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(1870)



L. L. L.

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. Pères de famille, inspirez la jardinomanie à vos enfans.”—*Prince de Ligne.*

VOL. IV.

1838.

EDITED BY C. M. HOVEY.

BOSTON:
PUBLISHED BY HOVEY AND CO., MERCHANTS ROW.
NEW YORK:
ISRAEL POST, BOWERY.
1838.

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BOSTON:
Printed by MANNING & FISHER,
No. 8 Congress Street.

P R E F A C E .

THE Fourth Volume concludes another year in the progress of our Magazine. The alteration in the title, which was made at the commencement of the Third Volume, has been highly satisfactory, and we are induced to believe, from its more popular appellation, that it has been the means of extending its circulation.

The Fourth Volume will be found fully equal to any of its predecessors. The papers have not, perhaps, been quite as varied, but they have been of a more detailed description, and, generally, from the pens of our most distinguished amateurs. In this volume a greater portion of the matter has been Original, than in either of the previous ones. As a new feature, a general retrospective view of the progress of Horticulture in the United States, for 1837, was given in the January number; this will be continued for each succeeding year, in our future volumes. The notices of new Fruits and Vegetables have been continued. The Floricultural Notices embrace a much greater variety of information, upon the cultivation of the species enumerated, than heretofore; the Foreign Intelligence has been more extensive—and the Domestic news and reports of Horticultural Societies, more complete than in the previous volumes. We have not furnished so many engravings, as we had hoped to have done; but this has arisen from causes beyond our control. We hope, however, that these causes will be soon removed, and that we shall have it in our power to enrich the pages of the succeeding volume of the Magazine, with several beautiful illustrations of green-houses, and other structures adapted to Horticultural and Floricultural purposes.

We need not make any promises that the Fifth Volume will be superior to the others, as we think our friends will not require it; the progressive character and improvement of the four volumes already before the Horticultural public, is, we trust, a sufficient guarantee that our desire is, to make each excel the other, as much

from the pride we take in its management, as from the hope of increasing our list of patrons.

In addition to the aid already extended to us, several gentlemen and amateurs, who take a deep interest in the science we profess to advance, have kindly proffered us their assistance; and it is a source of no small gratification to us, to know that our efforts, however so humble, have been such as to draw within our acquaintance, a large portion of all the principal patrons of gardening in the country.

The close of the Fourth Volume brings us to a brighter and more encouraging period in our labors than when it commenced. Unfavorable, indeed, were the prospects of this volume; and we rejoice that we have found friends to support and sustain us through it. To them—one and all—we offer our congratulations. With the Fifth Volume for 1839, we look for a large and widely extended circulation. The same kindness, which has always assisted us, we hope will be again exerted to enlist in our aid every friend or well-wisher of Horticulture throughout the Union. The Magazine will be published in same style and excellence, in which it has heretofore appeared, and every effort made to give it that standard merit which, alone, should entitle it to support.

C. M. H.

Boston, Nov. 15th, 1838.

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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 those errors indicated at pp. 77, 154, 274, 397, are the following:—
- In p. 321, for the last two lines of the first paragraph, after the word *meunier*, substitute the following:—"or Miller grape, and is so called from the under surface of the leaf having a light appearance like meal."
- In p. 367, 9 lines from the top, for "collections" read "collection."
- In p. 418, 22 lines from the top, for "when" read "where."
- In p. 277, 17 lines from the top, for "T. Magown, Jr." read "T. Magoun, Jr."
- In p. 63, 22 lines from the top, for "specimens" read "species."
- In p. 397, on the bottom line, for "D. longifolia" read "B. longifolia."

THE MAGAZINE
OF
HORTICULTURE.

JANUARY, 1838.

ORIGINAL COMMUNICATIONS.

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

WHEN we announced our intention of submitting to our readers an article, under this head, at the commencement of this and each succeeding volume, we were in hopes that all those amateurs and practical gardeners, who feel interested in the science of horticulture, would have come forward and assisted us in rendering such an article as complete as possible. Distributed as gardening is, in its various branches, throughout nearly the whole extent of the Union, it would be almost impossible for us to give a very correct view of its present state, unless we were aided by those who reside at a distance from us: knowing such would be the case, we gave early notice to our friends, and requested all amateurs and practical gardeners who appreciated our motives, to send us any information, in relation to the subject, which would aid us in perfecting this article; but we regret that we have only been favored with communications from two of our friends. We shall endeavor, however, to offer some remarks upon the advancement of horticulture in this country, during the past year.

Gardening has, until lately, in this country, attracted so little attention, and is yet practised in such a limited degree, that, as an art of culture, it can but be considered as in its infancy. Previously to the establishment of the various horticultural societies which at present exist, there were but few individuals who practised gardening to any extent, and the objects under cultivation were very limited, compared with what are now to be found in ordinary gardens. These societies, numbering among their members many of our most distinguished and intelligent citizens, have

given horticulture a respectable standing, and, by their influence, rendered it a general, and, in a considerable degree, a fashionable pursuit.

In Great Britain the high state which horticulture has attained—excelling every other nation—has been mainly owing to the influence of the London Horticultural Society, and, subsequently, to the establishment of the numerous provincial ones throughout the kingdom. These, by the emulation they have created among gardeners—a desire to excel each other in skill in cultivation—have done more towards spreading a taste for the pursuit than all other causes combined. The same results will follow the establishment of the horticultural societies of this country, if they are judiciously managed: and in no way will the interests of gardening be so much benefitted, as by liberal rewards, either of medals, or other marks of distinction, upon those amateur and practical gardeners who aim to show their skill in the management of the various objects under their care. Such premiums, however insignificant in themselves, awaken a desire among cultivators to excel each other, and improved methods of operation, beneficial to the whole of society, are the ultimate result.

In looking back upon the past year, we cannot but remark upon the depressed state of business, which has tended, in a very great degree, to influence and retard the progress of gardening. Although there has much been done, yet, had not the unexpected embarrassments in commercial affairs, which have been experienced throughout the country, taken place, there would have been a much deeper interest taken, and many new gardens laid out. In some sections of the Union these commercial troubles have been more deeply felt than in others; but the whole country has suffered in a greater or less degree. Such a state of things is very injurious to the florist or nurseryman; as, his articles being in a great measure fanciful and luxurious, they are not wanted, and his stock, consequently, remains upon his hands through a whole season. We need but instance the dahlia to show the correctness of our remarks; double the number of which were sold in 1836, to what were disposed of in 1837.

In speaking of the progress of gardening, we shall divide our subject into two parts, viz., Horticulture and Floriculture. In landscape gardening and arboriculture so little has been done, that it is unnecessary to say any thing in respect to them. We hope, however, that both will receive more attention than they have heretofore.

Horticulture.—In horticulture not so much has been effected the past year as in floriculture. Very few new fruits have been introduced from abroad, or produced from seeds in this country; and the planting of fruit trees has been quite limited to what it was in 1836. This, as we have before stated, has been owing

mostly to the depression of trade, and consequent inability of individuals to purchase largely, and want of time to attend to the subject.

In the commencement of our last volume we gave several papers under the head of *Pomological Notices* and *Notices of New Culinary Vegetables*. These embraced many new fruits and vegetables, whose qualities it would be unnecessary to enumerate here. These papers will be continued, and all the numerous fine fruits which have been sent to this country will eventually be fully noticed. We shall therefore refer the reader to the above papers for full information on these subjects.

The system of coiling vines in pots, which was first adopted by Mr. Mearns, and published in the London Magazines, and from thence copied into ours, has been fully tried during the two past years, and without much success. The method is now about given up. The best vines which we have ever seen subjected to Mr. Mearns's mode of treatment, were some under the care of Mr. Haggerston, at Mr. Cushing's; a few of these bore tolerable crops the second year. The attempts which have been made to procure grapes in quantity from coils of the same season have wholly failed in every instance. The planting of peach trees in pots is now becoming quite general: since our paper appeared on their management (II., p. 241,) several amateurs have been induced to try the experiment.

In Boston and vicinity but few trees have been planted. Pears are more sought after than any other fruit, particularly the finer sorts; and, as the stock of good trees is very limited, the nurseries have been tolerably well drained of the best specimens. Some new varieties have come into bearing the past year, and these will be noticed in another place. We have ourselves exhibited before the Massachusetts Horticultural Society some fine specimens of seedling strawberries, raised by cross impregnation between Keen's seedling, the Methven scarlet, and other sorts. We think highly of the quality of some of them; but another year's trial will be necessary, before we shall be able to ascertain fully their respective merits. We have given a paper upon the production of seedlings, and we hope both amateurs and practical gardeners will be induced to try experiments in raising superior kinds.

The cultivation of the pine-apple has been taken up in earnest by Mr. Cushing of Belmont Place, Watertown. When we last visited this fine situation, we found one of the elegant stoves converted into a fruiting pine-house, the pit of which was filled with fine grown specimens, some of which were beginning to ripen their fruit, or "swell off," as the phrase is. In the pit of the other stove was also a great number of succession plants, intended for fruiting next summer. Col. Perkins has also erected a

pinery, which will soon be filled with plants. We hail these as the first steps towards the general cultivation of this "king of fruits" by the wealthy gentlemen and patrons of gardening in this country.

The *Shephérdia argétea*, or buffalo berry, has begun to attract some attention as a shrub suitable for live fences. How well it is adapted for such purposes we are not informed. It is freely raised from seed, and will therefore probably soon be procured at a reasonable rate. In our opinion, however, we do not believe it will be found a substitute for the buckthorn. The fruit of the buffalo berry is very agreeable to the taste, and as a shrub for the production of fruit we think it well adapted to gardens, particularly where there are belts of trees or shrubberies attached. The berries remain upon the tree all winter, and give a lively appearance to its leafless branches.

We are not aware of many new gardens having been laid out the past year. Connected with the garden of the Mount Washington House, South Boston, there has been an extensive range of houses completed, which were commenced there in the fall of 1836. The garden is under the direction and management of Mr. William McCulloch. Grapes will be grown, together with other plants. Messrs. Mason, of the Charlestown vineyard, have made some addition to their structures for growing grapes. The new pineries of Col. Perkins will also be planted with grape vines. The supply of this fine fruit for the market is now fully adequate to the demand, and the very high prices which they have heretofore commanded must be soon reduced to a fair rate. These have been indeed extravagant, and we are gratified in believing that they will, before long, be within the means of all classes. The cultivation of foreign grapes in the open air must, we think, except in cities, be generally given up. During the three or four past years, scarcely a crop has ripened: nor have foreign grapes alone been cut off; very few of our native varieties have yielded any fully ripened grapes during the same period, unless in very favorable situations, with sunny aspects, sheltered from the cold winds. If the seasons continue to be characterized by the same severity of climate, we shall have to look to protected vines for crops of both foreign and native kinds. We hope, however, that milder summers and more favorable autumns await the cultivator, and that he will yet reap rich harvests from vines in the open air. The market has been very liberally supplied with fine late pears; but prices are held up so high as to exclude nearly all, but the most wealthy, from purchasing. Cultivators do not appear to know what is best for their own interests.

New York has improved less in the science of horticulture than her sister cities, particularly Boston or Philadelphia. Being the great commercial emporium of the Union, her citizens deeply en-

gaged in trade, she has been more severely affected by the suspension of business than either of the other cities. She cannot, indeed, be said to have ever taken so much interest in gardening as Boston or Philadelphia. Possessing, however, immense wealth, we anticipate a great increase of taste in horticulture and the formation of many new gardens. The Horticultural Society has occupied a large sphere of usefulness, but we have been pained to learn that it is fast losing its influence. The past year it held no exhibition, and, as we have already stated, some of the members have withdrawn from it, on account of its total inaction upon subjects connected with improvements in gardening. In the vicinity of New York, our correspondents, Messrs. C. & A. J. Downing, of Newburgh, have added a number of new fruits to their extensive nursery, and will soon have a fine stock, of many of Dr. Van Mons's new and superior varieties of pears, for sale.

In Philadelphia gardening has advanced with a steady pace, and the improvements the past year have been very great; probably surpassing any other city. We have been kindly favored with some notices respecting the state of the art in this city, and are therefore enabled to offer our readers a more particular account of what has been done. Horticulture as well as floriculture has received much attention. The Pennsylvania Horticultural Society has done much, by its exhibitions and by its liberal premiums, towards encouraging the cultivation of both fruits, flowers, and vegetables. And the onward progress which gardening is making, is owing, in a great degree, to its influence. Philadelphia has been always considered as standing at the head of all other cities in the Union in floriculture; and her citizens who are interested in the subject are probably determined that she shall not be, if possible, ever excelled. Thus, while the Horticultural Society of New York has been wholly inactive, and that of Boston slowly proceeding along without having given a premium these two years, the Society in Philadelphia has paid away several hundred dollars in rewards. It is the only sure way of creating a zeal among cultivators, whether amateurs or nurserymen; it awakens a desire to possess new things, and this causes the introduction of new plants, from whence the cultivators in different parts of the country, particularly the South, are supplied. We shall make some extracts from our correspondent's remarks.

In fruit, Philadelphia and its neighborhood has always been celebrated; but the new and more rare kinds which have been introduced into Boston and vicinity, from Dr. Van Mons's collection, or from the London Horticultural Society, are yet but little known there. Some fine kinds have been originated in Philadelphia, and among them we may mention the Seckel, one of the most delicious fruits, and the Petre pear: the latter we had

the pleasure of tasting but a short time since; it is a very fine late autumn variety. In the Report of the Annual Exhibition of the Society, an account of which appeared in our vol. III. p. 457, Mr. J. B. Smith obtained a premium for a seedling called the Pennsylvania pear. In grapes the milder seasons of Philadelphia afford an opportunity for crops in the open air to ripen, and in the city alone "thousands of pounds" were raised the past year. Some bunches, weighing two pounds, were cut from Muscat vines, which have stood out several years without *any* protection. Such "golden harvests" have been reaped, that arrangements are making for the planting of great numbers of vines in the open air. In times of old, persons who planted vines were only wont to "scratch a hole with a spade, and insert a grape vine, leaving all after management to nature: the result, of course, was abortive and discouraging; now, they proceed in a scientific and skilful manner, and prepare the soil, excavate and plant as vines should be planted." With such advantages in the open air, few graperies have been erected in Philadelphia. The first of any extent was that of N. Biddle, Esq., about two years since: but during the past season other cultivators seem to have become interested in their production by this mode, and a fine grapery, about ninety feet in length, has been erected by W. W. Cammac, Esq. Some efforts are making to introduce vines into green-houses; but our correspondent states, and we agree with him, that "there is a doubt of its general practicability, if the desire is at the same time to have a collection of choice plants. However, in the hands of a scientific operator, it may prove fruitful, without much injury to exotics." Mr. Biddle's gardener has produced some fine grapes in pots, for which he received a premium from the Horticultural Society.

There has been a decided improvement in vegetables. "An impulse has been given to the market growers, and they are making efforts to excel each other in the quality and quantity of their produce. This impulse has been stimulated by the liberal rewards of the Horticultural Society, which has done, and is still doing, much for the cause, patronized as it is by the citizens and neighboring amateurs, who are aware that a market well stocked and a table well covered with the most wholesome vegetables is the grand panacea of health." Immense quantities of rhubarb are now sold in the Philadelphia market, and there have been some improved varieties introduced, which command a much higher price than the old variety.

In Baltimore, the Maryland Horticultural Society has held its annual and monthly exhibitions, and done considerable towards directing the attention of the citizens to the subject; but we have not seen any reports of its exhibitions the past year, and from our own knowledge are unable to offer any remarks.

Washington has continued to advance in gardening, and the exhibitions of the Columbian Horticultural Society, which will be found in another page, have been of the most interesting nature. Fruits appear to have been less numerous objects at these exhibitions than flowers; but this is naturally the case as we go farther south, where, in some places, there are very few fruit trees. In vegetables, however, the citizens of the district appear to take much interest, and the specimens which have been exhibited would have done credit to any society. The past year has shown an improvement on previous ones, and undoubtedly their progress will be onward.

Charleston is yearly becoming more interested in the cultivation of fruits; and trees from the Middle and Eastern States have been sent thither to embellish the gardens of her citizens. The only knowledge we have of what has been done the past year is from the report of the exhibition of the Charleston Horticultural Society in our vol. III., p. 458.

In the West and other parts of the Union there is a decided interest felt in the subject, and another season we hope we shall be able to record all that may have taken place. Large numbers of fruit trees of all kinds have been sent from New York and Boston to the West. In Cincinnati there is a nursery established, and at St. Louis we believe one is about being formed. These nurseries will be the means of disseminating the new fruits throughout that portion of the country.

Floriculture.—This branch of gardening receives a great deal more attention than horticulture in every section of the country; not perhaps that the latter is not as interesting a pursuit, but because the limits of most gardens will not allow of the introduction of fruits to any extent, while a very small space allotted to flowering plants affords great gratification; and where there is a green-house attached, this gratification is doubly enhanced, by its contributing, in the gayness of its flowers, to our pleasure and recreation through our severe winters.

Within a short period there has been great improvement in the building of green-houses, both as regards the mode of heating and the finishing of such structures. Formerly they were shells, constructed without any reference to beauty, without proportion, and of the most inferior materials: the mode of heating adopted was by brick flues alone. Now, architectural proportions in building are taken into consideration, and the modes of heating various, though mostly confined to brick flues and hot water. As specimens of the style of houses lately erected, we may mention those of J. P. Cushing, Esq., Belmont Place, Watertown, and of N. Biddle, Esq., Philadelphia. Both are on a very large scale, but others have been built of great elegance. Two of them have been before noticed in our Magazine; they are those of

Mr. Perry and Mr. Becar, of Brooklyn, N. Y., and are probably not equalled by any thing of the kind in the country. For heating pits, the mode described by us, and illustrated by engravings, in our vol. III. p. 23, has been very extensively adopted in the vicinity of Boston, and has been found completely adapted to the purpose; within the past year we have seen three new pits which have been heated in this manner: with some few improvements upon the system, which we have since made, and which we shall probably mention at a future time, we have been enabled to keep up a fine heat, with scarcely the fluctuation of a degree throughout the winter season. We think there can be but one question, that it is the best and most economical mode of applying heat to small pits, that has been described.

Boston and its vicinity has improved, though not to any great extent, the past year. In its immediate neighborhood we do not know of any structures that have been erected. In Portsmouth a fine green-house has been built by an amateur; and in Salem we believe one or two have been put up. Some new plants have been introduced, which will be found under our head of floricultural notices. In the cultivation of tulips there has been a taste awakened by the fine exhibition of Mr. Walker, which has been noticed by us (III., p. 235.) If this show is continued every season—and we have understood Mr. Walker to say it will be, if no accident prevents—it will pave the way to a taste for their general growth. Dahlias are now the most noted flower, and the splendid new varieties which have been exhibited the past year bear evidence of the perfection which art in cultivation will attain. Some fine collections of Ghent azaleas have been imported, and in the course of another year we may expect to see some elegant specimens of this beautiful tribe. A few fine seedling pinks and pansies have been raised by Mr. Walker of Roxbury.

In New York Mr. Thorburn has added to his establishment at Ravenswood, L. I., a geranium house, for their cultivation alone, and has received many of the fine English varieties which have been lately produced from seed. In dahlias New York has equalled if not excelled her sister cities. Mr. Hogg has imported most of the new geraniums the past year.

Floriculture in Philadelphia is “onward, onward; year after year brings here another gay ornament for her gardens or green-houses, and month after month produces another structure, either temporary or permanent, convenient or ornamental.” N. Biddle, Esq., is about erecting a range of houses, to combine departments for cultivating plants from all parts of the globe, five hundred feet in length. Gen. Robert Patterson has erected a conservatory and hot-house, in the first style, which is to be enriched by the finest specimens of plants. J. J. Vanderkemp,

Esq., erected a house, and had it well stocked with plants in the short space of three months. Mr. Vanderkemp entrusted the whole to his gardener, even to the purchasing of the plants. Professor Wood has completed a hot-house and green-house for the cultivation of medicinal tropical plants; they are well finished, and both upwards of seventy feet in length: he also has a garden attached, for the growth of the medicinal flora of North America. We consider this one great improvement in gardening: such collections must be of great importance to young practitioners in medicine, as they offer an opportunity for examining the plants themselves, and thus ensure a correctness which cannot be obtained by dried specimens or from works upon the subject. Our correspondent, Mr. Mackenzie, has entered into the trade, and erected a small green-house and hot-house. Commercial gardening is in a more flourishing condition in Philadelphia than in Boston or New York. Mr. Buist has raised two very superior seedling dahlias, both of which gained prizes the past year as the best seedlings. The names are, Mrs. Rushton and Lady Washington; the latter is a fine white, and will probably be sent out next spring; the former is a seedling of this year, and is pronounced to be the finest dahlia that has been seen in Philadelphia; it is white, with a rose edge, fine shape, and free bloomer. Mr. Buist has succeeded the past season in importing a few first-rate carnations. Mr. J. B. Smith has also raised a most superb seedling camellia, said to surpass any of the striped ones; it is called *Esthèri*. Mr. Buist has also raised some fine ones, which have been noticed in our III, p. 203. The cultivation of the *Orchidææ* has been commenced by Mr. Buist, and he will soon have fine plants, of many species, for sale. An excellent article will be found in a succeeding page on their management, by his excellent foreman. In addition to these, immense varieties of roses, geraniums, &c. have been imported, embracing most of the fine European kinds.

Beyond Philadelphia we know but little of the progress of floriculture, but what we gather from the reports of such exhibitions of the various societies in that quarter as we have received; to which we refer our readers. These exhibitions show an increase in the number of new plants which are cultivated, and improvement in the cultivation of fine specimens. We would not, however, forget to mention our correspondent, Mr. Oemler of Savannah, who has raised many very fine hybrid hibiscuses, a tribe which he cultivates with great success; nor our friend, Dr. Ward of Athens, Ga., who is striving to introduce a great variety of the plants of the northern section of the country into the garden connected with the college at that place; both gentlemen have done much to spread a taste for flowers in their immediate

vicinity. From Dr. Ward our readers may look for a paper on the acclimization of plants in the course of the present volume.

We have thus given an imperfect sketch of the advancement of gardening during the past year. It will convey to our readers some idea of what has been effected. Our friends may feel gratified and encouraged, that, during such a year as the past, gardening has not been checked and retarded in a much greater degree. If the science has not lost a single votary, it has succeeded well: with the change of times and the consequent revival of business we may expect renewed efforts; and the loss of a season will be more than made up by the zeal which will undoubtedly be hereafter manifested by the amateurs and lovers of gardening.

ART. II. *On the planting, pruning, and management of Buckthorns for Hedges or Live Fences.* By J. W. RUSSELL, Superintendent at Mount Auburn.

THOSE persons who are desirous of obtaining, at the least possible expense, a good and durable fence around either gardens or farms, I would advise to give the preference to the buckthorn over any other kind of shrubs or plants that may have been recommended to them for this purpose, at least in this part of America. In the first place no kind of cattle have been known to feed on it; the field-mouse, that has been so destructive to trees through the winter months, of late years, never has molested it; no kind of *borers* or worms have as yet been known to feed on either roots or branches. It is also a very hardy plant, for it is seldom or never injured by the severity of our winters. It is naturally of a shrubby compact growth; therefore the better adapted for hedges than any other native plant within my knowledge. The fact is, that it might, with no impropriety that I am aware of, be termed the New England *hawthorn*; for I think, ere long, it will be as universally used throughout the United States, for live fences, as the hawthorn is in the north of England. The plants can be obtained at any of the nurseries near Boston, from two to three years old, and the cost will be from three to five dollars the hundred. I wish it to be borne in mind, that plants of the age just mentioned, should always be selected in preference to those of larger growth.

In the spring of the year, as early as the frost leaves the

ground, the hedge may be planted, and if the trench was dug out in the autumn previous, not less than three feet in width, and about fifteen or eighteen inches in depth, leaving the earth in a ridge on each side of the trench, for the purpose of freezing and thawing, it would add much to the quality of the soil at the time of planting. In order to do this work in the most thorough manner, the earth on only *one* side of the trench should be broken up pretty fine, with the spade, before putting it into the trench; when this is done and nicely levelled, some good old manure, that has more the appearance of rich earth than any thing else, should be placed on the soil that is already in the trench. The quantity that may be used must be left at the option of the operator, as he will be the most likely to judge of the good or bad qualities of the original soil: however, I should be in favor of giving the earth in the trench a bountiful dressing with the manure, more especially if such as I have spoken of can be obtained; if not, the nearer the proximity to it, the better.

I shall now suppose that one half of the earth, that was dug out in the autumn, is placed in the trench, with the manure, more or less, on the top of it; the earth that is still on the *opposite* side should now be put on the manure; this done, the workman should begin at one end of the trench, and dig or trench it all over, being mindful to incorporate the soil and manure well together. As soon as this is finished, the hedge may be planted in the following manner, viz. first, stretch a line across the centre of the trench as tight as possible; then with a good spade open the trench from the line, as deep as you will immediately perceive is necessary, from examining the roots of the plants; or a good criterion to go by would be, to set them as deep as they were originally planted, which may be easily known by a little observation. By keeping the line tight, and planting as close to or as near as possible, so as not to touch it, and observing to set the plants about nine inches apart in the row, or plant from plant, they will stand exactly where they ought to be; that is, as near as may be in the centre of the ground prepared for this purpose. The earth, having been all levelled carefully round the plants, the work is finished. I had nearly forgot to say, that the roots of the plants should have been pruned a little before planting, but not a *particle* of the top should be touched with a knife this year. In the spring of the year, after planting, the whole of the hedge *must* be cut down to within *three* or *four* inches of the ground: if this is not done, it is a hundred to one that the hedge will ever answer the purpose it was planted for, namely, that of having it thick and impenetrable *at the bottom*. There is not the least to be feared about the *top*.

In the spring of the year, after cutting the hedge down, or the third year from planting, I would advise only a partial cutting,

that is, to go over all of the hedge with a sharp knife, cutting down again only the *strong luxuriant shoots* to within three or four inches from where they started, leaving all the weak shoots untouched. This will be the means of making the hedge still thicker at the *bottom*; and it will be the last time that there will be any need of cutting so near the roots.

The fourth year the whole hedge ought to be brought into a good shape; and the shape of a hedge which I like to see best, is as near the shape of the *first* letter in the alphabet as any thing I can refer the reader to. I have seen hedges more than a mile in length of this shape, five or six feet high, and so thick at the bottom that a small dog could not have possibly found a place to have passed through it. The snow can never be of the least injury to a hedge formed in this manner: besides, who likes to look at a hedge thick at the top and thin at the bottom, when the remedy is at hand. Clearing away weeds, &c. once a year from the roots of the hedge, should not be neglected *the first three or four years*.

J. W. RUSSELL.

Mount Auburn, Cambridge, Dec. 14, 1837.

ART. III. *New method of obtaining a very early crop of Grapes, in Forcing-houses, as practised in Hamburgh.* Communicated by PROF. TORREY, N. York.

[The following interesting article on the culture of the grape was translated from the German, and laid before the New York Horticultural Society, by Mr. Poulson, of Hell Gate, and was forwarded, through the kindness of Dr. Torrey, its President, for insertion in our Magazine.—*Ed.*]

THE Horticultural Society of Hamburgh, at a sitting in Nov., 1835, offered a premium of eight Hamburgh ducats, to be awarded in 1837 to that individual who should succeed in producing the largest quantity of highly flavored grapes, not less than half a pound in weight, at a period not later in the season than the 15th March.

Mr. H. Davis, superintendent of the forcing-houses of E. Steer, Esq., in Hamburgh, has succeeded by a new, and, until now, unpractised management in ripening highly flavored grapes by *the 14th of January*. Mr. Steer having exhibited at the meeting of the Horticultural Society three different kinds of

grapes as samples, the Society unanimously resolved to award to Mr. Davis the premium of the eight Hamburgh ducats. Mr. Davis's method of procedure is quite novel to us, and will prove of the highest importance to those who desire to grow very early crops of grapes. While at Demarara and Trinidad, he observed with admiration the judicious management of the inhabitants, by which they have a continuous crop of ripe grapes throughout the year. For that purpose they make choice of a border planted with strong three year old vines, of the following late bearing kinds: black Alicant, Chasselas rouge, and blue Frankenthal. If the owner of such a border wishes to have ripe grapes in January, he sews up the vines in a coarse, loose linen canvass, lays them down, and covers them closely with wooden shutters. These shutters must be covered with about two feet of earth, and then an extra covering of leaves over the whole, sufficient to prevent any influence of the sun.

Although, in the experiment made by Mr. Davis, the vines employed were but one year old, he still succeeded perfectly in raising a crop of ripe grapes by the middle of January. The forcing-house was heated by steam, and Mr. Davis suggests, that, in vineries heated by flues, the vines should be well syringed in a temperature of 16° to 17° Reaumur. The Society are gratified to have called forth, through the means of the premium awarded to Mr. Davis, this ingenious method practised in tropical America. Although Mr. Arkwright exhibited before the Horticultural Society of London, twenty-five years ago, grapes ripened in January, yet his method required at least three years' preparation for the late ripening varieties. Mr. Arkwright's method appears to have consisted in the use of pine-houses and vineries, adapted to produce a later display of their leaves; but his method, if a successful one, was not sufficiently made known in its details to be of any public advantage. In Mr. Davis's method vines are selected which have never produced fruit, and they are retarded, by a double repose, from their usual growth, in order that they may push at a late period with the more vigor.

It is a well known fact in vegetable physiology, and one which must be observed in all early forcings, that there is a period of vegetation in summer, and one of repose in winter, in all plants. All vegetables produce, with few exceptions, their blossoms and fruits *once* in the year, and then return to a state of repose, in order to collect new vigor for the new vegetation. In the same way the grape vine will long produce fruit annually, though at different seasons, if the period of repose be changed and effectually carried out; rest being a leading rule, without which no plant can produce good fruit. To attain this, the vines, after they have been planted one, two or three years in a prepared house, must be forced as early as possible in a temperature of

15° to 17° Reaumur, so as to obtain healthy and vigorous shoots, which must be allowed to bear no fruit or small branches. In this way strong vines, and of the necessary length, will be obtained. By the end of March these vines will have grown so much, that the wood will be prepared for ripening in the month of April, which must be effected by a decline of temperature to 8°—10° Reaumur. In the beginning of May the vines must be taken down, and, after having laid fourteen days, they must be sewed up in coarse canvass, covered with shutters, and the shutters with earth and leaves. There they must remain until the end of July. In August begin to air them by degrees, and in the month of September the covers should be taken off, the vines trimmed and tied up. The forcing should now commence, giving the vines a moist atmosphere, and a temperature of 16°—18° Reaumur, until the fruit is ripe.

The season of the vines is then changed, and by the same attention to the time of repose, they will bear as readily and abundantly in winter as at any other season.

T. A. OHLENDORF,

Pres. of Hamburg Hort. Society.

ART. IV. *A few Suggestions in regard to planting out Fruit Trees.* By E. M. R.

