary to protect the plants from the extreme heat of summer, as well as from the extreme cold of winter. During the summer months I protect my plants from the hot sun, either in the green-house, or place them out of doors in the shade, with the pots plunged in the earth to the rim; and have found them to flourish in those situations much better than when exposed to the sun. In the winter I place them as near the glass as possible, and give them the full sun.

With this course of treatment they give me very little trouble, no more than any common green-house plant; and when it is considered that they are a great ornament at all seasons of the year, whether in flower or not, there are few plants which contribute so large an amount of pleasure for the small trouble they give. I do not know any class of plants that will bear the knife with more patience, than the E'pacris. When young, by merely pinching off the tops, they may be shaped into almost any form that the fancy of the cultivator may dictate; as they acquire age, they may be pruned with impunity, provided the operation is performed judiciously; that is, not to lop off too many of the leading branches at one time. My practice is to commence in the spring, by pinching off the extremity of any leading branch, as soon as I discover indications of a new growth; this operation I repeat till a sufficient number of young branches are forced out of the old wood, near the bottom of the plant, when the leading branches are cut off, at various heights, so as to form a handsome shape. New wood is sure to force out near the top of each branch, thus clothing the plant with new wood from the bottom to the top, every year. As the flowers are produced from the new wood exclu-

sively, this operation is necessary to insure a handsome bloom, and at the same time to retain a handsome shaped plant.

The *Erica* is another splendid class of plants, that seems to vie with the E'pacris in beauty and gracefulness, to which the above remarks will be equally applicable; with the exception, that the *Erica*, when it has acquired age, will not bear pruning so patiently as the E'pacris, but when young, the same treatment may be followed in giving form to the plant. It must also be borne in mind, that the ericas are, most of them, natives of the Cape of Good Hope.

In the above remarks, I have endeavored to be as clear as possible; and, should they be the means of facilitating the culture of these delicate gems, I shall be amply rewarded for my feeble attempts to describe a process of management, almost too simple for description.

JOHN TOWNE.

Boston, Sept., 1839.

ART. III. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

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; 3*s.* plain, 3*s.* 6*d.* colored.

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

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1*s.* each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6*d.* each.

Botanical and Floricultural Intelligence.—Mr. George Don, the botanist, is now engaged in assisting Mr. Loudon in editing and compiling a complete supplement to the *Encyclo-*

pedia of Plants, bringing it down to the present time, which will soon be published.—*Yours, M. B. B., London, Aug.* 31*st*, 1839.

Mr. Wales, of Dorchester, whose visit to London we noticed some time since, has lately returned, and, we regret to learn, in a very feeble state of health. His tour was partly undertaken for his health, but he was at the same time desirous of introducing many new and fine plants. He had sent out some new and beautiful species and varieties, but has, we believe, been so unfortunate as to loose many of them, owing entirely to his inability to attend to them on the voyage. Such as he has saved we hope to have an opportunity of procuring the names. —*Ed.*

Corræ`a *rùfa* is figured in a late number of the *Horticultural Journal.* It is not, however, a remarkable variety. The foliage is rather singular and pretty; the flowers are of a pale greenish yellow, and disposed at the axils of the leaves. It somewhat resembles the C. viridis. C. quadrifórmis, *rósa màjor*, and some others raised by Mr. Milner, are now advertised to be let out for the first time. (*Hort. Jour.*)

English Dahlia Shows.—Next month the great Dahlia Shows take place around London, which I shall attend, and perhaps give you some account of. Some of them have been put off, on account of the flowers being backward in their blooming.—*Yours, M. B. B., London, Aug.* 31*st*, 1839.

Rondelètia speciòsa.—This beautiful plant we saw a short time since in bloom, in the garden of N. J. Becar, Esq., Brooklyn, N. Y. It is a stove plant, and the specimen was imported last spring, consequently the flowers were inferior, in size and beauty, to a healthy well established plant: it has an umbel of beautiful orange colored flowers, remarkably showy, and it should be found in every collection of stove plants.—*Ed.*

Strelítzia angústa.—Since our last number went to press, this splendid species has flowered. One strong stem was thrown up about a foot high, and from it have opened a great number of flowers. It has clear white flowers, but is without the beautiful crest so ornamental in the regìna. It is not so beautiful as we had been led to anticipate. The foliage is indeed very noble, and the whole plant has an august carriage : but the flowers, compared with the old regìna, would rarely be considered so showy and superb. It has continued in bloom some time, and the plant has commenced making some fine leaves.—*Ed.*

Portulàca grandiflòra.—We have, on several occasions,

noticed the beauty of that fine species of *P*ortulàca, the *P.* Gilliès*ii;* but it is greatly eclipsed in splendor by the *P.* grandiflòra. This species has longer leaves than the Gilliès*ii*, is less procumbent in its habit, and possesses that good property —so much wanting in that variety—of flowering in such profuseness as to completely cover the plant with its roseate corols. *P.* Gilliès*ii* is exceedingly shy in blooming, and as the flowers are, generally, only produced on the extremities of the shoots, and these extending rapidly, the flowers are always at a distance from the root, and the centre of the plant has a weedy and shabby appearance. *P.* grandiflòra, on the contrary, is rather upright in growth, though quite dwarf, and the flowers are produced on the sides as well as the ends of the shoots.—*Ed.*

Trachymène cærùlea is the name of a new and pretty annual, which we have cultivated for the first time this season. It was introduced from New Holland into England a few years since, but appears to have now found its way into our gardens, for the first time. It belongs to the Umbellifèræ family, and may be considered as one of the finest additions lately made. The plants are now blooming freely with us; the seed was sown early in May, in a pot, and the plants removed to the open ground, where they have now acquired the height of two feet or more, and are filled with numerous compact umbels of pale blue or poreclain blossoms. The foliage is rather sparse, and the flowers appear on long peduncles, which elevate them so as to be distinctly seen above the plant. We are so much pleased with it, that we would urge its cultivation, another year, upon all lovers of fine annuals.—*Id.*

Bouvárdia triphylla, a plant usually grown in stove collections, and considered an extremely tender plant, grows admirably, and makes a showy display, with its clusters of tubular orange scarlet blossoms, when turned out into the open ground. It continues to grow and bloom the whole season, affording a constant succession of flowers. Any situation will suit in the border; and, if turned out early, it will rise to the height of three or four feet during the season; on the approach of winter, the roots may be taken up.—*Id.*

Doryánthes excélsa.—This plant, which we stated in our August number, (p. 338) had flowered in England in May last, had not, up to July, attained its full height. It was to be exhibited at Worton, at a crown a ticket; after that it was to be removed to Stafford Hall, to be exhibited at a shilling per ticket. All the editors of horticultural and floricultural periodicals were to be invited to see it. (*Hort. Jour.*)

MISCELLANEOUS INTELLIGENCE.

Art. I. *Foreign Notices.*

ENGLAND.

Value and prices of Tulips.—The tulip mania of the seventeenth century has indeed passed away, but the great prices which tulips continue to command among the English fanciers is remarkable. In a late number of the *Floriculturist* there is a good article on tulips and tulip fanciers, but it is too lengthy for our pages. It enumerates all the late and present growers, who have been at all celebrated for their fine collections, or for their success in breaking seedlings.

It appears that the first florist who raised breeder tulips was a reverend gentlemen by the name of Wood, who resided in London. At his death, about thirty-three years ago, his seedling breeders came into the hands of Mr. Davis, a private fancier, and from these that splendid Bizarre, "Strong's King," and all of that character, were produced. Since that time there have been Mr. Pearson, of Nottingham, Mr. Drinkwater, Mr. Strong, Mr. Austin, of Clapton, Mr. Holmes and Mr. Clarke, all celebrated growers, particularly Mr. Clarke, who is considered as having been one of the greatest contributors to the stock of English tulips.

At present there are several fanciers, of whom Mr. Goldham and Mr. Groom may be considered the most celebrated. A Mr. Greig, of Hackneywick, has now one hundred thousand seedling bulbs, which have not yet arrived at a blooming state.

The article concludes with an enumeration of several celebrated kinds, which have been much sought after, and the prices which they have commanded.

'The species called "Louis XVI." appears, for the first time, in a Dutch catalogue, of 1792, now before me; and is there priced, as a then new flower, at 300 florins, or £25. It is not very many years ago, that the late Mr. Austin offered Mr. Goldham for a "Louis XVI.," then in bloom, 73*l.* 10*s.*, and the offer was declined. "Ponceau tres blanc Superfin" came out at 40 florins, and very recently the editor, wanting the true Dutch "Ponceau," paid 6*l.* 6*s.* for it. "Rose Camuse" was introduced into England at the price of 6 florins, and has in many instances, and for many years, not only under its proper name, but also as "Rose Brilliant," produced from 2*l.* to 3*l.* per bulb, and in two or three instances 4*l.* The first price of "Violet Quarto," now about forty years old, was 3 florins. "Violet Quarto Superfine," or, as it is now termed in this kingdom, "Violet Alexander," has been frequently imported at the same price: not many years since, I stood beside a first-rate fancier, when Mr. Brooks then of the nursery, Ball's Pond, Islington, demanded, and received 5*l.* 5*s.* for a bulb of it. "Superbe en Noir" came amongst us at the price of 10 florins, and has since commanded, in many instances, a price of as many pounds. I will here mention one instance of great depreciation, the most remarkable on record,—"Semper Augustus," which in 1636 was sold for 7000 florins, or 583*l.* 6*s.* 8*d.*, I find catalogues in 1792 at 10 stivers, or 10*d.*

'The late Mr. Davy, of the King's-road, Chelsea, broke a tulip, and named it "La joie de Davy;" for this flower he was offered 157*l.* 10*s.*, and declined taking it. For the "Polyphemus," raised by the late Mr. Lawrence. of Hampton, from a seedling-breeder of Mr. Clarke's, the sum of 50*l.* was given for four bulbs, after it had been broken three years, and although it was known to the buyers that several roots of the same flower remained in the possession of Mr. Clarke and his friends. For the stock of another new flower, called "Fanny Kemble," consisting of a main root and three offsets, raised also from a seedling-breeder of Mr. Clarke's, the late Mr. Davy gave 100*l.*; these were resold at his death, which occurred a few months after his purchase, for nearly the same sum, and Mr. Goldham was the buyer; in his possession the stock of this fine flower still remains. Mr. Holmes, of Clapham, raised the "Louis XVIII." from a seedling-breeder. At his death, Messrs. Milliken and Groom, of Walworth, bought his collection of tulips from the person to whom they were bequeathed, and afterwards sold the "Louis XVIII." to Mr. Goldham for 42*l.*; and so recently as last year, Mr. Glenny bought the stock of the "Everhard" of Mr. Bowler, comprising seven roots, for which I believe 140*l.* was given. I could multiply instances of extraordinary value attached to tulips even in modern days, *ad infinitum*, but conceive enough is stated above to prove that, without gambling or artifice, there really is no decrease in the value of fine ones, nor any want of admirers of them.'—*Floriculturalist.*

ART. II. *Domestic Notices.*

The Horticultural Society of the Valley of the Hudson held its semi-annual meeting at Niblo's Garden, New York, as noticed in our last, on the 12th of September. We shall probably receive a complete report from our correspondent, Mr. Downing, the Corresponding Secretary of the Society. The papers state that the exhibition was very good, but we are sorry to learn that the amateurs and gentlemen interested in horticulture, in and around the city, did not contribute more liberally. The New York *Commercial Advertiser*, in noticing the exhibition, remarks that, amidst all the beautiful display, "We are not only chagrined, but provoked, to find that the New Yorkers, the cultivators of fruits and flowers in this city and its environs, have been so backward on this occasion. While Mr. Downing and others, of Newburgh, Messrs. Holbrook, Kneeland, and others, of Duchess co., Messrs Gen. Stephen Van Rensselaer, Judge Buel, Isaac Denniston, and others, of Albany, and Mr. Walsh, Lansingburgh, have taken such pains to favor us with choice specimens of their horticultural labors, we have not more than two or three exhibitors of fruit, and as many more of flowers—none, we believe, from Long Island or New Jersey. Our friends from the country have done very handsomely on the occasion, but the coldness of the city and its environs is chilling to their feelings and enterprise. It

has struck us, also, that our contemporaries of the press have been unusually backward in stirring up our citizens to the importance of this most interesting and beautiful department of practical political economy." The exhibition closed with an address by Wm. Emerson, Esq.—*Ed.*

Reports of Horticultural Societies.—We have been kindly furnished with the report of the Burlington Horticultural Society, and Albany Horticultural Society, each of which, with all others that we may receive, will appear in our December number.—*Id.*

Great drought in Georgia.—We have had a most unprecedented season of drought. It is full twenty months since the earth here has been saturated with water; many wells, which were never before dry, became so in the midst of last winter, and have not been replenished since; and since last summer we have not had a shower which penetrated six inches into the soil. I am now obliged to water (daily almost,) my pear and apple trees, to keep them from perishing. Even the forest trees are evidently suffering, and some evidently dying.—*Yours, M. A. W., Athens, Ga., Sept. 18th,* 1839.

The Chinese Corn.—I have, the present year, made the small experiment of one ear of the China tree corn. On the 17th of April I planted the ear, containing five hundred grains, in drills five feet apart, eighteen inches in the drill, and one grain at a point, having previously ploughed and rolled the ground; my only implement was the "Cultivator," excepting only one *light* ploughing about the middle of June, as is my usual method. By the middle of August it was sufficiently matured for meal, at least two months earlier than our ordinary sorts, [notwithstanding some persons persist in calling the China corn nothing but Virginia.—*Ed.*] and upon gathering it, the product was *nearly* one thousand ears, generally larger than the one planted; though many, as usual, smaller, and a few rotten from the excessive rains.—(*J. E. Muse, in the American Farmer.*)

Great Sale of Mòrus multicaúlis.—The great sale of 250,000 *Mò*rus multicaúlis trees, belonging to P. Physick, Esq. took place in Germantown, near Philadelphia, on Wednesday, Sept. 18th. It was attended by a great concourse of people from all parts of the Union, there being present, probably, not less than two or three thousand. The sales went off briskly, and the whole lot averaged about thirty-one cents each. The purchasers were principally from the west, and paid cash, with a discount of seven and a half per cent.—*Ed.*

Middlesex Horticultural Society.—A new Society, under the above name, has been formed in Lowell. An exhibition took place on the 18th of September, which was well attended. An account of the same will be found in another page.—*Id.*

Horticultural Society of Charleston.—The anniversary meeting of the Horticultural Society of Charleston, S. C., was held on the 14th of August last, and officers for the ensuing year elected. The standing committee submitted their report, for the past year, at this meeting, from which we learn that the Society is in a flourishing condition, although the fire and the prevailing epidemic have prevented the usual attention to horticultural pursuits. We shall notice the report again in our December number, and give extracts of that part of it relating to the fruits and flowers exhibited. Various premiums were awarded by the Society. (*Southern Agriculturist.*)

Nelúmbium *speciòsum.*—Some of our friends in Philadelphia informed us on our late visit there, that the *Nelúmbium speciòsum* had naturalized itself in the neighborhood of the city, where it blooms

abundantly all summer. It grows in a shallow ditch, where it covers the surface of the water with its broad and peltate leaves, and throws up numerous strong flower buds, which expand in all the splendor of oriental magnificence. We could hardly credit the assertions of our friends, but we were assured by them that they had cut the flowers, and there was no doubt of its being the true *N.* speciòsum. It is rather remarkable that this fact has not been made known before: connoisseurs of plants have tried in vain to raise it from the seed, but have not succeeded in producing plants of sufficient strength to bloom. The Hon. J. Lowell approached the nearest to it of any cultivator of our acquaintance, but we believe the plant was lost. We hope that some of the roots will be procured by some of the amateurs around Boston, and their growth attempted in pots, where they might, undoubtedly, be made to bloom. Perhaps they might be introduced into gardens where there is a pond of water. We hope our hints will induce the trial.—*Ed.*

Art. III. *Middlesex Horticultural Society.*

An association for the purpose of introducing a taste for horticultural pursuits, and for the improvement of fruits, vegetables and flowers, has been lately organized in Lowell, Mass., under the above title. It is intended for a county society, although probably most of its members and the scene of its action will be in the city. Already nearly three hundred persons have subscribed to the plan, which, with a most liberal and enlightened spirit, includes both ladies and gentlemen. To diffuse a taste for flowers and floriculture, among the former, it is much needed. The tending of some beautiful exotic, which bedecks the parlor window, seems coincident with feminine delicacy and refinement. Science is indebted to many illustrious females abroad, in no slight degree; let our fair emulate in the delightful pursuits of horticultural industry their sisters in Europe and Great Britain. We like the plan of the Society in this particular, and doubt not that success will crown the experiment.

The first public exhibition, under the auspices of the Society, was held in Mechanics' Hall, September 18, 1839. The morning seemed very inauspicious; successive showers precluding the hope of a successful display. In this we were, however, happily disappointed, the rain suddenly ceasing near noon, and a fine bright and warm sun dissipating all anxiety. Every leaf and flower was glittering in crystal drops, revived by moisture and warmth of the atmosphere. Bouquets and fruits, and the more solid contributions of fine vegetables came in from all quarters, so that, by the appointed hour, the hall was thrown open to the numerous company, and exhibited an interesting spectacle of nature's beauty in more than one form. We subjoin the list of contributions.

Native Plants.—Bouquet from Charles E. Brazer, containing Lobèlia cardinàlis, Neóttia cérnua, asters, sp. var., Clématis virginiàna, Heliánthus divaricàtus, &c. &c. Another from Mr. ———, of Aster

diffùsus and *Solidàgo* lanceolàta. Several fine native plants, from Oliver A. Locke. From P. P. Spalding, *Gentiàna* crínita. From Charles Dalton, *Arum* tryphyllum, in fruit, very large.

Garden Flowers:—From Miss H. Wright, *Silène* sp., Dracocéphalum virgínicum, Scabiòsa atropurpùrea, S. stellàta, Cacàlia coccínea, *Chrysánthemum* ánnuum. From Josiah Gates, an elegantly arranged flat bouquet, of double marigolds, *Tagètes* pátula flore pleno, double asters, &c. Dahlias, from Mrs. P. W. Warren, Symphòria racemòsa, *Phlóx* paniculàta, Dracocéphalum virgínicum, Plectocéphalus americànus, &c.

From Mr. Francis, a most delicate and elegantly arranged bouquet of *Hemerocállis* japónica, Heliánthus multiflòrus pl., *Acónitum* napéllus, *Antirrhìnum* màjus, *Œnothèra* grandiflòra. From E. B. H., sundry kinds and fine double marigolds, *Amarántus* melancholícus, double China asters, &c. From John Waldron, a similar bouquet, with *Senècio* balsámita. From James May, asters, Leopard balsams, &c. &c. From Nathan Wright, Jr., *Rudbéckia* fúlgida, *Phlóx* pyramidàlis, *Parthènium* matricària, flore pleno, *Amarántus* trícolor, Symphòria racemòsa, fine quilled China asters, and several sorts of dahlias. From Charles C. Nichols, yellow and red cockscombs, balsams, double marigolds, Chenopòdium anthelmínticum, *Euphórbia Cyparíssias*, Campánula mèdium. From T. T. Clark, varieties of China asters, dahlias, cockscombs, &c.

From Edward Tucker, marigolds, chrysanthemums, dahlias, *Zínnia* violàcea,. From Miss E. C. Brownell, Celòsia cristàta (fine,) snowberry, five varieties of dahlias, *Petùnia* phœnícea, *P.* nictaginiflòra, &c. &c. From J. N. Metcalf, *Hibíscus* africànus, and other flowers. From Mrs. Payson, a pretty bouquet of four varieties of dahlias, *Althæ'a* frùtex and *Phálaris* arundinàcea, *variegàta*, &c. From James May, Hydrángea hortènsis, asters, marigolds, Leopard balsams. From N. Wright, Jr., choice pansies, twenty varieties, prettily arranged with cypress spurge.

From Rev. Mr. Miles, asters, marigolds, Tropæ'olum màjus, dahlias, &c. From Mr. Francis, ten varieties of fine dahlias. From Mrs. J. C. Dalton, a delicate bouquet of sweet peas, snowberry, trumpet honeysuckle, Gleditschi*a*, *Lavátera*, and mignonette. From J. Breck, Brighton, twenty varieties of fine dahlias, many of them new. From Edward Fifield, asters, delphinium, *Papàver* rhœ'as, *Monárda* purpùrea. From Mrs. Bruce, *Phlóx* paniculàta, *Petùnia* violàcea, marigolds, trumpet honeysuckle, Lonícer*a* periclymènum. *Silène* sp. Chrysè*is* califórnica, *Hibíscus* africànus, &c. From William Vanderlip, superb bouquet, from the garden of Joseph Breck, Brighton, of *Verbèna* Tweedièn*a* supérba, Striped marigold, *Tagètes*, pátula; *Zínnia* violàcea, varieties, white, scarlet, rose, yellow; Xeránthemum ánnuum variety, *Centaurèa* suavèolens, varieties yellow, white, purple, &c. &c. From Mrs. Titcomb, asters, Coreópsis, Amarántus melancholícus, *Balsamìta* vulgàris, &c. From Mr. Francis, several varieties of *Viola* grandiflòra.

From Rev. John Lewis Russell, Chelmsford, *Verbèna* Tweedièn*a* supérba, *V. Melíndres* màjor, *V. Araniàna*, *V.* Eyrèa*na*, Maurándy*a* Barclay*àna*; *Phlóx* Drummónd*ii*, two varieties; Tigrídia pavònia; Eutòca víscida, *Lupinus* nànus, Nemóphila insígnis, *Silène* Tenòr*ii*, *Ibèris* coronàta, Tropæ'olum mìnus, &c. From L. Williams, of Dracut, twelve or more elegant varieties of dahlias, beautifully displayed among green leaves, and attracting much attention. From Mr. ———, Heliánthus multiflòrus, flòre plèno, Sweet Sul-

tan, asters, Tagè*tes* erécta flore pleno. From the carpet factory, (the area of which is devoted to flowers,) a bouquet of fine double balsams, asters, Tropœ'olum atrosanguíneum, *P*apáver rhœ'as flore pleno *crínita*, *P*lumbàgo cœrùlea, &c. &c. From T. Clark, very good cockscombs. From T. N. Pressey, *G*omphrèna globòsa. From N. Wright, Jr., fine bouquet of dahlias; also, bouquet of asters, snowberry, *Verónica* spicàta, *Zínnia* sp., *Kérria* japónica. From Mrs. R. Whittier, *A*lthæ'a frùtex flòre plèno *purp.*, *D*elphínium sinénse, flore pleno, dahlias, *S*èdum aizòon.

From Charles Hovey, *Hibíscus* palústris, *H.* moschàtus, *Phlóx* paniculàta, dahlias, *Zínnia*, var., petunias, *Hibíscus* africànus, leopard balsams, *C*entaurèa suavèolens *purpúrea*, Celòsia cristàta, &c. From N. Wright, Jr., *V*erbèna Drummón*dii*, *M*àlope grandiflòra. From Mr. Shattuck, *G*laúcium lùteum, phloxes, *P*yrèthrum parthèni*um fistulòsum*, *Petùnia* phœnícea, *Hibíscus* africànus. From T. Clark, a beautiful group of Ipomœ'a coccínea, Schizánthus pinnàtus, coreopsis, sp. *D*elphínium, mignonette, *Ibèris* coronàta, &c. From Dr. Parker, Billerica, asters, *Zínnia* violàcea varieties, *Petùnia*, &c.; also, fine dahlias, among which were a beautiful lilac seedling and Billerica Rival, of his own raising; also, *L*ìnum perénne, and *P*yrèthrum parthènum flore pleno, Chrysèis califórnica.

Plants in pots:—From Mrs. S. Fiske, *P*elargònium zonàle, var. marginàtum. From Mrs. P. W. Warren, myrtle orange, in fruit. From Dr. Parker, Billerica, Maurándy*a* Barclay*àna*, Poliánthes tuberòsa, flore pleno, *V*iola grandiflòra var. From Mrs. Mills, *P*elargònium zonàle. From Mrs. Fiske, *P*elargònium odoratíssimum, var. and Balm geranium. From Miss Locke, fine *M*yrtus commùnis in flower, *R*òsa sinénsis. From Miss Ann Rogers, Caméll*ia* japónica var. From J. N. Metcalf, lemon tree, large fig tree. From J. C. Carney, a large rose geranium. From Samuel A. Coburn, Dracut, two large lemons in fruit, and *M*imulus moschàtus. From N. Wright, Jr. *C*anna índica. From T. T. Clark, of rail-road depot, *V*erbèna Tweedie*àna*.

A box of native plants, prettily arranged, containing very large plants of *Gentiàna* crínita, *S*àlix recurvàta, *Phlóx* tardiflòra, *A*ster diffùsus and *C*lématis virginiàna, from B. F. Cutter.

A group of dahlias, from the collection of Messrs. Hovey & Co. of Boston, attracted much attention. We noted the names of some of the finest, as follows:—Sir H. Fletcher, Beauty of Kingscote, Incomparable White, Shakspeare, Princess Victoria, Marquis of Northampton, Lovely Anne, Contender, Mackenzie's Perfection, Queen's Superb, Ansel's Unique, Mrs. Rushton, Madonna, Sulphùrea élegans, Lord Liverpool, Grándis, Phalánthus, Queen of Scots, Blandìna, Reliance, St. Leonard's Rival, Conqueror of Europe, Ruby, Perfection, Bowman's Premier, Striàta formosíssima; also, *V*erbèna Tweedie*àna* supérba, *V.* Arrani*àna*, *V.* Eyre*àna*, *V.* teucroì*des*, &c.

Fruits:—From Jonas Warren, sweet apples. From P. P. Coburn, Dracut, very fair St. Michael pears, York russets, Fox grapes. From Dr. G. Parker, Billerica plums, Pumpkin Sweeting apples, Early Nonsuch apples, Mammoth Sweeting do., Baldwins, and New York russet, very fine; New Isabella peach. From Dr. J. C. Bartlett, (on the farm of Joel Adams, Esq.) Chelmsford, large sauce apple, (remarkable for size, but a poor bearer,) Orange Sweeting, native white variety of Fox grape, perfectly ripe; native apple, of decided merit in eating, as a table fruit, from December to February; Clingstone peaches.

From P. P. Spalding, Chelmsford, Bartlett or Sumner Bon Chre-

tien pears; Wheat plum of the vicinity; Bequesne Musque? pear; Spalding's Early apple, a fine fruit; Orange Sweeting; Native Yellow Seedling; Roxbury russets; Early Red Rareripe peach. From Daniel P. Coburn, Tyngsboro', watermelons, of good quality. From N. Wright, Jr. two dishes of fine fruit, containing Magnum Bonum plums, apples, Golden Chasselas, and Grizzley Tokay grapes, &c.; From J. H. B. Ayer, peaches. From J. N. Metcalf, Canada plums. From P. W. Warren, peaches, &c. From Daniel Shattuck, Concord, Green Gage plums, and fine peaches. From J. W. Mansur, Siberian Crab apples, which had made a second flowering. From William Boot, *Pyrus japónica*, in fruit.

Vegetables:—From Messrs. Curtis & Priest, a very fine pumpkin. From B. F. Cutler, gigantic Smyrna squash; superior Dutton corn; tomatoes; Warty squashes, and a twin connected Scallop squash; fine Canada Crooknecks; Mangel Wurtzel, and pumpkins. From P. P. Coburn, Dracut, large cucumbers; Rohan potatoes. From Lovell Fletcher, Chelmsford, a curious twin pumpkin; tomatoes; Silver Skin and Portugal onions; early ripened field corn, &c. From Dr. Parker, Billerica, Round Chenango and Rohan potatoes; Smyrna squashes; Baden corn, six ears on stalk. From Amos Carlton, Chelmsford, three very large Smyrna squashes. From Mr. Vanderlip, Dillingham potatoes. From P. P. Spalding, Chelmsford, a fine specimen of *Morus multicaúlis*, raised from a single bud, about eight feet high, with large foliage.

In the evening, according to previous arrangements, the Society listened to an address from the Rev. John Lewis Russell, of Chelmsford, (Professor of Botany, &c. to the Massachusetts Horticultural Society,) to which the public were invited. A large concourse of the elite of the city were assembled. The day and the exercises went off well, and give good augury of the prospects and success of the new institution.

We subjoin the list of officers.

William Boot, *President.*

Benjamin V. French, John Aiken, Samuel Lawrence, *V. Pres'ts.*

John C. Dalton, James B. Francis, John Avery, Alexander Wright, John D. Pillsbury, David Dana, *Trustees.*

Charles Hovey, *Secretary and Treasurer.*

ART. IV. *Massachusetts Horticultural Society.*

Saturday, Aug. 31st, 1839.—*Exhibited.* Flowers:—From S. Walker, six or eight varieties of dahlias, among which were Hero of Tippecanoe, Rival Yellow, and William Cobbett; also, fine bouquets. From M. P. Wilder, about a dozen dahlia blooms, among which we noticed Prima Donna, Unique, Striàta formosíssima, Birmingham Victor, Corinne, Conqueror of Europe, Countess of Torrington, Marquis of Lothian, and Miss A. A. Broadwood. From Hovey & Co. dahlias, viz: Eva, Striàta formosíssima, Mrs. Rushton, Unique, Reliance, Blandina, &c.; also, bouquets. From J. J. Low, Esq., Striàta formosíssima and Unique dahlias.

Native Plants:—A number of native plants, of various species, by William Oakes.

Fruits:—From S. R. Johnson, beautiful specimens of Bolmar Washington plums. From F. A. Curtis, Newton Falls, native peaches. From Mr. Parker, figs. From W. Skilton, White Gage plums.

Sept. 7th.—Exhibited. Flowers:—From M. P. Wilder, a variety of dahlias, some of which were Ne Plus Ultra, Unique, Striàta formosíssima, Sylph, Victory, Royal Standard, Rival Sussex, Marshal Soult, Cambridge Hero, Castánda, Rienzi, and Prima Donna. From Hovey & Co. a collection of dahlias, viz: Ne Plus Ultra, Beauty of the North, Striàta formosíssima, Unique, Rienzi, variabilis, Middlesex Beauty, Mrs. Rushton, &c. &c., bouquets. From Joseph Breck & Co. several dahlias, viz: Unique, Striàta formosíssima, Zarah, Ariel, Madonna, Granta, Sarah, &c., also marigolds and asters. From J. L. L. F. Warren, a few dahlias, with a variety of asters and marigolds. From Jos. Stickney, some fine specimens of dahlias, viz: Ne Plus Ultra, Unique, Suffolk Hero, and Conqueror of Europe; also, some excellent German asters. From D. Macintyre, blooms of Sunbury Hero, Rival Sussex, and Mrs. Rushton. From S. R. Johnson, fine balsams, pinks and Chinese roses. From J. J. Low, Striàta formosíssima and Unique dahlias. From J. Hovey, bouquets. From S. Walker, dahlias, viz: Hero of Tippecanoe, Mrs. Rushton, Golden Sovereign, &c., and pansies and bouquets. From W. Kenrick, bouquets.

Native Plants:—From William Oakes, *Arbutus ùva úrsi, Liàtris* scariòsa, *Myrica* cerífera, Lespedèza hírta, and L. Sessiliflòra and *Arum* triphyllum. From F. Parker, and E. Weston, Jr. Esqs., many specimens, among which were six species of *Aster*, Lobèlia inflàta, Chelòne glàbra, *Ranúnculus* rèpens, &c. &c.

Fruits:—From W. Oliver, Washington and Epargne pears. From M. P. Wilder, Bingham and Smith's Orleans plums, and Louise Bonne of Jersey pears. From R. Manning, the following:—Duquesne d'ete, Lowry's Bergamot, Dearborn's Seedling, Hasel, Grise bonne Paysans de Portugal, Frankreal d'ete, Sugar, Hoyswerda and Julienne pears; Red apricot, Elfrey prune, Bingham, Byfield, Green Gage, Peters's Yellow Gage, Petit Mirabelle, and Corse's Note Bene plums, all handsome. From S. R. Johnson, Green Gage and Bolmar Washington plums. From E. M. Richards, Summer pearmain, Orange Sweeting, Pie, (from Walpole,) Williams's Favorite, and Red Juneating apples. From J. W. Newell, Charlestown, White Gage and Flushing Gage plums. From D. Brims, nectarines. From J. L. L. F. Warren, Royal George, Heath's Favorite, and Royal Kensington peaches; also, Bingham, White Gage and Green Gage plums and figs.