DOES it not frequently happen, that those about to commence planting trees are not sufficiently aware what a very important item the *soil* forms? Where the soil is not particularly adapted to the growth of fruit trees, is it not much better to devote a sufficient quantity *entirely* to that purpose, and render it fit by deep ploughing, trenching, manuring, and, in short, to make the soil of a suitable depth,—say eighteen inches at least,—than to plant out trees promiscuously over a large tract?

It is believed that a much greater quantity of fruit, of a much superior quality, may be grown on one acre of land naturally suitable for the purpose, or made so by art, than can be raised on several where its adaptation is not taken into the account.

It is doubtless true that trees may be made to flourish for a *while*, in a soil naturally barren, (or exhausted by injudicious cultivation,) by digging the holes, for their reception, very large and deep, filling them, when the trees are being transplanted, with a

rich compost: but will they continue to grow, when they shall have extended beyond the bounds of the original excavation? Will they not, by degrees, become mossy, dwindle for a while, and finally sink into premature decay?

When one is obliged to plant trees on a sandy or gravelly soil, perhaps ditch or pond mud, (or clay in a less quantity,) with a suitable proportion of compost manure, spread on to the depth of several inches, and ploughed in, would be sufficient where apple or pear trees are to be cultivated.

Where cherry or plum trees are to be grown, it would be better to cart on a sufficient quantity of rich loam, sods, &c.; for plums, where it is practicable, perhaps a third or quarter part of *salt* marsh mud may be used with advantage, to make the soil of the depth.

Where peach trees only are to be transplanted, a light dressing of compost, consisting of stable manure, lime, wood ashes and loam will answer the purpose.

An error, which has been practised to a considerable extent, is, that of transplanting the roots at a much too great depth for the trees to flourish with vigor.

The distance between the trees must be regulated by the size which they will probably attain: they should not be planted so near as to interfere with each other, when fully grown.

When manure is spread round fruit trees, an erroneous practice prevails of putting it too near their trunks.

Some varieties of apples and pears (it is probably the case with other fruit trees, vines, &c.) will flourish where others will not; the Roxbury russet apple requires a strong and rather moist soil to produce large and fair fruit; the Rhode Island greening flourishes on a comparatively light and dry loam; and the American summer pearmain (the tree is of small growth,) has the reputation of succeeding on light or sandy soils.

By some the autumn is preferred for removing trees, and by others the spring. The spring is doubtless to be preferred for the peach and plum: as regards apples and pears, if the ground where they are to be set is somewhat moist, transplant them in the spring; if it is rather dry, the autumn is quite as well. The general rule for fruit trees is, when the sap is dormant.

Select young and thrifty trees from the nursery, of good size, not forgetting the great importance of their having sufficient roots; dig the holes about six inches larger in diameter than the roots are, when extended, and let the trees be planted not more than one inch deeper than they grew in the nursery. It is generally advisable to put some *mulch* (bushes which have been mown answer a good purpose,) round trees the ensuing summer after planting them, if the weather should prove dry, to be removed in the autumn.

After trees have been transplanted, they will require attention to see that they are not preyed on by insects, that they do not get loose, and are kept in proper form by a judicious pruning; which ought to be performed annually, when the sap is in full motion.

If proper pains have been bestowed on making the soil suitable, and if the trees have not been transplanted in a *hurry*, should you not have the satisfaction of seeing them flourish, you will have no cause of self-reproach.

E. M. R.

Dedham, Dec., 1837.

[The above most excellent hints are from the pen of an amateur well versed in the cultivation of fruit trees. The careless manner in which the operation of planting trees is performed, is the great source of most of the complaints which are so often made about their future success. Let the above remarks be treasured up by all who are about planting fruit trees of any kind.—*Ed.*]

ART. V. *Hints on the Cultivation and Treatment of several Genera of the Orchidææ.* By W. D. BRACKENRIDGE, Head Gardener in R. Buist's Exotic Nursery, Philadelphia.

AMONG the various tribes of plants which compose the vegetable kingdom, there are, perhaps, none more interesting, more numerous, or distributed so generally over the surface of the globe, as the family of *Orchidææ*. The fantastic forms of many of the tropical kinds, with the exquisite delicacy of their drooping racemes—the gorgeous rich colors of their flowers, of almost every tint and hue,—renders them undoubtedly one of the greatest ornaments of the stove.

It therefore has occurred to me, as a taste for rare and interesting plants appears to be fast gaining ground in many of our States, that, for the assistance of those who may possess a collection of *Orchidææ*, a few general hints, founded on practice, on the most eligible method of managing them, might prove acceptable to many. Confining my observations to the *Epiphytiscal* (not *Parasitical*, as they are sometimes called,) kinds, which are, with a few exceptions, confined to tropical regions, and generally found growing on the trunks and branches of trees, in

most instances removed a considerable distance from the earth, it becomes, then, the cultivator to study the habits and constitutions of such plants, and to place them in an atmosphere and situation as much in imitation of their native habitats as possible. To give directions for the treatment of different genera and species, separately, would occupy too much space, varying as they do in their localities, from those that vegetate in the dense forests of Brazil, to those found growing on barren rocks on the coast of New Spain. Yet, an intelligent horticulturist will at once conceive that plants, from both localities, can be accommodated in one hot-house.

The system which I have uniformly practised with success, in growing the genus *Cattleya*, *Epidendrum*, *Oncidium*, *Rodriguezia*, *Pleurothallis*, and others of the same nature, is to have cork or bark boxes made, say ten inches square by six deep, tapering towards the bottom; these should be filled to the brim with a mixture of turfy peat, broken potsherds, decayed wood, or *Sphagnum palustre*. In planting, those kinds with pseudo-bulbs should always be raised a little above the level of the box, so that the base of the bulb stands free of the compost; and in no instance should the roots of any of the kinds be buried deep, as they are apt, from superabundance of moisture and exclusion from the atmosphere, to decay; which is also the case with the young shoots when planted in a pot of earth, like a blanched *daffodil*, as we too often see them. All that is requisite is, to pack a few pieces of turf about the base, just so as to keep the plant steady, when the roots will run over the surface and cling to the cork in all directions.

Many of the small and delicate species succeed well by fixing a little moss round their roots, and binding them with copper wire to a piece of *birch* wood, allowing the bark to remain, afterwards, suspending the whole from one of the rafters. From the drooping habit of the flower-stems of many of the kinds they often take a perpendicular direction; and, for want of an aperture to escape, coil themselves around in the pot or box, and ultimately decay. Instances of this kind are often met with in the *Stanhopea elegans*, *Acroptera Loddigésii*, *Gongora atropurpurea*, and *Tribrachia pendula*: the evil is easily avoided, by planting in small baskets, made of brass or lead wire, and hanging them up; the racemes will then find their way through the openings, and hang down in graceful festoons.

The genera *Zygopetalon*, *Peristeria*, *Ornithidium*, *Catasctum*, *Cyrtopodium*, and their allies, will all thrive well in pots, provided they are well drained and filled with porous, decomposable, vegetable material, as pieces of decayed *willow* wood, mixed with *sphagnum* and siftings of peat soil. Water must be given sparingly at the root; in fact it may almost be dispensed with, if the plants

be gently syringed overhead once or twice every eight days in winter, and oftener, as the season advances. The temperature of the house should never be allowed to fall below 60° Fahrenheit scale; a warm humid atmosphere, almost approaching to saturation, being what they delight in, and without this no collection can be kept in a vigorous and healthy state.

As much of the success depends on placing the plants, some requiring shade and others light, as a general rule I would remark, that those with thick, coriaceous or subulate leaves, as *Oncidium carthaginense*, and *O. Cebollèti*, *Brassavola tuberculata* and *B. cucullata*, *Dendrobium speciosum* and *D. Barringtoni*, will stand sun and light with impunity; others again, as *Oncidium divaricatum*, whose leaves are thin and membranous, when exposed to the sun become languid and yellow. In the scorching heat of summer I would recommend a little to be given to them all, as it preserves that livid green appearance so pleasing to the eye. The greatest evil the cultivator has to contend with is the millepes, or wood lice. These pests attack and eat the points of the young roots, and when not attended to will soon destroy the whole plant. The only way to keep clear of them is to place the plants on hanging shelves, or to suspend the pots, as I before observed, which also leaves more space for other plants beneath.

Under the above treatment we have had this autumn the satisfaction of flowering some handsome and highly interesting species, which, with the old routine of management, would have remained in a weak, sickly state, and ultimately been turned out as cumberers. Should these few hasty remarks meet your approbation, on some future occasion I may offer some hints on the treatment of the terrestrial kinds.

W. D. BRACKENRIDGE.

Philadelphia, Dec. 10, 1837.

ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Ed-

ited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, Florist's Register, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo numbers, with a plate; 1s. each.

Floricultural intelligence.—In addition to the information given in the first part of this number, upon the progress of horticulture the past year, we present the following lists of new and rare plants which have been introduced into the country. The first embraces such as have been introduced to Philadelphia by Mr. Buist and others, and we annex a * to such of them as have been simultaneously imported into Boston.

Aristolòchia brasiliènsis	E'pæris diosmæfòlia
Aristolèlia <i>Mácuì</i> , fol. var.	heteronèma
Begònia acuminàta	obtusifòlia
insígnis	*paludòsa
lóngipes	<i>Erica Bowieàna</i>
parviflòra	cruènta supérba
pátula	curviflòra rùbra
sinuàta	grácilis
Bignònia jasmínoides	kè'vis
Borònia serrulàta	Monsòni
Brachysèma latifòlia	Savileàna màjor
Callistàchys robústus	vérnix
*Camèllia japónica Doncke-	Escallònia rùbra
laèri	<i>Euónymus japónicus</i> fol. varie-
Fòrdii	gàtus
*Gilesii	Gésnera aggregàta
Palmèri álba, true	Douglàsi
triúmphans	rupéstris
spicàta	Hòvea lanceolàta
Cèreus Smithiana	pannòsa
Clématis Siebòldi	Ismène <i>Amàncæs</i>
Dillwynia junipérina	Jacquínia armillàris
Diplàceus puniceus Nuttall	Linum monógynum
This is one of the plants	Manmillària acanthophlígma
raised from seeds brought	pyramidàlis
from California by Mr. Nut-	simplex
tall.	subpolyèdra
Dyckia remoteiflòra	Nierembérgia Blóckiï
Echinócactus scòpa	filicàulis
pulvinàta	Oxylòbbium arborèscens

* <i>Passiflora Kermesina</i>	<i>Thunbergia fragrans</i>
* <i>Londoni</i>	<i>Tropaeolum brachyceras</i>
<i>Pultenaea subbellata</i>	<i>tricolorum</i>
<i>Scottia dentata</i>	<i>tuberosum</i>
<i>Tetragastris peltata</i>	<i>Verbena Tweediana</i>

The following orchideous plants have also been introduced:—

<i>Brassavola tuberculata</i>	<i>Maxillaria picta</i>
<i>Cattleya Forbessii</i>	* <i>Oncidium flexuosum</i>
<i>Cyrtopodium Andersoni</i>	<i>Ornithidium reflexum</i>
<i>Dendrobium speciosum</i>	<i>Prescokia plantaginifolia</i>

The following plants have been imported into the vicinity of Boston by Messrs. Wilder, Sweetser, and Hovey & Co.

<i>Acacia Houstoni</i> (different from Mr. Buist's) <i>virgata</i>	<i>Melaleuca imbricata</i>
<i>Alpinia nutans variegata</i>	<i>Metrosideros albiflora</i>
<i>Amaryllis adventa</i>	<i>glauca</i>
<i>Harrisoni</i>	<i>latifolia</i>
sp. from Brazil	<i>myrtifolia</i>
<i>Ardisia umbellata</i>	<i>Nerium odorata</i> var. <i>fulvum</i>
<i>Arbutus coccineus</i>	<i>pulcherrimum</i>
<i>hybrida</i>	<i>splendens</i> fol. variegated
<i>rigida</i>	<i>Pæonia Moutan papaveracea</i>
<i>serratifolia</i>	<i>roseo violacea</i>
<i>Benthámia fragifera</i>	<i>purpurascens</i>
<i>Brugmansia sanguinea</i>	<i>stellata atropur-</i>
<i>Cactus coccineus</i>	<i>purea pleno</i>
<i>Napoleonis</i>	<i>Rhododendron arboreum album</i>
<i>paraguayensis</i>	<i>Chelsoni</i>
<i>Vaukerei</i>	<i>Cunninghami</i>
sp. from Trinidad	<i>verum</i>
<i>Cereus Deppeii</i>	<i>elegantissim-</i>
<i>niger</i>	<i>um</i>
<i>strigosus</i>	<i>excelsum</i>
<i>Camellia japonica curvatæ-</i>	<i>fromontianum</i>
<i>flora</i>	<i>incomparabile</i>
<i>delicatissima</i>	<i>Keteleeri</i>
<i>fulgentissima</i>	<i>nazarèthi</i>
<i>Gilesii</i>	<i>niveum</i>
<i>Maria Dorethea</i>	<i>novum</i>
<i>Crinum Careyannum</i>	<i>phæniceum</i>
<i>Cydonia sinensis lutea</i>	<i>speciosum</i>
<i>Eupacris impressa</i>	<i>spectabile</i>
<i>paludosa</i>	<i>superbissim-</i>
<i>Hedychium gracile</i>	<i>um</i>
<i>fulvum</i>	<i>R. Cartoni</i>
<i>Hibbertia grossulariæfolia</i>	<i>Gowenianum</i>
<i>Justicia calytricha</i>	<i>enueandrum</i>
<i>carnea</i>	<i>Salvia chamædryis</i>
<i>Melaleuca decussata</i>	<i>Syringa Josikæa</i>
<i>foliosa</i>	<i>Tacsônia pinnatifidula</i>

Upwards of one hundred named sorts of azaleas have also been introduced, the names of which we should add but for want of room. For a list of some splendid new camellias, see under head of *Ternstroemiaceæ*.

Dr. Torrey, of New York, has published a catalogue of plants found in the vicinity of Newbern, N. C., by H. B. Croom, Esq. A. M. This gentleman, with his whole family, it will be recollected, perished in the ill-fated steam-boat *Home*, when she was wrecked off Cape Hatteras. This catalogue was nearly through the press when Mr. Croom left New York; the season having advanced so far as to render his departure necessary, and the proof sheets were left to the inspection and care of Dr. Torrey, who has affixed a preface to the work, and a brief memoir of Mr. Croom's early life and character, by the Rev. Dr. Hawks of New York. It is a merited tribute to the memory of Mr. Croom, whose loss to science is greatly deplored. The catalogue is arranged after the natural system, according to Dr. Lindley, in the second edition of his *Introduction*, and contains upwards of a thousand species. We shall have occasion to refer to this hereafter. Some notice of Mr. Croom's death will be found in another page.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculaceæ.

DELPHINIUM

azureum De Cand. Sky-blue Larkspur. A hardly perennial plant; growing three or four feet high; with sky-blue flowers; appearing in summer; a native of North America. *Bot. Reg.*, 1999.

An interesting, but by no means handsome, species of larkspur, raised from seeds collected by Mr. Douglas in California. It is somewhat similar to the common *D. grandiflorum*, but more robust in its habit, and with erect racemes of flowers. Michaux discovered this same species in the Middle or Southern States, and it therefore appears to range, in its geographical distribution, from the Atlantic to the Pacific Ocean. Mr. Drummond also found this species in Texas. It oftentimes varies in the color of its flowers, being occasionally of a dirty pink. (*Bot. Reg.*, Oct.)

Ternströmiææ.

CAMELLIA.

We have been favored with the following description of several new camellias, which have been received by Mr. Wilder from Germany. Mr. Wilder has some of the plants, and, as will be seen by his note, is in expectation of the remainder the present season.

Agreeable to your request I send you a list of the new camellias that I have imported this year. I have only given you the names of the most distinguished, and to which I add the description and origin, so far as I am informed. Below, with this sign *, I also give you the names of a few that I am hourly expecting from Germany, which, if we may believe the description, are truly *nouvelle* and of great merit.

C. j. candidissima (China) "large, clear white, very full and perfect, just as good as the old double white."

C. j. Colvilli rubra (Belgium) "bright rose, with dark stripes, very double."

C. j. delicatissima (English) "blush white, delicately striped with red, very full."

C. j. Donkelaeri (China) "very beautifully variegated scarlet and white, very large, but not quite full."

C. j. francfurtensis (Germany) "quite large, full and perfect, bright rose, the outer petals darker."

C. j. imbricata alba (English) "perfect, full white flower, occasionally tipped with red."

C. j. Rollini (if the true, Belgium) "very large, bright rose, and perfect."

C. j. rosea nova (China) "bright rose, small, full and perfect as myrtifolia."

C. j. tricolor (China) "if Van Siebold's, (the wrong sort is nothing but imbricata,) clear white ground, striped with scarlet and rose, not quite full, but very large and distinguished."

C. j. triumphans (English) "deep rose, very thick and large flower."

C. j. Gunnelli (Germany) "clear white, large and full."

C. j. colorata nova (Belgium) "dark crimson, large and beautiful."

*C. j. nobilissima, "clear white, cupped petals, large and perfect."

*C. j. ochroleuca (China) "very scarce and eagerly sought for, not yet flowered; said to be nearly yellow."

*C. j. rugosissima (Belgium) "bright orange, scarlet; very full and perfect."

*C. j. Schryumakersii (Belgium) "dark scarlet; better than corallina."

*C. j. superbissima, "raised by M. de Socco, Milan, and which he describes as bright rose, and of the enormous size of seven and a half inches in diameter."

*C. j. Campbelli (Scotland) "clear white, with regular scarlet stripes."

*C. j. Palmer's Perfection (China) "said to be the most distinguished flower ever imported from China."

*C. j. Alnutti superba nova, "described as the best flower yet raised in England."

*C. j. King, "clear white, with regular scarlet stripes and points, the centre yellowish, petals undulated, very full and perfect."

Of camellias King, and Palmer's Perfection, my correspondent remarks, "Of all the camellias, these are now most sought for; the former I paid last autumn twenty-six guineas for a plant with seven leaves, and ten guineas for the latter, with two leaves."—*M. P. Wilder.*

Rosàcæ.

HORKELLA (Named in honor of John Herkel, Professor of Physiology at Berlin.) *Schlecht fusca* Lindl. Dusky Horkelia. A hardy perennial plant; growing two feet high; with white flowers; appearing in August; a native of California. *Bot. Reg.*, 1897.

Of little beauty. This and four other species were discovered in California by Mr. Douglas, and sent to the London Horticultural Society. In their growth they resemble potentillas; but they differ in having the flowers collected into corymbose panicles. It will scarcely be considered as worthy of cultivation only in botanical collections. Dr. Lindley states that the genus forms a transition from *Potentilla* to *Sibbaldia*, "and thus assists in establishing a gradual series of structure between the most highly developed forms of *Rosàcæ* and such imperfections as we find in *Sanguisorbiàcæ*." (*Bot. Reg.*, Oct.)

Leguminàcæ.

PODOLOBIUM

staurophyllum Don *Cross-leaved* Podolobium. A green-house plant; growing about four feet high; with yellow flowers; appearing in March; a native of New Holland; increased by cuttings; cultivated in peat, loam and sand. *Pax. Mag. Bot.*, Vol. IV, p. 171.

An "elegant green-house shrub." It is a free flowerer, especially when planted out in the border of the conservatory. In a pot its growth is checked, and it rarely attains to a good size. The leaves are opposite, trifid and coriaceous: the flowers are disposed in lateral clusters towards the extremities of the shoots, and have the appearance of large terminal racemes. It flowers in March, and at that time is a fine ornament for the green-house. Succeeds well in peat, loam and sand. (*Pax. Mag. Bot.*, Sept.)

Virgilia lutea has been exquisitely in flower at Mr. Mason's, in Charlestown, where plants have been raised from seeds which were sent to the Massachusetts Horticultural Society, by the Baron Ludwig, in 1836.

Begoniàcæ.

PEGONIA

insignis Graham *Noble-flowered* Begonia. A stove plant, growing three (?) feet high; with rose-colored flowers; appearing in December and January. Probably a native of Brazil. *Bot. Reg.*, 1896.

The most charming species of this genus, blooming in the month of December and January, "when it produces its lovely semi-transparent rose-colored flowers." It is not so conspicuous for its foliage as many of the more common kinds, but it far surpasses all in the brilliancy of its blossoms. The flowers are very numerous, and appear in pendulous corymbs. This species will thrive in the green-house, but it attains its highest state of perfection in the stove. The drawing was made from the collection of Lady Antrobus. (*Bot. Reg.*, Oct.)

Campanulàcæ.

CAMPA'NULA

portenschlagiana Alph. *De Cand.* *Dalmatian wall* Campanula. A frame or green-house plant; growing a foot (?) high; with blue flowers; appearing in summer; a native of Dalmatia. *Bot. Reg.*, 1895.

A pretty species, introduced into England by the Hon. W. F. Strangways. It is erect in its growth, with slender and delicate branches, and small, erect flowers, terminal upon all the shoots. It is a native of walls and rocks in Dalmatia, and is adapted to our green-house or frame collections. In summer it might be removed to the flower-border, where it would flower profusely. (*Bot. Reg.*, Oct.)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Scrophulariàcæ.

MIMULUS

Harrisoni Paxt. Harrison's Mimulus. A hardy plant; growing three feet high; with rose-colored flowers; appearing in June. Pax. Mag. Bot., Vol. IV, p. 173.

Between *M. cardinalis* and *M. roseus*.

One of the most showy varieties of the whole group. The habit of the plant is robust, erect, and slightly branched. The flowers are large, two inches across, fully open, and of an exquisite transparent rose, with a few dark spots in the centre. It was raised from seeds of the *M. roseus*, which had been impregnated with the *cardinalis*. It takes after the *cardinalis* in its mode of growth; but it has the purity of color of the *roseus*. Probably it may be treated like the *M. cardinalis*, as a hardy annual; see another page. It was raised in the nursery of Messrs. Low & Co., Clapton. (*Pax. Mag. Bot.*, Sept.)

MONOCOTYLEDONOUS PLANTS.

Iridiàcæ.

CROCUS

Imperati Tenore Imperato's Crocus. A hardy bulb; growing six inches high; with purple flowers; appearing in April; increased freely by seeds. Bot. Reg., 1993.

Another of the fine acquisitions to our gardens, introduced into England by the Hon. W. F. Strangways. It is one of the finest of the genus. The sepals and petals are of a beautiful clear purple, and the former are elegantly veined with dark brown. It flowers very early, and does not require so much sun to unfold its blossoms as the common *C. vernus* and its varieties. *C. Imperati* is found in profusion in all parts of the country south of Naples, in every hedge bank, to the height of two thousand feet above the sea; but it has never attracted much attention.

A variety, *C. Imperati* var. *albiflorus*, is the most beautiful of all the white ones. It is found much higher up in the mountains and is rare. (*Bot. Reg.*, Sept.)

Orchidiàcæ.

MILTÔNIA (In honor of Lord Fitzwilliam, one of the oldest and steadiest friends of natural science in Great Britain. Lindley.)

spectabilis Lindl. Showy Miltonia. A stove epiphyte; growing a foot high; with white and red flowers; appearing in July; a native of Brazil. Bot. Reg., 1992.

This is the plant we mentioned (III, p. 421,) as about to appear in the *Botanical Register*: it is a most splendid species. The sepals are greenish-white, and the labellum superbly shaded

with rich purple: it flowered in the collection of Messrs. Loddiges. *Miltônia* is closely related to *Oncidium*, and only differs in its lip being slightly connected with the column, much dilated and indented. As this tribe of plants is coming into cultivation, this is one which should be introduced. (*Bot. Reg.*, Oct.)

ONCIDIUM

cebollêta Swartz. *Clive-leaved* *Oncidium*. A stove epiphyte; growing upwards of a foot (?) high; with yellow and red flowers; appearing in February; a native of the Spanish Main. *Synonymie*: *Epidéndrum* *cebollêta* Jacq.

This is a pretty species, with small yellow flowers, slightly spotted with red, which appear in a large loose panicle. Dr. Lindley states that it is impossible to determine with certainty to which, out of two or three taper-leaved *oncidiums*, the name of *cebollêta* was applied by Jacquin; for he neither describes nor figures the flower of his plant. He therefore proposes, in this uncertainty, to call the present subject by that name. It was introduced by Messrs. Lowe & Co., and flowered in their collection. (*Bot. Reg.*, Oct.)

LANCEANUM.

We noticed this most splendid species in our III, p. 237; and again mention it to append the following remarks upon its cultivation, from Paxton's *Magazine of Botany*, where it figured on a folio sheet. Mr. Paxton states, that "it is by no means difficult to cultivate, as it thrives well in the orchidæ-house, with the usual treatment given to other species of the genus, viz. sandy peat and loam, mixed with reduced potsherds or rotten wood. Watering it is most particular to guard against, as the plants are very liable to be much injured, if allowed to get over-wet at the root. A portion of the root, with a leaf attached, is generally sufficient to form a new plant: this, when detached from its parent, should be carefully potted, observing, in doing this, not to put it too deep in the soil, as it is very likely to cause the growing bud to damp: it is also especially necessary to avoid wetting the bud in this dangerous situation during the process of watering. The bud will push better and sooner if the pot be placed on a warm flue."

Mr. P. N. Don, gardener to Mr. Bateman, exhibited, at a late meeting of the London Horticultural Society, a fine specimen of this plant; the flowers measuring three inches across, being more than twice as large as the figure in the *Horticultural Transactions*: this gives it an additional claim upon the lover of this tribe.

CYNORCHIS *Thouars* (Literally *dog-orchis*.)

fastigiata Lindl. *Corymbosè* *Dog-orchis*. A stove epiphyte; growing six inches high; with pink and white flowers; appearing in April. *Bot. Reg.*, 1998.

"This is one of the representatives, in tropical countries, of the terrestrial orchises of Europe, growing in similar situations, and

having knobby roots of the same kind." It possesses but slight beauty: the flowers are small, about two terminating a scape six or eight inches in length, of a pale rose color. It flowered in the collection of the Messrs. Loddiges last April. (*Bot. Reg.*, Oct.)

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

RUSSIA.

Great collection of Dried Plants for sale.—We perceive, by the 29d No. of Dr. Hooker's *Companion to the Botanical Magazine*, that the immense botanical collections of the late John Prescott, Esq., of St. Petersburg, Russia, are now offered for sale. This splendid herbarium, one of the largest in Europe, is warranted to contain twenty-five thousand species, and is particularly rich in all the vegetable productions of European and Asiatic Russia. Among the most valuable portions we notice Sieber's collection, Dr. Blume's herbarium, Poepig's collection in Chili and all Central America, large contributions from Fischer, Bieberstein, Gmelin, Hohenacher, &c. towards the floras of Russia, Caucasus, Persia, and Kamschatka, together with a suite of all Douglas's North American collections, two thousand specimens from Nuttall, and a very rich herbarium of American plants, from Torrey, Goldie and Gray; Ecklon's, Merton's and Emerson's Cape of Good Hope plants, and upwards of three thousand species of East Indian productions, from Dr. Wallich and Arnott, and Wight; there are also rich suites from the South Sea Islands, Madagascar, Senegal, California, the West Indies, as well as many unpublished plants from Egypt, Syria, and Palestine. The price stated for the whole herbarium, well preserved, labelled and arranged in the natural order, is one thousand pounds. Mr. Prescott was one of the first merchants in St. Petersburg, and gave his whole leisure time to the enriching of his herbarium.—*A. J. D., Botanic Garden and Nurseries, Newburgh, N. Y.*

ART. II. *Domestic Notices.*

Death of Mr. Croom.—Many of your readers are doubtless acquainted with the death of this gentleman, who perished, with his whole family, in the steam-packet *Home*, off the coast of North Carolina. Mr. Croom was an ardent devotee of science, and his labors in the botani-

cal field have done much toward clearing up what yet remained obscure in the botany of the Southern states. We have before us a catalogue or flora of the plants of Newbern, N. C., the proof sheets of which were left in the hands of Prof. Torrey, of New York, who has added a preface, bearing honorable testimony to the scientific zeal and moral worth of Mr. Croom. He was contemplating the publication of a continuation of Michaux's splendid work on North American forest trees, and making preparations for it just before his death. The catalogue of North Carolina plants is a full and interesting one, with remarks on many Southern species. We extract the following, which shows the great importance of a North American forest tree, little estimated by many.

"*Pinus australis* Michaux.—This is the *pitch-pine* of the Southern states, so important in its uses and products to the inhabitants of those regions, and indeed of the whole country; for, besides furnishing the large quantities of turpentine and tar, annually exported from North Carolina, its timber, plank, &c. are of the greatest importance throughout the whole South, in the construction of houses, fences, ships, &c.; insomuch that it may be doubted if there is another tree in America, or perhaps in the world, of greater utility and importance. "In the year 1804," says Michaux, "the exports of turpentine from North Carolina amounted to 77,827 barrels. In 1836, the amount exported from that State was not less than 350,000 barrels of turpentine, besides 50,000 barrels of tar, 50,000 barrels of pitch and rosin, and 20,000 barrels of spirits of turpentine. Of the pitch-pine lumber large quantities are exported to the West Indies and other parts. The port of Wilmington alone has for some years exported annually not less than 60,000,000 of feet. This tree extends from Virginia into the peninsula of Florida, in such abundance that the world, perhaps, might be supplied from its forests for several ages."—*A. J. D.*

Lobelia grácilis.—Have you seen a large patch of *Lobelia grácilis*, sown very thickly, in height of flower, with the sun on it? Nothing can be more beautiful.—*J.*, Nov. 2d, 1837.

New annuals, treated as hardy.—*Mimulus Smíthii* does well as a hardy annual; also *M. cardinalis*, sown in the open ground, will flower late. *Salpiglóssis hybrida*, sown in the open ground quite late, is now flowering profusely; the plants strong and two feet high. *Calendrimias*, the *C. grandiflora* and *discolor*, I treat as hardy annuals; the seed of the latter is apt to perish, and should therefore be sown very thickly. The seed of *Nemóphila phaceloïdes* is long in vegetating; I have as yet forwarded it: it is exceedingly beautiful, and seeds freely. *Nemóphila aúrita*, the seed of which I received this year, is pretty, though very inferior to *N. insignis* or *phaceloïdes*. Both the purple and white peunias came up in abundance, the last spring, in my garden, from seed self-sown. They and the scarlet zinnia are my favorites.—*Id.*

Verbena Tweediana.—This is a splendid new species. I think it equal to the *V. Melindres* [*chamædrifolia Swt.*] though not so dark or brilliant a scarlet: the corymb is larger and more compact, and the plant of more upright growth.—*Id.*

Bérberis Aquifólium.—It is said there are two varieties of *Bérberis Aquifólium*. I have observed a striking difference in two plants which I possess, one of which was received from the vicinity of Boston, and the other from Albany; the latter being far more beautiful in foliage than the former, and of a more upright growth than that.—*Id.*

Mignonette.—My mignonette beds have filled the garden with odor all summer. I shall sow it yet more extensively next season. Remind your readers of it at the proper season; and by the way, that is just now as well as in the spring. I intend to sow a bed to-morrow.—*J.*, Nov. 2, 1837.