From S. Pond, a variety of handsome plums, viz: White Gage, Bolmar Washington, Duane's Purple, Smith's Orleans, Green Gage and Isabella plums; also, Julienne pears. From Mrs. Bigelow, Medford, Rareripe peaches, beautiful. From J. Tidd, black Hamburgh and Sweetwater grapes. From A. Mitchell, Nantucket, a fine cluster of black Hamburgh grapes, weighing three pounds and three quarters. From the President, Duane's purple, Purple Gage, Imperial Gage, and Corse's Admiral, and Nota Bene plums.

Vegetables:—From J. L. L. F. Warren, common red and yellow, and small red tomatoes, very handsome. From John Hovey, common red tomatoes, the best we ever noticed.

Sept. 14*th.*—*Exhibited.* Flowers:—From Hovey & Co. thirty-two dahlia blooms, among which were Striàta formosíssima, Unique, Beauty of the North, Gen. Washington, Rival Sussex, Eva, Reliance, Princess Victoria, Mrs. Rushton, Blandina, Suffolk Hero, &c.; also, five species of *V*erbèna, viz: *V.* Tweedie*àna*, T. supérba, chamædrifòlia màjor, Eyre*àna* and *t*eucro*ìdes*; five varieties of *P*hlóx Drummón*dii*, from seeds; fine German asters and bouquets. From M. P. Wilder, thirty dahlia flowers, viz: Hope, Striàta formosíssima, Rival Sussex, Lady Sondes, Eva, A. A. Broadwood, Splendíssima, Sunbury Hero, Beauty of the North, Prima Donna, &c.

From J. Stickney, dahlias, as follows:—Countess of Torrington, Unique, Countess of Mansfield, Ruby, Conqueror of Europe, Mrs. Rushton, &c. &c.; also, fine German asters. From W. E. Carter, a number of dahlias, among others Glory, Rienzi, Exquisite, Countess of Mansfield, Mrs. Rushton, Sulphùrea élegans, Lord Nelson, &c. &c.; also, fine bouquets. From D. McIntyre, Rival Sussex, Mrs. Rushton, Prima Donna, Sunbury Hero, and Suffolk Hero dahlias. From Joseph Breck & Co. Striàta formosíssima, Unique, Lavinia, Paragon, and Beauty of Bedford, dahlias. From S. Sweetser, dahlias. From T. Mason, a variety of dahlias, bouquets and cut flowers. From S. R. Johnson, Chinese roses, balsams, asters, &c. From A. H. Hovey, pansies and asters. Bouquets, from W. Kenrick, Rufus Howe, J. Hovey, and John A. Kenrick.

From W. H. Cowan, cut flowers of the splendid Strelítz*ia* augústa, which we have noticed in another page.

Native Plants:—From Wm. Oakes, *A*ster sp., Solidàgo bícolor and pérbula, Empètrum Conràd*ii*, and *A*ster spectábilis.

Fruits:—From R. Manning, Buffum, Buerrè of Mons, (London Hort. Soc. Cat.) Belle Lucrative, Styrian and Golden Buerrè of Bilboa pears; also Diamond, Violette, Reine Claude, French long blue, and Prune d' Agen plums, and Gravenstein apples. From M. P. Wilder, Remsen's Favorite pear, (second rate,) and Corse's Admiral plums. From E. M. Richards, handsome seedling peaches. From S. Pond, Cushing, Julienne, Williams's Bon Chrétien and St. Ghislain pears; also, Green Gage, Corse's Field Marshal, and Lombard plums. From J. Dean, Mansfield, Superb sweet and spice apples and early peaches. From J. L. L. F. Warren, Julienne pears, and figs. From T. Mason, black Hamburgh and Sweetwater grapes, unnamed plums and Broomfield nectarines, very handsome. From J. W. Newell, White Gage plums. From Mr. Parker, Isabella grapes. From Mr. Lamson, Yellow Egg plums, measuring seven and three quarter inches in circumference. From Mr. Fisher, Brookline, Cushing and Williams's Bon Chrétien pears. From H. Sheafe, apples.

Sept. 21*st.*—*Exhibited.* Flowers:—The show of dahlias was very fine at this meeting, and some excellent blooms were shown. From S. Walker, dahlias, viz: Rival Yellow, Ovid (a fine flower,) Marquis of Lothian, Premier, Queen of Scots, Golden Sovereign, Glory, &c.; also, pansies and bouquets. From Hovey & Co. thirty-two dahlias, among which were Willmer's President, Striàta formosíssima, Premier, Unique, Variabilis, Zolermio, Maria Edgeworth, Horatio, Grand Purple, Eva, Rosetta, Cambridge Hero, Nimrod, &c.; also bouquets. From M. P. Wilder, thirty-four dahlias, viz: Marshal Soult, Ne Plus Ultra, Striàta formosíssima, Unique, Topaz, Exemplar, Prima Donna, Mrs. Rushton, &c. From T. Mason, several dahlias. From J. Hovey, bouquets. From W. Kenrick, bouquets

Native Plants:—From William Oakes, five species of *Solidàgo*, five species of *Aster*, five species of Lycopòdium, three of Aspídium, Sarracènia purpùrea, *Viburnum* lantanoìdes, Gaulthèria hispídula, *Onóclea* sensíbilis, two species of *Asplènium* and *Polygonum* articulàtum, and articulàtum var. múltiplex.

Fruits:—From O. Johnson, Zinfindal grapes (fine.) From W. Oliver, President peaches. From Mr. Sharp, natural peaches, very handsome. From T. Mason, black Hamburgh and Sweetwater grapes and nectarines. From J. Coolidge, Yellow Rareripe peaches. From J. W. Newell, seedling peaches. From Mrs. Bigelow, rareripe, natural, and melacatoon peaches, (all fine.) From J. Kenrick, Cutter's Rareripe peaches. From J. L. L. F. Warren, Royal Kensington, George IV., and seedling peaches, and Williams's Bon Chrétien and Washington pears. From William Oliver, St. Ghislain and Williams's Bon Chrétien pears. From R. Manning, Red Magnum Bonum, Sharp's Emperor, and St. Catharine plums. From J. C. Lee, Buffum pears. From N. Webster, pears and plums. From J. Hill, peaches. From J. Duncklee, beautiful seedling peaches.

Presented.—A complete set (4 vols.) of Aublett's *History of Plants*, by Turell Tufts, Esq., of Medford.

Messrs. John Clark and George Hallet, of Boston, were admitted subscription members.

The Tenth Annual Exhibition of the Society, was holden on Wednesday, Thursday, and Friday, the 25th, 26th, and 27th of September, at the Society's room, in Tremont street. The arrangements were the same as the last year, and, as usual, were under the direction of the decorating committee, who executed their duty with good taste.

The number of plants contributed was not quite so large as in years past; but, notwithstanding, there was nearly as large a number as could be placed in the room to advantage. We hope, another season, that the Society will endeavor to procure a large hall better fitted for our annual exhibition, that we may again gratify the public with such another gorgeous display as that which was made a few years since in Faneuil Hall. The Society's room is altogether too limited for an annual exhibition; and, from want of a proper light, the plants and flowers are seen to great disadvantage.

The display of that magnificent flower, the dahlia, was much superior to what we had anticipated a few days previous; the weekly exhibitions of this flower have been meagre, and we were agreeably disappointed to find the stands so well filled on this occasion. The asters were also fine, and assisted to render the show of cut flowers more interesting; and a good number of handsome bouquets contributed to heighten and set off the display.

The fruits were excellent, and the variety large. The pears of Mr. Manning, as usual, consisted of a great number of kinds. The beautiful forced grapes of Messrs. Haggerston, Cowan, and other gardeners, and those of Messrs. Johnson, Balch, and other amateurs, attracted, and, deservedly too, much attention. The vegetables were numerous and of good quality.

The weather on Monday, the first day, was delightful, and the number of visitors large; but the morning of Thursday broke with a lowering atmosphere and a raw easterly wind, which had a tendency to prevent so good an attendance as on the day previous. Friday, though not unpleasant, was rather a disagreeable day, but, notwithstanding, the rooms were well filled. In the afternoon the committee

of arrangements dined together at the Shawmut House, and the occasion was one of gratification to all.

The following report has been drawn up with considerable care, and, we believe, will be found correct :—

Flowers :—From the Hon. John Lowell, a splendid specimen of *Crìnum amábile*, a fine plant of *Araucària* excélsa, *Mùsa* purpùrea and *M.* sapiéntum, Trevirà*na* coccínea, &c. From J. P. Cushing, Esq., the elegant *Chamæ'rops hùmilis*, *Phœ'nix dactylífera*, and other plants. From Mrs. T. Bigelow, Medford, large plants of *Yúcca* gloriòsa, A'gave americàna var. variegàta, &c. From T. Mason, Melaleùca sp. *Erìca* arbòrea, grácilis, concínna and others, Callistèmon salígna, roses, stocks, &c. &c.; also, about sixty blooms of dahlias, among which were Paragon, Lovely Anne, Sir H. Fletcher, Angelina, Princess Victoria, Mrs. Rushton, Golden Sovereign, Fringed White, Ruby, Desdemona, Conqueror of Europe, &c. From S. S. Lewis, a large variegated euphorbia, in a pot. From P. Barnes, Boston, two fine coxcombs.

From W. E. Carter, fine plants of *Pandànus* spiràlis, *Phylica* pubéscens, Callistèmon salígna, *Erìca* concínna, grácilis, &c., Leucadéndron argénteum, Illícium floridànum, Magnò*lia* grandiflòra, seedling camellias, myrtles, orange trees, *Yúcca* gloriòsa, *O'xalis* Bowiè*ii*, and other plants; also fine dahlias, numbering fifty or sixty blooms, containing, with others, Rienzi, Mrs. Rushton, Glory, King Otho, Lovely Anne, Stone's Yellow Perfection, Madonna, Golden Sovereign, Mary, Conqueror of Europe, Blandina, Ruby, &c., with two or three fine seedling phloxes. From J. L. L. F. Warren, variegated hollies, Begò*nia* argyrostígma, fig trees, *Sálvia* fúlgens, Allò*ysia* citriodòra, Eugènia myrtifòlia, and other plants; also, several varieties of dahlias, marigolds and cut flowers. From W. Meller, Hæmánthus coccíneus, *Pittósporum Tobìra*, Eugè*nia* myrtifòlia, *Acàcia* armàta, &c.; also twenty-five or thirty dahlia blooms, among which were Countess of Mansfield, Criterion, Ne Plus Ultra, Conqueror of Europe, Desdemona, Beauty of Cambridge, Beauty, &c.

From S. Sweetser, ten pots of dahlias, of new and fine kinds, all in bloom ; these were all great ornaments to the room, particularly the Striàta formosíssima, which had six flowers expanded; the others were Marshal Soult, Ne Plus Ultra, Elliot's Coronation, Eva, Mrs. Ashley, Unique, Cambridge Hero, Piltdown Rival, Exemplar ; also fine specimens of several species of Cacti, viz. Cèreus córtex, and albiflòrus *Opúntia* brasiliénsis, and micradàsia, Echinocáctus múltiplex, and Epiphyllum truncàtum, with a dozen or more dahlia blooms. From Messrs. Winship, hydrangeas, myrtles, &c.; *Vibúrnum* oxycóccus and the Shephérd*ia* argéntea, both in fruit. From J. S. Ellery, Esq., a pretty pyramid of dahlias, fine bouquets, and dahlia flowers. From J. J. Low, Belladona lilies, a large Sago Palm, and a beautiful specimen of the Tea rose, in full bloom, grafted as a standard; also, about fifty dahlias, of which the finest were, Horsham Rival, Bonaparte, Mary, Victory, Ruby, Striàta formosíssima, Sulphùrea élegans, Beauty of Bedford, Countess of Mansfield, Viscountess Beresford, Golden Sovereign, &c.

From Hovey & Co., flowering plants of *O'xalis* Bowiè*ii*, Gardoquì*a* Hookè*rii*, and Epiphyllum Ackermà*nii*; a young plant in a pot of the *Mòrus* multicaúlis, three feet high, only two months from the cutting; a beautiful stand of verbenas, containing nine species and varieties, as follows:—*V.* Tweedie*àna*, and T. supérba, *V.* incisa, *teucroìdes*, Binney*àna*, Eyre*àna*, Arrani*àna*, chamædrifòlia màjor,

and venòsa; also, about one hundred and thirty dahlias, some of which were Striàta formosíssima, Reliance, Mrs. Rushton, Eva, Rosetta, Variabilis, Unique, Beauty of Kingscote, Grand Purple, Marquis of Lothian, Splendissima, Princess Victoria, Conqueror of Europe, Middlesex Rival, Maria Edgeworth, Cambridge Hero, Juliet, Victory, Fowler's Queen Victoria, Horatio, &c. From John Towne, several elegant species of heaths, viz: *Èrica* regérminans, Abietìna, conecínna, and grácilis; also, Cròwea salígna, Manéttia cordifòlia, and Menziè*sia* cærùlea. From N. S. Dyer, South Abington, Begò*nia* argyrostígma. From A. H. Hovey, China asters and dahlias.

From M. P. Wilder, about one hundred and twenty dahlias, among which we noted down Rienzi, Rival Sussex, Striàta formosíssima, Countess of Mansfield, Marquis of Lothian, Virgin Queen, Unique, Marshal Soult, Egyptian King, Mrs. Rushton, Ne Plus Ultra, Victory, Exemplar, Ruby, Prima Donna, Maria Edgeworth, &c. &c.; also, a fine cut specimen of *Liàtris* scariòsa. From S. Walker, upwards of seventy dahlias, some of which were Ovid, Mrs. Rushton, Premier, Glory, Rival Sussex, Berkshire Champion, Beauty of Bedford, Mary, Neptune, Golden Sovereign, Napoleon, Marquis of Lothian, Princess Victoria, Rienzi, &c.; also some fine pansies. From Joseph Breck & Co., about sixty dahlias, among others Victory, Ariel, Reliance, Zarah, Striàta formosíssima, Angelina, Maria Edgeworth, Unique, Rose d'Amour, &c. From Rufus Howe, a variety of good dahlias. From D. Macintyre, several handsome specimens of dahlias, among others were Red Rover, Golden Sovereign, Rienzi, Striàta formosíssima, Sir H. Fletcher, Rival Sussex, &c. From J. A. Kenrick, twenty blooms of dahlias and upwards, containing Victory, Mary, Golden Sovereign, &c. From W. McCullough, a variety of dahlias.

From Jos. Stickney, Boston, about sixty dahlias; among the number we noticed Ne Plus Ultra, Countess of Torrington, Blandina, Glory of the West, Birmingham Victor, Victory, Sarah, Star of Buckland, Unique, Mrs. Rushton, Ruby, Conqueror of Europe, Red Rover, Queen of Scots, &c.; also some superb German asters. From S. R. Johnson, Double balsams, a variety of Tea and Chinese roses and dahlias.

Bouquets of flowers were furnished by Messrs. Winship, Hovey & Co., T. Mason, W. Meller, S. Walker, J. Hovey, W. E. Carter, J. S. Ellery, J. A. Kenrick, and W. Kenrick, who sent two baskets elegantly trimmed with flowers, and a large fir tree completely clothed with blossoms of dahlias, marigolds, &c.

Fruit:—From R. Manning, upwards of seventy varieties of pears, as follows:—Louise Bonne of Jersey, Bezi de la Motte, Bezi Vaet, Henry IV., Doyenne Louis, Beurré Bosc, Alpha, Duchess d'Angouleme, Fig of Naples, Catillac, Forelle, Burgomaster, Hugenot, Beurré Seatin, Styrian, Foureroy, Buffum, Beurré Bronze, Bartrams, Capsheaf, Passe Colmar, Cumberland, Endicott, Beurré Von Màrum, Verte longue, Beurré d'Aremberg, Belle Lucrative, Winter Orange, Long Green, Frederic of Wurtemburg, Harvard, Naumkeag, Hacon's Incomparable, Bleeker's Meadow, Seckel, Wilkinson, Burgomaster (of Boston,) Chelmsford, Echasserie, Beurré Duval, Colmar Dewez, Winter Nelis, Napoleon, Belle et Bonne, Jalousie, Glout morceaux, Fulton, Rouse Linch, Prince's St. Germain, Fondant du Bois, Chaumontel, Josephine, Easter Beurré, Rousselet de Rheims, Beurré Diel, Surpásse Virgalen, Williams's Bon Chrétien, Old orange, and Bergamotte d'Autómne; also, Goliah and St. Catharine plums, and Gravenstein, Lyscom, Bellefleur, Fall Harvey, Marie Louise, Danvers Sweet, and Pennock's winter apples.

From J. M. Ives, a good variety of pears, viz: Bleeker's meadow, Bezi de Montigny, Gilogil, Duchess of Angouleme, Brown Beurré, Michaux, Beurré d'Aremberg, Lewis, Josephine, Passe Colmar, St. Michael's, Buffum, Capiaumont (true,) Glout morceaux, Easter Beurré, Striped St. Germain, Wilkinson and Raymond; Cruger's seedling plum, and Canfield and Michael Henry pippin apples. From D. Hill, a basket of handsome lemon rareripes. From O. Johnson, Lynn, some beautiful fruit; Burgomaster, Vert longue Panaché, Rousselet de Rheims, Washington, Julienne, Doyenne Gris, Long Green of autumn, Catillac, Admiral, Passe Colmar, Louise Bonne, Rousselet Panaché, and Sucré Vert pears; also fine specimens of Zinfindal, black Hamburgh, white Sweetwater, and Muscat of Alexandria grapes. From S. R. Johnson, black Hamburgh and Chasselas grapes. From William Oliver, Urbaniste, Ambrette, Seckel, Wilkinson, Echasserie and Williams's Bon Chrétien pears; also, Chasselas grapes, of out-door growth.

From M. P. Wilder, several varieties of pears; Cushing, Passe Colmar, Seckel, Bleeker's Meadow, Colmar Epineux, Louise Bonne of Jersey, Duchess d'Angouleme, Long Green, Bergamot de Paques, Columbian Virgoulouse, Beurré Diel, Burgomaster, Heathcot, Belle de Brussels, Glout morceaux, Capiaumont, Beurré d'Aremberg, and Verte longue Panaché; Orange quinces, and blue Imperatrice plums. From T. Mason, black Hamburgh, purple Constantia, Sweetwater and Isabella grapes and peaches. From E. Bartlett, Seckel, Andrews, Napoleon, Williams's Bon Chrétien, Fulton, and Culotte de Suisse pears. From J. Fisher, Seckel, Andrews, and Williams's Bon Chrétien pears. From H. Vandine, Cambridgeport, fine specimens of Coe's Golden Drop plums. From J. Newhall, Lynnfield, peaches and grapes. From William Worthington, seedling peaches. From R. Ward, Roxbury, fine Williams's Bon Chrétien and Seckel pears; old Mixon and Franklin peaches. From Charles Johnson, Hawthorndean and Porter apples, and Seckel pears. From S. Sweetser, Seckel, Fulton, and Chelmsford pears. From C. & A. J. Downing, Newburgh, N. Y., elegant fruit of the brown Beurré, St. Michael and Seckel pears.

From S. Downer, a fine assortment of apples, viz: Ramshorn, R. I. Greening, Fall Harvey, Wales apple, Pumpkin sweeting, Ribstone pippin, Æsopus Spitzemberg, Hawthorndean, Nonsuch, Lyscom, Gardiner's sweeting, Golden russetting, Old Colony Pearmain, Roxbury russet, Washington pearmain, &c.; also, Beurré Diel, Andrews, King of Wurtemburg, Heathcot, Seckel, Cushing, Messire Jean, Urbaniste, Fulton, Catillac, Harvard and black pear of Worcester. From the Hon. E. Vose, President, four fine varieties of melons, the Rock, Minorca, Cantelope and Persian; Urbaniste, Williams's Bon Chrétien, Heathcot, Napoleon, Seckel, Washington and Iron pears; Weller's Frecstone and Catherine peaches, and white Sweetwater grapes; beautiful Hawthorndean and Gravenstein apples. From W. Meller, black Hamburgh and Sweetwater grapes; Imperatrice plums and peaches. From H. Gray, Esq., black Hamburgh and St. Peter's grapes. From F. Tudor, specimens of fruit raised in his garden at Nahant; Petit Madam, Julienne, Buffum, Wilkinson, and Bleeker's Meadow pears and peaches. From S. Pond, Andrews pears (fine.)

From J. J. Low, Esq., Marie Louise, Lewis, Fulton, Forelle, Beurré de Roi, Roi de Wurtemburg, Urbaniste, and Wilding pears; Mela carla and Minister apples, and blue Imperatrice plums. From J. S. Ellery, Brookline, black Hamburgh, Miller's Burgundy, and Chasselas grapes. From J. Hooper, Jr., Golden Beurré of Bilboa pears. From W. Kenrick, specimens of the fruit of the Osage orange, from Phila-

delphia. From E. M. Richards, peaches and quinces, and Lady apples; also, Seckel, Fulton, and other kinds of pears. From A. D. Williams, black Hamburgh grapes, Seckel pears, and Hubbardston Nonsuch, and Horn apples. From George Newhall, apples and peaches.

From J. P. Cushing, Esq., fine black Hamburgh, Muscat of Lunel, St. Peters, Morocco and Muscat of Alexandria, grapes; beautiful striped St. Germain, and Poirè de Brugman pears. From Joseph Balch, Duchess of Angouleme, and Louis d'Arranches pears; also, white Muscat, white sweetwater, Miller's Burgundy, black Hamburgh, and black Prince grapes. From Joshua Gardiner, apples and peaches. From J. L. L. F. Warren, Porter, Roxbury russet, Baldwin and Lady apples; peaches, figs, and Seckel, Napoleon, and Williams's Bon Chrétien pears.

From the Hon. T. H. Perkins, beautiful St. Peter's, Muscat of Alexandria, white Nice, Frankindale and black Hamburgh grapes; also, some remarkably fine peaches and nectarines. From S. Walker, Elfrey plums. From P. May, a basket of very large and fine brown Beurré pears. From Jona. French, Jr., pears, the name unknown.

Vegetables:—From Jona. French, Jr., Rohan potatoes, fine Crook-neck squashes (nine weighing one hundred and fifty pounds,) Valparaiso and Autumnal Marrow squashes; also, beets, carrots and brocoli. From William L. Rushton, Esq., New York, fine Giant celery. From J. J. Low, Esq., Egg plants. From Geo. Newhall, tomatoes. From Dr. Lowell, Egg plants.

From E. H. Derby, Esq., a very large squash, weighing one hundred and nine pounds, and handsomely formed. From C. R. Lowell, Egg plants. From Richard Ward, Lima beans. From J. L. L. F. Warren, common large red and yellow tomatoes, fine large Rohan potatoes, Seven Years' pumpkins, Crook-neck and Autumnal Marrow squashes, and Lima beans. From H. Gray, a large squash. From A. D. Williams, large brocolis, beets, cabbages, &c. From Samuel Blake, South Boston, large squash, weighing one hundred and fifteen pounds. From the Hon. John Lowell, Rohan potatoes, the largest weighing two pounds and a half. From J. M. Ives, Salem, Rohan potatoes of good size. Mr. Ives planted eleven pounds of seed, and raised four hundred pounds: the vines blasted, or he would have had a much heavier crop.

We should not omit to notice, particularly, the fine specimens of pears, among which were the striped St. Germain, presented by Mr. Haggerston, gardener to J. P. Cushing, Esq. They were grown in pots in the grapery, and, for size and beauty, surpassed any thing we have ever seen. The brown beurré pears from Mr. Ives, were picked from a tree grafted on a quince stock, and they were handsome. Some brown beurrés, from the nurseries of Messrs. C. & A. J. Downing, Newburgh, N. Y., attracted much attention: they were very large and fine.

M. P. Wilder presented some specimens of wax fruit worthy of notice: they were received by him from Frankfort on the Main, and consisted of apples, pears and cherries. We have never seen any wax fruit which were such faithful representatives of the originals.

The premiums on dahlias were awarded on the first day of the exhibition; but we have not been able to secure a list of the successful competitors. This will appear in our next.

Sept. 28th.—A meeting was held this day, for the purpose of hearing the report of the committee appointed to nominate a list of officers for the ensuing year. Mr. Oliver, the chairman, made the report, which was accepted.

Art. V. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Chenangoes, per barrel,	1 00	1 25
Chenangoes, per bushel,	50	—
Common, per barrel,	1 00	—
Common, per bushel,	50	—
Sweet Potatoes, per bush.	1 25	1 50
Turnips, per bushel,	37½	50
Onions:		
White per bushel,	1 00	—
Red, per bunch,	3	—
White, per bunch,	2	3
Yellow, per bushel,	75	—
Beets, per bushel,	50	62½
Carrots, per bushel,	50	62½
Horseradish, per pound,	10	—
Radishes, per bunch,	2	3
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoy	50	—
Drumhead,	50	75
Red Dutch	50	75
Cauliflowers, each,	12½	25
Broccoli, each,	12	25
Lettuce, per head,	2	4
Beans, shelled:		
Sieva, per quart,	12½	—
Lima, per quart	20	—
Tomatoes, per half peck	10	—
Corn, per dozen,	10	12½
Celery, per root,	6	12½
Peppers, per pound,	2	3
Cucumbers, for pickle, pr h'd	25	—
Mangoes, per dozen,	20	25
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes, per pound:		
Winter crook neck,	1 00	1 50
Autumnal Marrow, per lb.	1 00	1 50
Canada crook neck,	2 00	—
Fruits.		
Apples, dessert, new:		
Common, per barrel,	1 50	2 00
Common, per bushel,	75	1 00
Porters, per bushel,	2 00	—
N. York pippins, pr bar'l	3 00	—
N. York pippins, pr bush.	1 50	—
Pears:		
Seckel, per half peck,	75	—
Long Green, per doz.	37½	50
Urbaniste, per doz.	37½	50
Heathcot, per doz.	37½	50
Baking, per bush.	2 00	—
Melons, each:		
Watermelons,	25	50
Cantelopes,	25	37½
Minorcas,	12	17
Grapes, per pound:		
Black Hamburgh	50	—
White sweetwater:	25	37
Isabella,	12½	—
Wild Grapes, per bushel,	1 00	1 25
Berberries, per bushel,	75	1 00
Cranberries, per bushel,	1 50	2 00
Peaches:		
Extra, per dozen,	50	75
Ordinary, per half peck,	50	—
Cucumbers, per doz.	6	—
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	—
Pine-apples, each,	12½	25
Cocoanuts, each,	5	6
Almonds, (sweet,) per pound,	12½	—
Shaddocks, each,	25	—

Remarks.—Since our last report, there has been a continuance of fine weather, which has been highly favorable to the growth and perfection of crops of all kinds. There has been a sufficiency of rain to forward the turnip crop, though there has been only one or two moderate showers: the month may be said to have been, thus far, as pleasant and favorable to the farmer, as is often experienced.

As the period approaches for the full maturity of the Potato crop, there continues to be greater expectation of an immense product over

the last year, and more than an average of the most favorable of the last four or five years. There will be an astonishing amount raised in this state. From Maine there have, as yet, but few been received: but large quantities are soon expected, which will undoubtedly reduce prices; Sweet Potatoes are moderately abundant. Turnips are plentiful and good. Onions remain about the same, with a fair supply. Beets and Carrots now come to hand in quantities: no Parsnips have been yet received. The past week or two no Radishes could be had. Cabbages are heading finely, and such as have been brought have been very large and fine: Red Dutch have not come in till the last week. Good Cauliflowers are scarce; Brocolis are heavy, large, and of beautiful appearance. Peas are all gone. Sieva Beans are plentiful, but Limas are scarce. Tomatoes, from the fine weather, are brought in in quantities. Corn is yet brought in of good quality. Celery is tolerably abundant for the earliness of the season, and there is the prospect of a good supply of excellent quality; the Bailey's Giant White and Red is much sought after, and is considered very superior for the table. Peppers are plentiful and cheap. Cucumbers, for pickling, are higher and but few to be had. Of squashes there is an increase of the crop, even over the great product of the warm and dry summer of 1838: and prices of all kinds have fell down to our quotations, at which autumnal marrows of the first quality may be had. The Pumpkin crop is also great.

In fruit there is some change since our last. Apples of good quality are scarce, and the supply is quite limited; indeed, there are few of what may be termed superior; New York Pippins are received from New York, and are readily sold at our quotations; Porters are scarce. Good Pears, are very scarce; this is, in some slight degree, owing to the destruction of the fruit by the storm and wind the latter part of August, which blew off a great deal of fruit; the sorts which we have named are about all that are to be had. Plums all gone. Some Melons are yet in market, but those of good quality command good prices. Grapes are abundant and lower; good ripe Isabellas are now brought in. Berberries plentiful. Quinces have come to hand this week, and there is a good crop. Peaches, of the growth of the vicinity, are now received: some extra fine ones command our highest prices. Oranges and Lemons remain the same. There are not any Walnuts or Chestnuts to be had.—*Yours, M. T., Boston, Sept. 29th,* 1839.

HORTICULTURAL MEMORANDA

FOR OCTOBER.

FRUIT DEPARTMENT.

Grape Vines, in the green-house or grapery, will, by this time, have had nearly or quite all their fruit cut. The leaves will gradually begin to fall, and, as they do so, they should be gathered up and removed;

it is often a good plan to assist the leaves in their falling, by taking a broom, and, drawing it upwards, gently, take off all the leaves which may be ready to fall. The lower laterals may now be trimmed out; as the wood ripens, the whole may be cut away. Give an abundance of air to ripen the wood.

Strawberry beds, made in August and September, should be kept clear of weeds, and hoed if the ground becomes hard; cut away all runners if the vines attempt to make any. Old beds should also be kept free from grass and weeds, and all superfluous runners cut off. Plants in pots, for forcing, should be placed in a frame.

Raspberries, *Currants*, *&c.* may be removed the latter part of this month with safety.

Peach stones, *plum stones*, and other fruit tree seeds, should be sown this month, or early next.

Fruit trees, of all kinds, may be safely removed this month, and when there is much planting to do, it will be better to begin now than to wait until spring.

FLOWER DEPARTMENT.

Dahlias.—It is probable that the dahlias will be killed by frost in the vicinity of Boston by the 10th or 15th of October, if not before. When, however, any danger of heavy frost is apprehended, it is well to earth over the roots about three or four inches in thickness. The roots may be taken up any dry day after frost. Place the roots in the cellar or green-house.

Gladiolus, *Tiger flowers*, *Amaryllises*, and similar tender bulbs, should be taken up before hard frost.

Pæonies may be transplanted now with safety.

Tulips and Hyacinths.—Where there are large quantities to plant, it is well enough to begin the latter part of this month.

Verbenas, layered into pots, should now be removed to a frame, or into the green-house, or the parlor.

Chrysanthemums, in pots, should be protected from frost.

Carnation layers should be protected in frames.

Pansies, grown from seeds sown late, should be kept clear of weeds, and be protected from hard frosts by throwing over leaves or hay.

Annual Seeds, such as rocket larkspurs, chryseis, coreopsis, Clarkias, &c. should now be sown in beds.

Petunias, wanted for preserving through the winter, should be taken up into pots; select the smallest plants.

Stocks, in pots, should be protected in a frame.

Rose cuttings, put in in August, may now be potted off.

Geraniums should be repotted, if they require it when put into the house.

Oxalis cernua and versicolor.—The roots of these pretty species should be potted.

Sparaxis, *Ixias*, *&c.*—These bulbs should be repotted this month.

Mignonette, in pots or frames, should now be carefully and sparingly watered.

Camellias will need careful watering; keep them always moist, but not wet; repot all that need it when taken into the house, and give the plants a good syringing to wash the foliage.

Ericas and Epacrises will need attention; repot if the plants need it. See another page in this number for directions.

All green-house plants turned out into the border, or plunged in pots, should now be taken up ready for housing.

Herbaceous plants may be removed now with safety.

THE MAGAZINE

OF

HORTICULTURE.

NOVEMBER, 1839.

ORIGINAL COMMUNICATIONS.

ART. I. *Notices of Gardens and Horticulture, in Salem, Mass.* By the EDITOR.

WE have had in view, for a long period, some notice of the many gardens which exist in this city; but, not having been able to make such full remarks as we desired to, we have, from time to time, put off the subject until the present, when an opportunity being offered, we availed ourselves of a leisure day, and the invitation of a friend, to inspect more carefully the improvements—which a somewhat advanced state of horticulture have suggested—now being made in the neighborhood.

There are few towns or cities, with the same number of inhabitants, which can boast of so large a proportion of fine gardens, and particularly of garden structures, for the purpose of forcing different kinds of fruit and green-house plants, as the city of Salem. Graperies abound, both in the city and its immediate neighborhood; and though the structures have, many of them, been recently erected, and the vines but lately planted, still we found many very handsome specimens of grapes already produced. In a few years immense quantities of this delicious fruit must be grown, if we might form any opinion from the large number of vines now cultivated.

The Pomological Garden of Mr. R. Manning, whose labors have been so zealously and assiduously devoted to the introduc-

tion of new fruits, is situated in North Salem, and is well known to all amateurs of fruit. His knowledge of the various kinds is undoubtedly more extensive and correct than that of any other gentleman in the country; and he is now doing individually and without reward, for our nomenclature of fruits, what Mr. Thompson, the well known pomologist, has undertaken to accomplish, aided by, and under the patronage of, the London Horticultural Society, in Great Britain. Mr. Manning is wholly devoted to his subject, and seems to have only one thing at heart—the correction of the immense number of names attached to our fruits, and the reduction of the innumerable synonymes, which abound in the catalogues, and which render them only a confused mass of names, affording no guide whatever to cultivators, who are desirous of selecting a number of fruits for planting, but, on the contrary, rendering that duty one of perplexity and labor.

One of the oldest gardens in the county is also situated here. We refer to the well known residence of E. H. Derby, Esq., a gentleman long and favorably known to the agricultural community for the interest which he has taken in matters relating to agricultural improvement. The Essex Agricultural Society, whose labors have been among the most useful of our county societies, owes much of its importance to the assistance of Mr. Derby, who has, for upwards of thirty years, devoted a great deal of time and expense to the introduction of improved breeds of stock—superior kinds of grain—and to agricultural pursuits in general.

Horticultural improvement has been rapid within three or four years; excepting Mr. Derby's, there was not, we believe, a few years ago, but one or two green-houses in the city. The taste, however, for flowers and fruits is rapidly spreading, and, within the past year, considerable has been attempted in the floricultural department. The dahlia was first cultivated as extensively and as successfully here, by the Messrs. Putnams, as any where in New England; and, latterly, Mr. Cabot, an amateur cultivator, has grown one of the finest collections of tulips in the country. On the whole, the efforts of our Salem friends may be viewed as eminently entitling them to a high rank in the scale of horticulture. Wealth and leisure are not wanting, and a general taste is only to be diffused to enable them to stand upon an equal footing with any other city. The Essex County Natural History Society, whose journal has been reviewed in our pages, has, by exhibitions of flowers, in connection with their cabinet of minerals, birds, &c. contributed considerably to diffuse a love for plants.

Elfin Glen, North Salem, residence of P. Dodge, Esq.—Sept. 19th. Two years since, Mr. Dodge resided at Woodside, a beautiful farm in Lynn, containing upwards of a hundred acres; this he had carried on for some time, and a great portion of the land was under high tillage. With a great deal of zeal in the cause of agriculture, Mr. Dodge has been continually adding to his farm, and enriching it in every possible manner, hoping to render it one of the finest in the county, until one of those circumstances occurred, over which one has no control, that completely put a stop to all farther improvement. The Eastern rail-road had been some time projected—the surveys completed, and preparations made to grade it throughout. Alas! the route selected ran through Mr. Dodge's farm, dividing it in two equal portions, and wholly destroying its beauty—its retired character—and its value for the purposes for which he intended it. He resolved at once to give up farming so extensively, to remove from the place, and immediately purchased the spot where he now resides, which is one of the prettiest in the vicinity of the city.

North Salem is but a short distance from the city proper; laying just across the river, any part of it may be reached in twenty minutes' walk. Bordering the river the land is rather flat, but receding, it is gently undulating, and well adapted for villa gardens. Its proximity to the business part of the city, and the usual quiet and retirement of the place, must render it a desirable spot for those who are anxious to get away from the turmoil and confusion of the city, and breathe the purer air of the country.

Mr. Dodge's grounds contain upwards of six acres, in two pieces; three acres laying on one side of Dearborn street, and three on the other, but each complete in itself, and having no connection. The dwelling is a neat and pretty cottage, with the out-buildings to the east: the garden is bounded on one side by the street, and on the other by the adjoining land; the North river washes the remaining boundary, as it extends out in a circular manner, from the most eastern to the extreme southern part. From the cottage, and indeed most parts of the grounds, the views are delightful: the city lies full in view; to the east the busy town of Beverly catches the eye, while a verdant country opens to the north; the river, laving the borders of the grounds, and often bearing upon its waters some freighted bark, is always a cheerful object; while a long line of rail-road, opening from the great tunnel, running under the city, skirts the shore on the opposite side, adding, when its trains of cars are set in motion, to the liveliness

of the scene. It is just such a situation as would be chosen, nine times in ten, and yet few, very few, such places are to be found in the vicinity of any of our cities.

The garden can scarcely be said to have yet been wholly completed: in the short space of two years there has been a great deal accomplished: fruit trees have been planted, hedges put down, and ornamental trees set out; a green-house, upwards of eighty feet long, erected, and a tolerable crop of grapes are now growing. The cottage stands near the road, and is entered from the west front; on the south end is a piazza; the drawing-room opens into this, and thence into the garden to an open space, answering somewhat the purpose of a terrace, neatly gravelled; a walk from thence conducts directly, in a straight line, nearly to the edge of the river, where it terminates in a rustic arch and vase on the lawn; on each side of the walk there is turf, with circles of flowers at the distance of ten or twelve feet; these are each backed by a line of buckthorn hedges, with a view to screen both the fruit garden on the east, and the vegetable garden on the west, from sight. As much as we dislike criticism in such a case as this, we must admit that this has too set an appearance for a garden in the modern style; our ideas, in regard to picturesque gardening, or, rather, what may be called the gardenesque style, are, perhaps, somewhat known, and some of our readers might think it singular for us not at once to disapprove of such taste. We have suggested to Mr. Dodge what we consider a great improvement, and have advised the removal of at least one of the hedges, and other alterations, which we think would add greatly to the beauty of the grounds. At the time the hedges were planted, Mr. Dodge had scarcely matured his plan. We shall undoubtedly, at another time, have occasion to notice all the improvements which will be made.

Two circles of flowers, in front of the cottage, were, during all the summer, up to the time of the destructive storm, (the last of August,) surrounded with basket work in the style of our drawing at p. 180, and they attracted much attention, and were deservedly admired; after the storm the flowers were so bruised and beaten, that it was found necessary to remove them. In front of the cottage, and extending to the limits of the garden, on the west, ornamental shrubs and forest trees are thickly planted, and are making a rapid and healthy growth; in a few years they will form a dense and shady grove. The green-house on the east side separates the garden from the outbuildings in the rear. In front of the green-house is one of the choicest collections of fruit, particularly of pears, to be

found in our amateur gardens, just coming into bearing. Part of the spare ground between the fruit trees was planted with Rohan potatoes, the yield from which, by the appearance of the vines, would be very large. Of the quality of this potato, for eating, there seems now to be no longer any doubt; it is unhesitatingly pronounced, by good judges, as second to no other variety. Mr. Dodge is one among the number of our friends who have tried them, and find this to be the result. On the edge of the river there is a rustic walk, from which numerous fine views are obtained; this conducts to a small summer-house, neatly fitted up, where a pleasant lounge may be enjoyed in a hot summer's day.

Dahlias seem to have flourished poorly; not a flower had yet expanded. The annuals, and other plants in circles on the turf, were showy and fine, particularly the verbenas and petunias. Vases, without flowers, are distributed near the cottage, and add much to the finished appearance of the grounds.

The three acres on the opposite side of the road are used as pasture land, and for farming purposes. We noticed one of the greatest crops of carrots that we have ever seen. Mr. Dodge has promised us the result of the crop.

This place we view as possessing the greatest advantages for rendering it altogether one of the most delightful villas that we have ever seen. The views are varied and extensive, the ground slopes off well for the purpose; and as the trees that have been planted are all young and may be easily removed, we hope that Mr. Dodge will make it a model of its kind, where others, desirous of furnishing themselves with a suburban garden, may find a copy just adapted to their wants, or at least procure some good ideas to assist them in the laying out of a suburban residence.

Garden of J. C. Lee, Esq.—Situated in the same street, but on the opposite side of the road, we found Mr. Lee's garden; it is upwards of six acres in extent, in the form of a parallelogram, running back to a considerable depth.

Entering from the front, the first object which struck our eye was a beautiful hedge of buckthorn, certainly as fine as any we have ever seen, now about seven years old. This hedge screens the garden from the lawn, in the rear of the cottage, running across it, parallel with the street; it is about seven feet high, two in thickness, and is completely clothed with foliage from the very base of the stems to the top of the hedge. Passing through the grounds, we found other hedges of smaller sizes, but each so well set as to eventually make as fine ones as that just noted.

The grapery is about forty feet long, and is divided in the centre by a partition, in order that part of the house may be forwarded in advance of the season. We found the vines maturing a heavy crop—rather too heavy to color well—and making good wood for next season. The Hamburgh and Sweetwater were the kinds mostly grown. We noticed about one hundred pots of strawberries prepared for forcing the ensuing spring.

Mr. Lee does not reside on the place, and it is in consequence mostly laid down to grass and fruit trees, there being few or no flowers, and but a limited quantity of vegetables. If Mr. Lee were to make his garden his summer residence, we do not doubt we should find it better filled with both fruits and flowers. It is a delightful situation for a garden.

Pomological Garden of R. Manning, Dearborn street.—Mr. Manning's garden is situated on the same street as those of Messrs. Lee and Dodge: it contains about two acres, fronting on the street one hundred feet or more, and running back some depth. It is nearly filled with fruit trees of various kinds, but more particularly with pears, of which his collection consists of upwards of three hundred sorts or names. Many of them have been grown from grafts received of Van Mons of Louvain, Thompson of the London Horticultural Society's Garden, and from other sources in England, France, and throughout this country, where there was any thing desirable to be obtained.

The severe storm of the last of August, appeared to have been very destructive in Salem and its vicinity. Mr. Manning informed us that, previous to the storm, he could count over two hundred varieties of pears in fruit; but at the time we were here, he had not more than seventy or eighty in bearing. The loss to Mr. Manning, in the market value of the fruit, was very great; but the loss of time, in ascertaining the value of several new kinds—which had never produced fruit before—in consequence of their not being brought to maturity, will be sensibly felt by amateur cultivators; another year, and perhaps two, may elapse, before some of the same sorts will bear again. The crop was exceedingly promising, and Mr. Manning had anticipated the pleasure of communicating to us, as a supplement to his previous articles on pears, (Vol. III, p. 10) some account of all those of which he had examined specimens this year. The ravages of the storm were yet to be plainly seen; here and there a large tree was shorn up which had been prostrated by the load of fruit, and the roots thrown almost out of ground; branches were torn from others, and the

leaves on many of the trees much discolored by the continued action of the wind.

We noticed the numerous pears more than any other fruits: Mr. Manning has a good stock of young trees, from among which many fine ones can now be selected, ready for planting; a great number are grafted and trained as half standards, which we prefer to standards in small gardens. Some are on quince stocks, others on pear, and one or two on the European thorn; but the latter Mr. Manning has found worthless for that purpose: an Eastern Beurré was one of the scions; but the shoots would not grow with any vigor. The quince appears to be the proper stock; and several pears which have fruited poorly on the pear, have produced fruit in great beauty on the quince. The Bonne Louise of Jersey does exceedingly well, and the specimens were handsome; the Brown Beurré also grows fair upon the quince, notwithstanding it is generally discarded from our gardens. Passing a few trees of the Fulton pear, well filled with fruit, Mr. Manning remarked that there was one peculiarity in this superior variety, which much enhanced its value: this was, that the pears, at whatever time they were picked off the tree, after they had obtained much size, would mature in a few days, so as to be almost as eatable as if they had remained on the tree, until they arrived at their full growth; every fruit blown off, after laying a day or two, becomes perfectly mellow, and ready for eating.

Many of the pears, received both from Mr. Van Mons and Mr. Thompson, are synonymous, or are kinds wrongly named; an instance of this may be seen in the Fig of Naples and the Fourcroy, each of which are alike, and neither the true fruit under which name they were received: they prove to be the Beurré Bronze, and the *true* Fig of Naples is yet to be added to our collections. The pear called the Wonder of Nature, of the London *Hort. Soc. Catalogue*, is also the Beurré Bronze. Mr. Manning has discovered many other supposed errors, and in due time, when he has fully satisfied himself that they exist, will probably give our readers the benefit of his experience.

Mr. Manning has fruited several varieties of plums this year, but there does not appear to be any thing new of particular note. Corse's Nota Bene has produced well, and Mr. Manning pronounces it to be one of the best plums we have; the trees bear well, at an early age, and the fruit is large and has a handsome appearance; we tasted some of the plums, and fully agree with Mr. Manning in his opinion of this variety. The tree is of vigorous habit, and well suited to our climate, hav-

ing been produced from seed by Mr. Corse, of Montreal. The old Red Magnum Bonum, which has been almost lost to our gardens, we saw here in fruit, the tree being an imported specimen.

It is really a gratifying treat to the lover of fruits to inspect Mr. Manning's trees, when in fruit; we only regret that we had not taken more time, and gone over the whole more thoroughly; for Mr. Manning would have pointed out to us the peculiarities and comparative value of several kinds, and such information would have been interesting to growers of fruits. But, that we may be the means of spreading before our readers every thing of importance, relative to new fruits, we have the pleasure of stating that Mr. Manning has kindly offered to give us, at a future time, any information we may deem of value to our readers. Mr. Manning has many fine trees for sale, and, as he is so scrupulously exact about the names, they may be relied upon as correct. All cultivators of fruit should visit the garden, where they will find Mr. Manning ready to communicate any information; and they who are anxious to know every thing of the fruits they raise, cannot pass an hour or two more agreeably or beneficially, than in calling upon the gentlemanly proprietor of the Pomological Garden.

Nursery of J. M. Ives.—The nursery of Mr. Ives is of recent date. It immediately adjoins Mr. Manning's, and consists of about the same quantity of ground, but is not yet so well filled with trees. The soil of both Mr. Manning's and Mr. Ives's nursery, does not appear quite strong and rich enough to grow the pear tree so vigorously, or the fruit in such beauty, as we have seen in deeper soils; but, notwithstanding, the trees are in excellent health, and if not quite as robust as in some soils, they are sufficiently so for all the purposes of trees for sale. It is much better for the future health of a tree, to remove it from an ordinary soil to a rich one, than the reverse; for in the latter case, it is sure to be attended with ill effects; on the contrary, trees in a rich soil make less fibrous roots than in a poorer one, and are, consequently, less liable to live when removed. The pear delights in a deep, rich, loamy soil, and the largest and finest fruit will be always produced in such situations. The fruits exhibited both by Mr. Ives and Mr. Manning, have been very handsome, and superior flavored, but in size have fell short of the same kinds which have been grown by other cultivators in the vicinity of Boston.

In walking through the garden, the first thing to which Mr. Ives called our attention, was several dwarf pear trees, on

quince stocks: these had been growing in pots the last winter, and bore a few pears; upon the approach of spring, the plants were turned into the ground, *out* of the pots, and, after a few weeks' rest, they commenced growing and blooming, and now had upon them some elegant specimens of fruit. The value of such trees is, that they can be taken up with impunity; the quince retains such a mass of fibrous roots, that dwarf trees may be taken up in the fall, forced to bear fruit, and set out again in the spring, and bear a second crop; they require but little care, to produce an abundance of fruit. The Michaux, a new pear, was one of these. The Brown Buerré here on a quince, and trained to a trellis, against a fence, was exceedingly fine. We also saw the true Capiaumont, which has been the cause of some discussion between Mr. Lowell and Mr. Kenrick. The Duchess d'Angouleme pears of Mr. Ives were very large and handsome. Many other varieties were in bearing. Dearborn's seedling has been superior with Mr. Ives.

In plums Mr. Ives is doing somewhat: Cruger's Seedling, a pale blue variety, he thinks well of. The Reine Claude Violet, not often found in our collections, is an excellent variety; it is much later than the Green Gage, and comes into eating when the latter is gone.

Among the many practices which Mr. Ives adopts to produce fruit early, is the *tying down* of the shoots of young trees, not yet sufficiently old to fruit, to induce them to form flower-buds: the practice, too, of inserting fruit buds of newly imported trees, and also of trees of various sorts, upon one large stem of an old but thrifty tree, in order that the variety and value of the fruit of the former may be immediately ascertained, without waiting two or three years of suspense, and for the purpose of bringing several kinds together upon one tree, is much adopted, both by Mr. Manning and Mr. Ives. Instances of this we saw on several trees. The Passe Colmar, Dearborn's Seedling, &c. were the subject of experiment, and we saw clusters of three or four pears hanging from the naked stem of old trees. The method of shield grafting, or grafting under the bark, is another mode very much practised at the pomological garden, and by Mr. Ives. Mr. Manning described to us what he considered a great improvement upon the old system, and, by repeated experiments, he had found it the most certain. Either process is as simple, and indeed plainer, than the old system of cleft grafting, and is particularly applicable to cherries and plums, which are generally increased by budding. Mr. Ives showed us a cherry tree which

had been grafted in this manner the past spring, which had made a most rapid growth: the graft was so perfectly healed over, that the place of union could not be discerned. At a future time we shall give an article on this method of grafting, with a description and engravings of the old mode, and of the improved one as practised by Mr. Manning.

The Imperial watermelon Mr. Ives has cultivated this year; but the cold summer did not seem to suit it: the melons did not acquire size or flavor; and had we not tasted this variety previously and also noticed it (p. 87,) we should not have believed it to have been the same fruit. We gave a few seeds to some of our friends, from which some fine melons were produced.

Mr. Ives is industrious and energetic in adding to his nursery all the good fruit, and intends to procure every fine variety; in doing so he will have an excellent opportunity, from his proximity to Mr. Manning's garden, to inspect the fruits, and select only those which are superior.

Residence of E. H. Derby, Esq., South Salem.—Nearly a mile from the city, on Lafayette street, the main route to Marblehead, is situated the demesne of Mr. Derby, commanding a fine view of Salem harbor and the city. Nearly forty years since, Mr. Derby commenced the formation of this garden, and made it at that period, and for a long time after, one of the best in the country; we visited it some twelve years ago, and even then it had the reputation of being far before any thing in Salem. Since that period, we have not seen it till the present year; but, as far as our recollection serves us, it has improved considerably, or, at least, it is in a much higher state of cultivation than it was at that time.

For many years, until the present, the garden has been under the management of a professional gardener: Mr. Willott was the last in the employ of Mr. Derby, but having left last winter, this year he has accomplished all his work under his own hand, aided by industrious day laborers. But, notwithstanding this, we saw nothing neglected: the walks were smooth and well rolled, the turf neatly shaven, the flower borders perfectly clean, the hedges regularly trimmed, and indeed every part of the green-houses have been kept in the most orderly manner. Mr. Derby is certainly entitled to great praise for his devotion to such pursuits at his advanced age.

The extent of the garden and pleasure ground is several acres. The garden lies to the south of the mansion, and is, we should judge, nearly a square. It is laid out with straight walks, running at right angles, with flower borders on each side

of the alleys, and the squares occupied by fruit trees; the green-house and grapery stand in the centre of the garden, and are screened on the back by a hedge. The whole range of glass was destroyed by the great hail storm of 1815, and the two wings only were rebuilt, and the old back wall, of what was the centre house, is now used as a wall for peach trees.

Some of the finest and most notable specimens in this place are the oaks grown from seeds planted in 1803, by Mr. Derby, and saved from a tree which he imported, now upwards of fifty feet high, beautifully and regularly branched. There is a fine Magnòlia tripétala, thirty feet high and well branched; and a noble tulip tree, forty feet high and upwards. A deciduous cypress, the first and only one we have ever seen, of any size, in the country, is over thirty feet high: the buckthorn hedges, too, are objects of great interest.

Mr. Derby was the first to bring the buckthorn into notice, as a most valuable plant for hedges; and the service he has rendered in doing this, would alone entitle him to the thanks of every friend of horticulture. In the centre of the garden is a small oval pond, containing gold fish: this pond is hedged round with the buckthorn, which has now been planted over thirty years! it is not over eight feet high, and is thickly set with branches and foliage from top to bottom, and perfectly impenetrable. In other parts of the grounds there are young hedges recently planted, of great beauty, but that around the pond exhibits at once, from its long standing, the value of the buckthorn over other hedge plants for our climate. Scattered over the garden are a great number of pear, apple, and other fruit trees, which, though they now show the marks of old age, produce abundant crops: here is the largest cherry tree we have ever seen, girting eighteen feet.

None of the plants were yet in the green-house: on the rafters was a large crop of grapes, rather too heavy to color well: some had already been cut. It is a fault with many grape cultivators, of cropping too heavily the first and second years of bearing. Mr. Derby has several fine old lemon and orange trees. We were shown a specimen of the *Yúcca* gloriòsa, which had been propagated from a cutting: the plant had got too tall for Mr. Derby's house, and he was necessitated either to destroy it, or head it down: he thought, to try the experiment, he would take the latter course; the stem was cut off close to the surface of the soil; the naked part was cut away, and the top of the plant put in as a cutting: it grew without any extra care, and the bottom and the top have each made beautiful plants.

We left, highly delighted with our visit; very few such old gardens exist in the country: if ever so beautiful, they are generally, especially in the vicinity of our cities, with the march of improvement, cut up and destroyed. Nearly every shrub and tree has been planted under Mr. Derby's eye, and it is a pleasure and a luxury, which does not fall to the lot of many, to walk under majestic oaks raised by their own hands, or to recline under the branches of the stately magnolia, or the beautiful tulip tree, grown up under their fostering care.

Amateur Garden of W. F. Gardener, Esq.—Mr. Gardener's grounds are also located on Lafayette street, but a short distance from the city. They comprise five or six acres of good land, which are mostly under cultivation. The house stands upon a slight eminence, and the garden, falling away in a gradual slope to the street, shows to good advantage; from the house and the garden the views are interesting, and of a varied character.

Mr. Gardener is very much devoted to horticultural pursuits, and spends a great portion of his leisure time in his garden: he manages, we believe, his whole place himself, having no professional gardener to attend either to the green-house or grapery. The garden is laid out prettily, with beds and borders of flowers, including some fine shrubs and handsome climbing plants, such as honeysuckles, &c. which are trained up to fancy shaped trellises: the whole having a beautiful appearance when we saw it, although the storm, as in other places, had done its portion of damage here.

In the green-house we found Mr. Gardener bringing forward an immense number of seedling azaleas and camellias: he has already raised, of the latter, some flowering plants, but they have not proved of sufficient beauty to be worth preserving. Of the young seedlings of last spring and the spring of 1838, Mr. Gardener has a great stock, and they seemed in excellent health, and the foliage green and vigorous. The azaleas were raised from seed last year, and there is a great mass of strong and healthy plants, showing a variety of foliage and habit. Mr. Gardener's collection of old specimens, of both camellias and azaleas, is one of the best in Salem, and contains many of the finer ones, such as Camél*lia* japónica Chándler*i*, élegans, Flòy*i*, imbricàta, flórida, &c. Chándler*i* was just opening a flower: its seems peculiar in its habit of early blooming, Mr. Gardener's plant being as much as the fifth or sixth one which we have seen early the present fall in bloom. The old plants of Azàlea *le*difòlia, hybrida, phœnícea, &c. are very large and well grown.

Mr. Gardener's grapery and green-house are both included in one range of about sixty feet in length, divided by a partition: the vines in the former have only been planted, in part, the last spring; but they were making rapid progress at this time, and will, probably, be strong enough to produce a few clusters next season. The Hamburgh is the principal variety grown, but the Zinfindal and Sweetwater are included among the kinds.

Mr. Gardener is continually increasing his plants by the addition of every thing fine, and we look forward to the period when his green-house will contain one of the choicest collections of camellias, enriched by seedlings of his own production, among which must be some of excelling beauty. Most happy are we to see amateurs devoting a portion of their time to the important object of producing seedling plants, and we hope the time is at hand, when we shall find but few who have not, by their zeal, been the means of contributing something to swell the catalogue of American productions, surpassing those of foreign growth.

Flower Garden of Mr. F. Putnam.—Having enumerated the places which we visited in North and South Salem, we come now to the gardens of the city, among which that of Mr. Putnam may be noticed as containing the most choice collection of green-house plants and select dahlias. It is only a small spot, situated in Lynde street, but is filled with plants. Mr. Putnam deals considerably in seeds and plants, and he has been the means of introducing into general cultivation many of the fine exotics which now grace the windows of the dwellings of many of the citizens.

Mr. Putnam's collection of cactuses is quite extensive, containing all the handsome and showy sorts, such as Cèreus speciosissimus, grandiflòrus, Jenkinsònii, and spléndens; Epiphyllum Ackermánii, speciòsum, truncàtum, &c. &c. He has also been one of the most successful growers of this fine tribe, and has flowered all of the above kinds in great profusion. His collection of camellias contains almost every good variety worth growing, including Landréthii and Flòyi, two American ones not surpassed by any others. The collection of geraniums is also very fine. Mr. Putnam has been successful in raising seedling cyclamens to some extent. The collection of dahlias has always been the most choice and select in the city, and some seedlings which he has raised, though now excelled by others, have been widely cultivated and much admired. In hardy herbaceous plants the collection of pæonies is perhaps not surpassed; and we believe he was the first

to bloom those new and splendid kinds, *P. Reevèsii* and *Póttsii*, in this country. No cultivator appreciates the beauties of a plant more than Mr. Putnam, and he is constantly augmenting his collection by the addition of new species or varieties worthy of general growth.

Amateur Garden of N. Silsbee, Jr. Esq., Pleasant street.—Mr. Silsbee's garden is only a limited spot, containing but little besides a grapery, a few fine fruit trees, and a collection of dahlias.

The grapery is about twenty five or thirty feet long, and of fair proportions: the vines are planted inside and are trained up the rafters. An excellent though small crop was ripening, the vines being yet young. We noticed some extra clusters of the Zinfindal. The wood for next season was strong, and ripening well. Most of the cultivators in Salem crop the young vines too heavily at first, to the injury of the future health of the plants.

Garden of J. F. Allen, Esq., Chestnut street.—This garden is confined to a small space, and is principally noticed for its graperies and peach houses. A year since, it contained only one small house for the combined purpose of a green-house and grapery, about thirty feet in length; only a few plants were kept, such as geraniums, roses, &c.; on the rafters vines are trained, and on the back wall is a large peach tree, which has produced an abundance of handsome fruit; the variety Mr. Allen calls the Royal George Clingstone. The fruit is of large size, and high colored, and is excelled but by few peaches in beauty. This tree produced about two hundred peaches the past summer.

In addition to this, Mr. Allen has put up the past summer a span-roofed grapery; the vines were planted in the spring, and have already made a good growth. Another house was in course of building for a peachery, the back of which was to join on to the end of the old grapery, to be forty feet long; it was to be completed by November. In the whole, Mr. Allen will have upwards of one hundred feet of glass, devoted to the cultivation of the grape and peach. The peaches on the back wall of the new house about to be built, were planted in the spring, in anticipation of the erection of a house, thus gaining a season in their growth. Mr. Allen devotes much time to his garden, and is very successful in the cultivation of peaches and grapes.

Garden of S. C. Phillips, Esq.—Attached to the beautiful residence of Mr. Phillips, the present mayor of the city, in Chestnut street, is a neat and beautiful garden, fronting about

fifty feet on the street. A new and highly finished grapery has been added the past summer. The back wall is built of brick, between which and the street is a garden lawn, kept in the neatest manner, the grass closely shaven, and the walks well rolled. In addition to the green-house there is a fine conservatory, attached to the house, and opened into from the drawing room and library, on the south side: it is built with a blank roof, and was intended mostly for the growth of hard wooded and evergreen plants, such as lemons, oranges, camellias, azaleas, rhododendrons, &c. &c., of which Mr. Phillips has already some fine specimens.

The garden contains a good assortment of annual and perennial flowers, and a choice collection of the newest dahlias; but these appeared to share the fate of others in the vicinity, very few flowers having opened. There are some good fruit trees growing in the borders. We hope, ere long, to see Mr. Phillips enriching his conservatory with a choice collection of camellias and other plants, and eventually to enlarge it so as to contain twice the number of plants which it will at present. The situation is one of the most pleasant in the street.

Mr. Deane's Garden, in Essex street, is one of the oldest in the city, and is well known for the excellent crops of grapes which have been raised by the owner for many years. The garden contains less than half an acre, and is generally devoted to fruit trees; there being but a few ornamental shrubs and plants. Mr. Deane was confined to the house by illness, and we regret that we had not the pleasure of seeing him.

The grapery is about fifty feet long, and is probably one of the oldest structures in Salem. We called upon Mr. Deane, ten or twelve years since, and at that time we thought the crop of grapes to be remarkable, both for quantity and quality, and such as would have been highly creditable to a professional grape cultivator. Since then the vines have, we believe, annually produced abundantly, but, notwithstanding the crop which we saw on our present visit was fully equal, if not superior, to the one of 1828. Mr. Deane must give his vines a great deal of attention, to reap such good results. The stems of the vines are now five or six inches in circumference. The border is raised above the ground, which is generally supposed to be rather prejudicial, as it subjects the roots to greater extremes of drought and wet, than if sunk on a level with the surface of the garden.

Garden of J. S. Cabot, Esq.—Few amateurs have done more to introduce fine plants than Mr. Cabot: his attention has been, for a long time, more particularly directed to the increase

of our hardy perennials, a tribe of more general value than any other. While some have lavished great sums upon the introduction of camellias and a few particular classes of plants,—whose prices are, and will be, for a long time, so high as to exclude them from general growth,—Mr. Cabot has been constantly augmenting his collection of hardy plants, both by importations from abroad and purchases of every thing new at home, and his garden now contains as great an assortment of hardy ornamental plants as is to be found in the country. He has a great number of phloxes, campanulas, veronicas, larkspurs, &c., all producing a succession of flowers from April to November.

Mr. Cabot's collection of tulips is said to be very splendid, and superior to any other in the country. We have never had the pleasure of seeing them; but from the sources from whence they were procured, and the high cost of the roots, we should judge that they are not surpassed. Part of the collection was purchased of Mr. Groom, the celebrated English fancier, and the other formerly belonged to Mr. Neal, a celebrated tulip grower of New York. We shall endeavor to see them the ensuing spring, when in bloom, and notice them more particularly. Mr. Cabot also cultivates a choice collection of dahlias.

The storm, which we have before alluded to, made such sad havoc with the herbaceous plants, that we found but few kinds in bloom; they were so broken down, that they had not recovered from the injury; some ten or twelve kinds of phloxes were flowering well, and among them that snowy-hued one, the decussàta álba, the finest white of the whole tribe. It makes a great show in the border, and contributes to set off the garden in September more than any plant, the dahlia excepted. Several others were very showy, especially *P.* cordàta, americàna, and Wheelèr*ii*. Mr. Cabot is still adding to his collection; and, as he has possessed himself of every desirable plant in the country, it is his intention to procure some additional kinds from England.

Besides the gardens which we have here noticed, there are several others which contain good collections of plants and fruits; but we had not the time to inspect them. We shall annually notice the progression of horticulture in this city, and record all the additional improvements which may be made in those places which we have here enumerated, as well as notice all new gardens which may be laid out.

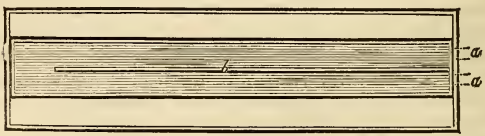
Art. II. *On habits incident to varieties.* By an Amateur.