Lima beans.—Notwithstanding the coolness of the summer, my Lima beans have done well, and if the frost holds off a little longer, I shall have ripe seed, as I have had these five years past. I forward mine in pots, and turn them out earlier or later, according to the season. I early perceived that there were varieties of them, and began to select the finest for seed: the consequence is, that I have finer Lima beans than any one I have met with.—*Id.* [This is the proper way to keep any kind of seed true, particularly so with the Lima beans; as they will, if no pains are taken, soon degenerate into the common Sieva bean.—*Ed.*]

Dwarf prolific Lima bean.—This variety I tried a few years ago. It is very inferior—no better or not so good as the Carolina Lima, or Sieva bean.—*J.*

Seven years' pumpkin.—Have you grown any seven years' pumpkins? I have about thirty fine ones—the most beautiful fruit of the pumpkin or squash kind I have ever seen. I am confident it is a great acquisition.—*Id.*

Columbia virgoulouse pear.—You are doubtless acquainted with this pear and its history. The original tree is now standing on the farm of Mr. James Corse, West Farms, Westchester Co., N. Y. The fruit is large and fair: one of my pears weighed eleven ounces, and measured ten inches in circumference. It is ripe in October, is extremely melting, capital flavor, and far surpasses any of the old varieties of the virgoulouse. Messrs. Bloodgood and Co., nurserymen, of Flushing, have taken considerable pains to introduce the Columbia virgoulouse, and now have a quantity of fine trees for sale.—*Yours, J. A. T., Hartford, Conn., Nov. 15, 1837.*

Verbena Tweedieana.—I am a great lover of plants, and presume many of your readers are my partners in that love, and, as well as myself, have often heard of *new and fine* plants, and almost as often been disappointed in their *fine* qualities, at least to my idea of fineness. However, I ask liberty to introduce *one* that has considerable pretensions, and in truth nine persons out of ten will pronounce it a real beauty—perhaps not when it opens a solitary flower—but to behold, as I did, a few days ago, a plant of it eighteen inches high and about fifteen inches in diameter, covered with nearly thirty corymbs of crimson flowers, each corymb having open on it from twelve to twenty florets; such surely was a floral beauty, and is known under the name of *Verbena Tweedieana*. It is more upright and stronger growing than the celebrated *V. Melindres* [*chamædrifolia*] and if not so bright, it flowers more freely, and the florets and trusses are much larger. It is of easy culture, either in the parlor or green-house, and will, the coming season, prove itself a universal favorite to hundreds as well as to—*Flora, Philadelphia, Nov. 10, 1837.*

Epiphyllum truncatum.—Did you ever see a scarlet parasole? I never did until to-day. I was in the hot-house of George Pepper, Esq., of this city, (who, by the way, has many pretty things and a very neat gardener,) and saw a most splendid affair. The handle (three feet long) was *Cereus triangularis*, and the cover was *Cereus* [*Epiphyllum*] *truncatum*. It has been only about three years grafted, and is now nearly three feet in diameter, and covered with many hundreds of flowers; and I venture to say that there never was a more splendid affair over the head of Victoria. The Philadelphia florists now generally practise grafting that beautiful fall flowering *Cereus* on the *C. triangularis*: it grows more freely, and is not so delicate in its treatment when thus grafted; and they find that the grafted plants command a higher price.—*Id.*

ART. III. *Retrospective Criticism.*

Marchioness of Tavistock dahlia.—Mr. Editor: Notwithstanding you have prefaced your comments, on our communication in your Magazine of the 18th ultimo, pages 445, 446, by stating that you did not “mention any particular individuals,” and that the above gentlemen (meaning the subscribers) had “seen fit to apply” your “remarks to themselves,” you have admitted that we were the persons you alluded to in your remarks on the dahlia var. *Marchioness of Tavistock*. Your attempts to place us as the aggressors, in this affair, and to plead “strict justice” for your own remarks, which you have been pleased to term “severe,” comes with a poor grace from the Editor, when it is admitted our opinion was solicited and given to him, as we have before stated, in confidence and friendship.

We will now take the Editor’s own version of this matter, and will attempt to show that it is *possible* for an editor to err. After informing us that it is “*his duty to point out* the comparative merits of new flowers, and to *decide* upon their superiority,” “in order that the floricultural community” “may be kept informed of the value of every new dahlia;” he very gravely adds, “that he has given too much attention to the cultivation of the dahlia, not to profess some knowledge of a fine flower.” If the Editor *possesses all* the “knowledge” he *professes* to have, still *we* would respectfully decline to be classed among “those who are willing to rely upon” his “judgment.”

The Editor proceeds, and states, “as the foundation of” his “remarks,” that “with the Beauty of Cambridge in one hand, and the *Marchioness of Tavistock* in the other, the two were compared, and the observation made was, that it *strongly resembled* the former; and, if our memory serves us, (for we did not then think of ever speaking of the decision) (?) that the Beauty of Cambridge was one which would be grown by them as soon as the *Marchioness of Tavistock*.” We recollect stating, that if the flower then exhibited, of the *Marchioness of Tavistock*, was a *fair specimen*, we would as soon cultivate the Beauty of Cambridge; and, for the edification of your readers, if not for yourself, Mr. Editor, we will copy the description given of the Beauty of Cambridge, in the catalogue published by Hovey & Co., No. 9 Merchants Row, Boston, in May, 1837. After due caution, attended with the usual very *particular* sign of **, the public are informed that “There is not an indifferent flower in this catalogue.” The Beauty of Cambridge is represented to be as follows, viz. “Beauty of Cambridge, (Brewer’s,) FINE WHITE, *elegantly tipped with purple*.”

“Now, mark the change ! * * * * *

* * * * *

In spring they call me *white*, in autumn *skim-sky-blue*.”

The Editor further states, that his “remarks were not made because the *Marchioness of Tavistock* was not thought a dahlia superior to all the others, but because it should have been classed with one of such *inferiority* as the Beauty of Cambridge,” with its “stiff,” irregular and blunt “petals,” nearly every flower showing a large eye, and the colors *dirty white* and dull purple, mottled and unevenly shaded into one another, without any distinctness.”

By comparing the above statements, made by the professor of “fine flowers,” we conclude he possessed but little knowledge of the Beauty of Cambridge in May last, or at any other time; both his stories cannot be correct. Will he please to inform those “who are willing to rely upon” his “judgment,” *which of these statements are correct*, so that they may be duly informed by him whose “duty” it is “to decide.”

The charge of "prejudice" we disclaim.

It may not be improper to state, that the Editor *knew*, or *should have known*, that the rules of the Metropolitan Society of florists and amateurs of London, have not been adopted by the Massachusetts Horticultural Society; and if his mark of approbation was given, on the principle which governs the members of that Society, we will venture an opinion, that all the other gentlemen used their *own eyes*, and their *own opinions*, when they marked for the best flower.

It appears somewhat unaccountable to us, that the *owner* of the flower *Victoria* should be the *only* person present who should be able to appreciate the beauty of "the most attractive flower in the room," upon which, at "every show," "encomiums" had been "bestowed" while "others equally fine were scarcely thought of." *Were all the persons present prejudiced?*

In our former paper we mentioned *Victoria*, with a view to show how the Editor's taste, (whose "duty" it is "to decide") was sustained by the marking for the best dahlias; which he now states "cannot be considered as any test of their respective merits." By this assertion does the Editor wish it to be understood that he considers himself possessing better taste than the other nine gentlemen, some of whom (to speak advisedly) have had as long experience and as good success in the cultivation of the dahlia as himself? or is their marking to be considered as no test, because they have judged by what they have seen and known, rather than from the information of the Editor and his English reports?

The scale made by the Editor, from the English periodicals, is foreign to our purpose. Many varieties of the dahlia that continue to take prizes, in England, have been excluded from some of the best collections in this country, as they seldom give us a passable specimen; other varieties may probably do better in this country than they do in England, and this may be the case with the Marquis of Northampton. We marked for this flower, using our *own* judgment; and there was no other variety that received a greater number of marks, as the best formed flower. The statement made by the Editor, that the Marquis of Northampton has not taken "a single prize," this season, in England, is incorrect; we have proof to the contrary. The Conqueror of Europe is too well known to require praise at our hands; it received *seven* out of *ten* marks, as the *best flower*; a pretty good proof that *it was the "most attractive flower in the room."*

Will the Editor please to point out when and where *Widnall's Princess Victoria* obtained a prize. We have examined the reports of the American, English and Scotch Horticultural Exhibitions, and, thus far, it appears *Widnall's Princess Victoria* (probably "for want of size") has not even made an *entry* in the "winning stand" of Mr. Widnall, or any other cultivator.

We respectfully request that you will give the above a place in your next number.

Yours, &c.

M. P. WILDER,
S. WALKER.

Dorchester, Dec. 21, 1837.

* * Since the above communication was written, we have examined Mr. Widnall's catalogue of May, 1837, and find the Beauty of Cambridge is retained in his collection of "superb dahlias," with the following notice, viz:

"S. W. has again taken from his list of 1836 more than fifty of the old varieties, and has added about the same number of the newest and best kinds, all of which obtained prizes at the principal exhibitions of the last season."

We mention this fact, to show how the Beauty of Cambridge is estimated by the person who RAISED *the Marchioness of Tavistock*, and who is known as the most successful cultivator in Great Britain.

M. P. W.
S. W.

We willingly give place to the above rejoinder of Messrs. Walker and Wilder, (to the exclusion of other matter,) in consequence of their express desire that we should give it an insertion in this number. Had we our wish, we should have deferred it until our next; but we give way to them.

We have but little to say, in answer to the remarks of the above gentlemen. We leave our readers to decide for themselves. We beg leave, however, to correct a mistake which the gentlemen have fallen into, and to add a few observations, by way of explaining the subject to those who may not be acquainted with the flowers which are mentioned in their paper. The remarks made by Messrs. Walker and Wilder, that the Beauty of Cambridge was a dahlia which would be cultivated by them as soon as the Marchioness of Tavistock, *is admitted*. This is *all* we wish. It is the main point on which the controversy stands. The attempt to make the Beauty of Cambridge appear a first-rate dahlia, (or, in other words, as beautiful as the Marchioness of Tavistock,) is as silly as the result has been abortive. Those who know the Beauty of Cambridge will agree with us in this remark. And it is here we would correct the gentlemen, in regard to an error they have committed, viz., that of placing the statements of Messrs. Hovey & Co., in regard to a dahlia, in connection with us. *Our* opinion has nothing to do with that of Messrs. Hovey & Co. What they say and what we say have no connection whatever, any more than that of Mr. Widnall, or any other seedsman. We presume, however, that Messrs. Hovey & Co., in publishing their extensive catalogue of dahlias, did, as all seedsmen in this country do, copy their descriptions from the English catalogues. From this Messrs. Walker and Wilder proceed to show the inconsistency of our opinion, and ask us for information on this point. We deem it only necessary to state, that *we* never made *any* statement about the Beauty of Cambridge, until we penned the remarks in our last. Our opinion is there recorded, and remains unchanged. It is needless for us to show, that though it was *not* an indifferent flower in the spring of 1837, it is an inferior one in the fall of the same year. The Queen of Dahlias was once the most superb edged variety ever seen. Is it so now? But we are occupying too much room, and find that we must draw our observations to a close.

The charge of prejudice need not have been mentioned. The vindictive spirit in which the above remarks are written, displays at once the desire the gentlemen had to discuss the subject in a way which would have been agreeable and perhaps interesting to our readers. The sneer at the English reports would have come with a better grace from others than those who quote Mr. Widnall's opinion.

One remark, and we leave the matter where we found it. The advice of Messrs. Walker and Wilder is altogether gratuitous. When we need their guidance, we shall most assuredly seek it: at present we feel competent to judge of our own actions, and are accountable only to ourselves for our opinions. Our object in making the remarks we did, in the first instance, was to benefit our readers—to let them see how far away from a correct expression of opinion prejudice would carry individuals—and to give some information concerning the character of those new and truly beautiful varieties of dahlias which have been introduced this season, which might, from various causes, remain unduly unknown.—*Ed.*

ART. IV. *Supplement to Exhibitions of Horticultural Societies.*

Columbian Horticultural Society.—We are sorry that the following very interesting account of the annual and fall exhibitions of this Society did not come to hand, so as to have enabled us to have given it in the December number: our kind correspondent who furnished us with the following article will, we hope, next season, forward the reports in time for the closing number of the volume; we pledge ourselves to insert all that are sent us, even if we have to add an extra sheet. We improve this early opportunity to present the following to our readers, and hope that, although it came to hand so late, it will not be found the less interesting.—*Ed.*

The First Autumnal Exhibition of the Columbian Horticultural Society of this District was held on the 21st and 22d of September last, in the spacious and magnificent saloon of Mr. Kanisi. The Committee of Arrangements consisted of the following members, viz: Messrs. Magneder, Buist, Pearce, Weaver, and Douglas, under whose superintendence this show was made not only very beautiful, but highly interesting. The saloon was decorated with great taste, and ornamented in a style of blended simplicity and elegance. At the entrance the eye was caught by the figure of an anchor, suspended from the ceiling, and formed of variously colored dahlias, which, at night, was surrounded by a circle of brilliant lights; thus indicating that the hopes of the Society were not only high, but bright. This was the work and conception of Mr. Buist. The *coup d'œil* was very striking, and the whole room had the appearance of an enchanted garden. The side-tables were decorated with pyramids and splendid vases of flowers, and the centre table with dahlias, roses, &c. of all hues, and the cross table at the bottom of the room was overspread with a profusion of the most splendid dahlias, forming, in large capitals, the name of the enterprising and industrious contributor, "Joshua Pearce." A large grape vine, covered with leaves and clusters of fine grapes, extended in festoons from one extremity of this table to the other, and was supported on each side by lemon trees laden with their golden fruit. The fruits and vegetables of the season, brought to the exhibition, were placed on stands in different parts of the saloon, and excited, by their magnitude, beauty and excellence, general admiration. Among other objects of interest, not properly to be classed among the horticultural specimens, were two fine glass hives, filled with two pans of honey, sent by Mr. Thomas Blagden, of Washington, and a citizen of Georgetown. Among the green-house and other exotic plants, were some highly esteemed and of recent introduction. "The bloom of cut flowers," the Committee on flowers observe in their report, "was varied and abundant. Of the China rose, the variety, beauty and fragrance far exceeded any collection heretofore presented, and, in relation to this justly admired flower, too much praise cannot be awarded to our cultivators for their exertions in procuring new varieties and improving the old ones by seed." The collection of dahlias was very large, and exceedingly splendid and beautiful. No such display had ever been witnessed before in this city. They were all of superior kinds, many new varieties and some seedlings raised in this District. The show of native flowers, ferns and mosses was in fine taste. These had been gathered and arranged in the most beautiful and tasty manner by the *fair patrons* of the Society, to whose active and unceasing exertions on this, as on all former occasions, the Society is largely indebted. "To them," says the Committee with great truth, "we mainly owe the beautiful arrangement of the flowers in vases, and other decorations; and the best compliment the Committee can pay them is to say, that they are

indispensable in our cause, and, like their fair emblems, we should fail without them." It was interesting as well as delightful to see those ladies thus laudably and zealously employed in drawing out and unfolding the magic combinations of beauty, dictated by their delicate and exquisite taste. The married and the single were alike engaged in this charming occupation, and it is but justice to them to give their names. They were, Mrs. Towson, Mrs. Seaton, Mrs. Kurtz, Mrs. Magneder, and Mrs. Pearce; and the Misses Mead, Magneder, Bingham, Gilman, Seaton, Barnard, McKean, Johnson, and Price.

The visitors were numerous and distinguished. The President of the United States, heads of departments, members of Congress, foreign ministers, officers of the army and navy, &c., attended, and swelled the collections to a considerable amount. The music of the marine band gave an additional charm to the beautiful spectacle, and the visit of several tribes of Indians, then in this city, added variety and interest to the scene, with which these rude children of nature seemed to be as much delighted as the most polished and refined. The following reports of the standing Committees will convey a proper idea of the various articles exhibited on this occasion.—*Geo. Waterston.*

Report of the Committee on Flowers.—Contributors. Mrs. Towson: A great variety of native flowers, in the form of an urn. The beautiful arrangement of bloom in this decoration made it highly ornamental, and fully displayed this lady's usual taste.

Mrs. Seaton: several vases of choice flowers, very handsomely arranged: Mrs. Bomford: from her collection, many fine plants: among them a *Ficus elástica*, in great luxuriance. Mrs. J. Kurtz: some fine geraniums, and other plants in excellent order. Mrs. Peirce: a stand of splendid dahlias, seedlings from Linnæan Hill, the word "Peirce" beautifully formed in the centre. Mrs. Lenthall: a very fine pomegranate, well stocked with fruit, and several other plants in fine condition.

Mrs. Suter: fine double asters, marigolds, and roses. Mrs. Waggon: fine dahlias, marigolds, and asters. Mrs. Dick: marigolds, remarkable for their extraordinary size and fine color. Mrs. Fulmer, Mrs. Davis, Mrs. Weaver, and Mrs. Wilkes: various cut flowers. Mrs. Gunnell: several varieties of tea and other roses.

Miss Gilman: a variety of native flowers, mosses and ferns, arranged with great ingenuity. Misses Mead, McKean, Bingham, Seaton, Price, Johnson, Lay, Barnard, Gunnell, R. W. Smith, E. P. Smith, Magneder: vases of flowers.

From the collection of Mr. J. Peirce some very choice China roses, fruit trees, and magnolias. His dahlias were numerous, and in addition to the many fine varieties, he exhibited a large number of splendid seedlings. From the collection of Mr. John Douglas, jr., a large number of dahlias, most of them very superior, and exhibited by him. From the collection of Mr. John Douglas, sen., a variety of choice plants, a few in pretty bloom, and a limb of *Datwra arborea*, ten feet high, with a profusion of flowers.

From the collection of W. Buist, among other plants, fine specimens of *Astrapea Wallichii*, *Manétia glabra*, *Idra coccinea*, *Brúnia nódiflora* *Russélia júncea*, *Eucalyptus cordata*, *Lechenaútia formosa*, *Leucadéndron argénteum*, *Gardoquia Hookeri*, *Melaleuca pubéscens*, *Crinum amabile*, *Ardísia solanácea*, *Ficus elástica*, *Fúchsia Youngii* grandiflora, and several varieties of acacias; of cut flowers, many new varieties; of tea roses and dahlias, a profusion of the most approved kinds. An anchor, suspended in the room, formed by him of dahlias, was greatly admired.

From the collections of Messrs. Yates, Slater, and Cammack, a large

number of dahlias of standard varieties. From Her Britannic Majesty's Minister Plenipotentiary, the Honorable Mr. Fox: a beautiful collection of the most select varieties of dahlias. From Dr. Alexander M'Williams: cactuses of large size and singular growth. From Dr. James S. Gunnell: a fine collection of dahlias—yellow, white, Kúrtzii, blush, tea and other roses, in very pretty bloom and excellent order; also seedling camellias, in vigorous growth.

From Captain W. Weaver: plants of *Campánula pyramidalis* of large size—the profusion of flowers rendered them very ornamental, and gave evidence of superior cultivation. From Georgetown College: *Hedychium coronarium* (or garland flower) and *Dionæa muscipula* (Venus's fly-trap,) both in great perfection. From Dr. Magneder: various cut flowers. From Mr. D. A. Hall: a melocactus (Turk's cap) of large size. From Mr. Little: superior asters.

From Mr. Blagden and Mr. Pettit: beautiful specimens of honey, in glass cases taken entire from the hive.

Report of the Committee on Fruits.—The Committee on Fruits have singular pleasure in making their report upon the fruits exhibited at this their first essay in raising a fall Exhibition. The fruits were abundant, numerous in variety, and fine in quality and maturity; and your Committee are fearful that they may be guilty of omissions when having to notice such numbers of specimens as, in the course of their duties, they were called on to inspect. They therefore crave excuse for the following brief mention.

The lady of the President of the Society presented a handsome collection containing, amongst others, the Georgia black peach, the General Brown and lemon peaches; Catawba and Isabella grapes; beurré pears, &c. Mrs. Seaton: a plateau, containing dishes of Isabella and Catawba grapes, various peaches, Seckel and beurré pears, red filberts, belle apples, &c. Mrs. J. Gales, jr.: a bunch of the lemon tree, bearing three lemons of extraordinary size and beauty.

Mr. John A. Smith: numerous varieties of apples, peaches, &c, amongst which were the belle, belle-fleur, summer Catlin, Robinson white, white Calville, black redstreak, Roane's white crab, Shippen's russeting, Long Island russet, sheepnose, golden pippin, Rhode Island greening, winter pearmain, winesap, wine-apple, pomme d'Apis, Hughes's crab, Scrivener's red, house-apple, green Newtown pippin, yellow Newtown pippin, Cooper's russeting, Holland pippin apples; Orange d'Hiver, St. Germain, St. Michael's Angletterre or English beurré and negro pears; lemon, yellow, freestone, and Dutchess peaches, monthly Alpine strawberries, Buonaparte canteleupe melon, &c.

Mr. William Cammack: Rodman's cling, golden purple, or Georgia paste peaches; Spitzemburgh and Newtown pippin apples. Mr. George Shoemaker: a noble display of Catawba grapes, fine peaches, and handsome lemons. Judge Morrell: very fine black Malaga grapes, from a vine raised by himself from seed. Georgetown College: handsome bunches of grapes, pears, &c. General Walter Smith: brown and golden beurré pears of superb quality.

Mr. Joshua Pierce: a great display of peaches, apples, and lemons, of superior quality. Mr. Kurtz, jr., a neat frame containing bunches of Catawba grapes tastefully arranged. Mr. John Douglass: a single specimen of peach, remarkable for being the finest in the room. Dr. Bayne, of Prince George's County: a fine collection of very handsome peaches. Mr. John Boyle: a dwarf apple-tree, little more than a foot in height, bearing a cluster of finely-formed fruit of extraordinary beauty. Mr. Robert Barnard: a few peaches of the Admirable, and a variety of fall Catlin apples.

Mr. Adam Lindsay: bell-fleur apples, and a branch of a vine contain-

ing such abundance of the finest grapes as would have puzzled Caleb, the son of Jephunneh, and Joshua, the son of Nuu, to have borne off from the land of promise without detection. Well, indeed, in this, did the father of the Society highly honor it and himself.

The Committee consider the Exhibition of fruits to have been extremely creditable to those who raised them, and an earnest of the perfection to which the District may attain in this branch of horticulture.

Report of the Committee on Vegetables.—The Committee on Vegetables report that at the recent exhibition held by this Society on the 21st and 22d of last September, the vegetables, although not so abundant as they had a right to expect, from the numerous members of the Society engaged in their cultivation, yet, in size and quality, were not inferior to any ever before exhibited. The Silesian or sugar beet, of Messrs. Hines and Mr. Lindsay, were particularly fine; the cabbages by Mr. Cammack would do credit to any part of the world. The sweet potatoes by Colonel Naylor were extraordinary productions; the field pumpkins of Mr. Barnard and Mr. Lindsay were well worthy of notice. The Committee take great pleasure in saying that all the vegetables were of the very best quality, and such as would do great credit to the best gardener of our country. The Committee have observed a gradual and progressive improvement in our vegetable market since the formation of this Society; and they have no hesitation in saying, they believe the Society has been the principal cause of that improvement.

The Committee annex hereto a particular list of the contributors and the articles presented.

Mr. Joshua Peirce: a fine plant of Delaway cabbage, very good Savoy cabbage, three flat Dutch cabbages, one weighing 18 lbs. three heads very good fall lettuce, pickles, ruta бага and stubble turnips, bunch of carrots, and one fine egg plant. Mr. John A. Smith: turnips, carrots, amber and mangel wurtzel beets, salsify, one Canadian squash, two Connecticut field pumpkins, one cream-colored pumpkin, one very fine bunch of double leaf frizzled parsely, fine specimens of the Lima beans, very fine okra and fine brocoli, three delicious and fine flavored nutmeg cantaleupes, simlins and vegetable marrow squash, and a bunch of hybrid turnips.

Mr. J. W. Weaver: Drumhead Savoy, red and sugar-loaf cabbage, very fine, very good fall radish, fine winter squash, carrots and parsnips. Mr. William Cammack: two beautiful flat Dutch cabbages, each 26 lbs., two bunches of long blood beet. Mr. Henry Naylor: very large and fine sweet potatoes, beans, beets, parsnips, and radishes, and one fine flat Dutch sugar cabbage. Mr. Barnard: excellent snowball potatoes, very fine specimen of the Lima bean, large Connecticut field pumpkins, and bush simlins, ripe for seed, three varieties of the sweet basil.

Miss Catharine Barnard: beautiful and rare specimen of the sweet basil, from Porto Rico. Mr. George Naylor: three very fine turnip beets, one fine flat Dutch cabbage, and snap beans. Mrs. Wheat: fine blood beets, good carrots and parsnips. Mr. Richard Southern: two fine Savoy and red cabbages. Mr. John Ousely: specimen of sweet pepper, and two fine egg plants.

Mr. Pleasants: fine large potatoes, (ash-leaf kidney.) Mrs. Carter: very fine Mercer potatoes. Mrs. Wachter: very good celery and parsnips. Mrs. Yates, of Alexandria: fine blood beets. Mrs. Seaton: fine turnip-root cabbage, beets and potatoes. Mr. Suter: specimen of the sweet gourd. Mr. Adam Lindsay: fine sugar or Silesian beet, pumpkin and sweet pepper. Mr. John Douglas: good celery, fine silver-skin onions, from seed sown the last Spring. Messrs. C. & M. Hines: eight sugar or Silesian beets, average ten to thirteen pounds. Mr. Samuel Whitall: fine silver-skin and straw-colored onions.

Fourth Annual Exhibition.—An account of the Fourth Annual Exhibition of the Columbian Horticultural Society has been delayed by causes which it is not necessary to mention. This delay, however, will not, it is hope, lessen its interest to those who take a pleasure in horticultural pursuits, or in the advancement of an art so conducive to the comfort, gratification and sustenance of mankind. The fourth Annual Exhibition of the Society was held on the 7th and 8th of June last, in the splendid saloon of Signor Carusi, which from its spaciousness, afforded an opportunity to display to great advantage the floral and other productions of the garden, and the Committee of arrangements did not fail to manifest their usual taste and industry in the decoration and embellishment of the room. It was indeed a beautiful spectacle, which all seemed to enjoy, and with which none could avoid being delighted. "Music," say the Committee, in their report, "which seems to be indispensable to such exhibitions, added its cheerful sounds to the harmonious notes of the mocking and Canary birds that charmed the perfumed atmosphere with their melody." The visitors were numerous and respectable, and the collections made on the first day exceeded those taken on the first day of any former exhibition of the Society. To the great disappointment of many who had delayed their visit to the last evening, the weather was so showery, during the whole of the second day, that they could not attend. "Not a single mark of disapprobation," observe the Committee, "is known to have been made by any of the numerous assembly; and every visiter seemed to enjoy the rich treat it was the study and pride of the Committee to provide for all." Among the interesting spectacles on the second day was the appearance of the orphans of the Asylums of Georgetown and Washington, conducted by their teachers, who partook of a sumptuous repast of strawberries and other refreshments generously provided on the occasion by a patroness of the Society, whose ardor in the cause is equalled only by her benevolence. These interesting objects of charity then united their infant voices in a song of praise to the Author of all good, and retired delighted with their visit. It is due to those ladies who so kindly volunteered their valuable services, to state that the arrangement of the cut flowers in the small pyramids, vases and stands, was their exclusive work; and the Committee remark that "they would be doing great violence to their feelings did they withhold the warmest expression of praise and approbation so justly due to the young ladies, to whom they were also indebted for so many of the sweetest and most admired ornaments of the room."* Greater unanimity and anxiety to excel each other existed among the contributors than on any former occasion, and the display of floral beauty was therefore more splendid in the collection of rare, valuable, and curious plants than it ever had before been. Among the rare plants were fine specimens of tea, India rubber, cactuses, camphor tree, sago plants, coral tree, silver tree of New Holland, several curious New Holland acacias, heaths, &c. The florists also exhibited the largest and finest collection of geraniums that had ever before been seen at the shows of the Society; a great variety of China and new hybrid roses, some of great beauty; fine large plants of the *Camellia japonica*, raised in this District from seed, and by inarching; a variety of *calceolaris*; some superior dahlias in fine bloom; and of native plants, some very delicate orchises, ferns, mosses, &c. The large contributors on this occasion were Messrs. Peirce, Douglass, Buist, Dr. McWilliams, Dr. Gunnell, Mr R. Dick, Mr. Hoppe, Mr. Fulmer, &c. of the District; Messrs. John and Samuel Feast, of Baltimore.

* These young ladies were the Misses Mead, Morrell, Cox, Seaton, Price, Smith and Barnard.