Artificial and natural cross impregnation present to the horticulturalist two constant phenomena of curious change. By the former, he is enabled to produce whatever form of floral character his own taste may dictate. The latter is taking place every day, under his own eye. It is, however, by no means the least apparent of the habits so peculiar to plants, in their sportiveness, that they depart from the standard of nature by each successive change. Multiplex flowers become more multiplex, and variety in colors becomes more varied. But does a variety ever return to the original type? We suspect seldom. The veritable St. Michael pear has never been reproduced, though myriads of seedlings have been raised from it. The famous old High Top Sweeting, of Plymouth County, (perhaps a companion of the pilgrims, and cherished by them,) can now be found in hundreds of varieties, and scarcely any two alike, or equally good. The experiments of Van Mons seem likely to set this matter at rest; yet we ought not to be satisfied in this singular seeming fact, until the experiment has been again and again reiterated. We have at this moment blooming, in our casement, a somewhat new form of that fine, plum-colored variety of *Petùnia* known as *P.* Blóck*ii*, and introduced among us three years since. From its close approximation to *Petùnia* nyctaginiflòra, we were led to suppose it was that, until, by close examination, and reference to our seeds, we discovered it a variety merely. The peculiar beauty of its bluish purple corol is entirely lost, and, in its place, succeeds a pure white. The texture is, however, more delicate, with small greenish veins, and a lingering trace of the blue just above the purplish reticulation of its throat. As yet, the plant has produced no seed, but should it do so, further experiments in the results of the next generation would be interesting; to ascertain whether it would return to the original type of the variety, or lose itself in further approximation to the original species. As it now presents itself, it appears to be the result of a natural cross impregnation of *P.* nyctaginiflòra with *P. var.* Blóck*ii*, the parent, from which the seed was gathered, being the latter. An Amateur.

ART. III. *Description of an Improved Method of applying bottom heat to beds for forcing or propagating, or to beds in stoves for Tropical Plants.* By the EDITOR.

IN one of our preceding volumes (III, p. 23) we described a new method of applying bottom heat to pits or beds, for forcing, propagating, and other purposes, where it was required. The description was accompanied with engravings, illustrative of the system. At that time several pits were constructed after the plan, which seemed to possess great advantages; but there appears to have been one objection to it which was not foreseen, and which rendered the method very prejudicial to the health of the plants. The command of heat has been more than sufficient, and the expense of keeping up a high temperature very little compared with other modes: the objection did not arise from any want of heat, or of its mode of application; but from the excess of steam which was continually thrown off from the cistern of water, saturating the soil and imparting to it a deleterious quality by the secretion of saltpetre. We had a pit built upon the plan, and after the experience of one season, during which period we carefully watched its operations, with a view to test its value, we saw at once that some alteration must be made to prevent the constant ascent of steam through the soil above, or the system would not answer the purposes for which it was intended. During the summer of 1837 this was attempted in the following manner: by referring to the plates, (*figs.* 14 *and* 15,) which we again present, to explain

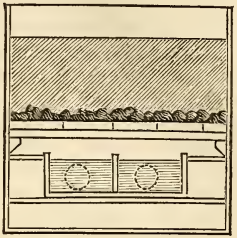
14



the system, it will be seen that it was recommended to lay a course of bricks flatwise over the planks, laid to support the earth, in order that the heat from the water might easily ascend through the crevices. These bricks were wholly removed, and their place supplied with thin square slate, which were laid together in cement, and the earth again put on for trial. In this way the bed was put in operation, and continued through the following winter, with very little better success than during the pre-

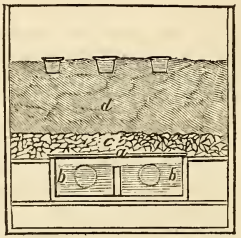
vious one: the steam still found its way through the pores of the tiles in such quantities, as to partially destroy the life of the soil in the pit, as well as that in the pots standing upon it.

15



In the summer of 1838, not finding our plan succeed, another attempt was made to remedy the defect, and at last with complete success: the whole of the earth, bricks, slates and planks were taken away, and nothing remained but the cistern and frame of the pit. A sheet of zinc (*fig.* 16, *a*) was now procured and nailed down tight, on to both sides and the ends of the cistern, as in the annexed plan, (*b*,*b*,) leaving no cavity over the cistern whatever; white lead was applied between the zinc and the cistern, in order to prevent any crevices being left for the steam to escape. On the zinc three or four inches of broken bricks (*c*) were laid for drainage, and the soil (*d*) applied above: the effect of this operation has been to secure one of the best modes of heating small beds, so far as our experience goes, that has yet been described. Not the least steam whatever can pass through the zinc, while a greater quantity of heat ascends than before, as it now communicates directly with the soil; there being no cavity by which external air can be admitted to the cistern as before.

16



We have been highly pleased with the manner in which our bed has operated; a temperature of 75° to 80° is kept up at a slight expense, and the soil is perfectly sweet and fresh. We have used ours for various purposes, such as striking cuttings of all sorts of plants which require heat, for plunging in tropical plants, and indeed for all the objects for which bottom heat need be applied; and, in every instance, with great success. Previous to the application of the zinc to the cistern, so much moisture ascended through the soil, that it was almost impossible to keep cuttings from damping off: on the contrary, it is so dry now, as to occasionally require the cuttings to be syringed.

The only alteration we have made in the pit has been in the substitution of the zinc plate: the same care in filling it up with the soil should be preserved as was recommended for the old mode. Of the excellence of a pit erected in the manner we have now described, there is no doubt; and we would strongly recommend this system to those who are in want of a small bed with bottom heat.

ART. IV. *Observations upon some supposed defects in the Cultivation of the Peach and Nectarine on brick walls, in the latitude of Boston.* By J. W. RUSSELL.

HAVING noticed, the past season, a general failure of the peach and nectarine crops, on trellised walls, in the open air, and from the inquiry made as to the cause, &c., I was informed that the trees, in the spring, were thickly covered with blossoms, and that the fruit set well; but after it had grown to some size, all or the greater part dropped off: this was attributed to the cold weather in June.

By examining one of those trellises, I found that it projected from the wall seven or eight inches: this has occurred to me, on a subsequent consideration, to be by far too much space between the wall and trellis, for the well doing of the fruit; all the distance that I humbly conceive to be really necessary is not more than two inches from the inside of the trellis to the wall. The only reasons that can well be supported in favor of trellis work for this purpose, in the open air, are, that it facilitates the labor of training and dressing the trees, and preserves the wall from the injury that would necessarily take place by annually nailing the trees to its surface.

I observed, last summer, some old trees of both peaches and nectarines, that have been trained to a brick wall upwards of twenty-five or thirty years, heavily laden with fruit, in the gardens of the late Hon. Theodore Lyman, of Waltham. The trees here more particularly took my attention, because of the scarcity of the crops at other places, where the trees are trained to trellises on similar aspects. After some consideration I ultimately came to this conclusion, however erroneous it may be, that the draft or current of cold damp air, traversing be-

tween the wall and trellis, in the spring of the year, may be the cause, in a great measure, of the dropping off of the fruit. But by placing the trellis as before advised, only two inches from the wall, the cold chilly air that is supposed to suck through the cavity left between the wall and trellis, would be completely counteracted; for when the trees are densely covered with foliage, which they will be by the time the fruit is as large as a nutmeg, the space would be entirely closed up with it by coming in contact with the wall, and therefore completely remedy the evil, if it be not an imaginary one. Finally, whatever method may be taken in order to be successful in the fruiting of peaches and nectarines in the open air, on brick walls, I firmly believe that the nearer the fruit comes in contact with the wall, the better.

Yours, &c. J. W. Russell.

Mount Auburn Cemetery, Cambridge, Oct. 18, 1839.

Mr. Russell's remarks are worthy of attention. It has been generally asserted that in this country, where the peach and the nectarine both ripen their crops to perfection as standards, that there was no necessity for erecting walls for their production; that it was wholly unnecessary and a useless expense, without any real benefit. Perhaps in the Middle States, where they are not subject to late frosts, this may be true; but in the latitude of Boston it will not apply. The peach has indeed, from the severity of our late winters, ceased to bear scarcely any fruit, and the trees appear to be rapidly decaying, so much so that their cultivation is in a degree given up as standards. In the larger and better gardens, however, particularly those attached to many of our first-rate residences, the trees are grown to some extent on walls, and their cultivation, in this way, is extending; and it is a question of some importance, in what manner they should be trained—whether immediately on the wall—to a trellis at six or eight inches distant, or at the space of two inches. We have not had much experience ourselves; yet it seems to us quite useless to plant the trees against a wall, if the branches are to be carried off to such a distance from it as to place them out of the reach of the warmth which the wall is intended to diffuse, by radiation, especially during the cool nights of spring. We may be in error; but we hope the observations of Mr. Russell, which appear to be founded in truth, will call forth the opinions of practical men, that the subject may be discussed to the benefit of all cultivators.—*Ed.*

ART. V. *Remarks on the flower of Opúntia vulgàris.* By JOHN LEWIS RUSSELL, Prof. Bot. &c. to the Mass. Hort. Soc. &c. &c.

DURING the past summer, having an opportunity of examining minutely the inflorescence of this fine but common species of Cactus, we were agreeably entertained by an exhibition of its economy, much of which was new to us. One would scarcely suppose that a flower so well known, and of so little general interest, in these days of improvement in the style and taste of the Cáctæ, could have possessed those merits which claimed the admiration of, and imparted instruction to, the beholder. The "prickly pear," like the houseleek, have now become despised and neglected plants; although once they were the especial subjects of the good wife's solicitude; the former for its blossoms, the latter for healing virtues. But, as fortune would, we met with two noble specimens of these somewhat antique plants, both in inflorescence, and derived no little satisfaction from such instances of primitive taste amid the innovations of fashion and refinement!

To grow the *O*púntia vulgàris in perfection, a most sunny and exposed situation is required. When this is regarded, the beauty of the flowers is striking and effective in large and old plants. The sulphur-colored petals, so pale and weak in the green-house, become deeper and richer, and border on golden satin. The flat thick stems (improperly called leaves) stand up in goodly and valiant array, and point their stout spines in noble daring and energy.

Our first observation was confined to the stamens, which we discovered to be sensitive. The flower was preserved for two days in a glass of water, and retained its beauty and perfection. On touching the filaments from behind, they slowly advanced towards the stigma; and by pressing them from before, the same effect was produced; but in this case the elasticity was most perceptible. In the space of fifteen minutes they resumed their original station, at which time the experiment may be repeated. This we did three successive times, with the same result, the flower thus exhibiting a degree of sensitiveness far more curious than that of the berberry or of the kalmia.

The style of the pistillum was evidently hollow throughout, its size affording amost facile experiment.

The anthers dehisce on the edges, as is most readily seen by the application of water to them, by which the pollen is scattered with great force. The pollen itself appears somewhat globular when submitted to a magnifier in a good microscope, and under this instrument, should it be touched with a drop of water, each grain of pollen separates and bursts, emitting the more subtile fecundating principle; a phenomenon observed, for the first time, by Needham, and subsequently proved by others. This more subtile dust, too minute for common observation, in turn swells and becomes much enlarged. At the base of the style may be seen the cuplike depression, which answers to the nectary. The petals of the flower exhibited a beautiful display of venation. These veins were however very unequal in size and appearance. The spiral vessels, so common in petals, were enclosed in very singular ducts, they being curiously jointed and moniliform.

Since we discovered the irritability of the stamens of *Opúntia vulgàris*, that of the florets of the Plectocéphalus americànus (*Centaurèa* americàna) fell under our notice. By passing the hand or fingers across the disk of this flower, a slow motion may be seen to take place, each fertile floret moving towards the centre. This is probably referrible to the same cause as is the other above mentioned, viz. the elasticity of the elongated filaments of the stamens, which being enclosed in the narrow tubular floret, causes the entire group to act simultaneously.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Growth of Vegetables in hot springs.—The lake of Solfatara, situated in the Campagna, between Rome and Tivoli, affords a curious instance of the adaptation of plants to the circumstances in which they may occur. "The high temperature of this water, and the quantity of carbonic acid that it contains, render it peculiarly fitted to afford a nourishment to vegetable life: the banks of travertine, (calcareous deposit,) are every where covered with reeds, lichens, confervæ, and various kinds of aquatic vegetables. So rapid is the vegetation, owing to the decomposition of the carbonic acid, that even in winter, masses of confervæ and lichens, mixed with deposited travertine, are constantly detached by the currents of water, from the bank, and float down the stream, which, being a considerable river, is never

without many of these small islands on its surface. They are sometimes only a few inches in size, and composed merely of dark green confervæ, or purple and yellow lichens; but occasionally are several feet in diameter, and contain seeds and various species of water plants, which are usually more or less encrusted with marble. Vegetables in such a temperature, and every where surrounded by food, are produced with wonderful rapidity. How marvellous are those laws, by which the humblest types of organic existence are preserved, though born amidst the sources of their destruction, and by which a species of immortality is given to generations, floating, as it were, like evanescent bubbles on a stream raised from the deepest caverns of the earth, and instantly losing what may be called its spirit, in the atmosphere!" (*Davy's Last Days of a Philosopher.*)

New coloring Plant.—In the steppes of southern Russia there is found a sort of crustaceous plant, called by Linnæus *Peganum harmala;* it sometimes covers the vast plains of Tartary, and becomes an invincible obstacle to the cultivation of the land. Cattle will not eat it; they dislike the odor of it exceedingly. This plant, hitherto useless or even injurious, has all at once become of great importance, from the property it possesses of giving an excellent and very durable red. Mr. Gœbel, the professor of chemistry at the University of Derpat, has discovered an easy means of extracting, from the seeds of this plant, a coloring matter, which communicates a lasting dye equally to silk, wool, cotton or flax. Every shade can be given, from a tender rose-tint to the deepest crimson, without any of the colors being liable to fade from exposure to the air. Fifteen grammes of the extracted matter are sufficient to dye in crimson three metres of stuff. This plant also grows naturally in Provence. (*Hort. Jour.*)

Art. II. *Foreign Notices.*

ENGLAND.

Growing Plants in glass cases.—A long paper has been lately read before the Botanical Society of Edinburgh, by Mr. D. Ellis, and subsequently published in the *Gardener's Magazine*, on the growth of plants in glass cases, in the manner first discovered by N. G. Ward, Esq. of London, and described in our first volume, p. 24. Mr. Ellis had some fancy boxes made in a handsome form, of the best mahogany, and glazed with the clearest crown glass. The design of the boxes was drawn by Mr. McNab, of the Botanic Garden. The plants were placed in the box in the spring of 1838, and in 1839, less than a year afterwards, the measure of the plants was taken, and they had greatly increased in growth, varying from one eighth to double their size when planted in the box; some had flowered, and others were showing flower-buds. During the whole period the box stood in the window, where it received all the light and the morning sun, and the box was not opened but once, nor any water given during the year. The experiment has succeeded admirably, and by this method plants

may be grown in the most smoky cities of England with great facility. We should be glad to see the experiment tried in the dry temperature of our rooms heated with anthracite coal. We have no doubt but the plants would flourish much better than they do now in the open room; and, as the boxes may be made so as to be as ornamental as any of the other furniture of the room, they can be introduced without forming disagreeable objects; indeed, on the contrary, they would, we think, be objects of the greatest curiosity. The plants which seemed to flourish best with Mr. Ellis were the Echinocactus, three species, Sarracènia purpùrea, Cypripèdium, Aloe geminiflòra, Lycopòdium stoloníferum, Chamæ'rops hùmilis, Dionæ'a muscípula. About thirty species were grown in the box, which was three feet long by one and a half in width. The article by Mr. Ellis, detailing his success, is replete with valuable information, and we shall endeavor to extract some portions of it hereafter.—*Ed.*

New Flower Hall at the Stafford Gardens.—A splendid new Flower Hall, for the monthly exhibitions of the Royal Society of Horticulture, has lately been erected on their new grounds at Chiswick. The building stands north and south, and the light is admitted from a curvilinear roof. The tables for the flowers are on each side, and run the whole length. The room is one hundred feet long, and when each of the tables are filled, the show must be very splendid. The London Horticultural Society have always held their shows in tents erected for the purpose, but a hall like the one here described must be vastly superior, both as respects the comfort of the visitors and the light admitted from above. The flowers, too, can be shown with a much better effect, as the hall can be rendered very cold, by closing it the day previous to the exhibition, and by syringing.

The ground selected for the garden comprises an acre, and the following remarks upon the manner in which it should be laid out, different from what it now is, are copied from the *Gardener's Magazine*, and were called forth by an inspection of the garden by the editor: they are worthy of being read by every one desirous of acquiring a knowledge of the principles which should always be pursued in laying out such a spot of ground.—*Ed.*

"Though we have found only one fault with the Flower Hall itself, we have nothing but faults to find with the manner in which the ground round it is laid out. The general outline of the plot is a parallelogram, lying in the direction of north and south, containing, perhaps, an acre, and the surface is flat, enclosed with a brick wall, and without any prospect. The Flower Hall itself is a parallelogram, and it is very properly placed in the middle of the plot. Now the question is, how is the ground between this building and the boundary wall to be disposed of? In our opinion the Flower Hall ought to have been placed on a platform of turf, raised at least one step above the general surface of the ground; and between this platform and the boundary wall there should have been, first, such a breadth of lawn as the space would afford; then, all round, a straight broad gravel walk parallel to the Flower Hall and the boundary; and, lastly, a border, chiefly of evergreen shrubs, to disguise or conceal the brick wall. This, in our opinion, is all that was necessary, and all that can be made of such a limited space, consistently with unity of design and expression. But, instead of this, there is no platform raised for the Flower Hall. The walk between it and the boundary wall is of the serpentine kind, and there is a curvilinear border of shrubs to disguise the boundary. This taste we consider to be at variance with the ob-

vious principle, that the lines and forms immediately surrounding any building should partake of the lines and forms of that building: and t is, we are certain, contrary to the principles of utility; for what can be more inconvenient for persons visiting this Flower Hall, who will naturally walk round it in parties to talk of the exhibition, than to have their attention distracted from what they have seen, by the necessity of guiding their steps along the windings of a walk, however broad it may be? It is true, that the whole work has been got up in a hurry, and this is an excuse for errors in execution; but it is no excuse whatever for the errors in the design, which, we contend, are here displayed to a degree which, considering the well-known taste of the architect (Mr. Hakewill,) and the liberal expenditure of the proprietor, deserves severe reprobation." (*Gard. Mag.*)

FRANCE.

Cultivation of the Mulberry Tree in France.—The importance of the cultivation of the mulberry tree, for the purpose of propagating that most profitable and industrious animal, the silk-worm, in France, has been taken under the serious consideration of the French government, the Chamber of Commerce, and the Horticultural Societies of Paris, Lyons, Orleans, Tours, Bordeaux, Montpelier, Nismes, Marseilles, Avignon, &c., and several scientific as well as commercial men have been appointed by the Minister of the Interior and Commerce, to investigate the facilities afforded both by the soil and climate, to carry this grand object into effect, so that the country may be able, in course of time, to supply a sufficient quantity for the annual consumption of its manufactures, without being obliged to import their raw material of silk from the parts of Italy, Turkey, Egypt and the East, which at present derive such immense revenues from the sale of this valuable article to the northern markets. It has been discovered that the French possessions in Algeria and Northern Africa are most propitious for the growth of the mulberry tree, and particularly for the propagation of the East India and China breeds of the silk-worm; also the island of Corsica and nearly the whole of the south and north-eastern departments of France, which hitherto have been greatly neglected in that horticultural and important branch of commerce. The numerous rail-roads that are actively being cut from one end of the kingdom to the other by enterprising speculators, by which means a speedy communication will shortly be established between all the leading commercial towns of the north as well as south, appear to have caused a complete revolution in the activity of horticulturists, and given a sudden stimulus to a science that had been nearly in a state of decline, compared with England, Spain, Portugal and Italy, but now promises to be most prosperous under the support and patronage of government and the learned societies.

A very interesting report has been presented to the *Académie des Sciences*, by M. Bain, on the industrious state of the production of silk in Touraine, which had nearly become extinct. The author states, "that for a long time the cultivation of the mulberry tree had been entirely abandoned in the hands of the peasantry, who neglected them, and many plantations were thus left to perish, or they pulled up the trees and did not re-plant others. Unfortunately within the last few years the more extensive horticulturists have only taken the subject under their notice, and the new plantations, which are

now coming to maturity, are principally the wild mulberry tree, which, although its leaves furnish excellent nourishment to the silk-worms, the crops of them are three times dearer than those of the engrafted trees. These trees would grow most abundantly in that part of the country, as it is a light and fertile soil, and they would be sheltered from the high winds to which they are exposed in the southern departments, that tear their leaves and so shatter them, that they become of no use as food for the worms. In 1837—38, it is true, that the engrafted trees were bit by the frost during that severe winter, an incident never known before; notwithstanding, however, they were enabled to procure leaves from them, and the worms that had been fed on them exclusively produced a silk of the finest quality.

Several experiments are being made on a very large scale, as the specie of the mulberry is very numerous; that which has been most planted is the *Morus latifolia*.* In September last they had already attained seven feet in height, although planted very late, and the wood was in such excellent condition, that it would resist the most severe frosts. This mode of planting the engrafted trees will be the means of greatly increasing their numbers, and enable the horticulturists to gather their leaves at the expiration of three instead of five years, which has hitherto been the time, and so deterred growers from devoting their attention to its cultivation.

The great fault in the peasants of Touraine is, that they raise their silk-worms in too confined spaces for the number they rear, so that the air has not sufficient circulation. They give them four meals a day, and change their leaves every four days. Notwithstanding this bad treatment, being favored with a mild climate, they produce nine to ten pounds to every ounce of grain. But since government has taken up the subject, the best means of propagating the silk-worm will be immediately adopted, as well as planting the best trees. (*Hort. Jour.*)

The French, English and Dutch Royal Horticultural and Floricultural Society of Paris.—This society was established, or at least formed, five years ago, by an association of nurserymen and amateurs of the science of horticulture and floriculture, under the especial patronage of their Majesties the King and Queen of the French, his Royal Highness the Duke of Orleans, the Duchess of Orleans, the Dukes de Nemours, Joinville, Aumale, and all the Princesses, his Majesty King Leopold of Belgium and his illustrious consort, the Prince of Orange, besides the leading nobility and scientific men of France, Belgium, and Holland, for the express purpose of improving and giving every encouragement to the advancement of floriculture, and the cultivation of native as well as the finest and rarest specimens of foreign plants and shrubs. To establish such a company as this, not only did it require a great outlay at first, but many difficulties to be overcome, so as to induce the leading floriculturists and amateurs throughout France, Belgium, Holland, and the whole of the continent of Europe, in fact, the four quarters of the globe, to lend their assistance in the advancement of so great an undertaking for the propagation of the beauties of nature. The greatest jealousies existed on the part of nurserymen, as well as amateurs, to allow their plants, which they had watched with the avaricious eye of the miser, spring up year after year in their secluded green and hot-houses, to become the admiration and property of the public, until they were shamed into a

[* Probably the *Morus multicaúlis*, or the Moretti mulberry.—*Ed.*]

more noble and generous feeling by his Majesty Louis Philippe, allowing the society to have cuttings and specimens from the royal gardens of the Tuilleries, Luxembourg, Neuilly, Chantilly, Versailles, Fontainbleau, Compiegne, &c. &c. The same floricultural philanthropy was imitated by King Leopold and the Prince of Orange, who most kindly permitted the members to have access to the Royal Botanical Gardens of Belgium and Holland, so as to select the specimens and seeds they might require, in completing their collections. This had the most beneficial effect for the society, as numbers who had hitherto declined a participation in so grand an object as the abolition of floricultural monopoly, became convinced of their injustice to the propagation of that science, and voluntarily became members. This difficulty conquered, honorary members and correspondents, from all parts of the world, offered their services in communicating to the society the earliest discoveries and improvements that might be made in horticulture and floriculture in the quarters where they might reside or visit. This company is composed of members of all nations without distinction, its grand object being to facilitate the production, sale, and purchase of the rarest and most choice flowers and plants that can be procured in every country, and by the encouragement offered to nurserymen and amateurs to exhibit their collections to the public, either for sale or making those exchanges with other plants, so as to propagate the different specimens as much as possible. The principle on which this association is conducted is something similar to the equitable or life annuity companies in England. Persons wishing to become members or shareholders, may purchase from one to ten shares, of one hundred to one thousand francs each. For these they are insured by the trustees or bankers of the society five per cent. interest certain on the money they may advance in the association, or, if they prefer it, in an annuity for life. The shareholders all mutually participate in the profits of the society, which, as a matter of course, must vary greatly according to the success of the plants, one season with the other, but on an average the profits upon the sales of the flowers and shrubs have varied from twenty to twenty-five per cent. for the last two years, (the season of 1837 not having been so profitable, in consequence of the very severe winter, which had a most fatal effect upon some of their choicest plants,) and so great is the encouragement given to the society by the nobility and the gay Parisian public, that they will, in all probability, become much higher. A certain sum is expended annually by the company in the purchase of plants and seeds, which become a general property. These are purchased from the exhibitors at the different shows of the company, which are open to nurserymen and amateurs of all nations, whether they be members or not of the society—they may make exchanges with them, or they are collected in foreign countries by their correspondents and agents, should they be recommended as prize specimens by experienced judges. At these shows prizes of money and gold and silver medals are publicly awarded for the most rare collections and specimens. To prevent any partiality being shown by the judges, they are selected by ballot from amateurs and the most scientific floriculturists not exhibitors.

When the company was first established they confined themselves to the purchase of a large plot of ground on the Boulevard Mont Parnasse, as an experiment. This garden was laid out in the most tasteful and scientific manner by the most experienced florists of France and Holland. Hot-houses, green-houses, and a spacious her-

barium and conservatory, were erected, on the most approved principle, with fountains. The greatest judgment was shown by the directors of the society in the purchase of collections of the finest and rarest flowers, hot-house and green-house plants and hardy shrubs, each placed in the soil and position most congenial to their natural habits. The collection of dahlias, many of them purchased from the best breeders in England, was very extensive; and the collection of tulips and roots was supplied by the first florists of Holland. The roses, carnations, piccotees, geraniums, azaleas, balsams, myrtles, polyanthuses, and the rarest foreign plants and shrubs, were displayed to the greatest advantage. This garden, in the French, English, and Dutch style, was thrown open gratis as a promenade to the public, who had the facility of making their own selection of flowers, which were cut before them, and formed into the most variegated bouquets. Every one who has visited Paris cannot but be astounded at the immense number of nosegays which adorn the saloons of the higher, as well as the middling, circles—the splendid cafés and restaurants of the Palais Royal, the Boulevards, and the numerous passages and fashionable quarters, the bazaars and confectioners' shops, *marchandes de modes*, &c. &c., so that they have the appearance of so many shows of the most delightful flowers and shrubs, for the express purpose of gratifying the eye-sight and senses with the beauties of nature, and the pleasing study of floriculture. This display is not confined to the saloons and cafés, but the altars of the numerous churches and places of worship are decorated with garlands gathered fresh every morning. The *Marché aux Fleurs*, (although one of the finest flower markets perhaps in Europe,) and the shops, could not be supplied by the florists in the environs of the capital with a sufficient stock of flowers and plants to meet the public demand daily; and, although high prices could be obtained by the growers and dealers, they could not be procured. It was the great *desideratum* of having a constant supply of plants for the Paris market, and the immense profit such a speculation held out to the florists, as, on an average, the sum laid out weekly in flowers alone varied from 25,000 to 75,000 francs at the *nouvelle an* (new year) and grand fetes, on which occasion it is customary to present nosegays as a mark of friendship and respect to the fair sex, or friends, on the anniversary of their birth-day, marriage, &c., that induced some of the leading amateurs and florists to form an association to carry that object into effect, by the purchasing of nursery-grounds, and extending the cultivation and advancement of the science of floriculture, in which undertaking all parties should have a share and interest, so as not to injure the nurserymen who had hitherto supplied the capital by their industry and talent, by the establishing of a monopolizing association, too frequently the case in other capitals of Europe, causing the ruin of the lesser gardeners and their families, who cannot compete against their influence and funds. The grand object of the Horticultural and Floricultural Society of Paris is not only, on private but public grounds, to give a stimulus to industry by the reaping of good profits for their labors, and to meet a constant and ready sale for their productions in the markets of the gay city. So great has been the encouragement and support given by the public to the Society, that they have been enabled to purchase extensive grounds at St. Germain en Laye, and Versailles, in the environs of Paris, which have been laid out in the most approved style, and possess the most extensive collections of flowers and exotic plants; they have also a very large

nursery at Orleans, Blois, and Montpelier. They do not confine themselves to the perfection of flowers alone, but their object is to improve the cultivation of hot-house and orchidaceous fruit trees—which study has been greatly neglected by the horticultural population, in not adopting the most scientific methods of pruning, grafting, &c., and taking every advantage of the bountiful gifts of nature, with the most luxuriant soils and diversified climate for every species of fruit and plants, both hot-house, green-house, and hardy. The idea of such an association in Paris was in consequence of the encouragement given in England to the competitors at the numerous floricultural shows, but, above all, to the excellent plan pursued by the Royal Society of Horticulture and School of Agriculture of London, to which the whole of Europe, and in fact the world, is indebted for the rapid advance that has been made and is making in floriculture, horticulture and agriculture; so that gardeners and farmers are now looked upon as men of intelligence and science by the aristocracy. (*Hort. Jour.*)

Art. III. *Domestic Notices.*

Great Exhibition of Dahlias, at the Conservatory of the Public Garden.—One of the most splendid exhibitions of that splendid autumnal flower, the dahlia, ever made in Boston, took place at the Conservatory attached to the Public Garden, on Thursday, Friday, and Saturday, the 3d, 4th, and 5th of October.

The proprietors of the garden have held two previous exhibitions, one on the 25th of June, for roses and cut flowers, which we have noticed; and another on the 4th of July, for bouquets. At each of these exhibitions, liberal premiums were awarded to the exhibitors. Desirous of encouraging amateurs and nurserymen in the growth of the dahlia, handsome premiums were offered, to induce them to come forward on the occasion, and make a great display. The weather succeeding the annual exhibition of the Massachusetts Horticultural Society had been highly favorable to the bringing forward of fine flowers, and there was a far finer show than could have been anticipated this season. The blooms were much more abundant, and more perfect, than at any time previous, and, in consequence, there was a greater array of magnificent flowers than we have ever seen together. The contributors were as follows:—

From Hovey & Co., upwards of three hundred blooms, embracing over ninety varieties, and among which the finest were, Reliance, Splendissima, Mrs. Rushton, Suffolk Hero, Mackenzie's Perfection, Lady William Powlett, Queen Victoria, Hermione, Beauty of Kingscote, Variabilis, Unique, Horatio, Lady Dartmouth, Rival Sussex, Sulphurea elegans, Juliet, Springfield Major, Middlesex Rival, Nimrod, Sir H. Fletcher, Alpha, Rosetta, Rienzi, Blandina, Striàta formosíssima, Duchess of Richmond, Eva, and Quilled Perfection.

From M. P. Wilder, about one hundred and twenty blooms, among which were many fine large flowers, viz. Hope, Mrs. Rushton, Countess of Mansfield, Striata formosissima, Cambridge Hero, Mary, Co-

rinne, Rival Sussex, Horticulturalist, Suffolk Hero, Sir H. Fletcher, Beauty of Kingscote, Marquis of Lothian, Sulphurea elegans, Unique, Springfield Major, Rienzi, Beauty of the North, Quilled Perfection, Birmingham Victor, Conqueror of Europe, Beauty of West Riding, Eva, Victory, &c.

From Joseph Banks, gardener to J. J. Low, Esq., nearly two hundred dahlias, the most conspicuous of which were, Striata formosissima, Horsham Rival, Countess of Liverpool, Unique, Red Rover, Countess of Mansfield, Mary, Bonaparte, Queen Victoria, Princess Victoria, Rainbow, Golden Sovereign, Premier, Lilac Perfection, Suffolk Hero, &c.

From Josiah Stickney, Boston, sixty fine dahlias, of several kinds. From S. Walker, nearly two hundred blooms. From Joseph Breck & Co., sixty dahlias. From T. Mason, upwards of fifty blooms. From S. Sweetser, fifty dahlias, among which were several fine flowers. From the garden, forty or fifty blooms. From W. Meller, sixty dahlias.

From the garden there was also a great variety of handsome annuals, to fill up a few spaces in the circular range of stands. Messrs. Hovey & Co. contributed ten beautiful species and varieties of verbenas, as follows:—V. Tweedie*ana*, and T. supérba, incisa, Eyre*ana*, chamædrifòlia major, Arran*iana*, Binney*ana*, *teucroides* and venòsa; also fine clusters of scarlet zinnias, five varieties of *Phlóx Drummóndii*, and flowers of Trachymene cærùlea.