Handsome contributions were also made by Mrs. Bomford, Mrs. Seaton, Mrs. Kurtz, Mrs. J. Thompson, Mrs. B. M. Berry, Mrs. Peirce, Mrs. Lenthall, Mrs. Forsyth, Mrs. Douglass, &c., and the Misses F. Clark, Gillman, Watterson, Boyel, M. Jones, Barnard, and Gunnell. The flourishing College at Georgetown likewise contributed a large collection of aloes, acacias, tea plants, cactuses, and various green-house plants. Mr. Dick's large and beautiful heliotrope was much admired, and also his double flowering pomegranate, *calceolaris*, &c. Of Mr. Fulmer, who sent a variety of garden flowers of the best varieties, the Committee thus speak: "This gentleman deserves great credit for the attention he has paid to this tribe of plants, in selecting and cultivating only the best and most showy sorts." Mr. John Feast's specimen of the *Cactus speciosissimus*, with four beautiful flowers, excited great admiration. Mr. Samuel Feast sent a specimen of the *Cactus speciosus*, with upwards of 75 expanded flowers, a collection of near 200 roses, embracing China, French and Scotch, splendid pæonies, &c., which were not received, unfortunately, till the evening of the second day's exhibition, when, from the delay and the want of water, they had been considerably injured. The cactus, had it been received immediately on its arrival, would, the Committee think, "have formed one of the most splendid objects in the room." From Mrs. Bomford's choice collection, fine specimens of *Ficus elástica*, geraniums, *calceolarias*, &c. were obtained, and a variety of cut flowers, tastefully arranged in silver and China vases. Mrs. Seaton sent fine orange and lemon trees, loaded with fruit and flowers, and some beautiful specimens of shell flowers; Mrs. B. M. Berry, cut flowers, arranged with taste in moss; Mrs. Peirce, new varieties of heart's-ease, very large and beautiful; Miss Gilman, a beautiful collection of native and exotic flowers so arranged as to form the word "FLORA," and Miss M. Johns, pretty specimens of shell flowers, very creditable to the taste and skill of the artist. Of the fruits exhibited at this show, the Committee on fruits speak in high and just terms. Of the strawberries exhibited, there were some specimens, the Committee remark, "which far outdid any heretofore brought to the notice of the Society; and there can be no doubt that attention to the growth and cultivation of this fine fruit is firmly fixed in this District, and the produce of the finest sorts much increased, to the exclusion of every common and inferior kind." At this, as at the preceding exhibition, the superiority was awarded to Mr. William Cammack, "whose Southborough seedling surpassed in size and beauty every other specimen offered." The goosberries were fine and free from rust. "Those exhibited by Mr. Cammack, from trees imported by him from Lancashire, in 1834, were the largest offered, and of these the green gage was decidedly the finest." The cherries were generally inferior to those at former exhibitions. The parcel by M. St. C. Clarke, Esq. were the finest in maturity, appearance, and flavor. The currants were few and small; and of the green-house fruits, the Committee give the superiority to those sent by Dr. McWilliams, though those produced by Dr. Riley and Mr. Peirce would have reflected high honor on any gardener. The following are the varieties of strawberries exhibited: Hudson, white melon, Bath scarlet, Downton, Willmot, Hautbois, Methven, Southborough seedling, Keen's seedling, John Adams, and Bourbon pine; and the exhibitors were Mrs. B. M. Berry, Mrs. Hickey, Mrs. Seaton, Mrs. Towson, and Messrs. Hoppe, Smith, Barnard, Ousley, William and Edmund Cammack. The cherries were of the following kinds, viz. May and June Duke, Spanish yellow, white-heart and black Tartarian; and the goosberries, the Warrington, Hero, white-smith, sportsman, green gage, Waters, amber, and favorite green. The show of esculent vegetables was, for the season, very creditable. These

consisted of various kinds of radishes, peas, lettuce, onions, early and George York cabbages, Mercer and ash-leaf kidney potatoes, bunch and Windsor beans, beets, rhubarb, cauliflower, long frame, London long early, Patrick's prize and Lumber Park cucumbers, double-leaf curled parsley, early horn carrots, mushrooms, and early tomatoes.—*W.*

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>	From To		<i>Pot and Sweet Herbs.</i>	From To	
	\$ cts.	¢ cts.		\$ cts.	¢ cts.
Potatoes, new :			Parsley, per half peck,	25	
Common, { per barrel,	1 00	1 25	Sage, per pound,	17	20
{ per bushel,	40	50	Marjorum, per bunch,	6	12
Chenangoes, { per barrel,	1 25	1 50	Savory, per bunch,	6	12
{ per bushel,	37½	50	Spearmint, per bunch,	6	
Eastports, { per barrel,	2 00	2 25			
{ per bushel,	1 00		<i>Fruits.</i>		
Sweet, { per bushel,	1 25	1 50	Apples, dessert :		
{ per peck,	37½	50	Common, { per barrel,	1 50	2 00
Turnips, { per bushel,	50	75	{ per bushel,	75	1 50
{ per peck,	17	20	Russets, { per barrel,	2 00	2 25
Onions :			{ per bushel,	1 00	1 50
red, per bunch,	4	6	Baldwins, { per barrel,	2 00	2 50
white, per bushel,	1 25	1 50	{ per bushel,	1 25	1 50
Beets, new, per bushel,	50	75	Bellflowers, { per barrel,	3 00	
Carrots, per bushel,	50	75	{ per bushel,	1 50	
Parsnips, per bushel,	75	1 00	Golden pippins, per bushel,	1 50	
Horseradish, per pound,	8	12	Pears :		
Shallots, per pound,	20		Passe Colmar, per dozen,	25	
Garlic, per pound,	14		Chaumontel, per dozen,	37½	50
			St. Germain, per dozen,	50	75
<i>Cabbages, Salads, &c.</i>			Beurre Diel, per dozen,	37½	50
Cabbages, per dozen :			Prince's St. Germain pr doz.	37½	50
Savoys,	37½	50	Lewis, per dozen,	25	
Drumheads,	1 00	1 25	Baking, { per barrel,	4 50	5 00
Red Dutch,	75	1 00	{ per bushel,	2 00	
Cauliflowers, each,	12½	25	Quinces, per bushel,	4 00	
Brocolis, each,	12½	25	Pine-apples, each,	12½	25
Lettuce, per head,	10	12	Grapes, per pound :		
Celery, per root,	6	10	Malaga,	20	25
			Cranberries, { per bushel,	2 00	
<i>Squashes and Pumpkins.</i>			{ per peck,	50	
Squashes, per pound :			Oranges, per dozen,	50	75
Autumnal marrow,	3	4	Lemons, per dozen,	37½	50
Linna,	2	3	Cocoanuts, each,	5	6
Winter crookneck,	2½	3	Shaddockes, each,	25	
Pumpkins, each,	12½	20	Walnuts, { per barrel,	5 00	6 00
			{ per bushel,	2 00	3 00
			Chestnuts, { per barrel,		
			{ per bushel,	4 00	5 00
			Almonds, (sweet,) per pound,	12	14
			Filberts, per pound,	4	6
			Castana,	3	6

REMARKS.—There is but little to note in the state of the market this month. The weather has remained cold, though not so severe as to

prevent the bringing of potatoes, turnips, and other vegetables, from the country. The stock, therefore, on hand, is considerably large and of good quality.

Potatoes remain without any alteration, except in Eastports, which have advanced a shade; and sweet, which, from the diminished stock, command higher rates. Sales of turnips have been more brisk, and, although there is a good stock, prices have advanced. Bunched onions are rather scarce.

Of cabbages there is a good supply, excepting drumheads, of which only a very limited stock of those of good quality remains on hand: the reason of their scarcity we alluded to in our November report. Cauliflowers yet come to hand in tolerable abundance for the season. Brocolis are about gone. Lettuce improves in quality as the season advances. Celery is plentiful and prices moderate. Squashes are less abundant than at our last report, and prices of all sorts have much advanced; considering the cool summer and early frosts, the stock is far greater, and the quality very superior to what would have been supposed.

Apples remain about the same; some fine golden pippins have just come to hand; Baldwins keep finely. Of pears, the supply has fallen off, and, with the exception of the Lewis, there is only a few dozens remaining; some very handsome pears, known as Prince's St. Germain, have been received. Quinces are about gone. Pine-apples are scarce. Malaga grapes abundant, there having been some arrivals with large quantities. Cranberries remain about the same. Walnuts and chestnuts are scarce.—*Yours, M. T., Boston, Dec. 23d, 1837.*

ART. VI. *Fulton Market, New York.*

Vegetables.—Potatoes, per bushel, $37\frac{1}{2}$ to $62\frac{1}{2}$ cts. Turnips, per bushel, 25 to $37\frac{1}{2}$ cts. Carrots, per bushel, 50 to $62\frac{1}{2}$ cts. Parsnips, per bushel, 50 to $62\frac{1}{2}$ cts. Beets, per bushel, $62\frac{1}{2}$ to 75 cts. Horseradish, per bushel, \$1 to \$3. Onions, per bushel: red, \$1; white, \$1.50. Spinach, per bushel, $37\frac{1}{2}$ to 50 cts. Cabbages, per dozen: drumheads, $37\frac{1}{2}$ to 75 cts.; Savoy, $37\frac{1}{2}$ to 50 cts.; red Dutch, 75 cts. to \$1. Celery, per dozen bunches, \$1 to \$1.50. Cauliflowers, each, $12\frac{1}{2}$ to $37\frac{1}{2}$ cts. Common salad, per half peck, 25 cts. Leeks, per dozen, 25 cts. Salsify, per dozen bunches, $62\frac{1}{2}$ cts. Pumpkins, each, $12\frac{1}{2}$ to 50 cts.

Fruit.—Apples, per barrel: Rhode Island greenings, \$2.50; Newtown pippins, \$1.75 to \$2.25; Spitzemberg, \$3; Banderveres, \$3; common, \$1.25 to \$1.50. Pears, winter, per half peck, 25 cts. Cranberries, per bushel, \$3. Grapes, foreign: white, 25 cts; black, $37\frac{1}{2}$ cts. Pine-apples, each, 50 cts. Oranges, per dozen, $37\frac{1}{2}$ to $62\frac{1}{2}$ cts. Lemons, per dozen, $37\frac{1}{2}$ to $62\frac{1}{2}$ cts. Cocoanuts, per dozen, 75 cts. Chestnuts, per bushel, \$5. Hickory nuts, per bushel, \$2.50 to \$3.00. Black walnuts, per bushel, 50 to 75 cts.

REMARKS.—The market is well supplied with all the common vegetables, which sell at reasonable prices. Brocoli is very scarce. Cauliflowers have been rather plentiful, and of good quality. Salsify is rather scarce. Celery plenty, and of good quality. Apples are plentiful and at reasonable prices; as are also grapes, oranges and lemons.—*Yours, J. H., New York, Dec. 22d, 1837.*

HORTICULTURAL MEMORANDA

FOR JANUARY.

But little can be done out this month, unless the weather is remarkably mild. Up to the present time (Dec. 25th, 1837,) it has been cold, with some snow, though but little remains upon the ground; there is now some appearance of mild weather. Where it is desirable to have early vegetables, hot-beds may be put into operation early in the month. Proper directions for making these, and the forcing of cucumbers, will be found detailed in vol. II. If there are frames containing plants, they should be properly aired every fair day, and covered well at night. Indoors' preparation may be made for the summer season, and much done to facilitate the business of the planting season, by preparing the tallies for marking plants, &c. Stakes for tying up plants may be made and painted, and other operations done, which cannot be put off till the spring or summer, without interfering with the labor of the garden.

FRUIT DEPARTMENT.

The only things that can be done in this department is the forcing of grapes and other fruits, in the hot-house, the pruning of vines in the green-house, if not done before, and the forcing of strawberries in hot-beds.

FLOWER DEPARTMENT.

In the green-house, the plants will need but little water; all dry leaves should be picked from the plants, and the house should be fumigated, to destroy lice, &c.

Camellias are about the only plants that require considerable water this month; as their flower-buds advance, they should be well supplied. The seeds may now be sown.

Amaryllises beginning to grow should be potted.

Erythrinas that flower in August and September, and that have since been at rest, should now be repotted and placed in a brisk heat, until they have started well, when they may be put in a warm part of the green-house, where they will bloom.

Heaths should be watered carefully.

Dahlias, for early flowering, may now be potted and plunged in a moderate heat.

Annuals, for early blooming, should have their seeds now sown in hot-beds.

Schizanthuses, and other annuals, in pots, should be shifted into a larger size.

VEGETABLE DEPARTMENT.

Cucumber seeds should now be planted in a brisk hot-bed of one or more lights, as the quantity is wanted. Make preparations, while the seedlings are coming on, for the beds for ridging the plants into.

Radish seeds should be sown.

Lettuce seeds may be also sown.

Asparagus may be now forced. Full directions will be found in vol. III, pp. 364, 444.

THE MAGAZINE
OF
HORTICULTURE.

FEBRUARY, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *On the Cultivation of Hedges in the United States.*
By A. J. DOWNING, Botanic Garden and Nurseries, New-
burgh, N. Y.

THE repeated inquiries made of us, in relation to live fences, induce us to make them the subject of a few remarks in this Magazine. In many sections of the Union, where timber is becoming scarce, and stone for fencing does not abound, a substitute is anxiously sought after, and must be found in some species of plant, capable of making a close and impenetrable hedge. The advantages of live fences are, great durability, imperviousness to man and beast, a trifling expense in keeping in order, and the great beauty and elegance of their appearance. Harmonizing in color with the pleasant green of the lawn and fields, they may, without (like board fences) being offensive to the eye, be brought, in many places, quite near to the dwelling-house. The delightful verdure, and, when in blossom, the exquisite perfume of the hedges in England, have been celebrated by many of the poets:

“ ——— How rich the gale!
Far off I scent the hawthorn's bloom.”

May is the beautiful appellation familiarly bestowed on the hawthorn in many parts of England; and the snowy whiteness of its flowers, deep green of its verdure, and brilliant crimson of its berries, unite in making the hedges composed of it among the finest objects in that highly cultivated country.

The English hawthorn is, however, unsuited to the United States. We make this remark, after witnessing numerous trials in its cultivation in various parts of the country. We say unsuited, because, although a hedge, and, with great care, a good hedge,

may be formed of it in many places, yet it is so evidently inferior to some other varieties of native hawthorn, that it is unworthy of extensive culture here. Our summers are too hot and dry for a plant, whose most genial home is in the moist and showery climate of England. In the spring months nothing can exceed the freshness of the soft green of the English hawthorn. But the moment the hot July sun bursts out, the growth is checked, the leaves begin to turn brown, and, before the middle of August, two thirds of the hedge is bare and defoliated. This want of vigor also gives room for the successful operation of a host of aphides, and other insects, which prey upon it, and often destroy many of the plants.

There are about twenty species of hawthorn growing wild in North America, and among them may be found some of the finest hedge plants in the world, suited to the peculiarities of every climate and soil, from Maine to Florida. With a more luxuriant and rapid growth than the English thorn, they combine greater strength and closeness of branches, stronger thorns, and, when properly trimmed, present a more impenetrable barrier to man or beast. During the hottest period of summer they retain their foliage in all its vivid brightness, and add to the beauty of the garden or fields, late in the season, by the beautiful crimson of their autumnal foliage.

We have in different stages of growth, at this establishment, six different kinds of hedges, and have found none to surpass in excellence the *Newcastle* thorn, (*Cratægus Crús-gállii*.) It is largely cultivated in the south of New Jersey, and some parts of Pennsylvania, and makes a close, durable, and impenetrable hedge, suitable for the most exposed situations. Our common thorn (*C. punctàta*) resembles it in many respects, and, as we have tested, is capable of making a hedge far superior to the English hawthorn, for this climate, and may be grown in at least two thirds the time. Another species, known as the *Washington* thorn, (*Cratægus populifòlia*), much planted near Philadelphia, though not, perhaps, quite equal to the *Newcastle*, yet makes a very handsome and valuable hedge. We have about eight hundred feet planted with this thorn, and consider it equal, in beauty of foliage and appearance, to any other thorn, though not naturally so thick in its growth as the *Newcastle*.

Almost every district of country abounds in some native species of thorn; and we cannot too strongly recommend farmers and landed proprietors, in districts remote from nurseries, to gather the berries in autumn,* and rear from them live fences of

* The *haws*, or berries, should be scalded in hot water, to loosen the pulp, and then planted before winter. In planting the hedge, the thorns should be two years old, and planted in double rows about ten inches apart, not opposite, but alternate or quincunx.

the greatest durability, which will add much to the value of their lands. In some parts of the Western states, where fencing materials are scarce, their place may be well supplied by rearing live hedges from the seeds of the wild thorns abundant there. Nothing could be more appropriate or beautiful on those smooth and widely extended prairies, which nature has made to resemble vast lawns and parks, and which should be disfigured by unsightly fences as little as possible.

In some situations, as in the division of meadow or tillage ground of extensive farms, a material is wanted for hedges which shall grow rapidly, without much preparation of the soil, and which, not being intended as a defence against the smaller animals, but merely cattle, need not be kept so thickly furnished with branches near the ground. The best plant with which we are acquainted, for such hedges, is the three-thorned acacia, (*Gleditschia triacanthos*.) The foliage is beautiful, the growth exceedingly rapid, and, when kept well trimmed, it forms a very stout and hardy hedge. It is easily reared from seed, and grows well in almost any soil.

The buckthorn (*Rhamnus catharticus*) is found to succeed well in some parts of the Union, and the Osage orange (*Maclura aurantiaca*,) a beautiful tree from Arkansas, will, south of the latitude of Boston, form a very handsome and efficient hedge. It is well armed with sharp thorns, and the foliage has all the beauty and glossiness of the orange.

For evergreen hedges, the red or Virginia cedar, if kept low and well trimmed, is extremely well adapted. The *arborvitæ* will also form a very handsome hedge or screen. The European holly, with its superb dark green foliage, and bright coral berries, in winter, which probably forms the most beautiful evergreen garden hedge in the world, unfortunately for us will not endure the rigors of our winters north of Philadelphia.

It is commonly believed that a great length of time is necessary for the growth of a good hedge. With the ground badly prepared, and a plant like the English thorn, unsuited to the climate, this is undoubtedly true. But if the soil is in good order previous to planting plants of American thorns, selected and well cultivated, handsome hedges may be produced in four to six years. When fully grown, they are indisputably the finest enclosures for the country in the world. The wall of masonry, the iron paling, or the wooden fence, may be well suited to the vicinity of houses or crowded towns; but for harmony of color, freshness of foliage, durability, and, in short, all that is most desirable for beauty and protection, the *verdant hedge* is without an equal. In the spring the air is sweet with the perfume of its blossoms; in summer the eye rests with pleasure on its deep green foliage; and in autumn its blushing berries and gaily tinted leaves adorn the landscape.

“Birds innumerable” make their nests in its tangled recesses, filling the air with a thousand notes; and, under its shelter, the first buds of spring open to the soft and genial air, and enliven the green turf with their beauty.

A. J. D.

ART. II. *Pomological Notices; or Notices respecting new and superior varieties of Fruits, worthy of general cultivation. Notices of some new Plums, Pears, Strawberries, and other Fruits.* By MESSRS. C. & A. J. DOWNING. *Notices of several new varieties of Apples.* By the EDITOR.

WE have not quite as much to communicate, under this head, at the present time, as we had last season, respecting new fruits. Mr. Manning's paper, in our last volume, describing all, or nearly so, of the different varieties of pears which he had proved with any certainty, leaves us little to say about them. There remained, however, twenty kinds or more, which he did not deem proper, from the information he then possessed, to mention. Another season of bearing, it was thought, might be the means of proceeding with their descriptions with more accuracy, and detecting whether they were mere synonymes or distinct varieties. Mr. Manning kindly offered to communicate to us his remarks at the conclusion of the season, and our readers may anticipate the pleasure of such information. From various engagements, however, he has, as yet, been prevented from sending us any thing in relation to new fruits of any kind.

In the absence of Mr. Manning's remarks, we now offer our readers some few pomological notices from our correspondents, Messrs. C. & A. J. Downing, of Newburgh, N. Y. We have no doubt but that they will be read with great pleasure and interest. The fruits they mention, with the exception of the pears, are quite new in the vicinity of Boston, and, we imagine, are but little known in the country out of the vicinity of Newburgh. In addition to these, we have supplied some notices of a few varieties of apples which have been exhibited before the Massachusetts Horticultural Society the past year, and noticed in our reports, and which have been pronounced by the fruit committee to be excellent kinds, and worthy of very general and extensive cultivation. They were mostly received from the Rev. H.

Ramsdell, of West Thompson, Connecticut, and were produced from trees which had been grafted with scions which Mr. Ramsdell had gathered in various parts of the country which he had visited, and are supposed to be native seedlings. We have tasted most of them ourselves; and, although we could not fully decide upon their relative merits, we have no hesitation in stating that some of them are equal, if not superior, to many of the old sorts which have been so highly estimated. They are all worthy of trial, and gentlemen who have extensive orchards would do well to engraft such trees as now produce inferior sorts with these varieties.

We have perceived with great pleasure that some new varieties of fruits have been produced from seed in various parts of the country. In our reports of the various horticultural societies in the Union we noticed some new kinds which have lately come into bearing. We certainly hope that this is but the beginning. It is to our own native seedlings that we must look, especially as regards apples, for superior varieties to take the place of the great number, of foreign origin, which do not succeed in our climate. Many of the English varieties, which have been reported to possess very high qualities abroad, have, with us, been pronounced by good judges as only second or third rate fruits. As yet, the Baldwin, Newtown pippin, and some other American apples, stand before all foreign productions; and there is no reason why, with such parents, a progeny should not be reared in this country, possessing all their vigor and hardiness, with an increase in excellent qualities. We hope our cultivators will pursue the subject with that zeal which they ever manifest in the cause of horticulture. Aside from the agreeableness which always attends the rearing of seedling fruits, our gardens will be stocked with a hardy and vigorous race of superior varieties.—*Ed.*

Coe's fine late red plum.—This fine and very late variety has fruited with us for the first time this season, and is worthy of extensive cultivation. The fruit is oval, from three fourths to an inch in diameter, and of a dull red color. It ripens here the last of September and first of October, and if plucked from the tree it may be kept in the fruit-room for a considerable time. The flavor is high, and the fruit juicy and sweet, and it will, no doubt, be a valuable variety for market. We received it from Miller, of the Bristol nurseries, England.

Frost Gage.—This plum, but little known out of this district of country, we consider one of the most valuable varieties in the whole catalogue of fruits. We can trace its origin no farther back than to the farm of Mr. Dubois, of Dutchess county, N. Y., who found the original tree upon his farm, planted, as he be-

lieves, by his father. The fruit resembles in form the yellow gage, though considerably smaller than that variety, as well as larger than the green gage: the color deep purple, with a faint suture on one side of the fruit. It is a sweet, juicy, and high flavored plum, and ripening as it does, about the first of October, is a most invaluable variety. Mr. Dubois has a large orchard of the trees, and sends annually a crop of these plums, worth three or four hundred dollars, to the markets in New York. We have forwarded some of the trees to Mr. Manning, and other gentlemen in the vicinity of Boston, and think it will succeed well in Massachusetts.

The Dutchess d'Angouleme, beurré Diel, beurré Spence, and Easter beurré pears, are beginning to bear well in the valley of the Hudson, and we have much pleasure in saying that they fully realize our expectations respecting these highly praised fruits. We particularize these varieties, because we believe them to be the finest late pears in cultivation, and are much gratified to find that, in the soil and climate of the Middle States, so different from that of Europe, and without walls, these pears sustain fully the high reputation given them by pomologists abroad.

Bishop's strawberry.—This is the finest of all strawberries, in our estimation. It is a great bearer, which the famous Keen's seedling, Wilmot's, &c. are not, and of delicious flavor, not tasteless and hollow at the core, like the Methven, while the size is fully equal to that of any of those varieties. The color of the fruit is a deep glossy crimson, and they are borne in rich clusters, presenting a beautiful appearance. It increases rapidly by runners, and appears to us better suited to our climate than any of the large strawberries hitherto imported from abroad.

The Cretan red raspberry.—This is another fine variety of the smaller table fruits, little known, and for which we bespeak a more general cultivation. The fruit is large and fine, rather more tart than the Antwerp, and the plant continues in bearing a long time, which renders it doubly valuable for family use.

Bergen's yellow peach.—A new and most excellent American freestone. Size large, color deep yellow, with red cheek, full of juice, and of a rich and most delicious flavor and perfume. It has borne here for the second time only, and the fruit equals, if not surpasses, any other variety in beauty and excellence.

Large haw or thorn apple.—Mr. Longworth, of Cincinnati, one of the most distinguished horticulturists of the West, writes us, in a recent communication, that he discovered, in the interior of Ohio, twenty-five years ago, a variety of haw, with fruit the size of a crab-apple, having a delicious flavor. He has lately rediscovered it, and has kindly promised to forward us some grafts. Should it prove as fine as he anticipates, it will be quite an addition to our fruits, as it is, probably, very beautiful in ap-

pearance.—C. & A. J. Downing, *Botanic Garden and Nurseries, Newburgh, N. Y.*

Apples in the collection of the Rev. Mr. Ramsdell.—The following varieties were forwarded to the Massachusetts Horticultural Society for exhibition in the latter part of October. We give the remarks of the committee, with some additions of our own. We name in course, as they appeared to us to possess superior merits.

Winter Chandler.—This is pronounced a first-rate winter variety, after the trial of two seasons. It may be described as follows:—Fruit large, round; stalk large, quite short, and set in a deep cavity; color yellowish-green and dull-red, with various stripes of a deeper tint, particularly on the side next the sun; flesh firm and juicy, with a very rich flavor, equal to the Baldwin; altogether a most delicious fruit. The tree is a constant and abundant bearer, and in eating from December until March.

Enfield pearmain.—Another excellent variety. Fruit medium size, round; flesh juicy, with a fine flavor. An abundant bearer, keeping well until February or March. It is very highly esteemed at Enfield, in Connecticut, from whence its name.

Winter greening.—Fruit above medium size, very fair, of a round, but rather flattened form; stalk remarkably long; color green, with a slight blush on the sunny side; flesh breaking, juicy, sweet, relieved by a lively and somewhat astringent acid, with an excellent flavor. A great bearer, and every way a valuable fruit.

Ramsdell's red sweeting.—Fruit above medium size, of a conical form; color fine dark crimson, covered all over with minute yellow spots, and with stripes of deep crimson on the side exposed to the sun; flesh firm, fine and mellow, sometimes cracking at maturity, juicy and sweet, with a delicious flavor: the whole fruit is covered with a dense and beautiful blue bloom, like the blue pearmain. The tree is a constant and abundant bearer, and the fruit is considered one of the most valuable in cultivation. In eating from October to January. Named in compliment to the Rev. Mr. Ramsdell, by the committee, for his exertions in collecting together the various kinds of apples which he has twice forwarded to the Society for exhibition.

Red pumpkin sweet.—Fruit very similar in form to Ramsdell's sweet, and of the same size; color fine dark crimson, with stripes of a deeper tint, and minute black dots or points; flesh fine and mellow, with a sweet and delicious juice. Ripe in October, and in eating until January. The tree is an enormous bearer, producing great crops every year. The tree from which the specimens exhibited were taken, required, last year, twelve props to enable it to bear up the great weight of fruit with which

the branches were loaded. It is stated that one gentleman has commenced an orchard, to be planted with this variety alone, being persuaded that no other fruit would prove so profitable, or yield so great crops.

Sweet winter.—Fruit medium size and round; color green and pale red, faintly striped with a deeper shade on the side exposed to the sun; flesh tolerably firm, sweet, with a very slight acid. In eating from December until May. It is a most productive fruit, and worthy of cultivation.

The other varieties sent by Mr. Ramsdell, and considered very good, were the pomme Royal, Nichols's sweet, and yellow gilliflower, with three or four unnamed kinds of some merit.

In addition to these, Dr. Burnet of Southborough communicated to the Horticultural Society some new varieties of apples, among which was the following:—

Lyscom apple.—Fruit large, round, and of a regular form; color green, covered nearly all over with broad broken stripes of pale red; flesh tender, juicy, sweet, with a just proportion of acid, and a delicious aromatic flavor. In eating from October to November. Pronounced by the committee to be a noble fruit. We recommend it to the notice of amateurs and nurserymen for trial.

Dr. Burnet first introduced to notice a very excellent pear, which was named by the Society, in compliment to him, the Burnet pear. We shall notice this fruit at another time.

We hope, in our next, to present our readers with some notices from Mr. Manning, together with some remarks of ours upon a few other new or but little known fruits.—*Ed.*

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

WE continue to offer such information to our readers as we have been enabled to gather together, both as respects the cultivation and trial of new varieties of vegetables in this country, as well as of those that are reported abroad to possess extraordinary merits. New varieties of superior vegetables are not rapidly produced, and after they are once introduced into cultivation, it is

long before they become generally grown and properly appreciated. Probably if as much attention had been given to the hybridization of vegetables, as has been bestowed upon fruits, the varieties would have been more numerous than they now are, and their qualities far better; the method seems, however, to have been but little practised in the culinary department. As the taste for superior articles becomes more extended, the demand will be greater, and gradually the old kinds will be discarded for new ones; finally, the desire for still more excellent specimens will induce cultivators to make more frequent attempts to procure something new; the result will consequently be, as it has been in other departments of gardening, the production of a race of new varieties, far better than those previously known.

We are glad to notice, in the various exhibitions of the past year, which have taken place throughout the country, an account of nearly all of which will be found at the close of the third volume, and in the commencement of this, that the cultivation of vegetables is attracting the attention of the respective societies before which they were exhibited. Liberal premiums have been awarded for the most excellent and best grown specimens, and the articles exhibited have been of much finer quality than those heretofore grown. These have, indeed, in many instances, been the produce of the gardens of private gentlemen and amateurs, though, in some instances, of regular market gardeners. It is with the gentleman and the amateur, however, that reform in cultivation must begin: the market gardener will generally be the last to adopt any new mode in growing a vegetable, or to make a trial of a new variety: when he sees that gentlemen are producing for their tables a much better article than his own, and thus, through a circle of acquaintances, preparing the public to better appreciate what is superior, he will be induced to make some efforts to supply himself with the best; but not till then will he, in scarcely a single instance, be persuaded that it is for his interest, as well as for the benefit of the public, to cultivate new and superior varieties.

We have introduced this article, for the purpose of making better known new varieties, with the hope that cultivators, particularly market gardeners, may see what there is that is new, and what has been proved to be worthy of general growth, to the exclusion of old kinds. We shall endeavor to introduce, annually, the names of all that may be reported to possess excellent merits; and those that we know, from experience or from the advice of friends, on whom we can rely, to be first-rate, we shall make no hesitation in so recommending. Those which may be merely mentioned one season, will the next, if they have been tried, be noticed at length, and their qualities commented upon.

The past year there has not been many new varieties of vege-

tables introduced, and but few, if any, originated in this country. Our notices now will therefore not be very extended, particularly as our remarks last year were made at length, and embraced about all the kinds that were then known. We shall take the articles in an alphabetical order, so that they may be more easy to refer to.

BEANS.—We do not know of any remarkable new sorts; nothing, certainly, among the running kinds which will equal the Lima; but as this variety scarcely attains, in the latitude of Boston, to an eating state, unless forced, a substitute is much sought after. The only new kind which comes any where near it in quality is the Soissons bean. We named this last season, and we only mention it now to add, that the past summer we had an abundance of fine pods as early as August, while the Limas, which stood close by the side of them, did not produce a pod fit for shelling until the latter part of September. Its quality is excellent, and it is fast coming into cultivation. They are also stated to be very superior to boil when dry.

The prolific Lima bean.—This is said to be very inferior, possessing little or no merit. See p. 28.

BROCOLI.—This very fine vegetable has been cultivated considerably the past season, and some monstrous sized ones have been raised. During the winter, nearly up to this time, as will be seen by our reports, the market has been tolerably supplied. The purple Cape has been the principal sort cultivated, and it is an excellent kind; but we find the following names of new varieties in an English catalogue for this year: *Summer's superb white*, *Howden's superb purple*, and the *new Imperial winter*. We know nothing of their qualities, but presume they are good. No doubt the seed will be introduced by Messrs. Hovey & Co., or other seedsmen, and a trial made of their merits, of which we shall inform our readers.

CABBAGES.—We have little to note respecting the trial of any new kinds, besides the continued cultivation of the Vanack, which has given very general satisfaction to all market gardeners who have grown it. We mentioned some new sorts, which were recommended last year, as being superior, but we have no information respecting their real merits. The following are the names of other new varieties, which appear in the catalogues for 1837 and 1838, viz. *new early Nonpareil*, and *early new Waterloo*. We hope the seed will be introduced, and their qualities tested, before the return of another year.

CAULIFLOWER.—Gradually, upon the increase in cultivation, this most excellent vegetable will, before a long time, be generally sought after in the market. Fine heads have been supplied the past fall, and during the winter, up to this time, and they are now to be found throughout nearly the whole season. The com-

mon early and late varieties have been exclusively cultivated. We would now notice the *new early German*, a variety advertised in the English catalogues. If early, and at the same time of good size, it will be a fine acquisition to the culinary department.

CELERY.—It is with great pleasure and satisfaction that we are enabled to inform our readers of the ready sale of the new *giant* celeries. Nothing can better display, at once, the prejudice which many market gardeners labor under than the mere relation of a fact which occurred the past season. In 1836, some tolerable (by no means fine) specimens of the giant celeries were first introduced to the market. The varieties were thought, by those who were more particular in their purchases of this excellent vegetable, to have the appearance of coarseness, so different were they from the old pipy kinds in general growth. But by request some individuals were induced to make a trial of a few roots: the result was highly favorable; they were not only pronounced better than the old sorts, but so very superior, that those who had eaten them came at once to the conclusion, never, if the giant celery could be had, to purchase the common varieties. From this fact, the beautiful appearance and the very ready sale of the giant sorts, a dealer endeavored to persuade an old market gardener to raise him a large quantity of the giant, stating to him that he had no hesitation in saying that it would sell more readily and at a higher rate than the old kinds. But his persuasions had no effect whatever; he was sure of his disposing of all he could raise of the old varieties, and he might not be enabled to sell perhaps a root of the new sorts; he preferred to go on in his old track. But so certain was the dealer that the giant varieties would sell, to the almost total exclusion of the common, that he agreed with the raiser, if he would undertake it, to guarantee him against any loss on his part. On these terms alone he set to work to grow a large quantity. We need scarcely mention, that it is eagerly sought after, sells rapidly at a considerable advance on the common kinds, and is preferred by all who have given it a trial. These two varieties are *Bailey's red* and *white Giant*.

In addition to these, we mention the following as for sale by the English seedsmen:—*Large Russian pink*, and *Law's Giant white*. When we have any correct information of their merits, from our own experience or from that of our friends, we shall present it to our readers.

CUCUMBER.—Excepting varieties for forcing, we believe there is nothing particularly new. For the former object, there has been some new varieties originated, and some that have been made trial of have been incidentally noticed by us in our third volume.

Walker's long green.—A most excellent variety, growing

from eighteen to twenty-six inches in length, and possessing all the good properties of a cucumber. For forcing, it is well known. We notice it now more particularly, to state that we raised some fine specimens in the open ground last summer, in a warm and somewhat sheltered situation. No other than ordinary care was bestowed upon them; but the vines, when cut down by the early frost of October, were crowded with young fruits in all stages of growth.

Among some new varieties, which we have seen enumerated, we notice the *Sion house*, *Spink's long frame*, and *new large Prizefighter*.

ART. IV. *Remarks on the Cultivation of the Gentiàna acaùlis.*
By S. WALKER.

So named from Gentius, king of Illyria.—*French*, la gentiane.—*Italian*, la genziana. By the *English* it is sometimes called feelwort, or baldmoney. The species of this beautiful plant are very numerous. It is a genus of the class Pentandria, order Digynia. **GENERIC CHARACTER:** *Calyx*, perianth, five-parted, sharp; divisions oblong, permanent. *Corolla*, petals one, tubular at bottom, imperforate at top, five-cleft, flat, withering, various in form. *Stamina*, filamenta five, subulate, shorter than the corolla; antheræ simple. *Pistil*, germen oblong, cylindrical, length of the stamina; styles none; stigmas two, ovate. *Pericarp*, capsule oblong, columnar, acuminate, slightly bifid at the tip, one-celled, two-valved. *Seeds*, numerous, small, fixed all round to the walls of the capsule; receptacles two, each fastened longitudinally to a valve. *Observe*, the figure of the fruit is constant; but both that and the flower varies much in the different species, as well in number as in form. Some species exclude a fifth part of the number in the flower. One adds three parts of the number in the flower. One species has the neck of the corolla spreading; a second has the neck closed with hairs; a third has the segments of the corolla ciliate; a fourth has a bell-shaped upright plaited border; in a fifth it is starred with small segments, interposed between the larger ones; some have a bell-shaped, and others a funnel-shaped corolla. **ESSENTIAL CHARACTER:** *Corolla*, monopetalous. *Capsule*, superior, two-valved, with two longitudinal receptacles.

I shall confine my present remarks to the species *Gentiana acaulis*; Dwarf Gentian, or *Gentianella*. "This plant," says Green, "in its natural alpine situation, has little or no stem, whence its trivial name; but it acquires one in a state of cultivation." In England it flowers in April and May, and sometimes a second time in the autumn. In this section of the country it flowers about the first of June. The flowering time in the Alps is in June, July and August. Ray observes, that although it be a native of the highest Alps, yet it readily admits of cultivation. It was much sought after in his time, by gardeners and florists, for the beauty of the flower; and is still much esteemed for the brilliant azure of its flower, so large in proportion to the size of the plant. As yet, it is but little known among the cultivators in our country; and, from this fact, I have thought a few remarks might not be unacceptable to your readers.

The propagation of this plant is by parting the roots; but it should not be parted or transplanted often; in order to have it flower strong, it should have a loamy soil and a shady situation. It may also be increased by seeds sown in the autumn: the plants will, if sown in a good soil, be strong enough to flower the second year; the seedling plants will flower stronger than those propagated from offsets. I would recommend the following compost, viz. one half good rich loamy soil, one quarter bog earth, and one quarter well rotted cow manure; to which add, in proportion to the whole, one tenth part of fine sand. In common with other Alpine plants, this plant loves a pure air, an elevated situation, and a moderately moist soil; so that it is absolutely impossible that they should flourish in a pot, confined to the green-house or parlor, or in the confined gardens in large cities. Ray observed it growing upon the highest parts of Mount Jura. Native of Switzerland, Austria, Carniola and Silesia.

By an examination of your former volumes, I find this plant noticed in pages 262 and 418, of vol. II; and also in page 235, vol. III; to which I would refer your readers for some additional information.

There are other species of this genus, well deserving the attention of the lover of flowers. It would give the writer great pleasure to learn, from some of your scientific correspondents, how many species of the gentian they cultivate, with remarks as to propagation, soil, &c. &c.

Yours,

S. WALKER.

Roxbury, Dec. 29th, 1837.

By the above, it will be seen that Mr. Walker has referred the reader to some remarks made upon this fine species of gentian by a correspondent and by ourselves; and we here deem it important to correct an error which we accidentally committed in speaking of it in vol. III,

p. 235. We there stated that it had not flowered to our knowledge in the vicinity of Boston, unless at the Botanic Garden at Cambridge, until it flowered with us. We overlooked the short notice sent us by a correspondent, (vol. II, p. 262) who saw it in bloom at Mr. Walker's. We some time since detected our error, and had it in our mind to make the correction once or twice; but each time it escaped our attention. We therefore take the present opportunity, in connection with Mr. Walker's remarks, to state that the *G. acaulis* flowered in his garden year before last, at which time our plants were but seedlings. It is such an elegant plant, and its cultivation so delicate, that, though so slight a mistake, it is due to Mr. Walker to give him the credit of blooming it previous to ourselves. We hope his remarks on its growth will induce others to add it to their collections of hardy perennial plants.—*Ed.*

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, *Florist's Register*, and *Royal Ladies' Magazine*. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo numbers, with a plate; 1s. each.

Botanical intelligence.—Dr. Torrey states, in the preface to the *Catalogue of Plants*, found in the vicinity of Newbern, N. C. by H. B. Croom, Esq., and alluded to in our last, that among the new plants discovered by Mr. Croom are “a beautiful evergreen *Andróneda*; an arborescent *taxus*, allied to *T. canadensis*, but attaining to the height of thirty feet; a noble new genus

of Coniferæ, with the foliage of taxus, and a fruit as large as a nutmeg, which Dr. Arnott will shortly publish under the name of *Tórreya*; and a very distinct new genus, to which I have given the name of *Croómia*, in honor of my departed friend."

Many new and rare plants were discovered by Mr. Croom, the specimens of which, together with his valuable observations on them were kindly presented to Dr. Torrey, with permission to use them for the benefit of science. These Dr. Torrey will soon publish in a paper by themselves. Mr. Croom left a valuable monograph of the genus *Sarracènia*, which will appear in the forthcoming volume of the *Annals of the New York Lyceum*.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ternströmiæcæ.

CAMELLIA.

We had intended to have given a list of the finest new varieties which will be in flower this month in this vicinity; but we have been prevented from various circumstances. A greater part of the flowers will open this month, which is rather earlier than usual. Plants generally made such an early growth last spring, that their flower-buds swelled rapidly in the fall, before the plants were taken into the house. This, together with the late unprecedented mild weather, for the season, has made them push their buds very rapidly.

At *Mr. Wilder's*, *Camèllia japónica Donckelaèri*, francofurténsis, delicatíssima, imbricatà álba, and many other fine new ones, we believe, are showing buds. A continuation of Mr. Wilder's paper, describing the varieties, will appear in our next.

At *Hovey & Co.'s*, *C. j. Flòyi*, élegans, imbricatà, and others equally beautiful, with the *C. reticulàta*, will bloom superbly this month.

Philadelphicæcæ.

PHILADELPHUS (a classical name of some doubtful shrub. The application of the term is unknown; it literally means friendly brother.)
speciosus *Schrad.* Showy *Syringa*. A hardy shrub; growing from eight to ten feet high; with white flowers; appearing in June. Bot. Reg., 2003.

A most beautiful species of the *syringa*; surpassing, in the size of its flowers, any of the others. It grows to the height of eight or ten feet, "and by no means stiff or formal, but with gently bending branches, loaded with snow-white flowers of the largest size," and destitute of fragrance. It is less cultivated than any of the other species, although it is by far the handsomest. Its mode of inflorescence is like the common kinds in general cultivation. We think this species is not yet in American collections.

Dr. Lindley states, that this beautiful genus is but imperfectly known, even to botanists, and to cultivators so little that it is

hardly possible to procure the species with any certainty from the nurseries, unless from the Messrs. Loddiges. He therefore proposes to gradually give the figures of the species, that the distinction between them may be more apparent. The *P. speciosus* is generally called *P. grandiflorus*, but it is entirely unlike the other plants so called, and which are neither the true *grandiflorus*. Probably as hardy in our climate as the common *P. coronarius*. (*Bot. Reg.*, Nov.)

Fabaceæ, or *Leguminosæ*.

DAVIESIA

latifolia R. Brown Broad-leaved Daviesia. A green-house plant; growing about three feet high; with orange and brown-colored flowers; appearing from May to August; a native of Van Dieman's Land; introduced in 1805; propagated by cuttings, and cultivated in sandy peat and loam. *Pax. Mag. Bot.*, vol. IV., p. 323.

A fine green-house shrub, producing axillary solitary heads or racemes of exquisite orange-colored flowers, marked with deep brown. The leaves are alternate and oval. Like all the New Holland plants, this species requires considerable care in cultivation. The shiftings should not be often, or the plants placed in too large pots. Water should be given often, but not in such quantity as to endanger the roots. This species should be in all collections. (*Pax. Mag. Bot.*, vol. IV, p. 223.)

ACACIA

longifolia Don Long-leaved Acacia. A green-house shrub; growing from six to ten feet high; with yellow flowers; appearing in spring; a native of New Holland; grown in strong loam and peat; propagated by cuttings. *Pax. Mag. Bot.*, vol. IV., p. 179.
Synonyms: *Mimosa longifolia* Andrews' *Bot. Rep.*, 107. *M. macrostachya* Poir., *Sup.*, p. 61.

The common, well known, beautiful, and fragrant species, found in all good collections. The plants are of vigorous growth, and attain the height, under favorable circumstances, of eight or ten feet. The flowers are produced in abundance, upon all the branches, and spring from the axils of the leaves, thus giving them the appearance of huge spikes of blossoms. The leaves are lanceolate and entire. The plant has an erect and fine habit. Mr. Paxton states, that it does best planted out in a conservatory, where the roots have room to ramify, and its branches to flourish. It is easily raised from seeds or cuttings. Mr. Paxton gives a list of upwards of twenty-five species, for the green-house, all of which are fine flowerers and of easy cultivation. (*Pax. Mag. Bot.*, Oct.)

pulchella Pretty zig-zag-spined Acacia. A green-house shrub; growing from four to six feet high; with yellow flowers; appearing in May and June. A native of New South Wales. *Pax. Mag. Bot.*, vol. IV., p. 198.

A pretty species, but far less brilliant than the *A. longifolia*. The plant forms a small prickly bush, with delicate pinnate leaves, producing an abundance of little globular heads of flowers, which appear at the base of nearly every leaf. Its blossoms are slightly fragrant. Like the *A. longifolia*, it flourishes in loam and peat, and is increased by cuttings. It is a desirable plant in a collection. (*Pax. Mag. Bot.*, Oct.)

* *Lobeliàcæ.*

SIPHOCAMPYLOS (From *siphon*, a tube, and *kampylos*, curved, in reference to the curved tube of the corolla.)

bicolor *Two-colored Siphocampylos.* A hardy perennial plant; growing three feet high; with scarlet and yellow flowers; appearing in April; a native of Georgia; propagated by seeds and division of the roots. *Pax. Mag. Bot.*, vol. IV., p. 195.

Found by our correspondent, Mr. Alexander Gordon, in Georgia, from whence the seeds were sent to Messrs. Lowe & Co. of Clapton, who raised the plants, and in whose collection they flowered in April last. This is the only species of the genus. The *stem* is erect and branched; *leaves* distant, alternate, with short footstalks, lanceolate, acuminate, and unequally serrated; *flowers* axillary, on gracefully pendant peduncles; *calyx* green, pubescent, with five short acute teeth; *corolla* more than an inch long, somewhat curved, cylindrical, divided at the edge into five segments; *stamens* five; *filaments* cohering; *anthers* pale yellow, collected into a tube. This is a very interesting plant, and would probably require the same protection that the lobelias from the same section of that country do. The profusion of yellow and scarlet blossoms, hanging gracefully on slender peduncles at the axil of each leaf, renders it desirable in collections. It will probably produce seed, and soon become generally cultivated. (*Pax. Mag. Bot.*, Oct.)

Plumbaginiàcæ.

STATICE

arborea Tree-like Statice. A green-house or conservatory shrub; growing to the height of six feet; with white flowers, appearing all the year; a native of Tenriffe; cultivated in sandy heath mould, loam, and rotten leaves. *Pax. Mag. Bot.*, vol. IV., p. 217.

“*Státice arborea* is one of those plants of which no drawing can convey an adequate idea; in truth, it is almost impossible for any artist to give the light and airy elegance of its widely spreading panicles of flowers,” which are produced in such great profusion. “One of the most interesting permanent conservatory plants ever brought to this country,” [England.] It was discovered in the Isle of Teneriffe, although Humboldt and Bonpland, who botanized this island, and published the result of their labors, do not mention a single specimen of *Státice* growing there. It is luxuriant in its growth; leaves varied at the margin, oblong, obtuse, smooth, ten inches in length, upper surface of a glaucous green, and pale beneath. The calyx is lavender colored, the flowers white. It branches freely in all directions, and it appears one mass of snowy blossoms, so numerous are the panicles, the stems of which are two or three feet long. “As a specimen plant in a pot, as a conservatory plant planted out in a bed, or as a summer border plant to decorate the flower garden in the open air, there is scarcely any thing to be compared” with its striking beauty. Flourishes in a temperature of from 45° to 55°; requires plenty of moisture when in a growing state, with frequent syringings of water. The figure was taken from a spe-

cimen grown by Messrs. Lucombe & Pince of Exeter. (*Pax. Mag. Bot.*, Nov.)

Asteràcæ.

CINERARIA

? *Waterhouseana* Paxl. Waterhouse's hybrid Cineraria. A green-house plant; growing from one to two feet high; with crimson flowers; appearing in March; increased by offsets, in light rich mould. *Pax. Mag. Bot.*, vol. IV., p. 219.

The beautiful genus Cineraria has been greatly improved under the hands of the skilful gardeners of Great Britain. It is but a short time since that only eight or ten species were in cultivation; now the species, and hybrids between them, number upwards of twenty. The *C. cruénta* is about the only species which we have ever seen in collections in this country, but it seems to be little admired, and is not often met with in very great perfection. It is a handsome plant, but by no means to be compared to some of the hybrid varieties, particularly the subject alluded to above.

The practice of hybridization is now carried to a great extent by the practical gardeners of England; and the new and beautiful flowers which are continually produced, attest that it is a sure method of procuring novelties, when a greater part of the civilized world has been travelled over by botanical collectors, and the chance of finding new species, of any beauty, is so rare. The most common flowers of the garden have not escaped attention, and the beauty of the flower border has been doubly enhanced by the production of new varieties. In the green-house, the more magnificent, as the camellia, the genanium, and the rhododendron, have heretofore been subjected to the skill of the gardener, to the neglect of others; but now the less beautiful, though not less interesting, as contributing to the gaiety of the green-house at all seasons, have begun to receive attention. And no tribe has been more improved than the cinerarias. Displaying their starry blossoms in profusion from February to June, they are objects always desirable, and, as they are easily cultivated from seeds, they will repay all the care and trouble bestowed upon them.

The present variety is a very elegant plant; the flowers are of a deep rosy crimson, and quite large. The foliage somewhat resembles the *C. tussilagofolia*, from which and the *C. cruénta* it was produced. It was raised by Mr. James Tate, gardener to John Waterhouse, Esq., after whom it is named. The greatest number of new hybrids have been grown by the Messrs. Henderson, of Pine-apple Place, several of which are very superb. As we have observed, the cinerarias are too little cultivated in our collections of plants. It cannot be because they are difficult to grow, as they are increased by seeds or by offsets; but the former make the handsomest plants. With the desire, however, to see them more general favorites, if any information upon their

cultivation will do so, we extract the following, furnished by Mr. Paxton:—

After stating that the *C. cruenta* is one of the best species to save seed from, he remarks that it ripens, “in general, in April and May, when it should be immediately sown; for we always find it the best way to raise young plants from seed every season; and, as this species is liable to sport a good deal from seed, we take care to mark, when they are in bloom, those which produce the largest corymbs, and when the seed is ripe, it is carefully collected and sown, by which the flowers of the succeeding season come much superior. The seed should be sown, as soon as ripe, in good sized pots, of light rich mould, and placed in a gently heating hot-bed, where they will soon vegetate; when they have made two or three leaves, they should be transplanted into small sixties, using the same light rich compost as before recommended, and replaced in the frame; in a short time they will require a larger sized pot, which should be immediately given, and so on till they reach the size of thirty-two, in which they may be allowed to flower. Towards the middle or latter end of October, if they have had proper attention, such as water, air, pot room, &c., they will commence throwing up strong flower-stalks from the centre, when they should be placed in a light part of the green-house, where they will begin flowering in December, and continue beautiful for several months. To have them in a flowering state in May and June, the following simple method should be followed. Sow the seeds, as before directed, about May, and when the young plants are sufficiently strong, they should be potted into sixty sized pots, and placed in a cold frame, where they should stand all winter in no larger sized pot than a forty-eight. In the spring, (March,) they should be shifted into thirty-two sized pots, and still kept in a frame; in a month or six weeks they will begin flowering, when the lights of the frame should be tilted, so as to admit an abundance of air; in order to have the plants dwarf, the head broad, and the flowers well expanded, they should stand as near the glass as possible; when the flowers are open, they should be taken into the green-house, where they will be quite ornamental.”

Any varieties that it is desirable to increase should be separated at the roots in August, potted, and managed like the young seedlings.

The cinerarias are also valuable plants for turning into the border in spring, where they make a gay appearance all the summer. Plants for this purpose should be raised from seeds in May, preserved in a cold frame during winter, and turned out of the pots into the border in spring, where they will flower abundantly. (*Pax. Mag. Bot.*, Nov.)

Pedaliaceæ.

MARTYNIA (Named by Houston in compliment to his friend John Martyn, Professor of Botany at Cambridge.)

diandia Willd. *Diandrous Martynia*. A tender annual; growing from two to three feet high; with deep crimson, pale pink and yellow flowers; a native of Vera Cruz; increased by seeds. *Bot. Reg.*, 2001.

Synonyme: *Martynia angulosa Lanark.*

A rather interesting plant, with beautiful blossoms, pendulous, upon erect axillary racemes, of a most delicate pink, fading to white, with the lips of the lobes of the corolla deeply stained with crimson, and a bright streak of yellow passing down the tube from the middle of the lip. The foliage is coarse, and an unpleasant odor is emitted from the whole plant, as in the common *Martynia*. Excepting this, we think it would be a general favorite. It is tender, and requires the same treatment as a balsam or coxcomb. The drawing was taken from a specimen which grew in the garden of the late Mr. Rothschild. (*Bot. Reg.*, Nov.)

Bignoniaceæ.

TECOMA (An improvement upon the Mexican name *Tecomachitl*, applied to one of the species.)

jasminoïdes Lindl. *Jasmine-leaved Tecoma*. A beautiful green-house climbing shrub; growing six or eight feet high; with white and crimson flowers; appearing in August; a native of New Holland. *Pot. Reg.*, 2002.

Synonyme: *Eienoua jasminoïdes Hort.*

One of the most elegant green-house climbers we are acquainted with. The flowers appear in dense terminal panicles, gracefully pendulous; corolla tubulous, campanulate, the limb plane and sub-equal, divided into six segments, of a pure white, and the tube inside of a deep crimson; leaves pinnate, glaucous and shining. Nothing could exceed, judging from the representation of the specimen figured, a plant of the *T. jasminoïdes* in full flower. Its numerous snowy corols, heightened with rich crimson, are charming in an eminent degree. It is stated to be not uncommon in English collections, but is a very shy flowerer. It is supposed a native of New Holland, and to have been originally received at the royal gardens at Kew. The drawing was made from the nursery of the Messrs. Chandler, Vauxhall, in whose collection it blossomed last August. It is undoubtedly as easy of cultivation as the common *T. capensis*. (*Bot. Reg.* Nov.)

Verbenaceæ.

PETREA L. (In honor of Lord Petre, who died in 1742, and of whom Linnæus speaks as one of the greatest losses botany or gardening ever felt in Britain.)

Stapésia Part. *Stapelia-flowered Petrea*. A twining stove shrub, growing from eight to ten feet high; with pale purple flowers; appearing in June; increased by cuttings, and flourishes in loam and sandy peat. *Pax. Mag. Bot.*, vol. IV, p. 199.

A very singular stove twiner, with oblong acute leaves, with prominent veins on the under surface, and of a yellowish-green color; calyx five-parted, pale blue; corolla five-parted, pale purple. The plant produces pendant racemes of flowers from the extremities of the branches, which remain beautiful for a long

time. It is stated to be an ornamental plant for the back wall of a stove, for a trellis, or for training up a rafter. Its cultivation is simple. It delights in open loam, with a little sandy peat, and when growing should be freely watered; but at other times with great caution. It requires to be kept constantly in the stove. Mr. Paxton states that this species has long existed in collections under the above name. It flowered in June last, in the nursery of the Messrs. Loddiges, from which specimen the drawing was taken. (*Pax. Mag. Bot.*, Oct.)

MONOCOTYLEDONOUS PLANTS.

Orchidæcæ.

CIRRIÆA

obtusata Lindl. *Plant-petalled* Cirriæa. A stove epiphyte; growing six or eight inches high; with yellow and orange flowers; appearing in March; a native of Rio Janeiro. *Bot. Reg.*, 2005.

A pretty species, "a good deal like *C. fúscò-lùtea*, for which I at first mistook it; but it seems sufficiently distinguished by its much more obtuse petals and smaller flowers." Dr. Lindley states, however, that he is "far from being satisfied with the goodness of such distinctions among these plants, and is inclined to fear that we sometimes trust to them too much." The flowers of the *C. obtusata* are collected into a dense pendulous raceme. The drawing was taken from a specimen which flowered in the collection of Richard Harrison, Esq., of Liverpool.

Among several species which flowered with the Messrs. Loddiges last March, was one which differed from all the rest, except the *C. obtusata*, in the form of the middle lobe of the lip; this Dr. Lindley called *C. pállida*. It only differed from the former in having the petals and sepals acuminate, and the lobe of the labellum placed in a slender unguis. "The value of these distinctions must remain for future inquiry." (*Bot. Reg.*, Nov.)

ONCIDIUM

deltoidium Lindl. *Triangular-lipped* Oncidium. A green-house (?) plant; growing about two feet high; with yellow and orange flowers; appearing in September. A native of Peru. *Bot. Reg.*, 2006.

A rare and very elegant species, with large and spreading panicles of yellow flowers, spotted with orange. It is nearly related to *O. divaricatum*, from which its narrow leaves and differently formed labellum sufficiently separate it. It is also closely allied to *O. macranthum*. The species was sent from Lima by John McLean, Esq., to Mr. Joseph Myers, Esq., of Aighburgh, near Liverpool, in whose collection it flowered last September, and from which specimen the drawing was taken. The arrival of this species in a living state, Dr. Lindley remarks, "should be a fresh stimulus to those who have mercantile relations with Peru, to procure orchideous plants from the west side of the Cordilleras, for many of them, especially those from the valley of the Lloa,

are of singular beauty. Hitherto scarcely any of them have found their way into our [English] gardens."

"It may be expected that this species will grow well with the heat of a green-house. I found it among a general collection of green-house plants, in Mr. Myer's garden, and it was in such good health, that I can hardly doubt its preferring the cool temperature in which Cape and New Holland plants thrive, to the excessive heat and damp to which *Orchidaceæ* are commonly subjected." If this should prove to be the case, it will be a valuable species, as few of the tribe will flourish in that situation; and therefore amateurs and others, who do not possess a stove, are deprived of the pleasure of seeing their singular and splendid flowers. (*Bot. Reg.*, Nov.)

Marantaceæ.

CANNA

Reevesii Lindl. Mr. Reeves's Indian Shot. A green-house (?) plant; growing four (?) feet high; with yellow flowers; appearing in May; a native of China; increased by seeds. *Bot. Reg.*, 2004.

"A most beautiful species of *Canna*, drawings of which were long since sent to England from China; and of which seeds have been at length procured by Mr. Reeves, to whom we owe so many of the finest Chinese plants now in the gardens of Europe."

This species is near *C. flaccida*, according to Redonté's figure and description. The leaves are ovate, lanceolate, and acute; the flowers are of a beautiful yellow. The drawing was made from a specimen which flowered in the garden of the London Horticultural Society, which was produced in a stove; but Dr. Lindley thinks a green-house would suit this species as well. The cannas are not highly valued, as stove plants, by our amateur gardeners and lovers of plants. They possess, however, much beauty, particularly the handsome kinds; and their vigorous growth and large foliage contribute to render them interesting at all seasons. None are more elegant, as respects their flowers, than the subject here spoken of, which deserves general cultivation, if it will thrive, as has been hinted, in the green-house. (*Bot. Reg.*, Nov.)

Liliaceæ.

LILIUM

speciosum Morren. Crimson Japan Lily. A green-house or frame bulb; growing two (?) feet high; with crimson flowers; appearing in August; a native of Japan. *Bot. Reg.* 2000. Syn: *Lilium superbum* Thunb. *Fl. Japan.*

One of the most superb lilies ever yet introduced into Europe, throwing "quite into the shade" all previously known species. The stem is erect; leaves scattered upon the stem, ovate, oblong, nerved; flowers solitary; sepals reflexed. "Not only is it handsome, beyond all we before knew in gardens, on account of the clear deep rose color of its flowers, which seem all rugged with rubies and garnets, and sparkling with crystal points, but it has the sweet fragrance of a petunia. Well might Kæmpfer

speak of it as 'flos magnificæ pulchritudinis;' for, surely, if there is any thing not human, which is magnificent in beauty, it is this plant."

"Beyond its own country, it has no rival; but in Japan there are others, that will scarcely yield even to it. Kämpfer tells us of the *Oni Juri*, or Devil's lily, with a showy flower, a span in breadth, the flowers all stained and mottled with crimson and purple and minium; of the *Fine Juri*, a dwarf species, daggled with marks of blood, its purple flowers, moreover, spotted with crimson; and of the *Fi Juri*, or fiery lily. Can these be among the twenty species of lily which Dr. Von Siebold is said to have brought alive from Japan to the Botanic Garden of Ghent?"

It flowered in Belgium as long ago as 1832, and several accounts of it have been published there, but they appear not to have found their way to England. Kämpfer learned that the Japanese obtained the roots from Corea; and Thunberg states that he saw it about Negasci and elsewhere, but always cultivated.

It flowered last August in England, in the nursery of the Messrs. Rollisons of Tooting, where the drawing was made. Paxton speaks of it, in the *Magazine of Botany*, as the *L. lancifolium rubrum*, but the *lancifolium* is a different species.

If the glorious specimens which Kämpfer mentions above are among those introduced by Dr. Von Siebold, it will be as great an acquisition to this tribe as the beautiful new camellias, which he brought from China, are to the camellia family. The plants will, undoubtedly, thrive with the same treatment as that given to the *L. japonicum*; that is, to plant them in a glazed pit, in good light loamy soil, where they can be protected from frost; or in pots, and sheltered in a frame; or in the green-house. (*Bct. Reg.*, Nov.)

ART. VI. Notes on Gardens and Nurseries.

After a considerable lapse of time, we resume our notices of gardens and nurseries. We were in hopes to have been enabled to have given them at considerable length at this time; but, with the press of matter and engagements which prevented us from visiting the gardens at this season, we have been compelled to defer a portion of them till our next.

After what we have stated in our article on the progress of gardening, during the past year, and our list of plants which have been introduced, a tolerable estimate can be made of the interest which the collections possess, into which such plants have found their way. Many of the

plants will not, probably, bloom for some length of time; but there are others, which will display their beauty the ensuing spring and summer, and a notice of their merits will undoubtedly prove interesting. It will be our constant aim, in these notes, to mention every thing new and rare, or worthy of cultivation.

Amateur garden of Mr. Sweetser.—Since our last notice of Mr. Sweetser's garden, he has added several new and beautiful plants, but more particularly of camellias, rhododendrons, azaleas, and cactuses: of the azaleas he has upwards of a hundred species and varieties, many of which will bloom soon. The rhododendrons are the same as those enumerated in the list at p. 20; they are in good health, though quite small plants, and it will be some time before they will flower. Among the camellias are many of the newest and most splendid varieties. Mr. Sweetser's collection of cactuses, cereuses, opuntias, &c. &c. is undoubtedly the most complete and best grown in the vicinity of Boston, and, we might almost say, in the country. The specimens, it is true, are not large, but there are a great number. As Mr. Sweetser has kindly offered to give us a complete list of all he possesses, together with his mode of growing the plants, we defer enumerating any of them for the present: it will probably appear in the course of the current volume. Of ericas there is a small but good collection of healthy seedling plants; one called *E. consolida*, (?) not more than six inches high and but eighteen months from the seed, is completely covered with umbels of its tiny pale pink bells. It is a most charming little species. *E. arborea*, six feet and upwards high, is beautiful with its racemes of exquisite white corols. A year hence, we anticipate a rich treat from the inspection of the various collections of *Ericæ*, which are now being made by amateurs and others: the distribution of the seeds, received from the Baron Von Ludwig, by the Massachusetts Horticultural Society, has given a great impulse to their growth. Among the camellias, we noticed *imbricata*, *Triphosa*, *speciosa*, *Vandesia carnea*, *elegans*, &c. *Pæonia papaveracea*, and *p. var. Banksia*, and *Ravensia* will each bloom in the course of the month. A fine plant of *Rhododendron hybridum* is also showing fine large buds. *E/pacris grandiflora*, *paludosa*, and *juniperina* will soon bloom. A beautiful variety of the *Nerium*, *N. odora var. Richardianum*, with very large pale rose-colored flowers, is just expanding.