The weather was delightful during the exhibition, but owing to the lateness of the season, and more particularly to the interest created by the Mechanics' Fair, which absorbed the whole public attention, and especially the notice of our contemporaries of the press, there was not so numerous an attendance of visitors that such a display would, at any other time, have called together. This we regret, as the show was one of great splendor, and well worthy of being seen by every lover of flowers.

The committee appointed as judges proceeded to inspect the blooms on the second day of the exhibition, and awarded the premiums as follows:—

To Messrs. Hovey & Co., for the best display of dahlias, $15.

To Mr. Joseph Banks, gardener to J. J. Low, Esq., for the second best display, $10.

To Messrs Hovey & Co., for the best twenty-five blooms, $15.

To Mr. Joseph Banks, gardener to J. J. Low, Esq., for the second best display, $10.

To M. P. Wilder, a discretionary premium of $7.

To Wm. Meller, a discretionary premium of $5.

To S. Walker, a discretionary premium of $3.

The judges were Messrs. J. E. Teschemacher, D. Haggerston, and J. W. Russell.

The proprietors of the Public Garden have shown a commendable spirit in getting up such exhibitions, and we trust that they will be continued another year. They will be the means of stimulating amateurs to excel in the growth of plants and flowers, with a view to competition, and the public will, no doubt, reap the benefit of their labors.—*Ed.*

Large Coxcombs.—Two very large coxcombs were exhibited at the annual exhibition of the Massachusetts Horticultural Society, which we omitted to notice, but which, on account of their large size, are deserving of some remark. They were grown by the gardener of

A. H. Waters, Esq., of Millbury, Mass., and one of the heads of flowers measured twenty-four inches in circumference. They were shown in pots and attracted considerable attention.—*Ed.*

The Dome of the Conservatory attached to the Public Garden, which was only partly glazed last winter, has lately been nearly completed. The interior is, consequently, much lighter, and the plants show to greater advantage. The angles of the conservatory have also, on the south side, been altered into apartments for plants, and glass substituted for the blank roof. One of these is to be devoted to the growth of the Cácteæ and other succulent plants. Some other improvements have been made in the interior arrangements, by which the plants are viewed better than before. The plants are all arranged for the winter, and the camellias will soon commence flowering, and present a splendid array of bloom all winter.—*Id.*

Gloriòsa superba.—Two specimens of this splendid plant have just flowered in the collection of the Hon. John Lowell, Roxbury: each of them expanded several beautiful flowers, and the stem or scape attained considerable height: they are, undoubtedly, the first specimens which have ever flowered in this country. The plants were received from Cuba in the spring of 1838, and, under the good management of Mr. Lowell, have been brought into flower. The blossoms are orange-colored, and very showy, and appear on a branched stem or panicle. We hope Mr. Lowell will communicate through our pages his method of treating the plants which has resulted in such signal success.—*Ed.*

Pretty annuals.—Has any one raised the *Lupìnus nànus* the past summer? Its elegant, slender spikes of small blue flowers, dashed with pure white, are yet opening in our borders, despite the frost and cold. From its hardihood, we suspect it may prove a hardy perennial, and therefore doubly welcome. In inflorescence it is the miniature of our own fine native *Lupìnus perénnis*, which, though profusely wild in the vicinity of Boston, yet is no mean addition to the flower border. And then, too, there is Eutòca víscida, which we should be very sorry to miss as a choice companion of Nemóphila insígnis. The latter we have grown to a great size in moist, rich places of the garden, and to such an extent as we have not seen elsewhere. Its very name imports its habit, (*nemos*, the wood, and *phìlo*, to love,) the lover of shade.

Cacàlia coccínea may be raised as a second crop (to speak agriculturally) from seed grown in the same year. Plants in this condition are now in bloom with us.—*L., October* 21, 1839.

Lechenaúltia formòsa.—This most beautiful little brilliant gem, we have ascertained, strikes readily from cuttings in June or July, taken from the extremities of the shoots; giving plenty of air and light, without sun, and with no need of a bell-glass.—*L.*

The Rohan Potato.—This variety has proved to be all that has been said in regard to it, both as regards productiveness and good eating qualities. The results of the crops of the present season show that it is vastly more productive than any other variety yet known; in most instances yielding sixty to eighty fold, and in scarcely any less than forty, and from that up to two hundred fold. We shall notice it again in our annual account of new vegetables, and mention some of the results of the planting of this season.—*Ed.*

Additional new Verbenas.—Mr. Hogg, of New York, has raised, the past season, some new verbenas, among which is a rosy one of great beauty.—*Id.*

Great crop of Squashes.—In our visit to Mr. Derby's garden, in South Salem, in September, he called our attention to a patch of squashes, the product of two seeds only. The vines had spread over many yards of ground, and we counted ten full grown squashes, nearly ripe. Since we saw them they have been cut and weighed, the aggregate amount of the whole ten being eight hundred and ninety-six pounds. The heaviest weighed about one hundred and ten pounds. This is an enormous product. The seeds were received from Illinois.—*Ed.*

Ripe Strawberries in October.—Ripe strawberries, of the second crop, have been picked in Philadelphia, and several up at the Marshall house. (*Newspaper.*)

Horticulture in Columbia, Pa.—To give you some idea of what is going on here, I take the liberty to inform you, that my collection comprises, of the Cítrus family about a dozen species; of the Cácti, about twenty-six; Stapèl*ia*, six; Cássia, three; *Ac*àcia, four; Hibíscus, six; Caméllia, four, and two dozen seedling plants; the coffee tree, tea shrub, black pepper, logwood, redwood, gum elastic, (Fícus elástica,) Eugèn*ia*, two species; *Ps*ídium, in fruit, (perhaps *P. py*ríferum,) and many others.—*J. B. G., Columbia, Pa., Oct.*, 1839.

ART. IV. *Massachusetts Horticultural Society.*

The premiums for dahlias, offered by the Society, were awarded by the judges on the second day of the annual exhibition; but we have not been able to secure a list of the respective amounts of the prizes. The successful contributors were as follows:—

The premium for the first display, to M. P. Wilder.

The premium for the second best display, to Jos. Banks, gardener to J. J. Low, Esq.

The premium for the third best display, to Joseph Breck & Co.

The premium for the fourth best display, to Hovey & Co.

The premium for the fifth best display, to S. Walker.

The judges were appointed by the Chairman of the Committee of Arrangements, and consisted of Messrs. J. E. Teschemacher, D. Haggerston, and J. W. Russell.

Saturday, Oct. 5th.—Exhibited. Flowers:—From S. Walker, about thirty dahlias, among which were Marquis of Lothian, Stone's Yellow Perfection, Dennissii, Dodd's Mary, Marchioness of Lansdowne, and Quilled Perfection; also, bouquets of dahlias. From W. E. Carter, upwards of forty dahlias, some of which were Mrs. Rushton, Kingscote Rival, Glory, Madonna, Countess of Mansfield, Yellow Perfection, &c. From J. Hovey, bouquets. From W. Kenrick, bouquets. From F. Tudor, from his garden, at Nahant, branches of the apple, apricot, pear and lilac, in *full bloom;* this may be considered as remarkable after the cool season just past.

Fruits:—From the President, handsome specimens of the following peaches:—Orange Clingstone, Weller's Favorite, Lemon Clingstone, Morris's Luscious, and one other kind, the name unknown; also, white Chasselas and Gros Frankinthal grapes. From W. Oliver,

Melacaton peaches. From J. G. Coolidge, Lemon Clingstone peaches, and unknown pears. From Jona. French, Jr. Chaumontel, Green Sugar, and Capsheaf pears; also, peaches and apples. From N. Barrett, Concord, wild grapes.

From W. E. Carter, specimens of fruit of the Eugènia malaccénsis (?) or the Rose apple: several of these were eaten, and pronounced to be a most delicious fruit, partaking of the perfume of the rose, with the sweetness of the peach; a few trees in pots, in any collection, would afford several dozens of this delightful fruit. The fruit is about the size of an apricot, but resembles in appearance an apple; the skin is of a pale yellow color, and the flesh, which is about a quarter of an inch thick, is of a yellowish white; the drupe or seed is as large as a filbert, enclosed in a hollow cavity.

From J. L. L. F. Warren, Duchess of Angouleme, Urbaniste, Buffum and Easter Beurré pears. From S. Downer, Isabella and Catawba grapes, but scarcely ripe; also, Brocas Bergamot pears. From Mrs. T. Bigelow, Medford, monstrous Pippin apples, very large and fine, and heath peaches. From E. M. Richards, seedling peaches.

Vegetables:—From Col. F. R. Bigelow, Medford, specimens of the Chinese tree corn, fully ripe; the ears were raised from seed which was planted about the 26th of May last, and the corn was fully ripe on the 15th of September; the produce was five ears from one seed, or two thousand grown from one.

This being a stated meeting of the Society for the choice of officers for the ensuing year, the members present proceeded to ballot for the same; and the following gentlemen were elected:—

President, Elijah Vose.

Vice-Presidents.—Jonathan Winship, Marshal P. Wilder, Benjamin V. French, William Oliver.

Treasurer, Samuel Walker.

Recording Secretary.—Edward M. Richards.

Corresponding Secretary.—Robert T. Paine.

Professor of Botany and Vegetable Physiology.—John Lewis Russell.

Professor of Entomology.—T. W. Harris.

Professor of Horticultural Chemistry.—Dr. S. M. Dana.

Standing Committees.

Committee on Fruits.—Edward M. Richards, chairman; Robert Manning, William Kenrick, Samuel Downer, Benj. V. French, John A. Kenrick, John M. Ives, P. B. Hovey, Jr., L. P. Grosvenor, J. L. L. F. Warren, Samuel Pond.

Committee on Products of Kitchen Garden.—J. L. L. F. Warren, chairman; Samuel Pond, Aaron D. Williams, Rufus Howe, Ebenezer Crafts.

Committee on Flowers, Shrubs, &c.—Samuel Walker, chairman; J. E. Teschemacher, C. M. Hovey, Joseph Breck, Samuel Sweetser, David Haggerston, Samuel R. Johnson, William E. Carter, John Towne.

Committee on the Library.—Elijah Vose, chairman; Robert T. Paine, William Kenrick, Ezra Weston, Jr., Charles M. Hovey, M. P. Wilder, Thomas Lee.

Committee on Synonyms of Fruit.—John Lowell, chairman; Robert Manning, William Kenrick, Samuel Downer.

Executive Committee.—Elijah Vose, chairman; William Oliver, Benjamin V. French, Edward M. Richards, Enoch Bartlett.

Committee on Finance.—Elijah Vose, chairman; Benjamin V. French, William Oliver.

At this meeting it was voted, that the thanks of the Society be presented to the Committee of Arrangements, for their acceptable services in getting up the Exhibition; and that they be also presented to gentlemen who so liberally contributed flowers, fruits, and vegetables to the annual exhibition.

Mr. Josiah Lovett, 2d, of Beverly, was admitted a subscription member of the Society.

Oct. 12th.—Exhibited. Flowers:—From Joseph Stickney, upwards of fifty fine dahlias; among which were Brown's Sarah, Mrs. Rushton, Countess of Mansfield, Ne Plus Ultra, (superb,) Ruby, Unique, Suffolk Hero, Eva, Conqueror of Europe, Star of Buckland, Red Rover, Countess of Torrington, Birmingham Victor, &c.: these were all good specimens. From T. Mason, seventy-five or eighty dahlias, embracing a great variety, principally the more common varieties of last year. From S. Walker, five new seedling pansies, very handsome, particularly one of the varieties, which was remarkably fine.

From the Hon. John Lowell, a beautiful cut specimen of the Gloriòsa superba, being a terminal shoot with six flowers expanded, and several buds; the plant has never flowered before in the country. Mr. Lowell has two plants now in bloom: we shall notice them in another page. From M. P. Wilder, three dahlias, which had opened since the destruction of the plants by frost, viz: Springfield Major, Queen of Scots, and Maria Edgeworth.

Fruits:—From R. Manning, Lyscom, Boxford, Ribstone Pippin, and Killam Hill apples; also, Tyson pears. From E. Emerson, Salem, fine specimens of Surpasse Virgoulouse, and Capsheaf pears. From W. Oliver, beautiful Urbaniste pears. From M. P. Wilder, monstrous Pompone peaches.

From the Hon. John Lowell, six varieties of pears, as follows:—Grand Bretagne, a fine looking pear, but not yet in eating; Glout Morceaux, but not the same as grown by Mr. Manning under that name; Reine Caroline, a very fine pear; Delices de hardenpont; Delices de Charles, also a good looking fruit, but not in eating; Beurré Bronze, the Fig of Naples, of Messrs. Manning and Kenrick, and the Fig of Vasillons, being synonymous. From B. Guild, Roxbury, black Hamburgh, Sweetwater and Isabella grapes, cultivated in the open air, very handsome. Plums, from S. Walker.

Oct. 19th.—Exhibited. Flowers:—From Jos. Stickney, Esq., upwards of two hundred dahlia blooms, comprising a great variety of kinds; some of the finest were, Ruby, Suffolk Hero, Mrs. Rushton, Eva, Unique, Birmingham Victor, and Ne Plus Ultra, which was very superb. From T. Mason, a variety of dahlias.

Fruits:—From B. V. French, monstrous pippins, monstrous Bellflower, Hawthorndean, and four kinds of unnamed apples; also, Wilkinson pears, and a variety not known. From I. P. Davis, some most beautiful specimens of pears, we presume from the fine collection of S. G. Perkins, Esq.: they consisted of the Duchess of Angouleme and Easter Beurré, both large and handsome, the Beurré d'Aremberg, Beurré d'Amalis, Dix, and Beurré Diel. From Isaac Harris, Boston, beautiful St. Michael pears. From Dr. Adams, fine St. Germain, Seckel, and St. Michael pears. From R. Ward, Roxbury, some as fine specimens of Seckel pears as we have ever seen. From E. Emerson, Salem, Surpasse Virgoulouse pears. From J. H. Dunklee, Brighton, Spanish chestnuts.

Oct. 21st.—Fruits:—From the President, some very superior speci-

mens of the Duchess of Angouleme pears, there being thirty large fruits, all the product of one dwarf tree trained to an espalier, besides fourteen which were not exhibited; also the Wilkinson, in excellent state. From E. Emerson, Salem, Surpasse Virgoulouse pears. From the Rev. Dr. Harris, beautiful Dix pears, from the original tree. From E. M. Richards, Harrison's Fall Baking pear (of Cox,) Rushton's Bon Chrétien pear (of Prince;) also, handsome Capsheaf pears and peaches, from an imported French tree. From James Morey, Nantucket, large orange quinces, weighing eighteen and a half and twenty ounces each. From Jacob Holyoke, of Marlboro', fine Lyscom apples, presented by B. Guild, Esq.

Art. V. *Retrospective Criticism.*

Quere.—Is the *Nelúmbium* speciòsum, of which you speak in your last number, nothing more or less than *Nelúmbium* lùteum of the south and west? A fine aquatic, and worth culture in our myriad ponds.—*R.*

Art. VI. *Obituary Notices.*

Death of Judge Buel.—It is probably known to most of our readers, that this estimable and valuable citizen died in Danbury, Ct., on Saturday, October 5th, in the 63d year of his age. We were about preparing a notice of this sad event, but the following worthy tribute to his life and services, from the *Albany Argus*, written, probably, by one who has known him long and well, has relieved us of that duty. Judge Buel was the first proprietor of the Argus, and the columns of that journal were dressed in mourning on the occasion of the appearance of the following notice:—

"Having accepted invitations to deliver anniversary addresses before the Horticultural and Agricultural Societies of Norwich and New Haven, Conn., on the 26th and 27th ult., he left home about a fortnight since, with that view. At Danbury, he was seized on Sunday night with a bilious cholic, of which he was relieved in the course of twenty-four hours; but bilious fever supervened, and he sank under it after an illness of more than a week—receiving, during the time, every attention, and unremitted medical attendance from the hands of strangers. It was not until Friday last, however, soon after his son had left him on his return to Albany, to request the attendance of his family physician, that the disorder assumed an alarming aspect. He was accompanied on his journey by his only daughter, of whom he took an affecting and final leave, in the full possession of his mental faculties, a few moments before he calmly breathed his last.

"Intelligence was brought yesterday morning by express, announcing the unexpected fatal termination of his illness. It was a melancholy

surprise to his anxious family, on reaching the steam-boat wharf in the afternoon, on their route to his place of illness, to be among the first to learn that his remains had been brought up by the Columbus, the day boat from New York, which arrived before the departure of the afternoon boat. The body had been brought from Danbury to Poughkeepsie, and thence to this city.

"For the last thirty years, Judge Buel has occupied a wide space in the political and agricultural world. In 1813, he removed to this city from Ulster county, and established the Albany Argus. In the following year he was appointed Printer to the State, and discharged the duties of that station, and of the editorship of the paper, until 1821, when he retired to the farm in the suburbs of the city, since so widely and favorably known as the 'Albany Nursery.' After his retirement from his editorial labors, he represented the city for successive years in the popular branch of the legislature, and at the period of his death was a Regent of the University. His last appearance in political life, was as the gubernatorial candidate of the opponents of the national administration in 1836.

"But it is as an Agriculturist, in the great and broad sense of the word, practically and scientifically, that he has built his fame as a public benefactor. As such, he was known throughout this continent and in the old world; and no man has contributed more, as a writer and in practical life, to elevate, inform and improve the agriculture of his age. Nearly six years ago, as an auxiliary in his plan for the diffusion of knowledge on this subject, Judge B. established 'The Cultivator,' a monthly publication, of the highest value, and of great and varied information, and which has attained a vast circulation throughout the American continent. His labors however were not confined to his monthly publication, ample as were its pages. His pen was in constant requisition upon nearly every subject connected with the cultivation of the soil, and his correspondence throughout the Union, and abroad, was extensive. In example, not less than in precept, he may be said to have conferred blessings upon the times in which he lived—blessings that will continue to fructify, and ripen into fruit, long after his body shall have mingled with his favorite earth.

"As a neighbor and a citizen—and in all the relations of domestic life—he was without reproach. He was esteemed not less for his integrity than his intelligence and worth—for the unaffected affability and simplicity of manner in his intercourse with his fellow-men. He may be said to have lived for utility; and to have died in the prosecution of his favorite employment. His death is a public bereavement, which all will mourn, as irreparable." (*Albany Argus, of Oct. 9th.*)

Judge Buel was almost as deeply interested in horticulture as agriculture, and our own pages have contained articles from his useful pen. As proprietor of the Albany Nursery, he has done much to disseminate good fruits; and, as the first President of the new Horticultural Association of the Valley of the Hudson, his name was eminently useful in giving reputation to the institution. The horticultural and agricultural community, in his death, have sustained a severe loss.

Died in Mobile, Ala., in October last, of the prevailing epidemic, *Mr. G. R. Rolton*, gardener to J. W. Tisdale, Esq. Mr. Rolton is known to our readers as the author of a communication in our present volume, upon the cultivation of plants in the vicinity of Mobile. We had anticipated other communications from Mr. Rolton, and, had his life been spared, we doubt not but he would have contributed

much useful information to our pages. His sudden death is to be deeply regretted.

Art. VII. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Chenangoes, per barrel,	1 00	1 25
Chenangoes, per bushel,	50	—
Common, per barrel,	1 00	—
Common, per bushel,	50	—
Eastports, per barrel,	2 25	—
Eastports, per bushel,	1 00	—
Sweet Potatoes, per bush.	1 25	1 50
Turnips:		
Common, per bushel,	25	37½
Ruta Baga, per bushel,	37½	50
Onions:		
White per bushel,	1 00	—
Red, per bunch,	3	—
White, per bunch,	2	3
Yellow, per bushel,	62	75
Beets, per bushel,	50	62½
Carrots, per bushel,	50	62½
Parsnips, per bushel,	62½	75
Horseradish, per pound,	10	12
Radishes, per bunch,	10	12
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoy	37	50
Drumhead,	50	75
Red Dutch	50	75
Cauliflowers, each,	12½	25
Brocoli, each,	10	20
Lettuce, per head,	6	10
Tomatoes, per half peck	20	25
Celery, per root:		
Common,	6	8
Bailey's Giant,	10	12
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes, per pound:		
Winter crook neck,	1 00	—
Autumnal Marrow, per lb.	1 00	1 50
Canada crook neck,	2 00	—
Pumpkins,	10	12
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 00	2 50
Common, per bushel,	1 00	—
Russets, per barrel,	3 00	—
Russets, per bushel,	1 50	—
Baldwins, per barrel,	3 00	3 50
Baldwins, per bushel,	1 50	—
N. Y. pippins, per barrel,	3 00	—
N. Y. pippins, per bushel,	1 50	—
Pears:		
Urbaniste, per doz.	37½	50
Dix, per doz.	75	—
Napoleon, per doz.	50	—
Beurre d' Amalis, per doz.	50	—
St. Germain, per doz.	50	—
Fulton, per doz.	25	—
Beurre Diel, per doz.	37½	—
Bleeker's Meadow, hl'f p.	50	—
Messire Jean, pr half peck,	37½	50
Moorfowl Egg, pr half p'k,	37½	50
Citron Melons,	12½	—
Grapes, per pound:		
Black Hamburgh	50	—
White sweetwater:	20	25
Malaga,	20	25
Quinces, per bushel,	3 00	4 00
Berberries, per bushel,	2 50	3 00
Cranberries, per bushel,	1 75	2 00
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	37½	50
Havana, (sweet)	50	—
Pineapples, each,	12	25
Cocoanuts, each,	5	6
Chestnuts, per bushel,	3 50	4 00
Walnuts, per bushel,	2 00	2 50

Remarks.—Never was the farmer or gardener blessed with a more favorable season for ripening his crops than the present. October, generally a serene month, has been unprecedently so thus far.

The weather has been delightful: two frosts succeeding each other, on the nights of the 7th and 8th, killed all tender vegetables; but, following this, the nights have been as mild as the days have been clear and brilliant. Should the winter set in as early as last year, none can have reason to complain that they had not an opportunity to prepare for it. Every late crop has fully matured. Potatoes, turnips, cabages, &c., have attained to their highest perfection of growth, so far as the weather has had any agency. Bounteous, indeed, has been the product, and propitious the time for harvesting the fruits of the summer's labor.

The potato crop is one of much importance, and we have generally taken some considerable pains to ascertain the probable amount of the crop and the average market prices; and in our next review of the market we shall offer some remarks, with a table, showing the different prices for the last five years. Since our last, they have not come forward in so large quantities as was expected, and it is now stated in some of the Maine papers that the crop is considerably below an average one. This may be, so far as regards the acreable yield; but when it is recollected that every year more soil is put under cultivation, and that probably one third greater breadth of land was planted than last year, the result will be, that the total produce will exceed that. Just as the crop is ready for the market, there is usually the report of a scarcity, in order to raise the prices, by producing an impression that they will soon be higher, and thus make eager purchasers. The demand for the southern market will be limited, and there will be no tendency to higher prices at present. Eastports are remarkably large and fine this year.

Turnips continue to come in abundantly, and prices have fallen: Ruta Bagas are large and handsome. Onions have fallen in price since our last—rather an uncommon thing at this season: it is, however, owing to the limited demand, there being none wanted for shipping. Parsnips have come in, since our last, of fine quality. Horseradish is not yet very plentiful. Some few Radishes have been received, and taken at quotations. Cabbages are abundant, and very superior: Drumheads and Savoys are extra large. Cauliflowers have not been found in the market so good, and in such quantities, as they are to be had now. Brocolis are fine and cheap. Lettuce is scarce and commands a good price. Celery is very superior; Bailey's Red and White Giant now take lead over the old sort, and bring much higher prices. Tomatoes most gone; only a few half ripened now left. Squashes continue to be brought in abundantly, causing a further depression.

The fruit market continues active. Apples are scarce, and the stock is now mostly received from New York and New Jersey. The Baldwins are very handsome this year, but a small crop in this vicinity. Of pears, there is now a very large variety on hand, comprising some of the very best kinds, such as the Urbaniste, &c.; probably the stock is as large, or larger, than in any season previous to the present. The only Melons to be had are the citron for preserving. Grapes continue plentiful: Black Hamburghs are a little firmer than they have been: Sweet-water, lower: Malagas have arrived so early, and in such great quantities, that the market is now glutted: the latter, however, were picked too early, and, though in good order, are, generally, not sweet. Quinces are scarce, and extra fine ones retail at our highest prices. Berberries have not been so scarce for many years. Cranberries come in freely, and prices, though firm, have not materially advanced. Lemons abundant from late arrivals.

Chesnuts have come to hand since our last: they are, however, exceedingly scarce. Walnuts have been received from Pennsylvania, but not yet in very large quantities; probably there will be a fair supply.—*Yours, M. T., Boston, October* 28, 1839.

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape vines will, by this time, have dropped their foliage, and may be partially pruned: all the laterals may be cut away, and part of the superfluous wood; leaving the final shortening of the wood to a later period. Give plenty of air in all fine weather, to fully mature the wood.

Grape vines, in the open air, of foreign varieties, should be laid down and protected by a covering of earth or litter. Isabellas, and other hardy sorts, should be partially pruned.

Strawberry beds should be cleared of all weeds, and, before frost sets in, they should have a covering of old hot-bed manure, about an inch thick.

Raspberry vines should be laid down, and protected with leaves or earth.

Fruit tree seeds, of all kinds, may be sown this month.

Fruit trees, planted this fall, should have a barrow of strawy manure placed around the roots, to prevent the frost from throwing them out of the soil.

FLOWER DEPARTMENT.

Dahlia roots have, by this period, especially in the latitude of Boston, been taken up and housed out of the way of frost: if any have been left out, they should be dug as soon as possible. There are various ways of keeping the roots; but they will generally keep well in any dry cellar out of the danger of frost.

Hyacinths, Tulips, and other hardy bulbs, should be planted early this month.

Hyacinths, to be grown in pots, should be set out this month, and the pots set in frames, where they can be protected from severe cold.

Pæonies should be separated and planted now, if not done before.

Oxalises, of all sorts, should be potted, if any remain yet out of the soil.

Ixias and Sparaxis should be all set out this month, and the pots placed in frames.

Herbaceous plants, of many kinds, should be slightly protected by a covering of leaves or strawy manure. Foxgloves, blue bells, and similar kinds, will need it.

Tree roses should be laid down, and the branches covered with leaves and earth.

Beds of Pansies should have a slight covering of leaves.

Annual seeds, of several kinds, may be yet sown.

Camellia seeds may be planted in the green-house this month.

Cactuses should be placed on a shelf, near the glass, and be very sparingly watered.

THE MAGAZINE

OF

HORTICULTURE.

DECEMBER, 1839.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Uses of the Cèrei and Cácti.—The dry stems of the stronger Cèrei are used in the mountainous parts of Chili and Peru, (where wood does not abound,) as timber, in constructing houses, on account of their being light, and therefore easily conveyed from one place to another; and although this timber appears of a spongy structure, yet according to Poppig, it forms an excellent article for fuel, and is very much used every where in those places where wood is scarce, and particularly in the neighborhood of Copiano, where it is in great repute for melting copper. It is also used in St. Domingo, for torches; and the young stems of some species, after they have been soaked, and thereby freed of all the cellular tissue, are tied together at the end, and form a very light and elastic cap. The juicy stems form inexhaustible springs for cattle, where water is very scarce. According to Von Martius, the mules are very clever in kicking off pieces of the stems of the large Cácti with their hoofs, and then sucking the juice, which flows in abundance. In the high plains of Mexico, immense groups of Cèrei, Opúntiæ, and Echinocácti afford the only means of satisfying the thirst of the innumerable herds of wild animals that abound there, when all the springs of water are dried up. The enormous sized globes of Echinocáctus ingens, and the species nearly allied to it, are used by smugglers in Mexico, for concealing their contraband goods, particularly brandy: for this purpose, the inner part of the plant is scooped out, and the empty space filled with the goods or liquors to be concealed; the piece of the rind that was cut out is then carefully replaced, and the plant carried to its place of destination. The slimy juice of the Cácti is very much valued by the Indians, on account of its cooling antifebral qualities, and the pulpy matter is used as poultices for softening sores or abcesses; and whole Cácti, or some cut in pieces, are thrown by the natives into dirty water, to purify it. The tender shoots of Opúntia *Nopalílio* are eaten as vegetables; and the flesh of Echinocáctus cornígera, and species nearly allied to it, are cut in slices, like pumpkins, and preserved in sugar. According to Poppig, the spines of many of the Cèrei are used in Peru as knitting needles. (*Garten Zeitung*, translated in *Gard. Mag.*)

Increase of soil from the falling of the leaves of Pines and Firs.—These leaves resist decomposition for a number of years, on account of the resinous matter which they contain, and the wind taking no hold of them, from their needle-like shape. They generally lie where they fall, and they accumulate to a considerable thickness, destroying all vegetation except that of trees already established. In the forest of Fontainbleau, M. Poiteau found that the leaves which had dropped from a plantation of *Pinus sylvéstris* about twenty feet high, had formed a stratum between six inches and eight inches in thickness; and nineteen years afterwards, when he examined the same plantation, he found the trees from forty-five to sixty feet high, generally thicker than a man's body, and the decaying stratum of leaves so much increased, that several rocks, which before appeared two feet above the soil, were no longer visible. (*Annales d' Hort. de Paris.*)

Use of the root of the common Berberry for Dyeing.—A paper was lately read before the Asiatic Society of London, "on the yellow color of the Berberry," by Mr. Solly. Mr. Solly stated that the root of the common berberry, or *Bérberis* vulgàris, was used for dyeing leather yellow; and that a cheap and abundant supply of this article was desirable. He described the color as being disseminated throughout the wood and bark and roots; and suggested that experiments should be made on the relative quality of color in each of their parts respectively. The natives of India use the extract of the root, where it is called the *horzis* or *rusot* of their medical writers. (*Athenæum.*)

Van Mons's theory for the amelioration of Fruits, more particularly of Apples and Pears.—According to Van Mons's theory, trees raised from the fifth, sixth and seventh generations, without interruption, from their first parent, ought to come sooner into fruit, and produce fruit of a better quality than those of the first generation, or those raised from the first sowing. This has been doubted by some physiologists. As a step towards this, M. Poiteau, in the spring of 1836, received from M. Van Mons one thousand seedling pear trees, of two years' growth, raised from the fifth and sixth generations, in a direct line from the first parent. These trees M. Poiteau and M. Noisette planted in a favorable situation, at Mont Rouge, in the suburbs of Paris, and they were examined in December, 1837, by a commissioner named by the Horticultural Society of Paris. The trees were found in a healthy state, but had not then shown flower buds, though Van Mons had said that a part of them would fruit at the end of five years. Before planting these trees, the roots were pruned, and all the pieces cut off were planted, and produced shoots; and by means of the plants so raised, M. M. Poiteau and Noisette intend to ascertain whether the plants raised from the roots will come into fruit sooner than the seedlings from which the roots were taken. (*Annales d' Hort. Soc. de Paris*, vol. xxi, p. 314 in *Gard. Mag.*)

Grafting Pinks and Carnations is said to have been practised in France in the sixteenth century. Some doubt this; but, at all events, it is practised at present by M. Loisel, head gardener to the Marquis de Clermont Tonnere, at Glisolles, in the valley of L'Iton, near Evreux; and, in his garden, six, seven, or eight pinks, of different colors, are found flowering on the same stalk. The operation is performed when the flower buds are about a fourth part of their size; and these buds are inserted in the axils of the leaves of the flower stem of the stock. They are inserted in the slit manner, and merely tied on with a bit of woollen thread. At the end of eight or ten days,

the scion will commonly be found united to the stock, when the ligature may be removed. In two or three days afterwards the flowers expand; and, if the varieties have been properly chosen, all those grafted on the same flower stem will expand at once. In general, the effect of grafting a flower bud is to retard its expansion from six to eight days. (*Annales d'Hort. de Paris*, quoted in *Gard. Mag.*)

Improved method of training Raspberries.—Cut out all the weakest shoots, so as to leave only about six on a stool; then twist the point of one shoot from one stool with one shoot from the stool adjoining, so as to form an arch. Do the same with two other shoots of each plant, so as to form a triple arch between plant and plant, in the direction of the rows, all through the plantations; the space between the rows being left open as usual. The plants should be six feet apart every way. The fruit produced by the trained canes will be fully exposed to the direct influence of the sun and to the air, and there will be more room for the suckers. (*Flor. Cab.*)

La Greffe herbace, or herbaceous graft, is commonly thought to have been the invention of the Baron de Tschoudy, of Metz, who employed it extensively in grafting the pine and fir tribe; but Francis de Neufchatel says this graft was known in France in the sixteenth century. (*Annales d' Hort. de Paris.*)

Thinning out the leaves of Vines injurious to the fruit.—Mr. Brassin, the manager of the celebrated vines at Thierney and Fontainbleau, does not thin out the leaves to ripen the fruit, as is too frequently done by many who cultivate grapes. When the fruit is full grown, instead of thinning the leaves, which shade the fruit from the sun, as is the common practice,—which is so injurious, that the more the leaves are removed, the less the fruit ripens,—he takes away the leaves between the grapes and the wall, in order that the heat of the sun may be reflected by the wall on the grapes. M. Poiteau truly observes, that no leaves can be safely removed by any one who does not possess some just notions of vegetable physiology. (*Id.*)

Preservation of Fruit.—Dr. Loiscleur des Longchamps preserves apples three or four years, and pears more than one year, by enclosing them in an air-tight box, and depositing it in an ice-house. Previously to placing them in the box, each pear is wrapped in five or six thicknesses of absorbent paper, which, in case of decay, prevents one fruit from contaminating another. Burying the box, which may be of zinc or lead, or perhaps an earthen-ware vessel, three or four feet deep in the soil, would answer equally well; and even a cool common cellar might be used for the same purpose. (*Id.*)

Art. II. *Foreign Notices.*

ENGLAND.

Illicium floridànum, Arb. Brit., p. 256, has proved hardy in the climate of England: a plant of it stood out unprotected during the severe winter of 1837–8, at Hylands, near Chelmsford, where, on January 21st, the thermometer fell to 3°. There are several plants,

one of which is five feet in height, with the branches covering a space of ten feet in diameter. They have been planted out upwards of twelve years, and flower profusely every year. (*Mamock's Flor. Mag.*) [Perhaps this shrub, which, with us, is a green-house plant, would stand our winters after two or three years' protection, till it acquires some size. We should like to have the experiment tried.—*Ed.*]

Collection of Orchidàceæ, in the Nursery of Messrs. Loddiges.—Swect's *Hortus Suburbanus Londoniensis*, published in 1818, contains about fifty hot-house Orchídeæ. The catalogue of the Messrs. Loddiges, lately published, contains upwards of one thousand species, showing one of the most astonishing instances of increase of species of any one family on record. Of the one thousand species of living plants, which Messrs. Loddiges possess, only seven hundred have been named, and there are over three hundred whose genuine name is not known, or only guessed at. So great has been the passion for this flower among the amateurs of England, that this great number has been collected through the exertions of Messrs. Loddiges. (*Gard. Mag.*)

Great Specimens of Cácti in the Collection of the Duke of Bedford.—Since this tribe has become so fashionable in Britain and on the continent, many of the most noted patrons of gardening—among whom the Duke of Bedford may be called one of the first—have been anxious to secure all the rarest and most showy species: to effect this object, collectors have been sent out exclusively to procure large and full grown specimens. The Duke of Bedford, within the short space of three years, has amassed one of the most splendid collections in Britain. In the stoves at Woburn, the great columnar kinds of Cèreus, thirty feet high, (and especially the noble specimens of C. senilis, two of which have attained to twelve feet, and are clothed with long pendent white hairs,) contrast admirably with the strangely broad and depressed form of the Melocáctus and Echinocáctus group, beset too as these are with spines of every shape and size and color. A Mammillària (yellow) supposed to weigh two cwt., has been sent from Mexico. It was borne on the shoulders of eight Indians for a considerable distance before it was placed on the wagon which conveyed it from the interior to the city. The species are used in Mexico as a sweatmeat, being cut in pieces and preserved in sugar. It had flower buds upon it when packed for Europe. (*Bot. Mag.*)

Combrètum purpùreum treated as a green-house plant.—A paper was lately read before the London Hort. Soc. upon the cultivation of this splendid flower. The author concludes his article by remarking that the Combrètum may be grown as a green-house plant, from the following circumstance:—The house in which a specimen grew, was left uncovered from November, 1830, to February, 1834, during which time the thermometer fell to 26° Fahrenheit. The consequence of such exposure to cold, was the loss of the leaves, but no further injury resulted; whence he inferred that a green-house would suit it, provided the wood is well ripened in the autumn. (*Gard. Mag.*)

Hoítzia *mexicàna* is the name of a splendid plant lately introduced. It is of an upright habit; requires the protection of the green-house during winter, but is as admirably adapted for the flower-garden in summer, as larger salvias and fuschias. It first flowered in 1838, in the collection of James Harris, Esq. of Kingsbury, where it was blooming through last winter, a plant upwards of six feet high, being covered with its fine pink blossoms. (*Gard. Mag.*)

Hybrid Mahonias.—Seeds of Mahònia rèpens growing near M. fasiculàris, have produced plants which have lost all the character of

M. rèpens, and approach nearly to those of the M. fasiculàta, having larger and more robust foliage, and vigorous, upright growth; producing their flowers at the axils of the leaves, and not in terminal corymbs. It is a most robust and hardy plant, equalling in beauty the M. Aquifòlium. Artificial impregnation will undoubtedly do much to increase the elegance of this fine tribe. (*Gard. Mag.*

FRANCE.

Propagating Dahlias by buds or joints.—In the nursery of M. G. Luezet, at E'cully, it is stated, in a report made to the Horticultural Society of Lyons, that the dahlias are propagated by buds or joints, in the following manner. After a stem has attained the length of from one foot to three feet, according to the variety, it is cut into as many pieces as there are joints. Each piece is then reduced so as to leave a very small space above and below the joint; one of the leaves is cut off, and the cutting so formed is planted, leaving one of the leaves above the ground, the greater part of the petiole being buried. Shading and the usual routine being attended to, the plants root immediately, and flower the same year. (*Annales d' Agriculture of Lyons*, translated in *Gard. Mag.*)

Prùnus doméstica myrobálana, Arb. Brit. 688.—This variety of the common *P.* doméstica, well known in many of our gardens as the Canada plum, has been used as a stock for the peach, nectarine, and apricot, in the nursery of Mr. Catros, of Bordeaux, since the year 1802. The seeds were first received from this country; only two plants were raised from them, which were preserved as stools, and from them the stocks used in the Bordeaux nursery, and all those sold to other nurserymen, have been raised. M. Catros died on the 11th of November, 1836, and the nursery business is now carried on by his nephews, M. M. Girard frères, who say that they have myrobalans, with yellow fruit, red fruit, and fruit of different shades of color, (Query, bullaces.) The myrobalan, M. M. Girard observe, has the advantage of growing vigorously in every soil. It makes an excellent stock for plums, as well as for peaches and apricots, and more particularly for the Reine Claude (green gage) which, grafted on the myrobalan standard high, produces magnificent fruit. (*Annales d'Hort. Soc. de Paris.—Id.*)

Large seedling Grape raised by Van Mons.—A seedling grape vine, at Brussels, raised by Van Mons, produces fruit as large as a green gage plum, which, at the latest, ripens in the first fortnight of August, and never fails. Its qualities are no less remarkable, as it is both solid and sweet. (*Journal of Science and Arts.*)

Effect of Lightning on Trees.—In the *Annales d'Hort Soc. de Paris*, vol. xxii., p. 120 to 134, an account is given of sixteen trees, which have been struck by lightning, in different parts of France, at various periods, from 1813 to 1837. The effects appear to have been very different on different trees. In some, the leaves only were destroyed; in others, the leaves were but slightly injured, but strips of bark appeared to be torn off; in some, the branches were broken, and no other injury done; in some, the trunks were split; and in others, no injury was done to the top of the tree, but the roots were laid bare, and torn in pieces. In several cases, where the trees were standing near houses, or hay or corn ricks, they seem to have acted as conductors to the electric fluid, and saved the cottage, or the cornstack or hay-rick from being struck by the lightning. This was par-

ticularly the case where the Lombardy poplar or the silver fir had attained a great height. The author of the article, Vicomte Héricart de Thury, concludes with the following advice:—

1. Travellers and country people, reapers, haymakers, &c., during the time of a thunder storm, should never take shelter under detached trees; more especially under a tree which stands at a distance from any other; such trees acting as conductors.

2. To take shelter rather under a bush, than a tree, and the lower and more spreading it is, the better.

3. Never to take shelter on that side of an object, from which the wind or the storm comes, or, indeed, in the direction of the wind or the storm. Thus, supposing the storm proceeding in the direction of east and west, then the north and south sides of a bush, or other sheltering object, are to be chosen, and not the east or west side

4. In the moment of danger, the safest way is to recline at length on the ground, choosing a furrow or ditch, if any should be at hand; but no time should be lost in searching either for a furrow or ditch, or for a bush or a hedge, because the upright position, maintained during the search, is incomparably more dangerous than the horizontal one.

5. Always to bear in mind that the danger is great in proportion to the shortness of the time which elapses between the appearance of the lightning and the noise of the thunder.

6. Those who cannot afford the expense of lightning conductors to their houses, farm buildings and ricks, should plant near them late growing trees, such as the pyramidal oak, (*Quércus pedunculàta pyramidàlis,*) the Lombardy poplar, (*Pópulus fastigiàta,*) the cypress, the larch, the silver fir, the spruce fir, &c. (*Annales d'Hort. de Paris,* as translated in *Gard. Mag.*)

Grafting the Lilac on the Ash.—It is recommended to graft the different species of lilac on the *Ornus* rotundifòlia, or flowering ash, in order to retard the appearance of the blooming, and to prolong the season of that beautiful shrub; but whether the lilacs would endure many years on the ash, is very doubtful, since the period of the movement of the sap in the trees is very different: the lilacs expanding their leaves fully a month before the ash trees. (*Annales de la Soc. d'Hort. du Nord,* as quoted in *Annales d'Hort. de Paris,* and translated in *Gard. Mag.*) [We are of opinion, that the earlier or later period of the flow of the sap, in the stock, would make no material difference in the vigor or health of the scion.—*Ed.*]

Roots of the Œnothèra biénnis, eatable.—At a meeting of the Society of the Sciences Physiques et Naturelles d'Agriculture et d'Industrie, it was suggested that the Œnothèra biénnis might be cultivated for the sake of its roots, which are fleshy, mild and nutritive. (*Annales des Sciences Physiques, &c.*)

Agave americàna.—The A'gave americàna is so common on several parts of the sea shore around Toulon, that it seems indigenous. Some plants flower every year. It is remarked that the year before it flowers, that the centre leaves become straighter and smaller than they ordinarily are. For the first few days, the stem rises about four inches in twenty-four hours. In the space of two months, this stem acquires the height of from twenty feet to twenty-two feet; it is then about fifteen to sixteen inches in circumference at its base. The Agave flowers at different periods, according to its localities, varying from thirty to forty years; it dies after having flowered, but its leaves are not completely withered till the following year. (*Plants Pha-*

nérogames qui croissent naturellement aux Environs de Toulon, noticed in *Gard. Mag.*)

Art. III. *Domestic Notices.*

Awnings for the blooming of Dahlias.—My Sulphurea elegans flowers continually, with perfect beautiful pale blossoms, under the awning which has been over it for many weeks. For all flowers which are apt to be too red, an awning will be particularly requisite. My Sulphurea elegans, exposed to the sun, has its flowers much stained with red.—*Yours, W. O., Sept.* 1839.

Immense yield of mammoth pumpkins.—One of my neighbors, Mr. Samuel Rinear, of Whitehall, Burlington Co., planted one seed of the Mammoth pumpkin about the 20th of last May, and the produce was gathered on the 21st of October, and weighed as follows:—The largest weighed 234 pounds; second size, 173 pounds; third size, 104 pounds; fourth size, 103 pounds;—in all, thirty-three pumpkins, weighing collectively, 1313 pounds! The length of the vine, with all its branches, was 1801 feet. I saw the pumpkins, and I have no doubt the weight and measure above are both correct. Beat this if you can. *Yours, respectfully, T. Hancock, Burlington, N. J., Nov.* 2, 1839.

Tulip Show in the City of Boston.—Mr. Walker's great Tulip Show, next spring, will be made in the city, in the public garden at the bottom of the Mall. An arrangement has been entered into, between Mr. Walker and the proprietors, by which this has been effected, greatly, we think, to the benefit of both parties. A much larger number of visitors will see them, from the facility which the place affords to strangers visiting the city, as well as to the inhabitants themselves, many of whom would visit the garden who would not take the trouble to ride out as far as Roxbury. By thus bringing such a splendid display immediately before the public, a greater taste for this gorgeous flower will be diffused, and the result will be a more extended cultivation of the tulip in city gardens, where they will flourish well, and where even the smallest spot will enable the owner or occupier to plant a bed of sufficient size to make a brilliant show during the months of May and June. We are glad to announce this excellent arrangement.—*Ed.*

Premature flowering of fruit trees and shrubs.—The season, as observed in this quarter, exhibits some singular phenomena in the vegetable kingdom. The severe storm of the 30th and 31st August seemed to operate upon most of the plants in our vicinity, like a frost, or a fire—curling, blackening, withering, and killing the foliage, which generally soon dropped off, leaving the limbs and trunks in a great measure denuded. This January nakedness was succeeded by a new dress of leaves; and at this moment many of the fruit trees, as plums, &c., the smaller ornamental trees and garden shrubs, particularly the laburnum and others of the accacia family, are actually blossoming a second time. These re-duplications are believed to be injurious to the future growth of plants.—*Nantucket Inquirer.*

[The same phenomena have occurred in many other places. In Sandwich, Mass., and in other towns on Cape Cod, the apple and

pear trees have flowered. A friend of ours, in Sandwich, informs us that his apple trees have been almost covered with bloom. At Nahant fruit trees, of all kinds, have flowered. At Newburyport the same thing has occurred. Most of these premature blooms have appeared in places near the sea-shore, or where the effects of the easterly storm, the last of August, were most felt, and are no doubt to be attributed, in a degree, to the above cause. The month of September was not so remarkable for its warmth, as to cause any such premature vegetation alone; but the storm, defoliating the trees, and checking the flow of sap, threw them into a state of rest; the ordinary weather of September started them into new growth, and so rapidly after the premature rest, that it operated like another season, and brought forward the next year's blossoms.—*Ed.*]

Iberis coronaria.—This is the name under which we have cultivated a new candytuft the past summer, and the plants are now, (Oct. 26,) in full bloom and beauty, the hard frosts of the 7th and 8th leaving it uninjured. It has pinnated foliage, and, we suspect, is *I. pinnata*. It is erect in its growth, flowering rather later than the old *I. amara*, but continues to display its blossoms after the latter has gone to seed. It is a most desirable acquisition, and it should be a general favorite in every garden. We have a plant before us, as we now write, covered with its umbels of snowy flowers.—*Ed.*

Continued drought in Athens, Ga.—Our drought still continues; no rain since my last which has wet through the dust for half an inch; though they have had some good showers from twenty to fifty miles around us. We have heavy dews, and it is yet wonderful how vegetation survives. I am still watering my young pear trees, and some cherries are in flower: if a warm rain comes soon, half the forest will be in bloom, and next year's fruit ruined. I have now, on some half dried up dahlia bushes, in my garden, the very best flowers which I ever saw in my life; not, to be sure, of any of your late crack varieties, but of such ordinary names as Napoleon, Grandis, Bride of Abydos, Beauty of Camberwell, &c. I suspect I have the finest specimens ever seen here.—*Yours, M. A. W., Athens, Ga., Oct.* 27, 1839.

Great produce of Rohan Potatoes.—The first day of this month, I dug my Rohan potatoes, and from *one* tuber planted last spring, weighing *one pound*, I dug *five bushels;* equal to three hundred pounds to one. The three largest weighed, collectively, ten pounds, and the largest weighed three pounds ten ounces.—*Yours respectfully, Thos. Hancock, Burlington, N. J., Nov.* 2, 1839.

Mr. M. B. Bateham, our correspondent, of Rochester, N. Y., has lately made a visit to London, Liverpool, and other places in England, and returned home in the steam packet Great Western, on her last passage to New York. Mr. Bateham made the tour principally on private business, connected with his extensive seed establishment at Rochester; but he also visited many of the more celebrated public and private gardens, with a view of becoming better acquainted with the state of gardening and agriculture. Mr. Bateham has written us, since his return, that he visited Chatworth, the noble residence of the Duke of Devonshire, the Birmingham Botanic Garden, the Sheffield Botanic Garden, the London Horticultural Society's Garden, at Chiswick, Messrs. Loddiges' extensive nursery, at Hackney, and numerous other gardens, at each of which places he made some memoranda, which, we are gratified in stating, he will communicate in our next volume. He represents gardening as in a most flourishing state, and the

gratification he received from inspecting the gardens, he considers, as amply remunerating him, or any one, desirous of observing the progress of the science, for the time and expense of the voyage.—*Ed.*

Mr. Buist, of Philadelphia, has lately returned from London, having passed part of the summer in England, Scotland, and on the continent, and has brought out with him many new plants.—*Id.*

Obstacles to the introduction of Tropical Plants, by the Tropical Company, at Indian Key, Tropical Florida.—Sir,—An accidental conveyance from some unknown person, has brought to my hands the 50th number* of your periodical, dated July, 1839. At the same time was received a letter from a gentleman in New Jersey, which requested for his hot-house, various seeds and plants of the adjacent West India Islands, which he naturally supposed could be easily brought to and transmitted from this central islet of the Florida Reef. As your Magazine is likely read by most gentlemen proprietors of green-houses and hot-houses, I hence beg leave, through your pages, to inform them of the *deplorable facts*, that even at Buffalo or at Cincinnati, they can obtain tropical seeds and tropical plants from all tropical America, via the ports of New York or Charleston, S. C., with much greater facility, cheapness and safety, than I, at Indian Key, can obtain them from Cuba, or the Bahamas, via the only port of Key West; and that hence, since my return to this islet, on the 25th December last, I have *not been able to obtain a single plant* through this only port of entry in all tropical Florida!!!

Indeed, so great are the govermental obstacles to all natural rights of direct intercourse with our nearest neighbors, that Colonel Harney, of the United States army, at Cape Florida, informs me that he has been compelled to request of the Secretary of the Treasury, his official permission for Bahamian boats to come direct from the Bahamas to his station, with provisions and other necessaries for his troops! These *insuperable obstacles* to all agricultural improvement of South Florida, were interposed years ago by the govermental establishment of the single port of entry at the *remote, westward, leeward island* of Key West; and these *insuperable obstacles* to the introduction and propagation of tropical plants, *must continue undiminished*, until additional ports of entry shall be opened at or near the southern extremity of the peninsula; but *not even one additional port of entry* will ever be established, so long as it can be prevented by the powerful opposition of all the private proprietors, public officers, and dependent population of Key West, all strongly interested and strenuously combined to retain and to perpetuate the exclusive monopoly of the whole wrecking business of this reef, hitherto absolutely possessed by that *single, remote, inconvenient, yet only port of entry* for all South Florida!!!

In January, 1837, I left Campeachy with *many* seeds, and proceeded to New Orleans, where I was vainly detained till the first of June, by the vain hope of finding a passage in some vessel bound directly to Key West. I was then obliged to go first to the foreign port of Havana and expose all my baggage to the double annoyances of entry and departure through the custom-house, and finally passed, in a fishing smack, to Key West, where various devices, in word and deed, detained my progress from the 17th June to the 17th July. But on my arrival at this islet, on the 20th of July, 1837, I soon found that its *vicinity* afforded the *only eligible* and *occupiable site* in all South

* This is incorrect, owing to a typographical error: the July number was the 55th, and was made to read the 50th, by the numeral 5 dropping out of the form.

Florida, for the *formation of a preparatory nursery of tropical plants.* Indian Key *was then*, and *is now*, the *only populated* islet nearest to the centre of the reef, to the coast of the main land, and to the rifles of the Seminoles. It also contained the *only person* most suitable, in all respects, to preserve and to propagate my tropical seeds, viz. Charles Howe, Esq., postmaster and inspector, the *only* man and *only* officer of all South Florida—*universally* admitted to be *the most worthy man and officer* in all South Florida! The same considerations combined with the trustees of the Tropical Plant Company, on the 8th January, 1839, to make a permanent location of the preparatory nursery for tropical plants on *Lower Matacumba*, one mile *west* of Indian Key. We *then* hoped, that even during the Seminole war, we might accumulate in this central nursery, all valuable plants which propagate themselves on the most arid soil, and which might thence be most conveniently extended over all the arid rocky islets of the whole Florida Reef. We positively knew that all the useful plants of the tropics which British skill and capital of many years had accumulated and domesticated on the arid stony soils of the neighboring Bahama Islands, were equally adapted to be profitably cultivated in the same climate, on the equally arid and stony soil of all the Florida Keys; and had we *barely* enjoyed our *natural rights* of *direct intercourse* between *Nassau* and the *nursery* at the only proper season of the solstitial rain in June, we should then have transferred a whole cargo of living plants, whose geometrical multiplication in a single year would have been incalculably important to the speedy cultivation of tropical plants in tropical Florida. But we *could not obtain a single tropical plant* for the preparatory nursery, and its cleared site is now becoming filled again with *indigenous weeds!* (Cárica *Papàya.**) We had, however, entertained strong hopes of collecting materials for the preparatory nursery, from the green-houses and hot-houses of the northern States and of Europe, by the only promised facility of a semi-monthly mail packet from New York *via Indian Key* and Key West to St. Marks; but the contractor did not fulfil his arrangements with the Post-master General, and hence we passed six months without even one regular mail for the regular transmission of even a single letter! A monthly mail packet from Charleston, S. C., was next re-established in July last, but on her third trip out, she was wrecked on the 7th of September, and we do not yet know whether she will ever be replaced by another monthly packet.

We also, at one period, entertained a *third* humble hope, for useful occupation of our *safe* central nursery, in the multiplication of the progeny of the few tropical plants near Cape Florida, introduced by me in 1833,—but which, since 1835, *have been propagating themselves* in the *dangerous* sites infested by the savage Seminoles. Under the kind instructions of the enlightened Secretary of War, *I*, at the least, *did* hope that a few plants might be *removed* from a few sites in the destructible possession of *red men;* but *now*, my only hope is, that the same plants may be *preserved* in the same sites from the destructive power of *white men.*

The proprietors of hot-houses in the United States will hence perceive that the only proximate hope for even a monthly intercourse with the preparatory nursery will depend on the restoration of the monthly mail packet from Charleston, S. C., and that the only future hopes for filling said nursery with plants direct from the tropics,

* Papaws.

will depend on the establishment of an additional port of entry, near the centre of the Florida Reef.—*Very respectfully, your obedient servant, Henry Perrine, Superintendent for the T. P. Co., Indian Key, Fa., Oct. 22,* 1839.

P. S.—Under actual circumstances it is very evident that I can barely increase my miniature collections in boxes of earth on this coral islet by the only means of the few seeds which shall possibly reach me through the only channel of the Patent Office, at Washington, D. C.; where the enlightened Commissioner has practically established the desiderated agricultural department by his immensely important circular of June 1st, 1839. But I do not expect any seeds, except from the very few intelligent friends of the enterprise who may thoroughly appreciate the probable importance of the advance in a single month of the vegetation of a single seed in this *exclusively calcareous soil!—H. P.*

[We regret exceedingly to learn that there are such insuperable obstacles to the establishment of a preparatory nursery of tropical plants at Indian Key, and we sincerely hope that government will be induced, in the same generosity with which Congress granted to the Company the land for the formation of the nursery, to open a port of entry at Indian Key, or near the southern extremity of the peninsula. We have looked upon the establishment of this Company as an object which will eventually be of immense usefulness and importance to the agriculture of the United States, and particularly to Florida and the southern portions of the Union, where many of the plants of the tropics, which afford staple commodities of commerce, may be introduced and acclimatized, through the medium of the preparatory nursery at Indian Key. Dr. Perrine, in his able report before Congress, has given a list of many of the most useful plants, which will, without doubt, flourish in Florida and the adjoining states, and their introduction and cultivation will render us independent of other nations, for those useful products which are now almost exclusively furnished us from the neighboring islands, in the same latitude, and with a climate and a soil in no way better adapted to their growth than the rocky islets of the Florida Reef.

We are glad to have the pleasure of presenting to our readers the above communication of Dr. Perrine, and as our Magazine does reach the hands of nearly all the principal proprietors of greenhouses and hot-houses, from Maine to Florida, we trust that their attention will be drawn to the subject; and we would request all those who may have seeds of tropical plants, particularly some of our correspondents in Philadelphia and Baltimore, to transmit to Dr. Perrine, through the Commissioner of the Patent Office, at Washington, any tropical or other seeds which they think would be useful to the preparatory nursery. We hope that Dr. Perrine will address us again on this subject, and we shall be pleased to be the medium of conveying information of the progress of the company towards establishing their nursery. Any seeds forwarded to our care will be immediately transmitted to the Commissioner at Washington, to be sent directly to Dr. Perrine.—*Ed.*]

Fúchsia fúlgens has flowered in the collection of Mr. I. H. Gardiner, of Roxbury. It is a splendid species, with large scarlet flowers, and of vigorous habit.—*Ed.*

Art. IV. *Exhibitions of Horticultural Societies.*

Our reports of the exhibitions which have been held by various societies are more complete than last year, though not so much so as we had anticipated. The monthly reports of the Pennsylvania Horticultural Society have been already given, and the report of the annual exhibition only remains to complete the shows of this flourishing society for 1839. The Horticultural Association of the Valley of the Hudson has held two exhibitions, one spring and one autumnal one; the former at Albany, N. Y., the report of which appears at p. 310; the latter held in New York, at Niblo's Garden, we have not received any report of up to this period. The exhibitions which have been held by other societies, except those given below, are the New Haven Horticultural Society, and the Brooklyn Horticultural Society, N. Y., reports of neither of which have yet been received. One new society has been formed, the Middlesex Horticultural Society of Lowell, an account of the first exhibition of which has appeared in our pages, (387.) We regret that our correspondents have not sent us the reports of the exhibitions of the societies above noticed, which do not appear in the following list; as it was our wish to have embraced every exhibition which had taken place the present year, even if we had been under the necessity of giving an extra sheet, to enable us to include them in this number. We believe that they would be read with more interest, collected together in this way, than if appearing at various periods; and they would present a better idea of what had been effected by the labors of each society, than if read in detached portions. We regret that we have not been enabled to accomplish this object. Another year we shall make it a point to give no report of any exhibition, unless received in season for our closing number of the volume.

It will be seen, by a glance at the reports below, that the objects have been more varied, and the specimens more numerous, than in previous seasons. It will also be seen that more premiums have been distributed than heretofore; and to this may be attributed the superior character and interest of the exhibitions. It is the only way to bring about legitimate results; and every society which has the spice of a taste for horticultural pursuits, and a desire to promote the interests of the science as its sole objects, will see at once that in no way can this be so speedily brought about as by the offer of liberal premiums; thus inducing both amateurs and practical gardeners to excel each other in their productions.

Essex County Natural History Society.—Three exhibitions of fruits and flowers have been held at the Society's hall this season; the two first early in the season, when the roses and pæonies were in their prime; the other, later, when the gorgeous dahlia makes so conspicuous a show, and the trees are heavily laden with the choicest fruit.

The storm on Friday night, August 30th, caused no inconsiderable havoc to the fruit and flowers. In many of our gardens the flowers were entirely destroyed, and the fruit was snaken from the trees in vast quantities; however, some were spared, and the garden of F. Putnam furnished a fine display of dahlias, said to be superior to any that has ever before been exhibited in Salem. The collection of fruit was very fine.

At all the exhibitions there has been, as usual, a goodly display of native plants, forming a striking and very marked contrast when arranged by the side of the more showy species of our gardens.

The following are some of the plants exhibited, and their contributors.

Wednesday, June 19, 1839.—Garden Plants:—From J. S. Cabot, roses, a variety, including Harrisòn*ia*, Wells's China cabbage, Watt's Celestial, and King of Prussia; pæonies, Whittlèj*ii*, Pótts*ii*, and Reevès*ii*; herbaceous plants, *O*'robus nìger, purpùrea and variegàta, Amsòn*ia salicifòlia*, *D*ictámnus rùbra, Dracocéphalum Ruyschiàn*um*, *G*eràn*ium* sanguíneum, *Lupìnus* polyphyllus, *Phlóx* maculàtum and suavèolens, *P*odalyria austràlis, Tradescánt*ia*, &c.; pansies.

From F. Putnam, *C*áctus var. Jenkinsòn*ii*, new scarlet and laterítius; pæonies, Bánks*ii*, papaveràcea, Reevès*ii*, Potts*ii*, Richardsòn*ii*, &c.; roses, Lee's crimson perpetual, Rivers's George IV, Empress of France, new beautiful Provence, &c. J. F. Allen, bouquets, pansies, &c. W. P. Richardson, bouquets, containing *G*eràn*ium* striàtum, roses, several varieties of columbines, blue bottles, &c. John Lewis Russell, bouquets, roses, pansies, &c.

Native Plants:—From Andrew Nichols, of Danvers, Sarracèn*ia* purpùrea, *I*ris prismática, and versícolor, *B*riza mèdia, *R*ubus odoràtus, &c. &c. John Lewis Russell, *C*álla palústris, Cetrària laminòsa, and Borrèr*a* purpuràcea. E. S. L. Richardson, *C*orydàlis glaúca, *A*rum triphyllum, *C*ístus canadénsis, *Th*èsium umbellàtum, &c. &c. George D. Phippen, *V*ícia satìva.

Fruit:—From J. F. Allen, figs and cherries. Andrew Nichols, seedling cherries.

Native Fruit:—E. S. L. Richardson, Fragària virginiàna.

Wednesday, June 26, 1839.—Garden Plants:—From Mrs. William Dean, *P*æòn*ia* Whittlèj*ii*. Mrs. J. D. Treadwell, bouquets of *L*ysimàchia, Lonícer*a*, roses, &c. J. C. Lee, moss and Scotch roses, and bouquets. E. H. Derby, Magnòl*ia* tripétala, *L*iriodéndron tulipífera, Hòy*a* carnòsa, Passiflòra and *A*càcia. J. S. Cabot, roses, Talma nouveau, Mobach, Cupid, La Beauté ebloui santé, Charles II., &c.; pinks, Ford's seedling, Bow's Claudius, Reid's Princess Victoria, &c. Astrántia mìnor, *F*umària speciòsa, *Spir*æ'a trifoliàta, and filipéndula flora pleno, Podalyria austràlis, Campánula *p*ersicæfòlia, varieties double white and blue; pæonies, &c.

From J. F. Allen, dahlias, first exhibited this season. James Green, moss roses, pinks, &c. T. Ropes, jr., *P*apàver orientàlis. G. D. Phippen, bouquet. S. Driver, jr., bouquets; roses, Bouquet perfecta, Banks's lutea, moss, cabbage, Provence, black mottled, Tuscany, Celestial, &c. William P. Richardson, bouquets of roses, geraniums, &c. F. Putnam, *C*áctus var. speciosíssimus, Ackermán*ii*, &c.; roses, about fifty varieties; pæonies, Húme*i*, Whittlèj*ii*, spléndens, anemoneflòra, and several other varieties.

Native Plants:—From Henry J. Cross, *G*èum nivàle, Campánula glomeràta (introduced,) and rotundifòlia, *Th*alíctrum corynéllum, *A*splènium ebènium, *A*rum triphyllum, *L*áthyrus palústris, Hypóxis erécta, *S*olànum dulcamàra, *K*álm*ia* angustifòlia, Azàlea viscòsa, *S*enècio aúreus, *G*eràn*ium* dissèctum. G. D. Phippen, *A*rum triphyllum, wild and cultivated.

Fruit:—J. C. Lee, strawberries, pine, Keen's seedling, and Hovey's seedling [No. 2;] cherries, white Bigarreau. J. F. Allen, peaches, Royal George clingstone; grapes, black Hamburgh, raised in his green-house. William P. Richardson, cherries, white Bigarreau.