In the stove the cactuses are in a most vigorous and healthy state; we have never seen any in a more flourishing condition: plants which were mere cuttings last spring are now one or two feet high; all of them are neatly tied up, and their appearance reflects much credit upon the taste of Mr. Sweetser. The plants being yet young, are encouraged by shiftings to obtain a larger size: still we have no doubt many of them will show flowers in the spring. *Epiphyllum truncatum* is now expanding its exquisite blossoms. *Amaryllis brasiliensis* has thrown up fine flower-stems, and some buds have already opened. *A. formosissima*, and some others, show buds. In addition to these, there are numerous other plants in bloom, which we have no room to enumerate now.

Residence of J. D. Williams, Esq., Roxbury.—In our vol. III, p. 30, we noticed the erection of a fine green-house, by Mr. Williams, and intended to have given a description of it during the past summer; but we were prevented. Mr. Williams has kindly permitted us to take a plan of it, and, as soon as it is in our power, it will appear, with the description annexed. We shall therefore, at this time, omit saying any thing in respect to the construction of the house, otherwise than the mode of heating, but shall confine our remarks to the plants. The green-house is upwards of sixty feet long, and about fourteen wide. It is warmed by a brick flue and hot water pipes; the latter constructed on a plan entirely different from that of any other in the vicinity of Boston. It au-

swers completely the purpose of heating the house, and, although there is a greater surface of glass exposed to the air than in any other greenhouse that we have ever seen, of the same dimensions, the temperature is easier kept up, and with less expense of fuel. We shall, in our description of the green-house, endeavor to make the mode distinctly understood. It is wholly of Mr. Williams's invention.

The house, internally, is fitted up with a back stage, and a pit in front, between which runs the walk from one end to the other. In the pit lettuces were growing, and some of the larger rhododendrons, camellias, and other plants, were plunged into it. Mr. Williams has no professed gardener, but his whole farm (of many acres) is under the direction of Mr. Burns, who also manages the green-house; and, though he has but little time to devote to it, and notwithstanding his limited knowledge of green-house plants, they all look very well. Some large specimens of ericas were in perfect health.

The most conspicuous plants were the camellias, of which there are several of the best kinds in the collection; *imbricatà*, *punctatà*, *eclipse*, and fine double whites, were in flower. The number of plants is yet limited; but we have no doubt that Mr. Williams will soon add other fine varieties. The most beautiful plant we noticed, of the one which we should certainly value as highly as any other, was an *Erica baccans*, between five and six feet high, handsomely shaped, and almost every branch terminated with a cluster of buds, some few of which had begun to show color. We cannot imagine a more lovely object than this will present, in the course of a fortnight or more. *E. mammòsa* was exquisite, with a few clusters of its elegant drooping tubulous flowers: we also found fine plants of *E. ventricòsa superba*, *colorans*, *cáffra* (?), *arbòrea*, and *mediterrànea*, the two latter in flower; *cáffra*, so called, was at least four feet high, and thickly branched; it will be one sheet of bloom in a few weeks. *Heliotròpium peruvianum* and *grandiflorum* were both in bloom; the latter is much finer than the former; the flowers are larger, and the color fine lavender, breathing as sweet an odor as the peruvianum. *Metrosidèros saligna* was covered with its crimson whorls of flowers; *Diósma capitata* was also pretty. A very large plant of *Acàcia longifòlia* was completely covered with buds. In addition to these there was an abundance of stocks, oxalises, roses, &c. and some very handsome carnations in bloom.

In the pit before mentioned, between the plants which were plunged, a good crop of lettuces were growing, and plenty of mushrooms. Mr. Williams had culled from one end of the pit, perhaps a space of a dozen feet, since the early part of last month, as many as he has wanted for his own use, besides occasionally sending some to his friends. We are glad to see the mushroom attracting attention. They might, we believe, be profitably grown by our market gardeners for the market, where, we have no doubt, they would command a fair price, and, if well grown, sell rapidly. Mr. Burns communicated to us his mode of proceeding, and we shall take an early opportunity of presenting it to our readers, that those who have a desire may make trial of his system.

Under the stage, and over the flue (which runs across the house once,) Mr. Burns showed us twenty or thirty pots of rhubarb for an early crop: some of the crowns were already pushing; last season he had an abundance in this way. A new variety, which will be noticed in a future number, has been raised in England, which is peculiarly adapted to cultivation in pots: it is stated to be some weeks earlier than any other sort.

In the back shed we noticed thousands of plants of the common daisy, which were taken up in large patches, and there laid in a mass upon the ground in a moist place. These Mr. Burns intends to use as edgings to

the flower borders; but, as our winters are so severe as to destroy the plants, if left standing out, he adopts this mode, and we should think a most safe one, to preserve them. The plants will flower full as well, if not better, for being removed. Numerous layers of carnations he had also in pots, which looked strong and healthy.

In the forcing grounds Mr. Burns has already put up several hot-beds; in one of these lettuces were just breaking the ground, and another was prepared for cabbages. In a small one-light frame he had thirty or forty pots of cucumbers, which had just been potted; they were planted about the 10th or 12th of January. Mr. Williams is a great amateur in farming, and raises bushels of cucumbers every season; he intends to have some twenty or thirty frames hilled out with the above plants, in the course of a few weeks. Mr. Burns is a very industrious gardener; and, although the late open weather has kept his attention directed towards the farming department, the green-house will not suffer in neatness and cleanliness, compared with those under the care of more experienced gardeners. We have no doubt that, when confidence in trade shall be restored, and the effects of the late, and, indeed, yet existing, commercial troubles, shall have passed away, that our amateurs will be induced to enrich their collections with all the new plants. There are few in the vicinity of Boston, who are more liberal, or who have more ample means to do so, than Mr. Williams; and we look forward to the time when his collection will be one of the richest and most complete. What is gratifying, in a great degree, is, that Mr. Williams is above the petty practice of *dealing* in plants, for the purpose of defraying the expenses attendant upon the keeping in good order collections of plants; being convinced that it is destroying the trade of those who make the business their profession.

Mr. Miller's garden.—Our readers have no doubt seen our occasional notices of Mr. Miller's fine seedling pinks, which were exhibited before the Massachusetts Horticultural Society. Mr. Miller is an elderly man, and spends a great portion of his time in cultivating his little garden, to which he has a green-house attached, adjoining his dwelling, about twenty feet long, and nine or ten wide. It is stocked with a pretty collection of various plants, which are in very good health and well grown. We observed one treasure which he possessed, which we believe is in no other collection: this was a fine plant of the *Chymocarpus pentaphyllus Don* (*Tropæolum pentaphyllum*), which had straggled up to the top of the house, and was covered with a profusion of its curious and beautiful blossoms. *Fuchsia globosa* and *microphylla* were each in full flower: several plants of *Erica arborea*, with their slender stems and snowy flowers, were towering above the other plants. *Sálvia fulgens* was showing its spikes of flowers, and *Acæcia longifolia* was full of blossoms; camellias, roses, primroses, stocks, &c. &c., innumerable, contributed to render the house as gay as the garden in summer. Mr. Miller showed us a great number of seedling cyclamens, which he had raised, and which were now flowering abundantly; he has also a number of seedling ericas. We wish there were more such select little collections of plants. How much delight and innocent pleasure might be derived from one even as circumscribed as this.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Decay of Trees.—A distinguishing knowledge of the health and decay of some of the most important trees, medicinally, may be derived from some of the lichens, which are never known to attack a plant until it is in a state of putrefaction. Several species of the *Rhizomórpha* family are certain indicators of decay, and when one of this species is seen upon the Peruvian bark, it may be declared unfit for medicine. The *Himántia cinchonárum*, the *Hypóchnis rubro cinctus*, and the *Opégrapha vizi-còla* and *fissúra* are only found when a tree has lost its vitality, and is on the point of decomposition. (*Address of Dr. Sigmond before the Medico-Botanical Society.*) [The horticulturist should bear this in mind, as such distinguishing knowledge is as important to him as to the medical botanist. How many thousands of trees are there in cultivation, whose trunks are covered with various lichens—nay, whose branches and spray are so thickly coated as to preclude almost all possibility of vegetation; and yet scions are taken, time after time, from trees more or less covered with lichens, and inserted upon healthy and vigorous stocks. The young grafts are carefully tended, and the soil in which the stocks grow properly prepared; but before the trees attain, perhaps, a bearing state, they already show signs of premature decay; the annual growths are short and weak, the bark of a dull shade, and in a short period the lichens attack the young plants, and prevent them from making any farther progress. They soon assume the decrepit appearance of the old trees, though yet, in reality, young, and their fruit, if they produce any, is hard and tasteless. It is a practice to scrape trees annually, to prevent lichens from making any progress upon the branches. It is, doubtless, a judicious mode. But they should be kept in such a vigorous and healthy state, that they will never need to have the operation performed on them, unless to remove the old bark. We have seen young trees, not ten feet high, covered with lichens, from the surface of the soil to the tips of the branches, wholly arising from neglect. It should be considered as an uncontrovertable axiom with the horticulturist, that scions cut from a tree upon whose trunk or branches lichens may be found, will never flourish when grafted into old stocks, however so healthy and vigorous; but that the first germs of decay are there laid which will eventually prove fatal.—*Ed.*]

Vitality of Seeds.—On opening an ancient British tumulus, some small seeds were found in the stomach of a human skeleton, which must have been eaten and lain there two thousand years. Some of these were planted by Professor Lindley, in the London Horticultural Society's garden, and have germinated and produced fruit. They prove to be the common raspberry.—(*Newspaper.*)

The felling of the Mahogany tree.—The following account of the felling of the mahogany tree in Honduras we have found in a foreign periodical; and as we believe it will prove interesting, we present it to our readers.—*Ed.*

“Throughout Honduras there are two seasons in the year for felling the mahogany tree; the first commencing shortly after Christmas, or at the conclusion of what is termed the *wet* season; the other about the middle of the year. Setting out on a mahogany expedition resembles, in some degree, the departure on a long voyage, the preparations for both being somewhat similar: indeed, the dreary time that must be passed

in the woods, in this employment, may not unaptly be compared to what is felt by many during a long confinement on shipboard. Christmas, however, is the season which brings all ranks together—the bond and free; and the hilarity which prevails amongst the slaves cannot possibly be more largely partaken of by any beings in the world. The young, the old, the decrepit—all unite in contributing to render this period joyous, happy and noisy. After a week or ten days of the most unbounded hospitality, festivity, and relaxation from every care, all becomes activity and preparation for the labors of the mahogany harvest; of which, the felling of the trees and the trimming, marking, and trucking out of those that have been felled, form the chief employments. Some of the wood is rough squared on the spot; but this part of the work is generally suspended until the logs have been rafted to the mouths of the several rivers. These rafts often consist of more than two hundred logs, which are generally floated at least as many miles. When the floods are unusually rapid, however, it very frequently happens that the labor of a whole season, or perhaps of several seasons, is at once destroyed by the breaking asunder of the rafts; the whole of the logs being thereby precipitated into the sea, and consequently lost forever to the owners.

“The gangs employed in this work consist of from ten to fifty negroes; each having one belonging to it who is styled the *hunter*. He is generally selected from the most intelligent of his fellows; and his chief occupation is to search the woods, or, as it is termed, the *bush*, to find labor for the whole. About the middle of January, and the beginning of August, the hunter is despatched on his errand; and, if his master be working on his own estate, this is seldom an employment of much delay or difficulty. He cuts his way through the thickest of the woods, to the highest spot, and climbs the highest tree he can find, from which he minutely surveys the surrounding country. In August the leaves of the mahogany tree are invariably of a yellow-reddish hue; therefore, an eye accustomed to this kind of exercise can easily discover, at a great distance, the places where the wood is most abundant. Having descended, on descrying the desired object, he bends his step thitherward, and, without compass, or other guide than what observation has imprinted on his mind, he never fails to reach the exact point at which he aims. It not unfrequently happens, however, that when the hunter has been very successful in finding a large clump, or body of trees, it becomes a matter of contest with his conscience whether he shall disclose the fact to his master, or *sell* the knowledge thereof to his master's neighbor—a liberal equivalent for this breach of fidelity being always punctually and immediately discharged. Those, however, who afford encouragement to such treacherous practices, are generally paid back in their own coin.

“On some occasions no ordinary stratagem is requisite, on the part of the hunter, to prevent others from availing themselves of the advantage of his discovery; for, if his steps be traced by those engaged in the same pursuit, which is a very common thing, all his ingenuity is requisite to beguile them from the true scent. In this exertion of cunning, however, he is not always successful; for he is often watched and followed by those who are well aware of all the arts he is capable of using; the eyes and ears of these are so quick, that the slightest turn of a leaf, or the faintest impression of his foot, is unerringly perceived and noted; and even the dried leaves strewed on the ground, frequently assist in conducting to the secret spot. Patents for discovery having never been contemplated by the wood-cutters of Honduras, any invasion of rights appertaining to the same has seldom been very scrupulously regarded, or attended to by them; and it therefore happens that persons so engaged must frequently undergo the disappointment of

finding that the advantage of a valuable discovery, which they have naturally promised to themselves, is suddenly seized on by others, even before the slaves of the former have time to arrive at the spot to cut down the timber.

“The mahogany tree is felled, generally, about twelve feet from the ground; and a stage is previously erected for the axe-men employed in levelling it: this, to an observer, would appear a labor of much danger; but accidents rarely occur to those engaged in it. The body of the tree, from the dimensions or quantity of the wood which it furnishes, is deemed more or less valuable; nevertheless, for ornamental purposes, the branches or limbs are generally preferred, the grain of these being much closer, and the veins more rich and variegated.

“The mahogany tree is seldom found in clusters or groups, being much more frequently single and widely dispersed; what, therefore, is denominated a ‘mahogany work,’ usually comprehends an extent of several miles. The growth of this tree is considered rapid, but that of logwood is much more so; the latter, it is said, attaining maturity in five years. It has been remarked that the mahogany which is felled between the months of February and September, is very liable to split; the same observation also extends to that which grows in rocky or mountainous situations. This is the ‘bayman’s’ greatest evil; for, unfortunately, the wood more particularly subject to this inconvenience is invariably the largest, and of the finest quality. There is but one precaution against this, whenever the tendency towards it is discovered; this is, to keep the tree immersed as closely as possible in deep water.

“The last day of felling, if the negroes have not been disturbed in their labor, is invariably one of festivity and merriment; for they are now able to think of comforts in which it was impossible to indulge during the progress of their work. Some are now busily employed in the improvement of their dwellings, which are merely huts or wigwams, composed of a few sticks and leaves; that of the master himself being seldom formed of better materials. Others search the woods for game, which is very abundant; and the more ingenious turn their attention to other small articles, from the less valuable mahogany for domestic uses, either as presents to their wives and children, or for sale on their return from the woods to the ‘bay.’

“The logs are usually brought out of the forest by cattle, and drawn on trucks to the water-side, or to the *barquadier*, as it is termed, which has been previously prepared by the foreman of the works for their reception. When the distance is great, this is a labor of infinite and tedious difficulty. So soon as a sufficient number of logs are collected to form a raft, and the waters have gained a sufficient height, they are thrown singly from the banks, and require no other aid or guidance than the force of the current to float them to the *booms* or large cables which are placed across the rivers, at certain eddies or falls: here they are once more collected, each party claiming his own from the general mass, and forming them into separate rafts for their final destination. Sometimes more than a thousand logs together are supported by these booms; and the catastrophe attendant on their breaking asunder, which, during extraordinary floods, frequently happens, is really tremendous, and in its consequences is truly ruinous to the woodman; for, thereby, the labors of perhaps two, three, or more seasons, become lost to him forever.

“The mahogany, when disposed of at Honduras, produces from £16 to £30 (Jamaica currency) per one thousand square feet; the price, however, can seldom be fixed, as it generally fluctuates according to the quality, size, and scarce or plentiful season. To give some idea of the profit (though, perhaps, the instances of such success are not numerous,) which attends the felling of mahogany, it may be stated that

a *single tree* has been found to contain twelve thousand superficial feet, and these to produce upwards of *one thousand pounds sterling!* The shipping of mahogany to Europe, however, especially during the late war with France, was seldom found to be advantageous, except to a few individuals who had succeeded in establishing a preference in the London market. Its exportation to the American States would be highly beneficial to the settlers, were there less restriction as to the dimensions of those pieces which are permitted to be carried thither; the same not being permitted to exceed twenty inches in the widest parts. Those American vessels, however, which import such mahogany into the States, are allowed, for every ten thousand feet, the privilege of taking three tons of log or other dye-wood." (*Hort. Jour.*)

Victoria regalis.—We noticed the discovery of this splendid lily, in our III. p. 426. Mr. Schomburgk has given the following account of his surprise, when he first beheld it. "A vegetable wonder! All calamities were forgotten; I felt as a botanist, and felt myself rewarded; a gigantic leaf, from five to six feet in diameter, salver-shaped, and with a broad rim, of a light green above, and a vivid crimson below, resting upon the water. Quite in character with the wonderful leaf was the luxuriant flower, consisting of many hundred petals, passing, in alternate tints, from pure white to rose and pink. The smooth water was covered with them, and I rowed from one to another, and observed always something new to admire. The leaf on its surface is of a bright green; in form orbiculate, with this exception—opposite to its axis, where it is slightly bent in, its diameter measured from five to six feet. Around the margin extended a rim about three to five inches high; on the inside light green, like the surface of the leaf; on the outside like the leaf's lower part, of a bright crimson. The stem is an inch thick near the calyx, and is studded with sharp elastic prickles, about three quarters of an inch in length. The calyx is four leaved, each upwards of seven inches in length and three in breadth at the base; they are thick, white inside, reddish brown and prickly outside. The diameter of the calyx is twelve to thirteen inches; on it rests the magnificent flower, which, when fully developed, covers completely the calyx with its hundred petals. When it first opens, it is white with pink in the middle, which spreads over the whole flower the more it advances in age, and it is generally found the next day of pink color. As if to enhance its beauty, it is sweet scented. Like others of its tribe, possesses a fleshy disc, and petals and stamens pass gradually into each other, and many petaloid leaves may be observed, which have vestiges of an anther. We met them afterwards frequently; and the higher we advanced the more gigantic they became. We measured a leaf which was six feet five inches in diameter, its rim five and a half inches high, and the flower across fifteen inches. The flower is much injured by a beetle, *Thrinicia* species, which destroys completely the inner part. We have counted from twenty to thirty in one flower." (*Gard. Gaz.*)

Impregnating plants with strong or peculiar odors.—The day has gone by for believing the impositions practised by a few gardeners to deceive the multitude; but by attentively studying the process of vegetation, certain phenomena will appear which are not so easy to explain, even with the assistance of physiology; and it is still more difficult to give a decided opinion on the subject. For example: at first sight the assertion of Mr. John Murray, of giving the smell of the onion to the rose, by being planted near it, appears ridiculous; and yet, even the celebrated De Candolle, in his *Physiologie Végétale*, omits giving an opinion on the subject—a proof that there is room for improvement in vegetable physiology, and particularly as it regards smell and taste. For my part I can tell you, as a fact, and a well established one, that all the wine merchants abstain from going to a particular part of the province

of Vicenza for their wine; and the reason of this is, that the wine there smells of the walnut, because the peasantry have a custom of training their vines on walnut trees, instead of using vine proprs. This smell may arise from different causes; and it is a remarkable fact, that the walnut does not always give its flavor to the grapes it supports. but, in general, only to those which have grown on light and dry soils, when the vine has received any bruise or wound, such as by a severe shower of hail, or by the roots having been injured by the plough. It thus appears to me, that whenever the wine tastes of the walnut, the spongioles of the vines could not have been in a healthy state: the greater part of them must have been decayed; and, from the connection between the root and the stem, when the hail injures the shoots of a plant, even the fibrils of the roots suffer, and are probably destroyed. It is evident that the mutilation which the vine sustains by the plough must also destroy the fibrils; and, in both cases, a section of the main root becomes the opening through which the juices of the soil are absorbed; and instead of these juices being digested and properly prepared by the spongioles, they are conveyed to the plant through the decayed or mutilated roots, either by capillary attraction, or by the absorbent power of the roots, in a greater quantity, and in a comparatively raw state. As the roots of the walnut which communicate with the water are known to give it their smell, all the moisture which comes in contact with the roots of the vine is impregnated with this flavor; and being absorbed and transmitted, without digestion, through the truncated roots, it gives the same flavor to the grapes. In the *Nouveau Cours d' Agriculture*, under the head of "Parsley," you will see it remarked, that if the celery, (*sedano*;) is covered with new dung, it will taste of it. I have mentioned this in a paper which I have written on celery, in the *Giornale Agrario Lombardo—Veneto*; and shown how much the French gardeners are in error, in taking up or transplanting celery; by which method few or none of the plants have their roots entire. Keeping these examples and principles in view, and following the same process, who can say that it is impossible that the smell of the onion may not be given to the rose, and the taste of the wormwood to the peach? (*S. Manetti, in Gard. Mag.*)

ART. II. *Foreign Notices.*

ENGLAND.

Dahlia Exhibitions, and Prizes.—In our vol. III, p. 430, we mentioned several of the principal horticultural and floricultural societies in England, which had advertised dahlia shows. We have received the returns of most of the exhibitions of these societies, and from them we have made out a list of some of the fine flowers that are known here, which have gained a majority of prizes. It will show the taste which exists among the florists of England, in regard to the beauty of the respective varieties.

The *Birmingham Grand Show* was held on the 20th, 21st, and 22d days of September, 1837. It was one of the most splendid in England, and upwards of £100 was awarded in various prizes. The premier prize (£20,) was awarded to Messrs. Brown of Slough, for the best twenty-four dissimilar blooms. They were as follows:—

Mrs. Wilkinson, Brown's Ion, Conqueror of Europe, Suffolk Hero, Coriolanus, Dodds's Mary, Middlesex Rival, Topaz, Shakspeare, Sylvia, Juliet, Lady Anne, Dr. Halley, Squibb's purple Perfection, golden Sovereign, Elphinstone's purple Perfection, Addison, Sir Henry Fletcher, Gem, Glory of the West, Springfield Rival, Etonia, Ruby and Jeffrie's Triumphant.

At the *Oxford* Grand Dahlia Show, Mr. Widnall gained the premier prize for the best twenty-four dissimilar blooms, which were the following:—

Widnall's Paris, Marchioness of Tavistock, Sylvia, Glorieuse and Juliet, Springfield Rival, Middlesex Rival, lilac Perfection, Mrs. Wilkinson, Metropolitan Perfection, Clara, Glory of the West, Marquis, Lenstriatum, Sir H. Fletcher, Bride of Abydos, Grant Thorbarn, Nimrod, Napoleon, Shakspeare, Topaz, Exemplar, Suffolk Hero, and Squibb's purple Perfection.

Mr. Widnall gained the first prize at the Cambridgeshire Horticultural Society, and the second at the Birmingham Grand Show alluded to above. In nearly all of his stands we notice Lady Dartmouth and Marchioness of Tavistock.

The following are the names of the flowers which gained a majority of prizes at *five* of the principal shows:—

Lady Dartmouth,	23	Sir H. Fletcher,	39
Marchioness of Tavistock,	10	Elphinstone's purple	
Dodds's Mary,	37	Perfection,	16
Conqueror of Europe,	19	Warminster Rival,	22
Juliet,	9	Sulphurea elegans,	21

Dodds's Mary Queen of Scots, Mrs. Broadwood, Rosa superba, King of Beauties, Princess Victoria and Marquis of Northampton each gained prizes, but not in any number.

It will be seen that Dodds's Mary and Sir Henry Fletcher received the greatest number. The reason of this is, that they have been in the catalogues *two* years, while each of the others were "let out" for the first time last spring, and some of them commanded *three* times the price of Mary and Sir H. Fletcher. This, of course, prevented their general cultivation. Probably, in the shows of the next season, the others will gain the greatest number of prizes. Lady Dartmouth was shown in stands of six, twelve, and twenty-four at each of the exhibitions. We shall notice some fine new ones which have not yet been imported to this country, and which are equally as fine as the above varieties, in our next.—*Ed.*

New Method of destroying Insects in Stoves and Green-houses.—

A paper has been communicated to the London Horticultural Society, detailing the following cheap method of destroying the red spider, scale, thrips, and green fly, without injuring the tenderest plant:—"Where there are but few plants infested with either kind of insect, take a one-light frame and place the plants infested about four inches apart, and then procure from one to two gallons of green laurel leaves and well bruise them; immediately place them between the pots, and close the frame with the least possible delay, taking care to keep the frame airtight; at the expiration of one hour take out the plants infested with the red spider and green fly, and it will be found that they cease to exist.

"It will take from eight to twelve hours to destroy the thrips and scale; at the expiration of that time take out the plants, place them in a warm and exposed situation, and in a few days the insects will all dry up and fall off.

"When plants are infested in stoves or green-houses with either insect, the process must be a little varied. A house twelve feet by twenty

will require about two bushels of leaves; they can be bruised in the house, and placed in a tub or box, and covered with a sack or cloth until a sufficient quantity is bruised; then they are to be strewed in the paths, and between the pots and other vacant places, and the house must be kept as close as possible for at least twelve hours. The evening will be found the best time, so that the house can remain closed and covered with double mats all night. I have found, by repeated trials, that the plan thus described answers better than any I have ever seen or heard of."—(*Hort. Jour.*)

Monstrous Pine-apple.—There is now growing, at the Earl of Shrewsbury's, Alton Towers, Staffordshire, a pine-apple of a monstrous production; it may be said to have fifteen heads. It is described as follows:—There is no crown where it generally is; the fruit swells out round the top of the pine-apple, leaving it hollow where the crown should be. It then divides into four parts. It then subdivides again into eleven divisions, each having a crown; two of these four parts are divided into four, the third into two, and the fourth into one, making in all eleven, with crowns. From the bottom of the fruit there are four more swellings, which almost appear to be distinct fruit, with crowns to each. It may weigh about six pounds, and appears to be the brown Antigua. It is the produce of a small plant.

It in some respects corresponds with the description given of the extraordinary monstrous state of the pine-apple that is sometimes found in the Indian Archipelago and in China.—(*Id.*)

Brugmansia Whymánii.—A plant, under this name, was lately exhibited at one of the meetings of the London Horticultural Society, with two expanded flowers of a fine purple color. It is stated, as a curious circumstance, that it proved to be only the old *Datura Stramonium*, the seeds of which were formerly sold in packets, at sixpence each, as a tender stove plant, while plants of the *B. Whymánii* sold as high as three pounds three shillings each, to which exorbitant price their title probably materially contributed.—(*Id.*)

A mushroom, attaining the almost incredible size of three feet one inch in circumference, and from which very nearly a pint of ketchup was extracted, was last week gathered in a field belonging to J. P. Burman, Esq., Harley in Arden, Warwickshire. (*Morn. Chron.*)

JAMAICA.

The sweet Orange (Citrus Aurantium.)—Independently of the excellence of the fruit, the orange is among the most ornamental of Jamaica trees. It is graceful in its port, with leaves beautifully formed and of a rich green; and it fills the air with the perfume of its delicate white blossoms. In the parish of St. John, in particular, the trees may be seen in thousands in the parterres and in negro villages, forming beautiful objects during the months about Christmas, laden with their golden-hued fruit, and which, for richness of flavor and for sweetness, cannot be surpassed. In that district a bitter or sour orange is rarely to be met with. It is deserving of remark, indeed, that the sweet orange is produced in its greatest perfection in districts, which, like that of St. John, belong to the limestone formations; whereas they are very inferior, (being more or less sour or bitter, even when raised from seeds of the sweetest sorts,) when grown where any of the other rocks prevail. Little or no care is bestowed in Jamaica on the cultivation of the orange: as the fruit, notwithstanding this, is produced in the greatest abundance, and of so fine a quality, it must appear surprising that it is not made an article of exportation, as few of our objects of cultivation would give a more favorable return. Were the fruit carefully hand-picked from the

trees, on a dry day, and, after being slightly papered, packed in common flour barrels, on the spot, there is no doubt but they would bear the voyage over to England, and arrive in a marketable condition. Few trees are longer lived than the orange, those of the orange groves of Spain having survived six hundred years; and few are more productive, some individuals having been known to produce, in one year, six thousand oranges. The sweet orange, according to Dr. Turner, contains malic acid; and, we may ask, might not an effervescing liquor, like cider, be obtained from the juice? As a fruit, it is inferior to none. The pulp is cooling and refreshing in fevers, inflammations, and scurvy, and alterative in phthisis and dyspepsia. The bitter orange is employed in making the well known preserve, marmalade; the peel is an aromatic bitter; the roasted pulp is an excellent application to fœtid sores; and the negroes employ it as a substitute for soap, in washing their coarse linens. From the flower a distilled water is prepared. (*Macfaylen's Flora of Jamaica.*)

ART. III. Domestic Notices.

Pennsylvania Horticultural Society.—The following are the names of the dahlias which gained the prizes at the exhibition of this Society, an account of which was given in our last volume, p. 452.

First Prize.—Best twelve dissimilar blooms: Mary, (Dodds's,) Countess of Orkney, scarlet Perfection, (Brewer's,) Granta, Buist's Daniel Webster, John, and Washington, yellow Perfection, Hermione, lilac Perfection, Hon. Mrs. Harris, and Metropolitan Perfection, R. Buist.

Second prize.—Best six dissimilar blooms: Marchioness of Abercorn, Lady Northampton, Hermione, Levick's superb lilac, John Hampden, and Romeo, A. Dryburgh.

First seedling prize.—Best parti-colored bloom: Buist's Mrs. Rushton, R. Buist.

Second seedling prize.—Best self: Buist's Washington, R. Buist.