Vegetables:—Samuel Webb, jr., exhibited specimens of rye, (Secàle cèreale,) of unusual size, raised by him in Conant street, near the North river. The stalks measured from seven to eight feet, and the heads from six to seven inches. The whole field averages from six to seven feet. A correspondent of the *Yarmouth Register* describes a field of rye on the farm of Heman Bursley, of West Barnstable. He says, it appeared remarkably even and tall, most of it as high as the head. He cut several stalks above the root, which, on measuring, were found to vary from six feet four inches to six feet eleven inches; one head measuring seven inches, or seven and three quarters, including the beard. The present specimen exceeds that of West Barnstable. In Lancaster, (Mass.) I noticed a field of rye, about the same time, where many of the stalks measured seven feet and upwards.

Thursday, Oct. 3, 1839.—Garden Plants:—From Francis Putnam, dahlias, two hundred blooms, of about one hundred varieties, among which were Ansell's Unique, Mrs. Rushton, Striàta formosíssima, Ne Plus Ultra, Countess of Mansfield, Sunbury Hero, Zeno, Hope, Marchioness of Lothian, Queen Victoria, new Picta formosissima, and Rienzi. William F. Gardner, *Oxalis Bowièii*. Bouquets from Miss R. S. Ives, J. C. Lee, and W. P. Richardson.

Native Plants:—From Henry J. Cross, *Hamámelis virgínica*, *Gentiàna* saponària, *Cúscuta* americàna, Gerárdia pediculária, and tenuifòlia, *Polygala* sanguínea, *Solidàgo* bícolor, and cæ'sia, *Aster* Nòvæ Anglæ and Neóttia cérnua. E. S. L. Richardson, *Solidàgo* and aster, many species, &c.

Fruits:—From R. Manning, apples, Ribstone pippin, Danvers winter sweet, Bellflower (Coxe,) and Brabant Bellflowers; pears, Long Green, (of Coxe,) Beri de la Motte, Winter Nelis, Wilkinson, Beurré brown, Beurré bosc, Catillac, Winter Orange, Monsieur le Cure (Burgomaster of Boston,) Jalousie, Louise Bonne de Jersey, Easter beurré and Fulton; plums, Imperatrice violette, Coe's Golden Drop, and Saint Catharine. Pickering Dodge, Elfin Glen, pears, Napoleon; grapes, black Hamburgh, white Chasselas, rose Chasselas, and Zinfindal. William A. Lander, apples, Monstrous pippin, and Fall pippin; pears, Ganzel's Bergamot, St. Ghislain, and two others, names unknown.

From J. C. Lee, pears, Messire Jean, Rouisselet de Rheims, and Long Green Mouthwater; peaches, Malta, and several fine sorts, name unknown; Grapes, black Hamburgh, Sweetwater and Zinfindal (all excellent,) and a pot containing a black Hamburgh vine, with six bunches of beautiful fruit. Ephraim Emmerton, pears, Surpasse virgalieu, Beurré Diel, Urbaniste, Maria Louise, Henry IV., St. Michael, Broca's Bergamot, Princess d' Orange, Seckel, Capsheaf, Glout morceau, Bonne Louise, Cushing, Prince's St. Germain, and Frederic de Wurtemburg.

J. M. Ives, apples, Campfield or Newark sweeting; pears, Lewis, Jalousie, Glout morceau, Bezi Montigny, Bezi de la Motte, Beurré bronze, Bleeker's Meadow, striped St. Germain, Michael Henry pippin, Josephine, Andrews, Capiaumont, Easter beurré, Brown beurré, Wilkinson, Buffum, Passe Colmar, Duchess d'Angouleme, St. Michael, and Autumn bergamot; peaches, Lemon clingstone; plums, blue Imperatrice, and Cruger's seedling; melons, Minorca and Green Flesh (citron.) George Driver, grapes, black Hamburgh, (open culture,) and Isabella. William P. Richardson, apples, Ribstone

pippin; pears, Moorfowl's Egg, Broca's Bergamot, Brown beurré, and Iron; quinces; oranges.

Vegetables:—From Pickering Dodge, Elfin Glen, a pumpkin weighing seventy-nine pounds, from seeds sent him from Indiana.

Albany Horticultural Society.—The annual meeting of the Albany Horticultural Society was held in Albany, on Wednesday, the 18th of September, 1839, in the large hall room in the Athenæum building. The show was well attended, and was got up in fine style. The committee reported the following contributions to the exhibition:—

From Walter Elder, (gardener to Dr. Wendell,) Albany, fifteen sorts potatoes, China corn, bouquets of flowers, white and red sugar beets, mangel wurtzel, red and white onions, French pumpkin, weight ninety-six pounds, Spanish pumpkin, weight ninety pounds, kohl rabi, white egg plant, yellow and red tomatoes, twenty sorts heart's ease. Philip Henry, Albany, white solid celery, German greens, kohl rabi, case-knife pole beans. Andrew E. Brown, Albany, large pumpkins, celery, yellow tomatoes. G. C. Thorburn, New York, a case containing choice varieties of dahlias. James Wilson, Albany, dahlias, green-house plants, varieties of heart's ease.

From J. Buel & Co., Albany Nursery, a beautiful variety of dahlias and other flowers, interwoven in the form of a Castle of Flora; also, a great variety of bouquets of flowers. Theophilus Rossole, Albany, white solid celery, very fine butter squashes, turnips, blood beets. Daniel Payne, Albany, large Roman cabbage, weight twenty pounds, Spanish pumpkins, cocoa-nut squashes, ruta bagas, potatoes, cucumbers, variegated corn. Theodore Allen, Hyde Park, salsify, or vegetable oyster, purple egg plant and red onions. Charles Gilchrist, Albany, drumhead cabbages, weight twenty-one pounds each, egg plant, pears, apples, parsnips, carrots, beets, black cluster grapes. John Faley, Albany, large pumpkin, ruta baga, potatoes.

From William Buel, Albany, onions, potatoes, beets, mangel wurtzel, carrots, parsnips, winter squashes, egg plant, ruta bagas, dahlias, peaches, pears, plums, apples. John W. Smith, Albany, potatoes and parsnips. Mr. Benson, Hudson, sweetwater, Isabella grapes, and tomatoes. Joseph Hall, Arbor Hill, Albany, pears and quinces. P. Ashton, Albany, onions, beets, Lima pole-beans, carrots, purple egg plant. Charles Buel, Albany, fine tomatoes. Charles H. Loucks, Albany, large pumpkin, weight one hundred and ten pounds, cocoa nut squash. Gen. Dix, Albany, two varieties pears. Thomas Ingram, two varieties of grapes. A. P. Heartt, Troy, dahlias and egg plants.

From Prof. J. W. Jackson, Schenectady, bouquets of flowers, and a fine assortment of dahlias. Thomas Turner, Albany, plums, grapes, peas, Rohan potatoes, yellow and red tomatoes, beets, cabbages, carrots, four varieties corn, ruta baga; largest French pumpkin, weight one hundred and twelve pounds; celery, squashes, onions, dahlias, and a lot of flowers. Robert Neely, Albany, Isabella grapes and plums. Dr. B. P. Staats, Albany, egg plums. J. Whalen, Albany, white egg plants, tomatoes, nasturtium in pickle, grapes, dahlias and other flowers. John B. Hutson, Albany, purple brocoli, fine carrots, egg plants, long and turnip beets. Jacob Mayer, Albany, one large pumpkin.

From John E. Lovett, Albany, magnum bonum and egg plums. Thomas Dowling Albany, three sorts seedling potatoes. Edward Fortune, Albany, onions, large watermelons, tomatoes, beets, mangel wurtzel, parsnips, carrots, seven year pumpkins, crook-neck win-

ter squashes. Judge Woodworth, Hyde Park, onions, carrots, sugar beets extra large, mangel wurtzel very large size, purple egg plant, Lima beans, Rohan potatoes, turnips, seedling Victoria potatoes. C. N. Bement, Albany, superior white carrots, (a new variety,) long blood beets, mangel wurtzel, tomatoes. Wm. Bement, Albany, squashes, parsnips, onions, carrots, mangel wurtzel very fine.

The following are the reports of the Committee for awarding premiums:—

The committee appointed to decide the premiums on flowers, &c., would report that they have awarded the premiums as follows:—

For 25 best dahlias, to G. C. Thorburn, New York,	$20 00
For 25 next best dahlias, to James Wilson,	15 00
For 25 next best dahlias, to J. Buel & Co.	10 00
For 25 next best dahlias, to Prof. Jackson,	5 00
For 25 next best dahlias, to A. P. Heartt, Troy,	3 00
For best design for a centre ornament of a table of flowers, to J. Buel & Co.	5 00
For second best design for a centre ornament of a table of flowers, to William Buel,	3 00
For best bouquet of flowers, to W. Elder,	2 00
For greatest variety bouquet flowers, to J. Buel & Co.	3 00
For best specimen green-house plants, to James Wilson,	2 00
For greatest assortment of plants in pots, to J. Whalen,	2 00
For greatest assortment of Heart's Ease, to W. Elder,	1 00

Alexander Ross, Walter Elder, Martin Lowe, committee.

The committee appointed to award premiums on fruits would award the following premiums:—

For two largest bunches grapes, to J. Whalen,	$5 00
For next largest bunches Isabella grapes, to R. Neely,	3 00
For white sweetwater grapes, to Mr. Benson, of Hudson,	2 00
For pears, to C. Gilchrist,	5 00
For pears, to Gen. Dix,	3 00
For one dozen best variety apples, to William Buel,	5 00
For one dozen next best variety apples, to Charles Gilchrist,	3 00
For one dozen best peaches, to William Buel,	2 00
For one dozen best quinces, to Joseph Hall,	1 00
For four water-melons, large size, to E. Fortune,	3 00

Isaac Denniston, R. M. Meigs, A. P. Heartt, committee.

The committee to award premiums on vegetables, have awarded as follows:—

Largest pumpkin, weight 112 lbs., to Thomas Turner,	$2 00
Next largest, 110 lbs., to J. H. Loucks,	1 00
Two largest heads cabbages, to C. Gilchrist,	1 00
Two next largest heads cabbages, to Daniel Payne,	1 00
Best variety of winter squashes, to Edward Fortune,	2 00
Best tomatoes, to Charles Buel,	1 00
Best fruit of the egg plant, to A. P. Heartt,	1 00
Best variety winter potatoes, W. Elder,	2 00
Two best heads brocoli, to J. B. Hutson,	2 00
Six best heads celery, to Theophilus Rossole,	1 00
One dozen turnips, for family use, from Judge Woodworth, of Hyde Park, Duchess county,	1 00
One dozen best carrots, for family use, to P. Ashton,	1 00
One dozen best carrots, for stock, to C. Gilchrist,	1 00
One dozen best ruta baga, for stock, to J. Faley,	1 00

Half dozen best sugar beets, for stock, to Judge Woodward, of Hyde Park, ... 1 00
Half dozen best mangel wurtzel, to C. N. Bement, ... 1 00
Half dozen best beets, for family use, to W. Buel, ... 1 00
Half dozen best parsnips, for family use to J. W. Smith, . 1 00
Half dozen best salsify, or vegetable oyster, to Theo. Allen, of Hyde Park, ... 1 00
One dozen best onions, to Edward Fortune, ... 1 00
Half peck best Lima pole beans, to Judge Woodworth, . . 1 00
Half dozen white carrots, (disc. prem.) to C. N. Bement, . 1 00
Half doz. yellow tomatoes, (discr. prem.) to T. Booth, . . 1 00
Three varieties seedling potatoes (disc. prem.) to T. Dowling, 1 00
German greens, (discr. prem.) to P. Henery, ... 1 00
Kohl Rabi, (discr. prem.) to P. Henery, ... 1 00
Two Spanish pumpkins, (discr. prem.) to Daniel Payne, . 1 00

Andrew E. Brown, Charles Buel, Jesse Buel, jr., committee.

Horticultural Exhibition of the Burlington Lyceum, (N. J.)—Dear Sir.—Below I send you an account of our horticultural exhibition, held in this place on the 25th and 26th of September last. The show was well got up, and was attended by a large number of visitors. The following were the contributors:—

From Horace Binney, Esq., black Hamburgh grapes, late Heath peaches, Gloria mundi apples, Butter pears, Spanish chestnuts, Coffee tree full of fruit, *Pandànus*, or Screw pine, green and black tea, mahogany, banana, two fine gum elastics, palms, and many other fine exotics. Charles Chauncey, Esq., Butter pears; sugar cane; five extra lemon trees, full of fruit, equal to any in this vicinity; oranges, figs, palms, gardenias, roses, and many other exotics.

From Joseph Askew, Crasanne, Muscat, Allemand, St. Germain, Seckel (fine,) Butter (fine,) and Harrison fall pears. Joseph Goldy, Gloria mundi and Lady apples. Amelia Smith, Mandarin and Myrtle orange trees, full of fruit. Susan I. Smith, white Chasselas, Isabella and Elsinborough grapes, and Crasanne pears. Thomas Dutton, Crasanne and Orange d'hiver pears. John Cox, Seckel pears. Susan V. Bradford, *Yúcca* sp., thirteen feet high, oranges, myrtles, pomegranates, jessamines, pittósporums, roses, &c.

From Capt. F. Engle, Butter pears. Samuel R. Wetherill, frost gage plums, Crasanne, Bergamot, Butter, and Harrison Fall pears, Isabella, and white Lisbon grapes, Maltese orange trees full of fruit, sweet oranges, lemons, cactuses, &c., a basket bouquet. Mrs. Hiberts's garden, Thirteenth and Lombard streets, Philadelphia, a fine basket bouquet. Mrs. Henry C. Carey, two fine basket bouquets, wine apples, Madeira nuts, and butter-nuts. Charles Kinsey, lime tree, with sixty full grown fruit on, lemons and Butter pears. Dylwin Smith, Butter pears and apples. Samuel Stockton, Elsinborough grapes. Mrs. S. C. Roberdet, Elsinborough, Isabella and Golden Chasselas grapes. Mrs. Emory, some fine exotics. Ann Cox, lemons and orange trees, full of fruit, and centre bouquets. Mrs. Rebecca Chester, lemons, oranges, Catawba and Isabella grapes.

George Gaskill, Isabella grapes. James C. Hulme, Elsinborough grapes. Joseph & N. W. C. Scott, some fine watermelons. Lewis Price, Elsinborough grapes. Mrs. Mackason, Isabella grapes. James Sterling, Elsinborough grapes. George Deacon, Lisbon grapes. Samuel R. Gummere, Elsinborough grapes. Abraham Z. Shreeve, Isabella and Elsinborough grapes. John Pool, Gloria mundi apples. Robert Grubb, fine apples, and wild grapes. James Amonson, fine

apples. Margaret M. Smith, Bland and Elsinborough grapes. Samuel Vauseive, limes, lemons and other exotics. Christian Estelow, four sugar beets, weight together, forty pounds and three quarters. David King, fine quinces. William McKee, jr., limes, roses, cactuses, and other fine plants; a fine bouquet. Adam Price, figs.

From Thomas Hancock, black pepper, mahogany tree, coffee tree, aniseed, and gum elastic; red cheek Malacoton peaches, hard shell almonds, white Chasselas grapes, one hundred and one varieties of dahlias, two pyramids of cut flowers, put up by Nathan Holman and Matthew Roydhouse. Thomas Heiskell, about ninety varieties of dahlias. Allen Jones, Smock's Cling, and Rodman's Red Cling peaches. Isaac Pullen, Heightstown Smock's Cling, and Rodman's Red Cling peaches. Israel Kinsman, Smock's Free, and Rodman's Red Cling peaches. John Hulme, a seedling freestone peach, extra fine. Miss Caroline Watson, a fine bouquet. Ward Cheney & Brothers, a fine umbrella bouquet. George Robinson, a fine pyramid bouquet.

The following ladies and gentlemen contributed fine specimens of vegetables, viz: William G. Deacon, mammoth pumpkin, one hundred and ninety pounds; Jonathan Hilyard, William Smith, Burr Woolman, Charles Kinsey, Jacob Dawson, John Roydhouse, Joseph L. Powell, Caleb Gaskill, David Allen, Daniel Hancock, Samuel Rogers, Benjamin Tage, Horace Binney, William McKee, jr., Mrs. Kellum, Joseph Pierson, Ward Cheney & Brothers, Henry Mahan, Dylwin Smith, Joseph H. Smith, Joseph Askew, Matthew Ivory, Adam Price, Mrs. Gen. Wall, Bishop Doane, Caleb S. Wright, Thomas Hancock, Joseph Parish, jr. Mrs. Henry C. Carey, Mrs. Rebecca Chester, Capt. F. Engle, Francis Weber, and James C. Hulme.

From James Hopkins, corner of Broad and Chestnut streets, Philadelphia, a very superior ink for writing on zinc labels.

Premiums awarded on Thursday, the 26th:—

For the best native grapes, Elsinborough, six bunches, to Samuel Stockton.

For the best foreign, six bunches, white Chasselas, to Susan I. Smith.

For the best peaches, half peck, Smock's Cling and Rodman's red Cling, to Allen Jones.

For the best pears, half peck, and Seckel apples, to John Cox.

For Gloria mundi, to Joseph Goldy.

For the best watermelons, three, to Joseph and N. W. C. Scott.

For the best potatoes (Mercer's,) to Capt. F. Engle.

For the best sweet potatoes, to Matthew Ivory.

For the best Lima beans, to Adam Price.

For the best onions, to Benjamin Tage.

For the best twelve varieties of dahlias, to Thomas Heiskell.

For the best bouquet, to Ann Cox.

For the best celery, six roots, to John Cox.

For the best brocolis, three heads, to Bishop Doane.

For the best egg plants, three, to Joseph Parrish, jr.

For the best pyramid of cut flowers, to Nathan Holman.

For the largest pumpkin, one hundred and ninety pounds, to William G. Deacon.

We more than realized our expectations and the expectations of others.—*Yours, very respectfully, Thomas Hancock, Burlington, Oct.* 1839.

Maryland Horticultural Society—Meeting, Aug. 17th, 1839. Flowers:—From John Feast, Brunsvigia Josephinæ, Aristolòchia labiòsa,

Reneálmia nùtans, Vitex Agnus cástus, Madame Déspres Tea rose, Bourbon Tea rose, Passiflòra Kermesìna, and twelve varieties of fine dahlias.

Fruits:—From B. I. Cohen, Esq., a dish of fine peaches, and two of plums. From Abner Linthicum, Esq., half a peck of Duff's early yellow peaches, very superior.

Aug. 24th.—Flowers:—From John Feast, a beautiful bouquet of cut flowers, consisting of dahlias, roses, hibiscuses, &c. From Dr. T. Edmonson, jr., a beautiful collection of cut flowers, consisting of the following roses: Jaune Déspres, Noisette, Madame Déspres, Bourbon; also, phloxes, German asters, and the following dahlias—Water Witch, Dennìssii, King of the Whites, Desdemona, Lady C. Long, Martin Van Buren, Village Maid, &c.

Vegetables:—From John McCauley, gardener to Mr. Wilson, a large and fine egg plant, weighing five pounds and four ounces, and a plate of fine Lima beans.

Sept. 7th.—Flowers:—From John Feast, a new plant, from the West Indies, producing a scarlet flower, name unknown; also, a fine variety of dahlias. From Samuel Feast, a fine variety of dahlias, and several roses, &c. From Edward Kurtz, a bouquet of fine German asters and zinnias; also, seedling phloxes, &c. From Mrs. John Lester, a large bouquet of China asters, fine.

Fruits:—From James Stuart, (Talbot Co.) an apple weighing one pound and five ounces. From Mrs. John Ridgley, of Hampton, three varieties of peaches, remarkably fine, six weighing two pounds and ten ounces.

Vegetables:—From Jeremiah Nichols, (of Kent Co.) a sugar beet, weighing thirteen pounds and eight ounces.

A committee of arrangements was chosen at this meeting, to superintend the annual exhibition on the 25th.

Sept. 14th.—Flowers:—From John Feast, Oxalis Bowièi, and a collection of roses, dahlias, &c. From W. C. Wilson, a fine collection of dahlias. From Samuel Feast, a collection of dahlias and roses.

Vegetables:—From Col. Mercer, two mangel wurtzel beets, weighing each sixteen pounds and ten ounces, and fifteen pounds and two ounces. From Robert Ramsay, three fine egg plants, one weighing five pounds and eight ounces. From Robert Gilman, one large potato. From John McTavish, one large pumpkin, weighing one hundred and six pounds; also, one egg plant, four pounds.

Fruit:—From R. Owen, pippin apples. From James Wilson, Dwyana pears. From John Barbour, three large apples. From J. McTavish, Catawba, and other grapes.

The Fall Exhibition of the Society was held on the 25th, 26th, and 27th of September, and far exceeded any previous show of the Association, both in the quality and excellence of the articles exhibited; especially has the Society to congratulate itself and the community, whose interests are so identified with this laudable institution, at the marked and manifest improvement, gradual though sure, which is evident in our horticultural productions. "What indeed could exceed the rare and beautiful fruits, with which the tables were so bountifully loaded? The vegetables—what shall we say of them?—then, too, the rich and varied display of native and exotic plants, enriched by that gorgeous flower, the dahlia." The following were the contributions to the exhibition:—

Flowers:—From Dr. T. Edmonson, the following green-house and hot-house plants:—Coffèa arábica, Astrapæ'a Wallíchii, (seven feet in diameter,) Dracæ'na férrea, three varieties of Hibíscus sinénsis,

Caméll*ia* japónica álba plèno (in bloom,) Strelítz*ia* regìnæ, Calàthea zebrìna, Tradescánt*ia* bícolor, Cunninghám*ia* lanceolàta, several species of Cáctus and many other plants; also, dahlias in boxes, which were very attractive. From Mrs. George Lane, Pittósporum *Tobìra* variegàta, *Eu*ónymus variegàta, Passiflòra alàta, *Myr*tus [?] austràlis, Brugmánsi*a* arbòrea, *L*òtus jacobæ'us, Magnòl*ia* fuscàta, &c. From St. Mary's College, Coók*ia* punctàta, four species of *F*icus, Dracæ'na dràco, Eucalyptus of sorts, A'gave geminiflòra, *A*rum cordàtum, myrtles, melaleucas and many other plants. From G. W. Andrews, Epiphyllum Ackermánn*ii*. From Miss Cohen, a large plant in full bloom of Céstrum noctúrnum.

From Zebulon Waters, two plants of the Guernsey lily, in bloom, Jasmìnum grandiflòrum, Fúchs*ia* globòsa, Achània *m*alvaviscus, &c. Mrs. Skinner, a fine specimen of an orchidaceous plant. Ed. Kurtz, Metrosidèros semperflòrens, green and black tea plants, Yellow Tea rose and the Triumph of Luxemborgh Tea, an ornamental stand of verbenas, &c. Mr. Cowly, choice plants. Mr. Devaux, Echinocáctus Eyriès*ii*, *I*lex variegàta, Crássula falcàta, *Eu*ónymus variegàta, and other plants.

From John Feast, Astrapæ'a Wallích*ii*, *F*icus elástica, *O*'xalis Bowiè*i*, Mûs*a* paradisìaca, Tillándsi*a* serràta, Tabernæmontàn*a* coronària, Erythrìn*a* Crísta-gálli, Cr*i*num americàna, Gésner*a* nòva, *Hi*bíscus of sorts, Sago palm, cactuses, cyclamens, melaleucas, &c. From Samuel Feast, *Coff'ea* arábica, Carolíne*a* prínceps, and regìnæ, clove tree, Dracæ'na dràco and férrea, Passiflòra prínceps, alàta and Kermesìn*a*, Manéttia cordifòlia, Cáttley*a* Forbès*ii* in fine flower, *M*imòsa arbòrea, cinnamon, camphor and tea trees, Sago palm, acacias, and other plants.

Cut flowers were contributed as follows:—From Mrs. G. W. Riggs, a fine display, particularly of roses. Mrs. John Lester, bouquets. Mrs. Robert Gilmore, Tea, Noisette, daily, and other roses, zinnias, marigolds, hollyhocks, verbenas, &c. Mrs. Charles Bohn, splendid dahlias, and other choice flowers. Miss Moore, some choice bouquets of dahlias and many other flowers. W. C. Wilson, a superb collection of magnificent dahlias, among which were Marchioness of Tavistock, Mary Queen of Scots, Conqueror of Europe, Sulphurea elegans, Juliet, Stone's Yellow Perfection, Sir Henry Fletcher, Glory of the West, together with other flowers. Mrs. George Law, a choice stand of dahlias, and large quantities of the choicest annual and garden flowers. Mrs. Robert Taylor, some very fine flowers. Mrs. Muschett, a collection of roses and other flowers.

From Miss Sophia Kurtz, a fine collection of zinnias. Miss Mary Waters, roses, dahlias, zinnias, &c. Mrs. Lyons, very fine Lady Slippers. Mrs. Folke, Havre de Grace, Gordòn*ia* pubéscens. R. Holiday, China roses, verbenas, dahlias, &c. very fine. Mr. Devaux, double China roses, verbenas, heliotropes, &c. Mr. Frederic Lovering, dahlias, roses, &c. P. P. Sadler, a fine display of dahlias. Henry Rhodewald, dahlias, zinnias, roses, marigolds. Dr. Edmonson, a stand of dahlias, with a large collection of other flowers. Chas. Timmons, gardener to Robert Gilmor, a fine display of roses. Mrs. J. Dixon, many choice varieties of roses, verbenas, &c. John Feast, a fine stand of choice dahlias, containing many new kinds, with bouquets of flowers. Samuel Feast, a stand of dahlias, with a variety of roses, verbenas, passifloras, zinnias, &c.

Fruits:—From Miss Ann Rogers, a basket of Buerre pears, of uncommon beauty, and of high flavor. Mrs. H. L. Bowley, a basket

of very superior figs. Joseph Evans, very large apples, one weighing twenty-six ounces. Mrs. Hyam, a large collection of grapes, Tamprena, golden Chasselas, Bordeaux purple, Catawba, Herbemont's madeira, &c. Wm. H. de Courcy, of Easton, a basket of mammoth Pippins. Mrs. J. Lester, a dish of pomegranates of great size and beauty. Robert Sinclair, Vergaleau pears, native plums, and four varieties of apples. Mrs. Isaac M'Kim, superior quinces, Seckel pears, and Herbemont's grapes of excellent quality. Henry Moore, of Aisquith street, a peck of superb Heath peaches, yellow Celestial figs, and Isabella grapes. Charles Bohn, fine large lemons and apples. Mrs. Robert Gilmor, a dish of raspberries. W. E. Phillips, Muscatel grapes. Gid. B. Smith, Isabella grapes from a vine of two years only, with three hundred and fifteen bunches, all of the same gigantic size. James Wilson, white Codlin apples; striped, Seckel, and Buerre pears; Isabella, and Bland grapes.

From Dr. Tho. Edmondson, Osage orange, and a large supply of lemons, oranges, and St. Helena limes, very superior, and a basket of the fruit of *Pyrus japónica*, or Japan Pear. Peter Coombs, English red streak, and mammoth Pippin apples, and very fine Heath peaches. R. H. Owen, monstous Pippin, and Siberian Crab apples. Chas. Timmons, gardener to R. Gilmor, very fine figs, raspberries, and Seckel pears. Lloyd N. Rogers, very superior Seckel pears, Heath peaches, and Herbemont's Madeira grapes. Mrs. Wm. Gilmor, a dish of raspberries. Nicholas Biddle, of Philadelphia, grapes of open ground culture, and a superior bunch grown under glass, of large size and delicious flavor. F. D. M'Henry, a large and liberal supply of Bellflower apples of excellent quality. Peaches from Messrs. Williams, James, Hen. Hull, &c. Grapes from Messrs. Z. Waters, B. I. Cohen, F. A. Levering, Butcher, Johnson, and many others. Large Chinquepins from James Delacour, &c.

Vegetables:—From John W. Ward, Rohan potatoes, and the Cow-horn, a new variety kidney shaped; parsnips, Winter squash, gourds, Lima beans, white corn, &c. David Barnum, Seedling onions, Savoy cabbage, turnip, beets, parsnips, &c. Th. B. Skinner, Ockra. Geo. Beltzhoover, three large mangel wurtzel. John Mercer, of Cedar Park, a pumpkin weighing one hundred and ten pounds, and mangel wurtzel weighing nineteen pounds and a half. Mr. Devaux, white carrots, endive, Sugar pepper, sweet tomato, Cow-horn potato, celery, Turnip-rooted do., artichokes, leeks, &c. Thomas French, cabbages, parsnips, Spanish radish, egg plants, beets, cucumbers, &c. H. B. Chew, of Epsom, Rohan and Mercer potatoes, beets, cabbages, tomatoes, artichokes, &c. Chas. Timmons, gardener to R. Gilmor, Cow-horn and Mercer potatoes, seedling onions, egg plants, Lima beans, &c.

From Chas. Deems, gardener to James Wilson, carrots, squash, beets, egg plants, tomatoes, Lima beans, Mercer, Rohan, and Cow-horn potatoes, Tree corn, &c. G. E. Bowley, seedling onions, vegetable marrow, carrots, &c. Thos. Dixon, gardener to Mrs. Donnell, carrots, egg plants, salsify, tomatoes, rhubarb, onions, three varieties of Lima beans, parsnips, flat Dutch cabbage, &c. William Yates, egg plants, beets, Lima beans, flat Dutch cabbage. Jonathan M'Tavish, a pumpkin weighing 106 lbs. Mrs. George Law, vegetable marrow, yellow sugar tomatoes, and cow-horn potatoes. W. W. Watkins, vegetable marrow. Peter Coombs, orange carrots, salsify, cape brocoli; long green cucumbers, mercer potatoes, &c. Robert Ramsay, egg plants, blue potatoes, white corn, &c. Henry Schwartze,

four stalks of corn four and a half feet high. John Ridgely, of Hampton, mangel wurtzel, 16 lbs. each. Rohan potatoes from Samuel Feast; gourds from Edward Schæffer; seedling onions from F. D. M'Henry and George Barrow, &c.

Besides the above, several articles of silk were presented for the Society's premiums. Among them was a net shawl and a pocket handkerchief. The whole exhibition, from the Report, appears to have passed off to the satisfaction of all. (*Am. Farmer.*)

Columbian Horticultural Society, (Washington, D. C.)—The Society has held monthly exhibitions, the reports of which we have the pleasure of presenting below.

Monthly Meeting, May 4, 1839.—*Exhibited.* From Mrs. Seaton, a splendid bouquet of tulips, in great variety; also, fine double hyacinths. Mr. J. F. Callan exhibited handsome bouquets of flowers. A member brought forward blooms of Zephyránthes atamásco and Amaryllis alàta.

Vegetables:—From Mr. Cammac, fine specimens of asparagus, five stalks weighing one pound and a half. Mr. Callan also showed a large basket of Giant asparagus.

July 6*th.*—At this meeting there was a good exhibition of fruit, as follows:—From J. A. Smith, black apricots, yellow Bough, red Juneating, Early Harvest, Summer rose, and English codlin apples; Buffalo berries; three plums, supposed to be Bolmer's Washington, and St. Catherine pears. J. F. Callan, Algiers apricots. Mr. E. Brown, Early Masculine apricot, from a bud put in three years ago. G. Watterston, Esq., exhibited some fine specimens of apricots, from a tree raised by him. Mr. Watterston states that the tree is a great bearer, and that the fruit is wholly free from specks and worms, of good size, rich yellow, tinged with red. Mrs. Watson, large and fine Ne Plus Ultra gooseberries. Joshua Pierce exhibited a purple fig, a single fruit, weighing upwards of half a pound, and of delicious flavor. The specimen was raised out of doors. [We should be glad to know from Mr. Pierce the name of this variety.—*Ed.*] Vegetables were exhibited as follows:—J. A. Smith, purple egg plant (fine,) large orange carrots, two mangel wurtzel beets, fine curled lettuce, sweet peppers, potato onions, &c.

July 20*th.*—At this meeting a variety of articles were exhibited. Mr. Poletti presented a specimen of the Tuberose in fine bloom, which was much admired. The following fruits, vegetables, &c. were shown:—

Fruits:—By Joseph Gales, jr., European purple mulberries. Richard S. Coxe, Bolmer's Washington, and Shoemaker plums, the latter raised from a tree found native in the State of Pennsylvania, and brought into this District by George Shoemaker, of Georgetown. B. O. Lowndes, of Bladensburgh, fine yellow gages, of rich and fine flavor, and admirably perfect. R. C. Washington, plums, said to be the New Orleans. John Cox, of Georgetown, Bolmer's Washington plums. John A. Smith, the following: Hagloe Crab, Summer Rose, Summer Queen and red Juneating apples; Elfrey, Bolmer's Washington and Green Gage plums; Summer Beurre pears.