Some account of the Mrs. Rushton dahlia will be found in page 9. It will be seen, from the above, that Dodds's Mary stands among the best.—*Ed.*

Erythrina Crista-galli.—This species, which flowered freely with me in the open ground last September, I potted early in the winter, and it has now shoots ten or twelve inches in length. It is a very beautiful affair, and will probably be grown very generally another season.—*T., Jan., 1838.*

Mimulus cardinalis.—I have this species in the window of my parlor, between two and three feet high, grown from seed sown last summer, late. I keep it there for the musky odor it possesses, which is to me not disagreeable, and enhances, I think, the fragrance of its neighbors by combination, as was very evident with a *Daphne odora*, which I had in bloom.—*Id.*

Camellias in parlors.—The only way to have camellias bloom in parlors, (as they are warmed at the present day,) is, to anticipate their usual inflorescence, and cause them to swell their buds in the fall. Mine are all now beginning to start for a new growth, which I encourage, as I am convinced it is the only mode.—*Id.* [Our correspondent is right in his conjecture. It is almost impossible to keep a bud upon a camellia from November to February in a room heated to the temperature of 70° or 75° with anthracite coal. But if the plants make an early growth,

set their flower-buds in season, and swell them to a good size, so as almost to show color by November, the short time the plants remain in a dry atmosphere before their buds expand will do them no injury, and they will open freely. At some future time we shall speak of this mode at length.—*Ed.*]

Introduction of tropical plants.—Dr. Henry Perrine, whose laudable exertions, for some time past in making, known the value and importance of the vegetation of extra-tropical America, are well known to many of us, is now, we believe, before Congress with a petition for the establishment of a port of entry at Indian Key, in Florida. When this is accomplished, as there is good reason to believe it soon will be, great facilities will be afforded at that favorable locality for the thorough naturalization and propagation of the most valuable products of Mexico and the peninsula of the Gulf. Among these the far-famed Sisal hemp is not the least important. Coffee, chocolate, and many of the most valuable vegetable products of the West Indies can also be acclimatized there, and their cultivation will then probably extend much farther north.—*A. J. D., Botanic Garden and Nurseries, Newburgh, N. Y.*

[We are highly gratified to learn that this important subject is about to attract attention. We had but just sent the above notice, by our correspondent, to press, when, as we were overlooking our agricultural papers, our eye accidentally fell upon the letters of Dr. Perrine, in the *New York Farmer*, to Mr. McLane, Secretary of State, in reference to this matter. We have been exceedingly interested and greatly pleased in their perusal, and only wish that our limits would allow of our extracting them entire, for the information of our readers. It is not only in an agricultural point of view that the acclimatization of the tropical plants can be looked upon as important: many of the most beautiful plants, of which our stoves can boast, are natives of the tropics, and if the more useful, as affording commodities for the comfort and sustenance of life, can be successfully cultivated, they may also be introduced for the beauty and ornament of the garden. We have often wished that some enterprising individuals would undertake the experiment of naturalizing the tropical plants to the extreme southern portions of the Union; once introduced there, they might gradually become inhabitants of a slightly cooler climate, and, ultimately, the Carolinas, Georgia, and other Southern states, might be enriched with the splendid productions of the West Indies, flourishing with vigor in their naturalized situation. In this view it is important to the horticulturist. But the acclimatization of the staple products of the tropics will be of immense benefit to the whole country. With a climate embracing every variety of temperature, and a soil, from the richest to the most sterile, we have no reason to doubt of the accomplishment of these objects. Dr. Perrine has shown, conclusively, that it can be done; he states that the banana and the cocoa palm, the most tender of all tropical plants, are now flourishing in tropical Florida. In the commencement of his letter Dr. Perrine remarks, that he wishes to show, “not only that the cultivation of tropical staples is *practicable* in our territory,—but, also, that it is absolutely *necessary* for home consumption—is positively *profitable* for the foreign market—and is highly *desirable*, in other respects, to promote the peace and prosperity of the Union.” We have but little space for extracts, but we cannot refrain from quoting the following commencing and concluding portions of his letters:—

“The *practicability* of cultivating tropical productions in general, he has manifested, with the fact, that the peculiar climate of the tropics extends beyond the astronomical boundary, several degrees north, into our peninsular territory; and that the best plants of the tropics are actually flourishing in the southern portion of that peninsula, at Cape

Florida. He has not only shown that, below 28°, Southern Florida enjoys the dry warm winter—the wet refreshing summer—the breeze by day from the sea, and by night from the land,—and the trade winds from the east, which are *common* to tropical countries in general; but he has also proved, by its narrow level surface stretching south-eastwardly,—by the hot ocean river running north-westwardly, along its eastern shores, and by the greater steadiness of the westwardly winds in those latitudes; that tropical Florida is even *superior* to the elevated islands of the West Indies, and to the broad peninsula of Yucatan, in that *uniformity of temperature*, which is the most favorable for vegetable growths, animal health, and physical enjoyment. He has, moreover, not merely shown that in this superior climate of the tropics, are already growing various common vegetables of the tropics, but he has further announced the flourishing condition of the tenderest and yet most productive plants of the torrid zone, — the banana plant, and the cocoa palm, which are universally pronounced to be the greatest blessings of Providence to man; and it may, hence, be considered experimentally demonstrated, that it is practicable to cultivate all tropical productions in the soil of the southern portion of the peninsula of East Florida.”

* * * * *

“Our moral obligations to improve the condition of our country, are based on the unparalleled combination of advantages with which it has been favored by Providence. With the most favorable form of government, and the most productive varieties of the best species of the human race, we have all the soils and climates of the earth, and the consequent ability to cultivate, most profitably, all the most valuable varieties of the best species of the vegetable race. It hence becomes our duty to combine within our territory the creation of the greatest possible amount and variety of cultivated vegetable products, for the physical enjoyment, not merely of our own citizens, but also of the inhabitants of all extra-tropical countries, and probably even the natives of the torrid zone itself. It has been demonstrated, that with a natural equality of soil in even our extra-tropical climates, our slave labor can create cultivated tropical products much more abundantly and cheaply than either the free or slave labor of the colored natives of inter-tropical climates; that many articles of tropical culture, instead of deteriorating, become more productive beyond their native zone; that we may ultimately apply the still more productive free labor of our white citizens to the cultivation of tropical staples; and that such laborers, under such institutions, cannot be devoted to tropical agriculture in any other part of the world. The great equatorial current of the ocean, after cutting off New Holland from Asia, wearing its way round Southern Africa, and being reflected by tropical America, brings to our shores, under the name of the Gulf Stream, the accumulated heat of the torrid zone, to encourage our cultivation of the valuable vegetables of that unproducing belt of the globe. The white population on its borders will soon be forced to embark on its bosom for the United States. Once entirely abandoned by the skill and capital of the white species, the colored species will not furnish an adequate quantity of even *uncultivated* products for extra-tropical consumption. Even logwood, mahogany, and other wild materials for the arts, are diminishing every day. The Peruvian bark, sarsaparilla, and other spontaneous medicines, are also vanishing, and noxious substitutes are exported, to kill, instead of cure, our fellow-citizens. If, therefore, we do not *speedily* naturalize *all* useful tropical plants in tropical Florida, they will soon disappear from the surface of the world.”—*Ed.*]

Seckel pear.—I noticed, in the last number of your Magazine, that statement from the *New Haven Herald*, that the Seckel pear is found in the woods of Connecticut. The story is too absurd to require contradiction.—*Yours, J. A. T., Hartford, Conn., Nov. 15, 1837.*

ART. IV. *Queries, Criticisms, &c.*

Errata.—In our last, p. 8, eight lines from the bottom, for “here” read “her.” In p. 25, twenty lines from the top, “*Lanceolum*” should be in small type, to represent a species and not a genus. In p. 31, last line, for “unknown” read “known.”

Seckel pear.—In your Magazine for November you mention that the “*New Haven Herald* states that the *Seckel pear* was a favorite of the early settlers of Connecticut, and is found growing wild in the woods of that State.” Now, Mr. Editor, it would be wrong for us to be *envious* of our sister city; but we must say that we have been very unjustly *sighted*, if in that region they have been blessed with so delicious a fruit as the *Seckel pear*; and we, their brethren, for two hundred years past, have not been invited even to taste a specimen of *their wilding*.—*E. W. B., Hartford, Dec. 18, 1837.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, Nov. 11th, 1837.—Exhibited. Fruits: From S. Sweetser, specimens of St. Germain pears. From E. Bartlett, handsome Dix pears. From S. Freeman, Sandwich, by Dr. B. Shurtleff, of Chelsea, Rhode Island greenings, and unknown apples.

Nov. 18th.—Exhibited. Fruits: From L. S. Grosvenor, specimens of the Sandford pear, rather too ripe; also fine apples, the name unknown; pronounced by the committee to be a superior fruit. From B. V. French, Wilkinson pears. From J. Boot, of Boston, two kinds of apples, from Newburport; one was Moody’s seedling, or Grandfather apple, a kind esteemed in Essex county. From S. Pond, beurré Diel pears, and a variety not in eating, the name unknown.

At this meeting a vote was passed, expressing the deep sympathy of the Society with the family and relatives of the late T. G. Fessenden, Esq., in the dispensation of Providence which has inflicted upon them so severe a loss.

Dec. 1st.—Exhibited. Fruits: From the President of the Society, Lewis pears, and nonsuch, bellflower, hawthorudean, marigold, De Witt or Doctor, spice gilliflower, and Gardener sweeting apples. From Jos. Balch, Moody apples. From T. Brewer, Passe Colmar and Virgoulouse pears; also Tolman sweeting and river apples.

Dec. 9th.—Exhibited. Fruits: From R. Manning, Figue de Naples and Surpasse St. Germain pears; the latter supposed by Mr. Manning to be the true kind described by Mr. Braddick; also fall Harvey apples, believed by Mr. Manning to be one of the best fall and early winter varieties; its origin is not known.

Dec. 16th.—Exhibited. Fruits: From S. Downer, Lewis, Dix, Passe Colmar, Blecker’s Meadow, Catillac and beurré vans pears; also, Nonsuch, Otley, Brussels pippins, two kinds of Spitzembergs, and Lady apples; Passe Colmar pears from Mr. Vose.

Dec. 20th.—Exhibited. From S. Walker, a beautiful new seedling pansy, called Queen Victoria. It was decidedly one of the best Mr. Walker has ever raised. Blooming at this late season, the plant standing in a pot, the size of the flower was not so large as it would undoubt-

edly attain in a good soil in the open air. The colors are very fine and distinct: the upper petals are of a deep rich velvety purple; the lower ones are nearly white, elegantly marked with the same color as the upper petals, with a fine eye, slightly and beautifully pencilled. The form approaches nearer to the hemispherical than any of his seedlings we have seen. It is a great acquisition to the named varieties.

ART. VI. Faneuil Hall Market.

Roots, Tubers, &c.			Pot and Sweet Herbs.		
	From	To		From	To
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
Potatoes, new :			Parsley, per half peck,	50	75
Common, { per barrel,	1 00	1 25	Sage, per pound,	17	20
{ per bushel,	40	50	Marjorum, per bunch,	6	12
Chenangoes, { per barrel,	1 25	1 50	Savory, per bunch,	6	12
{ per bushel,	37½	50	Spearmint, per bunch,	6	
Eastports, { per barrel,	2 00	2 50			
{ per bushel,	1 00		<i>Fruits.</i>		
Sweet, { per bushel,	none.		Apples, dessert :		
{ per peck,	none.		Common, { per barrel,	1 50	2 00
Turnips, { per bushel,	50	75	{ per bushel,	75	1 50
{ per peck,	17	20	Russets, { per barrel,	2 00	2 25
Onions :			{ per bushel,	1 00	1 50
red, per bunch,	4	6	Baldwins, { per barrel,	2 00	2 50
white, per bushel,	1 25	1 50	{ per bushel,	1 25	1 50
Beets, new, per bushel,	50	75	Bellflowers, { per barrel,	3 00	
Carrots, per bushel,	50	75	{ per bushel,	1 50	
Parsnips, per bushel,	75	1 00	Golden pippins, per bushel,	1 50	
Horseradish, per pound,	8	12	Pears :		
Radishes, per bunch,	12½		Passe Colmar, per dozen,	25	
Shallots, per pound,	20		Chaumontel, per dozen,	37½	50
Garlic, per pound,	14		St. Germain, per dozen,	75	1 00
			Beurre Diel, per dozen,	37½	50
<i>Cabbages, Salads, &c.</i>			Prince's St. Germain pr doz. none.		
Cabbages, per dozen :			Lewis, per dozen,	none.	
Savoys,	37½	50	Baking, { per barrel,	5 00	6 00
Drumheads,	1 00	1 25	{ per bushel,	2 00	
Red Dutch,	75	1 00	Quinces, per bushel,	none.	
Cauliflowers, each,	12½	25	Pine-apples, each,	none.	
Brocolis, each,	none.		Grapes, per pound :		
Lettuce, per head,	10	12	Malaga,	20	25
Celery, per root :			Cranberries, { per bushel,	2 00	
Giant,	8	12½	{ per peck,	50	
Common,	6	10	Oranges, per dozen,	12½	37½
Spinach, per peck,	37½		Lemons, per dozen,	25	37½
			Cocoanuts, each,	5	6
<i>Squashes and Pumpkins.</i>			Shaddock, each,	25	
Squashes, per pound :			Walnuts, { per barrel,	5 00	6 00
Autumnal marrow,		4	{ per bushel,	2 00	3 00
Lima,		4	Chestnuts, { per barrel,	4 00	5 00
Winter crookneck,	4	5	{ per bushel,	4 00	5 00
Pumpkins, each,	12½	20	Almonds, (sweet), per pound,	12	14
			Filberts, per pound,	4	6
			Castana,	3	6

REMARKS.—The remarkably mild weather of the month, up to this time, is almost unprecedented in the history of the country. Just after

the date of our last, moderate weather set in, and, from Christmas to this date, it has been uniformly warm and delightfully pleasant; only a few days of cloudy weather having ensued. Indeed, some of the days have been characterized by the blandness of the month of May. This weather has been favorable for bringing produce from the country, and the consequence has been a continued supply of the various productions. It has also enabled marketmen to forward their preparations for early vegetables; and, unless very severe weather should occur, a good supply of lettuces, radishes, &c. may be anticipated rather earlier than usual. On the other hand, the warm weather has been unfavorable to the keeping of vegetables and fruits; such articles as cabbages, squashes, &c. have decayed much quicker than they would have done in a cooler temperature, and fruits, particularly apples, have been much injured.

There has been but a slight alteration in the prices of the various articles. January is a dull month, but it has been particularly so this year, no doubt arising from the one great cause, the *currency*, and its disturbed state. The high priced articles are but little called for: shipments of fruits or vegetables are not made in very large quantities, and sales generally are very dull.

Of potatoes an abundance is laid in. New Hampshire has given us a good supply; during the month large quantities have been received from that state, and of fair quality; there have been no eastern arrivals, and Eastports have continued to advance—the only alteration in potatoes. Sweet are gone. Turnips plentiful. Onions a fair supply, and good. Beets, carrots and parsnips remain the same. The first radishes of the season came to hand a few days since; they were very good. Horse-radish has been received in plenty, and of excellent quality.

Cabbages are tolerably abundant, although rather poor, from the effects of the weather; there is no alteration in the prices. Cauliflowers are scarce and nearly gone. No brocolis to be had. Fine lettuce is now received. Celery is tolerably plentiful, but there is considerable poor in the market: the warm weather has rotted it at the heart. We have enumerated the two most prominent kinds for sale, as there is some difference in the price. Spinach has come to hand.

Squashes have decayed very rapidly, and but few of first-rate excellence are to be found: prices have sensibly advanced. There has not yet been any arrivals from the West Indies. A variety of sorts are to be found in the market, but we have not thought fit to name them; they may, however, be included under the head of Limas.

There is but little variation to note in fruits. Apples are plentiful, abundantly so, and sales dull; prices remain the same. Bellflowers are about gone; and but few golden pippins are to be found. Pears are mostly gone; a few dozens are occasionally brought in. It will be seen that St. Germain's are quoted high; but a few have sold at the highest rates; they were most beautiful specimens. Foreign grapes are rather scarce. Pine-apples gone. Of oranges and lemons a good supply, and but few sales at this season. Walnuts continue scarce: the only first-rate ones which have been received in this market were brought from the state of Ohio.—*Yours, M. T., Boston, Jan. 23d, 1838.*

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

The unprecedented mild weather of the month of January, up to the moment we now write, (26th) has enabled the gardener to make prepa-

rations for forcing with great facility. In most warm situations the frost is out of the ground, and we have heard of many farmers ploughing their lands. Certainly, if this weather continues, it can as well be done now as later. In the forcing garden it has saved the gardener much labor, as hot-beds have retained their heat well, and have needed much less lining. Lettuce in frames, radishes, &c. have been greatly benefited by the mild weather. We can hardly expect a continuance of it; but we may, with good reason, consider the winter as in a degree broken up. February is a short month; and when we enter upon March, we soon find spring approaching with great rapidity.

FRUIT DEPARTMENT.

There is yet but little doing in this department, except in the green-house or vinery. In the latter, grapes may be introduced, peach trees in pots, and strawberry vines. In the green-house fruit trees may also be introduced, if there is room to spare. The grape vines in the border will not start until about March.

Grape cuttings may be put in this month in a hot-bed.

FLOWER DEPARTMENT.

As the season advances, vegetation proceeds more rapidly, and the plants in the green-house and stove need more attention. Seeds also require planting, and cuttings of various species and varieties of plants put in. Both departments should be kept clean, and free from insects.

Amaryllises commencing to grow should be potted now.

Alstrœmerias should now be potted, and they will flower strong in the spring.

Cactuses should be kept dry, and placed in a cool part of the green-house, if they are wanted to bloom well.

Ericas should be watered carefully: the seeds may now be sown, and cuttings put in.

Camellias will continue to need good supplies of water, until they have done flowering and finished their growth. Inarching may be commenced this month. Attend to the impregnation of flowers where new kinds are wanted.

Azaleas should now have considerable water, and when their buds expand, it should be given in quantities.

Trevirana coccinea: the small imbricated roots of this pretty plant should now be potted in fresh soil.

Anomatheca cruenta bulbs should now be planted in small pots.

Dahlias for blooming early should now be potted in light soil.

Annuals, of all kinds, may now be sown in hot-beds, where it is desirable to have them early; repot those in small pots in the green-house.

Geraniums: repot those in small sizes, into larger ones, in a good, rich, light soil: they will flower much better.

Nerium splendens may now be propagated from cuttings.

Ranunculuses, in pots, should have an abundance of water, when they begin to throw up their flower buds.

Ixias, sparaxises, and other cape bulbs, should be liberally supplied with water after they show their flower buds.

Tree pœonies, in pots, may now be brought into the green-house from the cellar, or other situations where they may have been placed, and they will bloom in a few weeks.

THE MAGAZINE
OF
HORTICULTURE.

MARCH, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Pomological Notices: or notices respecting new and superior varieties of Fruits, worthy of general cultivation.*
By the EDITOR.

THE past season was a very favorable one for most fruits. Without any great extremes of heat or cold, many varieties appeared to ripen better than in those seasons when sultry days and a scorching sun have been more frequent occurrences than the two or three past years have witnessed. Spring set in tolerably mild, though not early, and was succeeded by a dry and temperate summer, and a fall unclouded, and remarkable for the very few showers which fell during the latter season: September was exceedingly dry; early frosts followed, but not to damage any fruit but the grape crop, which, in the country, was almost entirely cut off. Pears were abundant, though in elevated situations, on hill-sides, they suffered some from the long drought in August. Probably a greater crop of fall and winter varieties never matured in the country. Plums bore very well. Apples, also, afforded good crops and of fair quality. Grapes, in cities, and in latitude south of New York, ripened very well.

The dryness of autumn was highly favorable to the maturing of the young wood of various fruit trees: the fall previous, 1836, and in particular that of 1835, was very mild, with heavy showers; this caused a rapid growth of the young wood, which was speedily checked by early frosts, and the branches in a greater or less degree destroyed. The sap being in full motion so late, the wood had no opportunity to acquire that ripeness and solidity which enables it to stand the winter, otherwise, successfully. From this cause many trees were partially destroyed or considerable

rably retarded in their growth. We hope that the past summer, so favorable to the ripening of the wood, will be followed by a spring and summer equally favorable to the development of their fruit.

A less number of fruits which can be deemed new have come into bearing the past year than the season previous. Some kinds, however, which are not new, but which have produced their fruit in only two or three gardens, have again borne crops, and afforded better evidence of their superiority. In England some of Mr. Knight's pears have ripened good crops, and they are pronounced superior fruits. We shall mention a few of them in our remarks.

The Dix pear has proved fully equal to the high character which has been given of it: until the past year very few fruits have been produced, except upon the original tree; grafts which have been taken from it not having come into bearing till 1836, and not in any quantity till 1837. It is a beautiful fruit. Mr. Manning had not fruited the Dix when he communicated to us the list of pears in our last volume. With Mr. Downer of Dorchester, who has some fine old vigorous trees, with numerous strong grafts upon them, the specimens were exceedingly fine the past year. It should be in every collection of fruits.

Beurré bosc.—Specimens of this fine variety were exhibited at the annual meeting of the Massachusetts Horticultural Society, by Mr. Manning. It is pronounced a first-rate pear by Mr. Thompson of the London Horticultural Society's garden, superior in all respects to the Marie Louise. We shall expect some account of this from Mr. Manning, who exhibited specimens of the fruit the past season.

Cabot.—A new pear under this name has been raised from seed, the produce of a fruit of the brown beurré, by J. S. Cabot, Esq., an amateur, of Salem. Mr. Manning states that it is a great bearer, and a good fruit.

The beurré Duval and *Gloria* have each produced fruit the past year with Mr. Manning. Unripe specimens were exhibited by him at the annual exhibition of the Massachusetts Horticultural Society, in September.

The Fondante d'Automne, Mr. Thompson states, in a late article in the *Gardener's Magazine*, is a rich and most delicious fruit. He highly recommends it.

Winter Nelis, or *Nelis d'hiver.*—This variety Mr. Manning has fruited for two or three successive seasons. He at first formed a rather unfavorable opinion of its merits, but subsequently, in our last volume, he pronounced it a superior fruit. In this opinion he is supported by Mr. Thompson, who highly commends it as one of the best winter varieties.

The Louis bonne (of Jersey,) is taking the place of the Ma-

rie Louise in the northern parts of England, where it produces better crops and with much more certainty than the latter.

The Eyewood, Althorp crassane and Brougham are the names of three of Mr. Knight's best seedlings, which have produced fruit in the London Horticultural Society's garden. They are stated by Mr. Thompson to be valuable varieties, and very much hardier and better adapted to the climate of England, where many of the Flemish kinds will not produce fruit in any perfection. The Althorp crassane is exceedingly buttery, melting and highly flavored. The Brougham is a very great bearer, and fine fruit.

The Petre pear.—This variety was exhibited, the past fall, before the Massachusetts Horticultural Society, by Mr. Manning: we are not informed whether the fruit was the produce of trees in his garden, or whether the specimens had been procured elsewhere. We had the opportunity of tasting it, and we consider it a very fine pear. In the *Gardener's Magazine*, (vol. VIII, p. 587,) is a notice of this variety, by Col. Carr, the proprietor of Bartram's Botanic Garden, Philadelphia, accompanied with a cut representing the outline of the fruit. From the description we learn that the tree "was raised from seed, received in a letter from Lord Petre, of England, about the year 1735, and planted by Mr. Bartram near one end of the dwelling-house, at the edge of a gravel walk, where it has never [in 1832,] received any manure or rich earth. The roots extend to the walls of the house. The tree has never been subject to blight, and has not once failed to bear in the last thirty years; some seasons producing ten or twelve bushels of fine handsome fruit, which is in good eating from the middle of September to Christmas." The stem of the tree in 1832 was fourteen inches in diameter, and twenty-five feet high. It is now above a century old, and has probably borne upwards of five hundred bushels of pears. The tree was twenty-five years old before it produced a single fruit, and barely escaped being cut down as barren.

The fruit is described as of medium size, oboval, truncate at both ends, swelled at the top, and three to four inches long. Skin, thin, greenish-yellow, with small pale spots. Flesh, white, soft, juicy and buttery, with a delicious flavor, peculiar, very slightly musky, and vinous. The fruit is produced in clusters of two or three each.

We have copied this description, as we believe the pear is but little known. Our opinion is that the fruit will rank with the best pears of the season in which it ripens: and if the above account of Col. Carr is correct, it certainly merits general cultivation.

PLUMS.—The following varieties are all we have room to no-

tice at the present time. They are fine fruits, and deserve cultivation:—

Denyer's new Victoria plum.—A new variety under this name has been raised in England by Mr. Denyer, nurseryman. It is of a large size and delicious flavor. It is a sure and free bearer against a wall in any aspect. It is also more prolific as a standard than any other. Mr. Thompson commends it to the notice of all cultivators. We hope it will be soon introduced.

Rivers's early.—A fine early plum, raised from the seed of the *Précoce de Tours*, which it somewhat resembles: but it is earlier, more hardy, and very prolific. Fruit medium size, oval: ripens perfectly as a standard. It is undoubtedly a valuable kind.

Coe's golden drop.—Trees of this fine and handsome plum have ripened their fruit most excellently in Salem, while in Boston and vicinity they have rarely produced a single plum. We have trees which have been grafted some years; but the fruit drops before it attains any size.

The blue Imperatrice.—The *Semiana* plum, much cultivated around Boston, Mr. Manning has proved to be synonymous with the *Imperatrice*. The name should consequently give way to the former. The catalogues of our nurserymen need much correcting.

We omit the notice of some other fruits until another opportunity.

ART. II. *Notices of Culinary Vegetables, new or recently introduced, worthy of general cultivation, in private Gardens or for the Market.* By the EDITOR.

WE have constantly endeavored, in our previous volumes, to impress upon the mind of the marketman the importance of the cultivation of the most superior varieties of vegetables for the market; and not only to marketmen, but to gentlemen, farmers, and all who produce their own vegetables for their table. We have, during this time, presented our readers with several articles from the pens of practical men, and we believe they have been duly appreciated by many; indeed, we have known some instances of our remarks having been the cause of great improvement in this department of gardening. We shall continue to offer all

the information which we can procure, and we hope that our efforts will be the means of awakening still greater attention on this important subject. This article, which we shall annually introduce, will contain all that we can collect in relation to new and superior varieties of vegetables, and we shall feel gratified if, by our labors, we add one superior variety every season to our already cultivated kinds, or displace an old sort by the introduction, into general growth, of one of more excellent merits.

The proper cultivation of vegetables, as well as fruits or flowers, can only be understood by some theoretical knowledge, aided by constant practice: too many are apt to imagine that the growth of vegetables is so simple in its nature, that the most uninformed on all subjects upon gardening, even those who can scarcely tell a cabbage from a cauliflower, can cultivate a vegetable garden. But let not any be led away with this idea. It is true, that if the seed of a plant is good, when committed to the earth, under ordinary circumstances it will grow, and with even moderate attention it will arrive at some degree of perfection. This, however, is not understanding the cultivation of vegetables. The system of cropping—the application of proper manures—the choice of seed—the merits of a variety—and, finally, the *routine* of cultivation, are particulars which can only be gathered by experience, assisted by some knowledge of soils and manures, and of the vegetable system. This misunderstanding of what constitutes the art of culture has led many into errors, which have been continued from prejudice, until it is almost impossible for them to grope their way out. Mr. Bridgeman of New York, in his *Gardener's Assistant*, has done much to remove some of the errors and prejudices of cultivators, and we hope that what we shall contribute will aid in furtherance of the same object. But we leave this digression, into which we have been led by a consideration of the subject, and turn to our remarks upon the new or more recent varieties of vegetables introduced.

CARROT.—The old long Orange has been so long and almost exclusively cultivated in this country, that the introduction of an entirely new sort would be quite a novelty. The Altringham, and scarlet Studley, have been more or less grown during the three or four past years; but still they are not generally known, or their qualities properly appreciated, particularly the former. In England, where immense crops of carrots are raised, the Altringham is preferred to all others for cattle, producing a heavier and better crop. In truth, it is nearly exclusively cultivated; single roots have been grown, weighing nine pounds. We hope to see it take the place of the long Orange for field culture, where it produces a much more profitable crop. The scarlet Studley is also a fine variety, which deserves to be extensively grown,

both for its excellent qualities and for its beauty. These two varieties, though not new, we have thought proper to mention, with the hope that it may be the means of rendering them more generally known. As a new variety, we find mentioned in English publications one called the early white German; but we have learned nothing of its merits. Both this variety and the scarlet Studley are advertised by foreign seedsmen as *choice* vegetable seeds.

In the third *Report* of Drummond's Agricultural Museum, a work containing much useful information upon agriculture, we find the following notice respecting the sowing of carrot seeds: as the same has never met our eye in any American publication, we have been induced to copy it, that our farmers may try the experiment, and ascertain whether it is important to the agriculturist. It is stated that the carrot crop has greatly increased in Scotland within a few years, and that it has been in a degree owing to the method of successfully vegetating the seed, which was first published in the above report: the system is, to "bring the seed to the point of vegetating, before sowing, by mixing it with sand or earth, kept moist and turned occasionally for several days; to manage, in the drills, that some nourishing compost, including moss, if possible, be right under the seed, and within reach of the infant plant; and we may add, that to prevent vermin destroying the crop in its early state, some cultivators find it advantageous to mix up flour of sulphur with the seed, weight for weight."

CORN.—We should not notice this article now, but to say something in regard to the variety called the Dutton. Few of our readers, we apprehend, look into our pages for much information concerning the practical part of agriculture; but they may well suppose that we should occasionally notice its progress, and enumerate any very important improvements made in the art, which are not only of benefit to the farmer, but may be, in a greater or less degree, so to the marketman, or the cultivator of vegetables for his own table. This variety, which we believe to be nothing more than the old kind of corn well known, some years ago, as the Sioux, has since acquired the local names of the Lathrop corn, the Colman corn, the Buel corn, the Phinney corn, and lastly the Dutton corn, under which name much has been said respecting it in the agricultural papers of the past season. It is certainly a very valuable kind, and yields a great crop; and during the last cool season it ripened well in the vicinity of Boston. We should recommend it, from what we know of it, to farmers, as the best variety for a certain and profitable crop. For the purposes of the table, to be used when green, it does not possess the merits of the old and well known varieties.

LETTUCES.—We have nothing particular to add respecting

lettuces to what we stated last season. We have not heard of any new or remarkable kinds, and we believe that none of any great merit, (unless a few new Cos lettuces,) have been added to the already mentioned sorts. What we have before stated in regard to the synonymous names in catalogues will apply with equal force at the present moment: but we look forward to a correction of the many errors which exist in the catalogues of seedsmen. The new Cosses are called the new Pearl Cos and the *fine* new Brighton Cos. The Cos lettuces, however, are not cultivated much in this country.

PEAS.—Since our articles of last year, one of the kinds we then enumerated has been tried in the vicinity of Boston. This was the Early Warwick pea; and a friend on whom we can rely for information states to us that it is one of the most profuse bearers he has ever grown; and that the peas are also of superior flavor. It will, in all probability, by another season, be introduced, as it should be, into pretty general cultivation.

Groom's superb Dwarf blue.—We name this variety again, that it may not be forgotten by those who are desirous of possessing such an excellent pea.

The following are new varieties:—Cedo nulli, said to be remarkably early; Smith's superb early double blossom, new branching Prolific, and the new transparent Neapolitan: we have also noticed that a new Marrow pea of great merit has been raised, but not in sufficient quantity for the trade.