During the interval between the last and the present meeting the following fruits have been exhibited:—By Joshua Pierce, peach apricots, named Magician, weighing each two and a quarter ounces, handsome and well matured. C. C. McLeod, Early Bough apples, of noble dimensions. Mrs. Seaton, Bolmer's Washington plum.

Vegetables:—By J. A. Smith, vegetable marrow squash, large red

tomato, fine Early Egg tomato. Michael Stone, early red turnip beet, very large; Salsify, or Vegetable Oyster, the finest ever exhibited to the Society. Mr. Poletti, two large early table cucumbers, already gone to seed. Joshua Pierce, one peck of potato onions, containing twenty-three, and weighing fourteen pounds. Mr. Pierce states that he has for several years cultivated the potato onion with much success; that the crop of this season has been very fine, averaging about eight hundred bushels to the acre. Mr. P. thinks that he might have raised at the rate of one thousand bushels per acre, by planting a little closer.

Among a variety of agricultural specimens was an ear of the Chinese tree corn, fourteen inches long, of *this season's* growth, fully ripe. The committee pronounce it a "valuable acquisition."

August 17th.—At this meeting Mr. Pierce displayed a large variety of peaches, which were very fine, consisting of the following kinds:—Red-cheek Melacaton, Lemon Clingstone, Lemon Freestone, Noblesse, Morris's white rareripe, Belle de Vitry, True Chancellor, purple Freestone or black George, Congress Freestone, Oldmixen Cling, claret purple Cling, Kennedy's Carolina, early red Magdalen, Mercaton, Golden Purple, Barnard's Oldmixen, Crumel's Chancellor, Newington Freestone, New York Freestone, Independence (a seedling,) Crumel's Morris white rareripe, Golden Clingstone nectarines, not quite ripe. Also, Bartlett pears, a favorite variety; Fama Gusta apples, very large; and a bunch of Sweetwater grapes, weighing one pound and a quarter, fully ripe, and delightfully flavored. Mr. Pierce also exhibited a great variety of beautiful dahlias, including some seedlings of much merit. George Shoemaker, beautiful specimens of Sweetwater and Catawba grapes; St. Michael pears and ripe figs. Mr. Otterback, fine bunches of Chasselas and Burgundy grapes, and two bunches of well ripened foreign grapes, not named. J. A. Smith, pears—Bon Chretien; very large; Seckel, very fine. R. C. Washington, rareripe peaches. Mrs. Seaton, peaches and nectarines. R. Barnard, one Oldmixen peach, seven ounces weight.

A variety of vegetables was also exhibited, among which was a specimen of the produce of a bean, from South America, received last spring from Mr. Montgomery. They were in fine order, and said to be very prolific, and easy of cultivation on poles. Mr. M. in his narrative of a journey to Guatemala, in speaking of this bean, observes, "Of the vegetables of this country, one of the most useful is a small species of bean, perfectly black, which is very extensively cultivated, and constitutes the chief nourishment of the working classes. They are called by the South Americans *frigoles*—are boiled, and then fried in lard or butter, and seasoned with salt and pepper."

The Fall Exhibition of this Society was held on Saturday, the 14th of September, in the City Hall. Having been got up in haste, and the season not the most propitious, it being somewhat too late for fruits, and too early for the best show of dahlias, it was apprehended that the society would not be able to make such an exhibition as would do justice to its character for enterprise and skill. The apartment, too, it was thought, was not such as was calculated to show to the best advantage the various products of the garden that might be brought for exhibition, or such as to allow an arrangement that would produce the most striking effect. These fears proved, however, to be wholly groundless, and it was acknowledged by the numerous spectators of both sexes, who thronged the apartment, that, though more circumscribed, it had not been excelled in beauty of arrangement, in

the splendor of flowers, and the quality and excellence of fruits and vegetables, by any former exhibition of the society. The merit of this arrangement, as well as the brilliant floral display itself, must be mainly attributed to Mr. Buist and Mr. J. Douglass, Jr.; two enterprising florists of this city, and members of the committee, who entered into it with great zeal and spirit, and who are entitled to the thanks of the society and the public, for the taste, activity, and industry they displayed on the occasion. These florists were, however, aided by the exertions of Miss Mead and Miss Bache, to whose taste, zeal, and industry, the society has been more than once greatly indebted for the beauty of its floral arrangements. The articles exhibited were arranged in half circles around the apartment. At the bottom of the room, in front of the entrance, on the President's desk, elevated on a platform, stood a floral pyramid four feet in height, surmounted by a star, three feet in circumference, composed of choice dahlias, tea, noisette, and other roses, verbenas, and other beautiful flowers from the garden and green-house of Mr. Buist, and prepared by him. Immediately below this, on the Secretary's desk, stood a smaller pyramid, but not less beautiful, composed, by the same hand, of dahlias and tea roses, and surmounted by a Strelitzia regìnæ. At the commencement of the circular table to the left, was seen a splendid collection of beautiful dahlias, roses, chrysanthemums, petunias, china-asters, verbenas, and other flowers, from the capitol gardens, arranged in the form of a spear-head, about three feet in height, and prepared by Mr. Maher, whose skill and industry have contributed so much to the beauty of the public squares in this city. On the semicircular stands, between which sufficient room was left for the free passage of spectators, were arranged the splendid floral contributions of Messrs. Buist, Douglas, Gunnell, Cammack, Slater, Yates of Alexandria, Blagden, &c., and the contributions of fruits and vegetables of Messrs. Cammack, Shoemaker, Wiltberger, J. A. Smith, Blagden, King, Slater, Chew, &c. Among the first were the collections of Mr. Buist, consisting of sixty varieties of the dahlia, twenty-five of the tea rose, sixty of the noisette and China rose, specimens of the Pròtea argéntea, Mannettia glàbra, Ficus elástica, and many other beautiful cut flowers.

Mr. J. Douglas's contributions were very splendid, and consisted of fifty-four varieties of the tea and noisette roses, one thousand six hundred cut roses, dahlias, china asters, amaranthus, &c., which made a beautiful show.

Dr. Gunnell's collection of roses was, as usual, large and beautiful, consisting of fifty rare and choice varieties of the tea, noisette, and China rose. Among these were three, the Susanna, yellow centre, and Pocahontas, raised from seed by Mr. Suter. Mr. W. Cammack furnished for this department fourteen varieties of the dahlia, several varieties of the rose, phlox, and coral plant. Mr. Yates, of Alexandria, twenty seven varieties of the seedling dahlia. Mr. T. Blagden, twelve varieties of this rich and beautiful flower, and specimens of Verbena tweediana, petunia, Calendùla officinàlis, and balsam. Mr. Slater, twenty varieties of the dahlia. Miss Mead, fine vases of China roses, purple and white petunia, large amaranthus, pansies, and byzelia [?] tuberosa. Mr. Lovejoy, a bouquet of fine seedling dahlias. Mrs. Suter, excellent specimens of china-asters, large marigolds, dahlias, verbenas, phloxes, petunias, &c. Dr. Laurie, fine dahlias. And Mr. Causten, a specimen of the Mexican rock plant. J. F. Callan, a bouquet of dahlias, &c., and a parcel of flowers of upland cotton.

The beautiful spear of flowers, arranged by Mr. Maher, consisted of a great variety of the dahlia, *Verbèna Tweedieàna*, phlox, petunia, China asters, roses, and other rich flowers, which were greatly admired, as well as the very rich and gorgeous pyramids of Mr. Buist, which were not only objects of great beauty in themselves, but served as splendid decorations to the room. A young and flourishing pomegranate tree, in fine bloom, was exhibited by Mr. Polletti, and the Phœnix *dactylifera*, or date tree, by Mrs. Birth.

In glancing over this fine collection, the eye rested on a bouquet of beautiful passion flowers and volkamerias, sent by Miss Causten, which were much admired for their rarity and beauty; and the whole floral department was exceedingly attractive and choice, as well as highly creditable to the respective cultivators. Among the fruits were fine samples of the white and late heath peach, from Messrs. Cammack and Wiltberger; the Lafayette, from Mrs. J. Hellen; the red, from Mr. Stone, and the Gen. Brown, Georgia black, and yellow Gates, from Mrs. Towson; and of the Seckel, Bon Chretien, Buffalo Berry, and Brown Beurre pears, from Mrs. Towson, and Messrs. Shoemaker, J. A. Smith, and McKain. Among the Seckel pears was a specimen of very beautiful color, and luscious in flavor, sent by Mr. James Cox, near Baltimore. From the orchards of Messrs. Wiltberger, Smith, Gales, and Chew, were excellent samples of the pippin, Spitzemberg, pound, bell-flower, Catlin, sheepnose, Green Newton, Michael Henry, Robinson white, Pomme d'Api, black redstreak, and Bell apples; and a variety of native and foreign grapes—the Catawba, Isabella, and Malaga—from the vineries of Mrs. Towson and Messrs. Shoemaker and Blagden. One of the pound apples sent by Mr. Chew weighed twenty-two ounces, and those of Mrs. Gales were not far short of it. Judge Morsell's Malaga jar grapes were produced from seed, and had a fine appearance. But the most remarkable and superior species of grape at this exhibition was one exhibited by Mr. J. Caldwell, of this city, to which he could give no name, and which had sprung up a volunteer in his garden. One bunch of this grape weighed one pound nine ounces, was without pulp, and had a delicious taste.

The show of vegetables was highly creditable to the Society, and, though not so abundant as at some of its former exhibitions, many of them were superior in size and weight. They were all excellent. Specimens were exhibited of the Canadian and Marrow squash, orange pumpkin, okra, cucumbers, cayenne and sweet pepper, egg plants, parsnips, carrots, egg tomato, mangel wurtzel, sugar beet, potato onions, ruta baga, green Savoy cabbages, Dutch runners and beans, from seed distributed by the society some time ago, from the garden of Mr. J. A. Smith; cocoa-nut squashes, vegetable marrow, five feet long, curled parsley, turnip beets, rice plant in a pot, fox seedling potato and Rohan potato, from the garden of Mr. T. Blagden; a large Rohan potato, weighing two pounds, from the garden of Mr. Slater, of Alexandria; Rohan and Kidney potatoes, Bergen cabbages, parsnips, pickle cucumbers, long blood and long sugar beet, and ears of China tree corn, from Mr. Wiltberger's farm; blood and turnip beets, from Arlington house; a long blood beet, weighing twelve pounds, from Mr. Jackson's, near Tennallytown; fine egg plants, sent by the Georgetown collection; large stalks of celery, tomatoes, and turnip beets, from Mr. W. Cammack's garden; specimens of Spanish pepper, presented by Mr. Shoemaker; large flat

Dutch cabbage, egg plants, and sweet and Spanish pepper, by Mr. Polletti; and a large flat Dutch cabbage, by Mr. Wible.

Among these articles were seen samples of the Rock, or Sheath corn, from the Rocky Mountains, presented by Mr. P. Thompson; and a beautiful specimen of the *Dutton corn*, having *seven ears united and growing from the same head*, sent by the Washington City Silk Company. But the most extraordinary vegetable production at this exhibition, was a *pumpkin*, which weighed ninety-three pounds, and measured five feet eleven inches in circumference, presented by Mr. J. H. King, who also exhibited a large yellow squash, and a beautiful silver-skin onion, weighing one pound. The Committee on Vegetables, in their report, very correctly remark, that "the vegetables were all of a superior kind, and, as a whole, the best ever presented to the Society. The beets, pumpkins, squashes, Rohan potatoes, egg plants, &c. were prodigies. It is true the season has been a favorable one; but they think the improvement is owing more to the improved skill and attention of the horticulturist, than to the season." This was decidedly the most gratifying and splendid fall exhibition the Society has had since its organization.

The spectators were numerous during the whole exhibition, which continued from 2 o'clock to near 7 o'clock, and were manifestly much gratified and delighted with this fine horticultural show. (*National Intelligencer.*)

Horticultural Society of Charleston, S. C.—This society held its anniversary meeting on the 14th of August, and a report of the standing committee for the past year was read by the chairman, Dr. Johnson.

From the report, which is too long for the room we have to spare, we condense the following:—

The committee notice a fine *Rhododéndon Russellìànum*, and a fine collection of amaryllises, belonging to Mr. Alexander McDonald; a premium was awarded for the former. Mr. Thomas Bennett was awarded a gold medal for his zeal in ntroducing new and costly exotics, and for his exhibitions of the same. Mr. John Michels, a silver medal for a great show of roses and a dwarf banana. Mr. James Legare's fine collection of camellias, &c., is noticed, and a premium was awarded to him for his fine taste in laying out his grounds. Col. Lucas's fine collection of camellias, the largest and the best in the city, is noticed, and a silver medal awarded him. Mr. Gonzales is mentioned as presenting a collection of camellias and other plants; for his successful cultivation of the sweet lemon, having exhibited a plant fourteen feet high, the committee awarded him a medal.

Mrs. Mary Davis cultivates the largest collection of tulips and hyacinths, for which she was awarded a silver medal. Mr. J. F. Green exhibited a beautiful collection of roses; and for his rose golconda,(?) a splendid variety of running rose, he received a silver medal. Mrs. Wagner cultivates a fine collection of pelargoniums, and the committee awarded her a silver medal for the best. Mr. Giles is noticed as growing the ranunculus in great beauty, for which he received a silver medal. Mr. Condy's and Mr. Howard's collection of roses are highly spoken of as being select. Mr. Hedley displayed fine flowers of the *Pæònia* officinàlis var. fràgrans, and the committee recommend the more general cultivation of the pæony. Mr. Joseph A. Winthrop has been eminently successful in growing the rhododendron in the climate of South Carolina, and several varieties have bloomed in his garden; the committee awarded him a silver medal for a beautiful specimen of the *R.* Catawbiénse. Mr. Gray and Mr.

Teasdale exhibited choice dahlias; and the gardens of Mrs. Cochran, Mrs. Ripley, and Mrs. La Bruce, are noticed as being filled with choice plants.

The following premiums were also awarded by the Committee on Fruits and Vegetables:—

To Mr. Francis Michel, for the earliest fine peaches, a silver medal.
To Mr. George Spidel, for the best nectarines, a silver medal.
To Mr. Edward Barnwell, jr., for the best strawberries, a silver medal.
To Dr. F. Y. Porcher, for the best watermelons, a silver medal.
To Mr. John Hume, for the best muskmelons, a silver medal.
To Mrs. Fred. Rutledge, for cauliflowers, a silver medal.
To Mr. Jas. Bancroft, for artichokes, a silver medal.
To Mr. Frederick Winthrop, for brocoli, a silver medal.
To Mr. Edward Barnwell, jr., for Madeira onions, a silver medal.
To Mr. J. J. Lapenne, for Guinea squashes, a silver medal.
To Mr. James Legare, for Kohl Rabi, a silver medal.

The committee also notice the farms of several gentlemen, which "exhibit strong evidence of judicious cultivation." The nursery of Mr. Gilliman is particularly recommended for the finest variety of pears. (*Southern Agriculturist.*)

The Middlesex Horticultural Society.—This newly organized society, an account of whose first exhibition we gave at p. 387, appears to have been begun with spirit, and is continued with the same zeal. We have just been presented with a schedule of premiums to be awarded for garden productions in 1840, and which we annex below, that our readers may see the flourishing condition of the society. We have no doubt but that the offer of these liberal premiums will be the means of inducing amateurs, and practical men, to exert themselves in the growth of superior flowers, fruits and vegetables, and that the result will be an increased taste manifested, by the inhabitants of Lowell and vicinity, for horticulture in all its branches. The annexed is the list of premiums to be awarded for articles in 1840:—

Flowers:—Bulbous or tuberous rooted flowers, dahlias excepted, best display during the season	$5 00
Pansies, best display	3 00
Geraniums, best plant	4 00
Pinks, best display	3 00
Roses, best display, hardy kinds	4 00
Roses, best display, tender kinds	3 00
Best four varieties of dahlias	5 00
Best dahlia	3 00
Herbaceous plants, best display during the season	3 00
Native plants, best display during the season	6 00
Fruits:—Strawberries, not less than one quart	3 00
Cherries, not less than one quart	2 00
Peaches, not less than one dozen	5 00
Plums, not less than one quart	5 00
Gooseberries, not less than one quart	2 00
Raspberries, not less than one quart	4 00
Currants, not less than one quart	2 00
Pears, best autumn varieties, not less than two dozen	2 00
Apples, best autumn varieties, not less than two dozen	4 00
Grapes, native, first prize	5 00
Grapes, native, second prize	4 00
Melons, not less than a pair	3 00

Vegetables:—Asparagus, earliest and best in open ground	3 00
Rhubarb, best six spears	3 00
Peas, earliest and best peck	4 00
Salads	4 00
Potatoes	6 00

The society will withold any premium when it does not consider the specimen offered deserving of it.

All specimens offered for competition must be the property of the exhibitors, and must have been raised by them in the county of Middlesex.

Discretionary premiums will be awarded upon any flowers, fruits and vegetables, not mentioned in the previous list, which shall in the judgment of the society appear to deserve them.

Due notice will be given of the different times of exhibition.—*Lowell, October*, 1839.

Horticultural Society of New Haven, (Conn.)—Since the preceding part of this number went to press, we have received the report of the exhibition of this society. Coming to hand at so late a period in the month, we have not now an opportunity to give it at full length, but in order to have it appear in this number, we have condensed it as follows:—

The committee remark that "it is extremely gratifying to witness the lively and increasing interest manifested by all classes of citizens, for the prosperity of our society, and the liberality with which the lovers of nature, in the garden and the field, have contributed of their abundance to sustain it. Some few years since, it was apparently in a declining condition; without funds, in debt—many of its warmest friends, those who had held the laboring oar from its foundation, began to entertain serious apprehensions of its ultimate success. This question, we are happy to say, may now be considered as settled. It can no longer be doubted that our annual exhibitions, each succeeding year, showing a manifest improvement on the preceding, have awakened in the bosoms of the cultivators of the soil, a spirit of honorable rivalry, which promises well for both producer and consumer; and should the same feelings continue to prevail—of which we can see no reason to entertain a doubt—our exhibitions hereafter will inevitably be followed by the same beneficial results which have attended those already held.

"In nearly every department of horticulture, we notice a very decided improvement at the late over former exhibitions. Vegetables suitable to the season were in great abundance and of every variety, all showing that much care and attention has been bestowed upon their cultivation.

"Our soil appears to be peculiarly adapted to the culture of all the various tribes of the pumpkin family, as we may well judge from the great quantities and apparently good qualities of squashes, melons and pumpkins exhibited. The large Chili squash of Mr. F. Franklin, weighing one hundred and thirty-two pounds, was the largest ever exhibited here, and, with one exception, the largest raised this year, within our knowledge. This is equally true of the watermelon of Mr. D. Dorman, weighing forty-two pounds.

"We observed many fine specimens of the potato family, and among them several of the noted Rohan, showing that our soil is well adapted to the raising of this useful and healthy vegetable.

"Had we space, we should be pleased to mention more particularly, other kinds of vegetable productions, but suffice it to say that, of every variety usually exhibited, we noticed but few which did not give

assurance of the great productiveness of our soil, when properly cultivated and suitably enriched.

"Of the fruits, the peaches far surpassed those of any former exhibition. Our opinion of those, however, is more concisely expressed in the list of premiums below, than we can possibly express in words, nearly every specimen exhibited being considered worthy of a premium, though only two were offered.

"The season has been unpropitious for grapes generally, still we are gratified in having seen upon our tables fine specimens, both native and foreign, of this delicious fruit.

"Of apples, we observe many varieties uncommonly excellent, evidently showing an increasing interest in the culture of this most useful but much neglected fruit.

"Of pears, we had nearly, if not quite, our usual variety, although the season cannot be said to have been favorable to their healthy and vigorous growth. Much care seems to have been devoted to the cultivation of this very desirable fruit in our vicinity. The Seckel, Punderson, Winter Virgalouse, Jona, Bon Chretien, and a variety of nameless seedlings are extensively cultivated, and are of excellent quality. The usual contribution of Bon Chretien, from the garden of Capt. B. Beecher, was decidedly superior to any offered, but too late, by the rules of our society, to be entitled to a premium."

The following is the award of the premiums for fruits and flowers:—

Peaches:—First premium for freestone, Samuel St. John, $2 00
Second premium for freestone, Wooster Hotchkiss, . . 1 50
First premium for clingstone, Dr. Goodsell, ... 2 00
Second premium for clingstone, R. Hall, ... 1 50
Third premium for clingstone, A. Bagley, ... 1 00
First premium for seedling, William H. Elliot, ... 1 50
Second premium for seedling, Dr. J. B. Robertson, . . 1 00
Premium for Blood, Jerry Sheldon, ... 1 00
Plums:—First premium, Jonathan Maltby, ... 2 00
Second premium, N. Darling, ... 1 50
Pears:—First premium for the Seckel, Mrs. S. Huggins, . 2 00
Second premium for the Seckel, J. Maltby, ... 1 00
Premium for the Punderson, to Dr. E. Ives, ... 2 00
Premium for a seedling, J. Maltby, ... 2 00
Premium for a Virgoulouse, N. Darling, ... 1 00
Premium for the Winter, C. Alling, ... 2 00
Premium for the Bon Chretien, Judge Daggett, ... 1 50
Premium for three varieties, M. Cogan, ... 1 00
Apples:—Mr. C. Allen, A. D. Rose, and N. Darling, received premiums of $1 each.
Premium for the seedling Punderson, to J. M. Prescott, . 1 00
Grapes:—Twelve premiums were awarded to different cultivators, for out-door grapes and grapes under glass.
Dr. E. Ives received a premium for a seedling Isabella, of 1 00
Melons:—Six premiums were awarded for melons, to various cultivators: the kinds were, the citron, Champagne, Champagne water, Champagne black, Jerusalem, and apple seeded.

FLOWERS.

Green-house and other plants:—First premium, Miss Gerry, 5 00
Second premium, William Mansfield, jr. 4 00
Third premium, Mr. Mugford, ... 2 00
Fourth premium, William Mansfield, jr. 1 50

Bouquet:—First premium, Mrs. A. N. Skinner, ... 3 00
Second premium, Mrs. E. Monson, ... 2 00
Dahlias:—Best varieties—First premium, John Burgis, . . 2 00
Second premium, Mrs. B. M. Sherman, ... 2 00
Third premium, Miss Julia Mansfield, ... 2 00
Dahlias and other cut flowers:—First prem. Miss P. Beach, 2 00
Second premium, B. Silliman, jr. 2 00
Third premium, Micah Baldwin, ... 1 00
A premium, of $5, for the largest and best assortment of vegetables, to F. Franklin.

Upwards of one hundred and fifty dollars were awarded in premiums. (*Society's Report for* 1839.)

ART. V. *Massachusetts Horticultural Society.*

Saturday, October 26th, 1839—*Exhibited.* Flowers:—From Josiah Stickney, Esq. upwards of two hundred blooms of dahlias, many of them very fine, and some exceedingly beautiful; we particularly noticed the specimens of Ne Plus Ultra, Unique, Mrs. Rushton, and some others. Dahlias in the vicinity were cut off some days ago, (the 6th,) and the present display was one of much rarity to amateurs residing out of the city. From the gardens of Mrs. Hubbard, F. Tudor, Esq., and Dr. Robbins, at Nahant, there were exhibited a variety of flowers, culled in the open air, and containing, among others, dahlias, verbenas, marigolds, sweet peas, petunias, and other tender annuals, generally destroyed by the earliest frost; at Nahant, however, up to this period, there has been no frost, showing that on this rocky promontory, notwithstanding it is so much exposed to the winds, vegetation is not checked until some time after it is destroyed in the immediate neighborhood of the cities of Boston and Salem.

Fruits:—From Henry Corse, Esq., corresponding member, Montreal, L. C., several fine specimens of apples, as follows:—Fameuse or Pomme Niege, Golden Reinette and St. Antoine, and seedlings of his own raising, viz: Canada seedling, medium size, oblong in form, somewhat tapering to the eye, skin dark red: St. Lawrence, medium size, round, a fine fruit, in perfection in September: Seedling crab, a beautiful fruit, resembling somewhat the Lady apple, and about the same size. Mr. Corse was present at this meeting, being on his return home from a visit to New York. Mr. Corse remarked to us that he had a number of seedling apples, only a few of which had yet fruited. Mr. Corse was kind enough to give us some information, respecting several new fruits which he has raised, which will appear in our next volume under the pomological notices.

From R. Manning, Lyscom and Minister apples, the latter large, handsome, and a fine eating fruit. From J. F. Allen, large and fine specimens of Beurre Diel and Chaumontelle pears, and a variety, the name unknown. From Dr. James Jackson, Passe Colmar, Crasanne and green sugar pears, and a kind supposed Coffin's Virgoulouse.

Art. VI. *Faneuil Hall Market.*

Roots, Tubers, &c.	From $ cts.	To $ cts.
Potatoes:		
Chenangoes, per barrel,	1 25	—
Chenangoes, per bushel,	50	—
Common, per barrel,	1 00	1 12½
Common, per bushel,	50	—
Eastports, per barrel,	2 25	—
Eastports, per bushel,	1 00	—
Sweet Potatoes, per bush.	1 25	1 50
Turnips:		
Common, per bushel,	25	37½
Ruta Baga, per bushel,	37½	50
Onions:		
White, per bushel,	1 00	1 50
Red, per bunch,	3	4
White, per bunch,	2	3
Yellow, per bushel,	62	75
Beets, per bushel,	50	62½
Carrots, per bushel,	50	62½
Parsnips, per bushel,	62½	75
Horseradish, per pound,	10	12
Radishes, per bunch,	10	12
Shallots, per pound,	20	—
Garlic, per pound,	12	—
Cabbages, Salads, &c.		
Cabbages, per dozen:		
Savoy	37	50
Drumhead,	50	75
Red Dutch	50	75
Cauliflowers, each,	12½	25
Brocoli, each, scarce,	20	25
Lettuce, per head,	6	10
Tomatoes, per dozen,	50	—
Celery, per root:		
Common,	6	8
Bailey's Giant,	10	12
Spinach, per half peck	17	20
Pot and Sweet Herbs.		
Parsley, per half peck,	25	37
Sage, per pound,	17	20
Marjorum, per bunch,	6	12
Savory, per bunch,	6	12
Spearmint, per bunch,	3	6

Squashes and Pumpkins.	From $ cts.	To $ cts.
Squashes, per pound:		
Winter crook neck,	1 00	—
Autumnal Marrow, per lb.	1 00	1 50
Canada crook neck,	2 00	—
Pumpkins,	10	12
Fruits.		
Apples, dessert, new:		
Common, per barrel,	2 00	2 50
Common, per bushel,	1 00	—
Russets, per barrel,	3 00	3 25
Russets, per bushel,	1 50	—
Baldwins, per barrel,	3 00	3 50
Baldwins, per bushel,	1 50	—
N. Y. pippins, pr barrel,	3 00	—
N. Y. pippins, pr bushel,	1 50	—
Greenings, per barrel	3 00	—
Pearmains, per barrel,	3 00	—
Dried apples, per pound,	7	8
Pears:		
Napoleon, per doz.	—	—
Beurre d' Amalis, per doz.	50	—
St. Germain, per doz.	50	1 00
Beurre Diel, per doz.	37½	—
Messire Jean, pr half peck,	37½	50
Winter St. Michael, pr doz.	50	75
Chaumontel, per half peck,	50	75
Baking, per bushel,	2 00	—
Grapes, per pound:		
Black Hamburgh,	—	—
Malaga,	20	25
Quinces, per bushel,	3 00	4 00
Cranberries, per bushel,	2 00	2 25
Lemons, per dozen,	20	25
Oranges, per dozen:		
Sicily,	25	—
Havana, (sweet)	37½	50
Pineapples, each,	—	—
Cocoanuts, each,	5	6
Chestnuts, per bushel, scarce,	4 00	4 50
Walnuts, per bushel, plenty,	1 75	2 00
Almonds, (sweet,) per pound,	—	—

Remarks.—Since our last, there has been but little alteration in prices. The remarks prepared are unavoidably omitted, for want of room. Potatoes continue to arrive, though in less quantities than was expected, and, in consequence, Chenangoes have advanced twelve and a half cents per barrel: other vegetable productions remain about the same. Tomatoes are of hot-bed growth and handsome, and command quotations. Apples sell a little quicker, and the supplies from New York now being stopped, a slight advance has taken place. Chestnuts scarce. Walnuts plenty.—*Yours, M. T., Boston, Nov.* 28, 1839.

HORTICULTURAL MEMORANDA

FOR DECEMBER.

FRUIT DEPARTMENT.

Grape vines, in the green-house, should now be finally pruned for the season. Let it be done with a sharp knife, and tie in the shoots after the operation is finished. In green-houses it is best to bring down the shoots near to the front sashes, and there lay them together lengthwise of the house: this being the coldest situation, they are less liable to start prematurely in the spring. Cuttings for propagation should be cut and carefully preserved, by placing the bottom ends in earth in the cellar.

Strawberries, for forcing, should be placed in frames until ready for removal to the hot-house.

Fruit trees, in pots, should be placed in a cool cellar, from whence they can be brought into the stove, or hot-house, in succession.

Strawberry beds, raspberry vines, grape vines, &c., not yet protected, should be attended to immediately.

FLOWER DEPARTMENT.

Dahlia roots, in the cellar, should be looked over once a month to see that they are in good order.

Camellia seeds may now be planted in the green-house.

Camellias will now commence blooming, and will require to be liberally watered. Such as need it may be safely repotted at this season. Clean the leaves, and occasionally syringe the plants. When seeds are wanted, be particular and attend to the impregnation of the blossoms.

Azaleas should be sparingly watered through the months of December and January.

Lechenaultias should be very carefully watered at this season.

Ixias, *Sparaxis*, &c., potted last month and placed in frames, should now be brought into the green-house and placed on a shelf near the glass.

Tree pœonies, for blooming early, should now be brought into the green-house.

Cactuses should receive but very little water at this period.

Chrysanthemums, after they have done blooming, should be protected in a frame.

Hyacinths, set out in pots early in November, and placed in frames, may now be taken into the green-house or parlor. A second planting may now be made to bring on a succession of flowers.

Verbenas should be slightly watered, and placed on a shelf, as near the glass as possible.

Ericas will require attention. Water cautiously, and see that the drainage is not choked up.

Geraniums should be looked over, and if any lice infest them, give the house a good fumigating to destroy them; they are generally numerous at this season of the year on both geraniums and roses.

Hyacinth beds, and beds of choice tulips, should be covered with about three inches of coarse, strawy manure, or leaves, to prevent the frost from penetrating too deep into the soil.

Tiger flowers, amaryllises, and similar tender bulbs, should be laid away in the cellar or the green-house, out of the danger of frost.

LIST OF PLANTS.

In the body of the Magazine some errors occur in the spelling of the botanical names, the capitalizing of generic and specific names, their derivations, and accentuation: these are all corrected in the following list of plants. The synonymes are also given where the names have been indicated incorrectly.

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CORRECTIONS.

All the names of plants, either generic, or specific, enumerated in the body of the work, which are wrongly accented, the derivations incorrect, or erroneously spelled, are corrected in the list of plants at the end of the volume. Besides the errata inserted at pp. 193, 232, 308, 352, are the following:—

In p 3, 6 lines from the top, for "it," read "they."

In p. 35, 27 lines from the top, for "Baily," read "Bailey's."

In p. 149, 2 lines from the bottom, for "Prés," read "Près."

In p. 153, for "G. R. Rotton," read "G. R. Rolton." The same error occurs on p. 244.

In p. 197, 25 lines from the top, for "Paux," read "*Pánax*."

In p. 351, 12 lines from the bottom, for "peat," read "heat"

In p. 393, 24 lines from the top, for "tenth annual exhibition," read "eleventh annual exhibition."

In p. 443, 15 lines from the bottom, for "Loiscleur des Longchamps," read "Loiseleur des Longchamps."

In p. 452, 19 lines from the bottom, for "spice of a taste," read "spread of a taste."