POTATOES.—Since the introduction of the forty-fold potato there has not been any new variety added to our collections of importance. This kind is gaining favor, and has been quite extensively cultivated the past year. The produce is immensely great; and though they are sometimes small, probably arising from a too light soil or warm situation, or from planting too many potatoes in a hill, yet, when properly grown, they acquire a good size, ripen early and keep well.

The Rohan potato is the name of a new variety lately mentioned in the agricultural papers. Judge Buel, in his *Cultivator*, speaks of it as a "species [variety] of uncommon size and productiveness." He obtained only two tubers from France, in the fall of 1836, but, by the kindness of Mr. Thompson of Catskill, he says, he was enabled to increase the quantity to twelve pounds. The tubers were divided into sets of two eyes each, and one planted in a hill, four feet apart, in a piece of ground much shaded, and in a low situation: the crop was dug in September, and weighed and measured; weight, 525 pounds—measured 9 bushels; thirty-five of the largest tubers filled a bushel basket. Of the quality he had not been able to decide in November, when his remarks were made. Others, however, have pronounced them very superior for the table. Judge Buel, in

conclusion, states that they are "undoubtedly the most productive variety" he has ever met with. The above statement, however, does not make them so productive a variety by more than thirty per cent. as the forty-fold, the latter having yielded 70 lbs. to 1 lb. of sets. We shall notice this variety again when we have more information respecting it.

Our readers have probably noticed, in the report of the exhibition of the Columbian Horticultural Society at Washington, (p. 35,) that the Ash-leaf kidney and the Mercer potatoes were exhibited at the fall show of that society. The first of these is said to be a fine variety, very early, waxy, and of good flavor: the latter is somewhat known, and is also a fine kind. We hope both of them will find their way into the gardens in the vicinity of New York and Boston.

The American early is the name of a variety which is considerably cultivated in Scotland: the seed was received from New York a few years since. We cannot imagine what this variety can be, unless the Nonpareil, which we noticed last year; the kind was stated, when sent to Scotland, to be the best grown in the vicinity of New York. We notice it, that any of our friends in the latter city who may know it, or those who sent the seed away, will inform us of its origin and its qualities, and under what name it may be known at the present time in that vicinity.

Hill's early.—This is the name of a very good early variety which is much cultivated around Boston. It is a fair looking potato, of good quality, and is well deserving of growth for an early crop.

RHUBARB.—Since the introduction of Wilmot's superb, we believe there has not been any new additions to our gardens. This variety has taken the place, in many instances, of the formerly cultivated kinds, and it is considered superior in flavor, more tender, and very much earlier in its growth. From a very few seeds, which were first received in the country in 1834, the present stock has arisen. We recommend it to all who are forming new plantations.

The Goliath and *Giant* rhubarbs have long been celebrated in England, and we should be happy to see them introduced into this country. They are of exceedingly vigorous growth, and, withal, tender and fine flavored. We hope that this notice of them will excite those who esteem this vegetable (and who does not?) to make some exertions to procure them.

Youell's celebrated Tobolsk rhubarb.—This is an entirely new variety, which has created no little noise among the horticultural community of England, if we may judge from their periodicals. It is brought out under the "especial patronage" of the queen, to whom the grower, Mr. Youell, sent specimens for

trial. In order that our readers may know everything in relation to it, we extract the following, from Mr. Youell's advertisement:—

“This highly esteemed variety will be found to be the earliest of all early sorts. As a proof of its extraordinary precocity, it was, this season, [1837,] ready for TARTS, &c. the *twentieth of February*, on the open border, in a very exposed situation, and will continue to produce its fine large stalks till September.

“It would be useless to eulogize its merits, farther than the great demand for it last season, together with the many high testimonials of approbation received, claim for it a decided superiority.

“The Tobolsk rhubarb may be grown in boxes or pots, in any common garden mould, or enveloped in damp moss, and placed in a *closet, dark cellar, or the back fire-room of a hot-house*, and watered occasionally, when it will produce the stalks of a beautiful transparent delicate pink, containing a rich, vinous, juicy pulp; and when cooked retains its beautiful color, which renders it an elegant addition, as well as a delicious luxury, to the table, at a season when fruits are unattainable. *Roots planted in November will be ready for cutting [the stalks] in January.* A fresh box brought in every three weeks will afford a regular supply; and the plants, when done with, may be taken out of the boxes and replanted in the open ground, and may again be cut for use in summer, and replaced in the cellar, &c., in November.

“This rhubarb makes an excellent preserve when cut into pieces an inch and a half long, and preserved in sugar.”

Thus much we have set forth in the advertisement, and the letter communicated, by order of the queen, to Mr. Youell, states that “its excellent qualities fully justify the high character” he had previously given it.

Certainly it will prove a valuable variety, particularly for forcing, as in our climate, however so early it might be in that of England, we should never expect to see it in a fit state for cutting, in the open ground, without artificial means of some kind, before the early part of April: but as it can be so easily managed in boxes, in almost every situation, out of the danger of frost, it may be had at all seasons: besides this, it has the rare property of retaining its beautiful color, (a delicate pink,) which would give it an additional and decided value, were it deficient in other particulars. We certainly hope that some of our enterprising amateurs or seedsmen will introduce this variety; for if it equals the description given of it, or even comes near to it, it will be a most important acquisition. Immense quantities of rhubarb are now disposed of in our markets, and the sale is extending every year. Could it be supplied in quantity during the months of January, February and March, it would command a liberal price. By the return of another season we hope we

shall be able to give some account of this variety, gathered from its cultivation in our own gardens.

SQUASHES.—The autumnal marrow, noticed by us in our I, p. 28, has become a very favorite variety. In Essex County, and particularly around Salem, where it was first introduced, immense quantities have been raised both for private use and for the market. In Lynn, we believe, one farmer raised twenty tons the past year. They are ripe for eating very early in August and September, on good soils, and keep as well as the crookneck. They also command a very good price. It has been stated that the autumnal marrow was superior to all other squashes: it may be so to some; but, in our opinion, a true Canada crookneck is a far more excellent vegetable; but as the latter is so apt to get mixed with the common crookneck, which is much coarser, and inferior in many respects, the autumnal marrow offers an excellent substitute. It produces great crops, and with a certainty of being mostly matured, even in the coldest seasons, if the two last may be considered standards from which to draw conclusions. It should be strongly impressed upon the minds of those who cultivate this variety, that they must either procure their seeds from those who can be depended upon, or, should they raise their own, they must be particular to save only from such as could not have had their blossoms fertilized by any other kind.

The apple squash is the name of a fine little summer variety, deserving of extensive growth. It is decidedly superior to either the common bush or scollop, or the summer crookneck. We believe it is not very new, although it is rarely met with in gardens; it is, however, too valuable to suffer such neglect. It may be also used as a winter squash in the early months of that season, when it will be found a capital vegetable. We bespeak for it a place in the garden of every cultivator of vegetables for his own use.

TOMATO.—Some time since we received a few seeds of the small yellow fruited tomato from our friend and correspondent, Dr. Ward, of Athens, Ga. This variety, he informed us, was greatly preferred to the common large fruited, in that section of the country, and was cultivated, to the almost entire exclusion of the latter. Our seeds were planted so late in the spring, and the season was so cold, that but six or seven of the fruits ripened; and as we wished to preserve them for the seed, we did not have an opportunity to fully ascertain their merits; but from a trial of one or two of these, we should not hesitate to recommend this variety for extensive growth.

We had intended to make some general remarks upon the past season as favorable or unfavorable to the growth of vegetables; but we have already occupied so much room, that for the present we close this article.

ART. III. *Some Observations on, and Directions for, the Cultivation of Asparagus.* By S. WALKER.

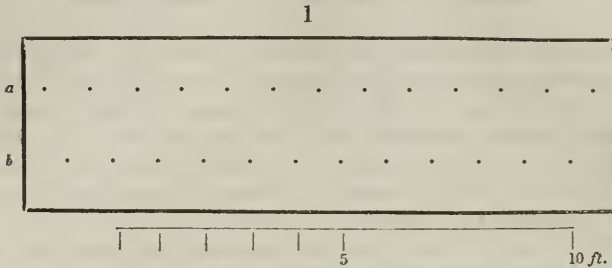
Asparagus officinalis: Common *Asparagus*, or *Sperage*. This delicious and valuable vegetable is propagated by seeds, sown in the spring, on a bed of rich earth, either in rows or broadcast, as the taste of the cultivator may direct: it must be trodden over, to bury the seeds, and during the summer the bed should be kept clear of weeds. Towards the end of October, or the beginning of November, when the haulm is quite withered, cut it off close to the soil, and cover the bed with two inches of manure, over which spread about the same portion of loam, and with the *back* of a rake smooth over, and crown up the bed for the winter. This covering will preserve the young buds from being injured by the frost. In the following spring the plants will be ready to transplant into the permanent bed.

Perhaps there is no vegetable more improved by good culture than asparagus; and, as the *future* supply mainly depends on a proper preparation of the bed for the plants, and the dressing thereof from year to year, I shall endeavor to be explicit, and at the same time as concise as possible. Prepare your bed as follows:—

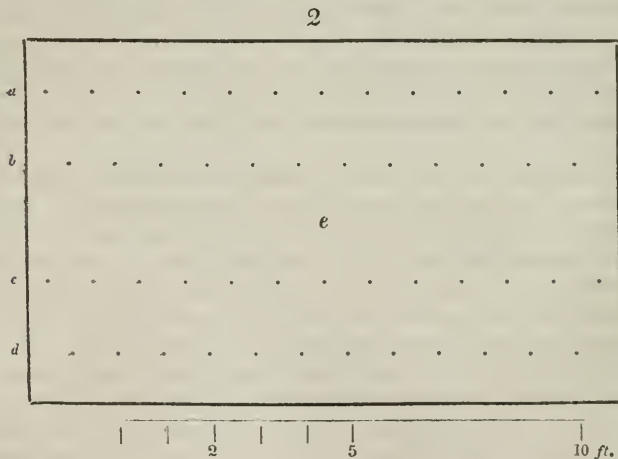
In the spring, (April,) when you have selected the spot which you intend for your asparagus bed, say one hundred and twenty feet long by four feet wide, or sixty feet long and eight feet wide, (I intend this bed for a family of seven to ten persons; for a larger or smaller family continue the same proportions,) trench the bed two good spits, and throw out the soil into one of the alleys; cover over the *under soil* (which I shall call your third spitting,) with manure about four inches; incorporate the manure and under soil well together, taking out the stones, if any, and then replace a part of the soil thrown out; if the first or top spitting is the best, use that, with about an equal proportion of manure, until the bed is six inches above the level of the ground.

Your bed will now be ready for the reception of the plants from your seedling bed, which you will take up carefully with a fork: be careful not to injure the fibres, or roots, of the plants, and select the longest plants for use. Now place a line, (*fig. 1, a,*) fifteen inches from one side of the bed, and make a trench six inches deep, and wide enough to receive the plants with their roots *spread out horizontally*, (which must be done with your fingers, keeping the crowns of the plants upright, and placing as much soil about them as will keep them in that position until you cover up the trench, which should be done when you remove your line; place the plants twelve inches *apart* in

the rows; having completed planting the first row, remove your line eighteen inches, (b,) and plant as before. If the bed is



only four feet it is completed, so far as it regards the planting: the crowns of the plants will be covered with about two inches. If the bed is eight feet wide, (fig. 2,) you will remove the



line thirty inches, (c,) and plant a row; and again eighteen inches, (d,) which last row will complete a double bed, with an alley of thirty inches (e,) in the middle, and sufficiently wide for you to go up the centre, and cut the two inner rows, without treading on the plants. The beds can be made of any length, to suit the convenience of cultivators.

After the planting is finished, you will smooth the whole over with a rake, and throw out a small quantity of the soil out of the centre of the bed, (which will form a sub-alley,) upon the beds right and left; and with the back of a rake round off the two divisions of the bed so as to give each a gentle slope from the centre to each alley. In the autumn the beds will have settled

considerably; at which time, that is, as soon as the haulm is withered, you will cut it off close to the soil, and add two inches of well rotted manure, over which put one inch of good rich loam, and crown it up as before directed: continue to do this every autumn; and every spring fork the bed over, taking care not to injure the crowns of the plants; keep your bed free from weeds, and you will have fine large spears, and plenty of them.

I am under the impression the size of the spears, and the quantity of asparagus, depend very much, if not wholly, on the cultivation: it loves a very rich sandy loam. When persons wish to put out plants, which they can purchase at the seed-stores, instead of waiting to raise plants from seed, in which case they gain one year, I should *prefer* the plants known to be the proceed of seed from a bed producing large spears.*

A bed planted in 1838 should not be cut until 1840. If you cut the first year after planting, you injure the bed in the proportion you cut; and if you cut freely, your bed will be ruined for the future. After the second year you may cut freely. All inferior spears should be suffered to run up, as they will strengthen the roots. Cut sparingly after the first of July, as late cutting is injurious to the bed; and after you have discontinued to cut be careful the tops are not injured or destroyed, as mutilation of the stem is very injurious to the bed. When you cut, have a proper knife, quite sharp, which place to the side of the spear, a little below the surface, nearly perpendicularly, and cut the spear in a sloping direction. If you hold your knife horizontally, you will often cut off other buds under the surface, which you do not see, and thus destroy the crop, and weaken the plants for the future.

Yours, &c.

S. WALKER.

Roxbury, Feb. 8, 1838.

The above article of Mr. Walker's will, we apprehend, be the means of rendering the cultivation of this most excellent vegetable better known. In connection with one drawn up by us, from data furnished by Mr. Pond, (vol. II, p. 134,) it will afford all the information that need be desired to grow it to a

* Although I consider this of *minor* importance, when compared with the rules for cultivation. I never met with fine large spears on a bed poorly cultivated, nor did I ever meet with poor small spears on a bed well taken care of. I wish my readers to bear in mind this fact. You may raise *giant* or *dwarf* asparagus as you please. Pay attention and cultivate highly, with plenty of manure, and you will raise *giants*—neglect your bed, and it will produce *dwarfs*. [Fine roots, raised from what is called the *giant*, may be obtained of Hovey & Co., seedsman, 9 Merchants Row, Boston.]

great degree of perfection. The cultivation of asparagus is not sufficiently understood—and hence the abundance of poor quality which is to be found in our markets. New beds, properly made, the soil sufficiently nourishing, the roots well selected, and their after culture duly attended to, would throw up numerous spears of immense size. But the roots are too frequently planted in a shallow soil, and afterwards the beds receive but little care, when they soon lose their vigor, and produce weak shoots.

It is from a knowledge of this fact that we have the *giant* and common kinds of asparagus, the former of which, so called in the vicinity of Boston, we now believe to be wholly owing to cultivation. Since we penned the article before alluded to, in our second volume, we have been convinced of this in more than one instance. By this we do not, by any means, intend to be understood as saying that we shall not, at some future time, have what may truly be denominated giant asparagus, or, in other words, that asparagus may not be very greatly improved from seed, by skilful practice. Horticulture has made such rapid strides, particularly in Britain, of late years, that we know not where improvement will find its bounds. A few years, or, if not in so short a time, another century, may find the gardens at that time producing asparagus twice or three times as large as that which has been denominated the *giant* of our gardens. It is not at all unreasonable to suppose this, as we have already seen, in our day, as great, or more important, results in other vegetables, as well as fruits, under the hands of skilful practitioners.

When we drew up the communication of Mr. Pond's, from a few notes furnished us, we did not inquire from whence he had procured his seed. We saw ourselves that the asparagus was extremely large and handsome; and as he pronounced it the *giant*, we at once attributed its size to the peculiar kind, rather than to its vigor. But we have since known beds which have been planted from his seedling roots, which possess no stronger claims to be called giant than that which has been called, in distinction, the common sort. Ready are we always to afford our aid in the dissemination of any superior new variety of fruit or vegetable; and equally ready shall we be to denounce any inferior sort, as well as all attempts at making *new* names to old varieties, from interested motives. Let all who wish to procure fine *giant* asparagus pay the same attention to the planting of the roots as has been directed by Mr. Walker, or practised by Mr. Pond, and we can assure them that, upon the care bestowed in planting, the choice of soil and situation, the age of the roots, &c., will depend the procuring of *giant* or *dwarf* asparagus.

Mr. Walker has grown asparagus for a long period; and although he has not, that we are aware of, made any exhi-

bition of specimens of his cultivation, yet he has produced that which would equal the *giant* of his neighbors. His mode of making the beds is very good, and answers every purpose: they are easily weeded, and the asparagus can be cut without tramping the soil down until it acquires such a firmness that that alone is one great obstacle to the health and success of the roots. Let all remember, who are about forming new plantations of asparagus, that a little extra care and expense will lay the foundation of beds which will flourish, with the greatest vigor, years after those have ceased to produce asparagus which were carelessly and hastily set out.—*Ed.*

ART. IV. *Some account of the Papaw Apple, (Cárica Papàya,) and its fruiting at Hyde Park, N. Y.* By JAMES HOGG, New York.

THE *Cárica Papàya*, or papaw apple, is a native of the East Indies, and is considered a very delicious fruit; it is also grown in South America and the West Indies. The fruit, a drawing of which I send you, was produced upon a plant in the collection of the late Dr. Hosack of Hyde Park, where it was raised from seed sent to Dr. Hosack by Dr. Stevens, from the Island of St. Thomas, in 1831. The plant has now upon it three more fruits like the present, but they are not quite ripe.

This is the first time that the *Cárica Papàya* has fruited in this country, and I am not sure that it has ever ripened in the gardens of England. Loudon, in his *Encyclopedia of Gardening*, does not mention it among his exotic fruits. The fruit is of a bright gold color; skin smooth, and interspersed with little russetty spots.

Yours,

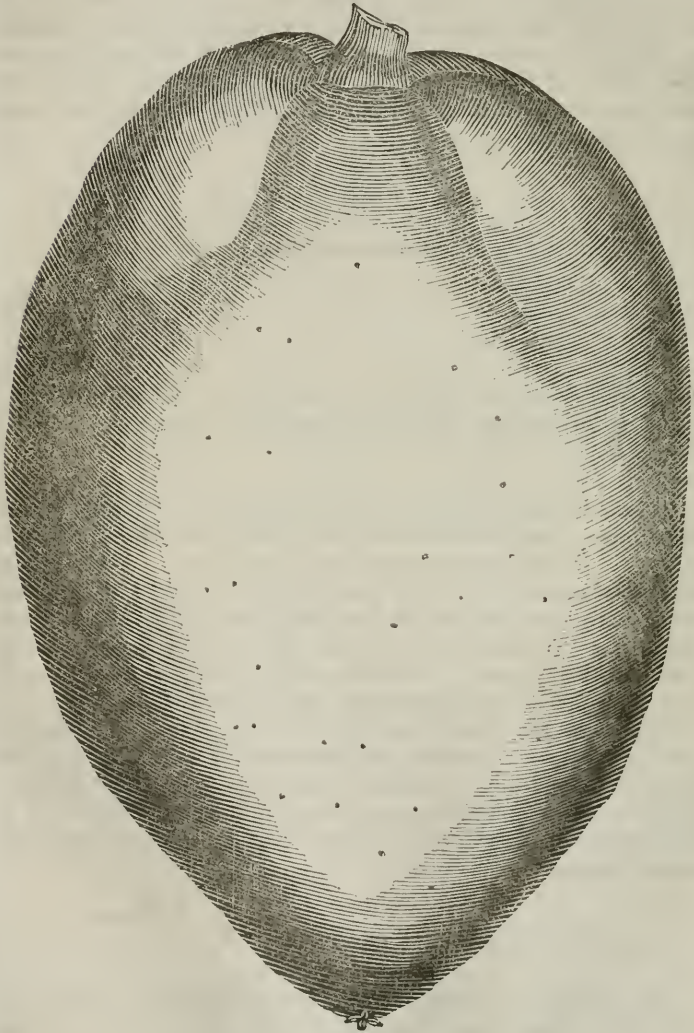
J. HOGG.

New York, Feb., 1838.

The drawing of the fruit of the *Cárica Papàya* L., kindly sent us by Mr. Hogg, was taken by a lady of New York, of its natural size; but the dimensions of our page would not allow us to give it without reducing; the annexed engraving (*fig. 3.*) is, therefore, *three quarters* of the natural size of the fruit, produced on the above named plant, which measured six inches

in length, and five inches in diameter. A long account is given of this fruit by Sir W. J. Hooker, in the *Botanical Magazine*, 2898, but as we have not the back volumes of that work before

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us, we are unable to make any remarks. Dr. Lindley states, in his *Introduction*, that the fruit has "little to recommend it." Its great peculiarities are, that "the juice of the unripe fruit is

a most powerful and efficient vermifuge: the powder of the seed even answers the same purpose, and thus a principal constituent of this juice is fibrine, a principle otherwise supposed peculiar to the animal kingdom, and to fungi. The plant has, moreover, the singular property of rendering the toughest animal substances tender, by causing a separation of the muscular fibres: its very vapor does this; newly killed meat, suspended among the leaves, and old hogs and old poultry, becoming tender in a few hours, when fed on the leaves and fruit."

The genus was formerly placed in the order Cucurbitaceæ of the natural system. Dr. Lindley has, however, made it the type of a new order, *Papayaceæ*. In this opinion he is supported by Auguste St. Hilloise. The plant must be a very beautiful object when covered with its monstrous golden fruit, and would be a great ornament to all stove collections. We hope the gardener at Hyde Park will send us his mode of treating the plant since it was raised from the seed.

In regard to the fruiting of the papaw apple in England, we have ourselves no evidence. We find it, however, enumerated in the catalogue of plants in the Duke of Bedford's collection, at Woburn, given in the *Hortus Woburnensis*. Loudon, in his *Hortus Britannicus*, states that it was introduced to England in 1690, and is figured in the *Botanical Register*, 459. But we have not the first series of this work, and therefore cannot state whether the figure was from a British or foreign specimen: as many tropical plants and fruits have been figured both in the *Botanical Magazine* and *Botanical Register*, from drawings taken in their native countries, that of the papaw apple may have been made in the same manner. If the gardener at Hyde Park, or Mr. Hogg, should favor us with its management, from the seed to its fruiting state, we will endeavor to append, to the same, some account of it from the above-mentioned works.—*Ed.*

ART. V. *Observations on the Camellia and its Varieties, with some account of its introduction into Great Britain and this country.* By M. P. WILDER.

[Continued from Vol. III, p. 136.]

55. *Camellia japonica* var. *Graya nova*. *French Catalogues.*

This is a fine French variety. The flowers are large, of a brilliant crimson color; the exterior petals are in two or three

rows, heart-shape, the inner ones smaller, undulated and twisted, forming a perfectly full double flower.

56. *Caméllia* j. var. *Vandèsia* supérba. *Hort.*
Comtesse de Vandès superb *Caméllia*.

An English seedling, raised, with another named *Vandèsia* cárnea, (of which we shall speak hereafter,) in the Comtesse de Vandès garden, Bayswater, near London, probably about the year 1828 or 29.

This is a robust, strong growing variety: the flowers are quite large, from four to five inches in diameter, of a dark orange scarlet color. The outer petals are in two or three rows, broad and flatly expanded; the inner ones are smaller, unequal, of various shapes, intermixed with the stamina, and sometimes striped with white; a remarkable showy variety.

There is another of this name in commerce, which is not a full double flower; the petals are few, in two or three rows, of a bright scarlet, and showing the sexual organs.

57. *Caméllia* j. var. *Colvillii*. *Sweet's Brit. Fl. Gard.*
Colvill's Carnation-flowered.

Raised at Mr. Colvill's Nursery, King's Road, Chelsea, England, in 1824. "The petals are numerous, and of a lively blush color, spotted with innumerable small red spots, and marked with narrow stripes of a deeper red, approaching to crimson. Some specimens are as perfect as a carnation, to which the flowers have a great resemblance." (*Chandler & Booth's Ill.*)

58. *Caméllia* j. var. *Buckliàna*. *Caméllias of Bolwiller*.

This caméllia has full double and well formed flowers, of a fine crimson color; the size three to three and a half inches in diameter. The outer petals are round and slit at the apex, the inner ones more or less irregular in shape; the whole frequently marked and spotted with white, and sometimes an entire petal of the same color, strongly resembling *C. j.* var. *Chándleri*.

59. *Caméllia* j. var. *venòsa*. *Fr. Cat.*

This flower is of the form of *C. j.* var. *Pompònia*, the color a deep blush, almost a pink. *C. j.* var. *intermèdia* of American catalogues is the same variety.

60. *Caméllia* j. var. *Decandòlleii*. *Fr. Cat.*
 Syn: *C. j.* var. *Candolleàna* *Fr. Cat.*

A very pretty variety, and remains a long time in perfection on the bush. The color is a very bright pink, the outer petals large, the inner ones smaller, spathula form and twisted, the whole with a faint watery line at the edge, approaching to white.

61. *Camellia j.* var. *marmorata*. *Fr. Cat.*

This is a double flower, but not quite full, of a crimson color, spotted with white.

62. *Camellia j.* var. *rubicaulis*. *Fr. & Eng. Cat.*

The flower of this variety is of medium size, the color a dark rose, spotted and marbled with white. The petals are few, but very well arranged, after the manner of *C. j.* var. *coccinea*; a neat, pretty flower. There is a variety in the trade called *C. j.* var. *rubicaulis variegata*, which is the same as the present subject.

63. *Camellia j.* var. *Sweetiana*. *Sweet's Brit. Fl. Gard.*
Sweet's painted-flowered Camellia.

Raised at the Colvill nursery, from pomponne and double-striped. It is described by Mr. Sweet as a "flower bearing a strong resemblance to a beautiful variegated rose, generally very double, more spreading than many varieties, and elegantly marked and variegated with white, blush and a deep rosy red."

64. *Camellia j.* var. *Sweetii*, or *Sweetiana*. *Fr. Cat.*

This is a very different flower from the English camellia *Sweetiana*, just described, and not less beautiful. The color is dark crimson; petals very numerous, regularly laid over each other, from the circumference to the centre, notched at the apex, and beautifully spotted with clear white.

65. *Camellia j.* var. *gloria mundi*. *Fr. Cat.*
Glory-of-the-world Camellia.

A good double well-formed camellia; color a fine crimson, spotted with white, much like *Chandleri* and *rubicaulis*.

66. *Camellia j.* var. *alba variegata nova*. *Fr. Cat.*

This flower is single, of medium size, of a pure white color, singularly splashed and striped with dark rose. The petals are very prettily cupped, and retain their form until the flower drops. It is truly a lovely variety.

67. *Camellia j.* var. *Gilesii*. *Chand. & Booth's Ill.*
Syn: Nancy Dawson of French Catalogues.

A new English seedling of great merit. The flower is described as being quite large, from four to five inches in diameter, of a dark scarlet color, spotted and striped with white, and usually having as much of the white as red.

68. *Camellia j.* var. *comete*. *Fr. Cat.*

This is a new French variety of the single white. It has one row of exterior petals: the stamens are not in a compact column, as is usual in single flowers, but are diverging from the pistil, and radiating outward to the circumference, representing more the figure of a star than a comet.

69. *Caméllia j. var. punctàta simplex.* *Eng. & Fr. Cat.*
Single-white striped.

A very large, broadly expanded, single camellia, the color a light blush, spotted and striped with rose.

70. *Caméllia j. var. latifolia nova.* *L'Abbe Berlésé Monograph.*

This is of recent introduction. The flower is of a bright rose color, spotted and marbled with white. It has two or three rows of large outer petals, and the centre is filled up with smaller ones of irregular shape, forming a full double flower.

71. *Caméllia j. var. Roi de Pays Bas.* *Fr. Cat.*
King of the Low Country.

The color of this camellia is very deep crimson, with darker prominent veins, and remains a long time in perfection. The petals are not numerous, but very regularly arranged.

72. *Caméllia j. var. ròsea nova* (of China.) *Fr. & Eng. Cat.*

This camellia has been recently introduced into Europe from China, and is no doubt a true Chinese variety. The flower is of medium size, of a delicate rose or pink color. The petals are as numerous as those of the old double-white, and as perfectly arranged over each other to the very centre. It is represented as being the most sure and indefatigable bloomer we are acquainted with.

The following varieties, from No. 73 to 77 inclusive, are generally termed single flowers, having an outer row of from five to seven very large guard petals. Where the stamens are not transformed into petals, they are called single flowers; but where they are petaloid and diversified in color, making up a full conical centre, they are called semi-double, or double flowers. All this class of flowers are excellent for producing seed.

73. *Caméllia j. var. papaveràcea.* *Fr. Cat.*

A very large, broadly expanded, dark red single flower, measuring from five to six inches in diameter.

74. *Caméllia j. var. Baumanniana.* *Camellias of Bolwiller.*

Raised from seed by the brothers Baumann of Bolwiller, France. The color is a bright cherry red, the centre filled with transformed stamens, some of which are striped with white.

75. *Caméllia j. var. grandissima.* *Fr. Cat.*

A large and beautifully formed, single, dark orange scarlet camellia.

76. *Caméllia j. var. delécta.* *Fr. Cat.*

This is similar to the *Baumanniana*, except that the petaloid

stamens are mostly of a clear white color, which gives the flower a very unique appearance.

77. *Caméllia j.* var. *spathulàta.* *Fr. Cat.*

This is also a large single dark red flower, measuring four to five inches in diameter.

M. P. WILDER.

Dorchester, Feb., 1838.

[To be continued.]

ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, *Florist's Register*, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo numbers, with a plate; 1s. each.

Botanical intelligence.—We have received from Dr. Torrey of New York, a copy of a paper, which will appear in the next volume of the *Annals* of the New York Lyceum, to be published soon, describing several new genera and species of North American plants. In the absence of our foreign periodicals, we have annexed some account of each of the species enumerated.

Those who wish to see the generic and specific distinctions complete, must consult the above work.

New North American plants described in the fourth volume of the *Annals* of the New York Lyceum of Natural History:—

Cruciferæ.

LEAVENWORTHIA (In honor of Dr. M. C. Leavenworth, of the U. S. army, an indefatigable botanist, who has largely contributed to our knowledge of the plants of Arkansas, Louisiana and Florida *Torrey*.)

Generic character. *Calyx*, somewhat erect, equal at the base. *Petals*, equal, cuneiform, truncate or emarginate. *Filaments*, distinct, toothless. *Silique*, sessile, oblong, linear, somewhat inflated and torulose; valves indistinctly nerved. *Style*, distinct, or almost wanting. *Stigma*, minutely bidentate. *Seeds*, in a single series, flattened, with a broad winged margin. *Funiculus*, free. *Embryo*, nearly straight, or with the radicle somewhat bent on the cotyledons: the radicle very short, conical, pointing obliquely upwards, towards the hilum. *Cotyledons*, orbicular. *Dissepiment*, 1-nerved, minutely reticulated; the areolæ transversely linear-oblong. Herbaceous, annual: flowers on long subradical peduncles, or in loose racemes, yellow.

L. aúrea *Torrey*

Root, straight. *Plant*, 2—6 inches high. *Leaves*, mostly radical. *Racemes*, 4—10 flowered. *Flowers*, in the young plant, solitary, on long, erect, naked peduncles; in advanced specimens, racemose. *Petals*, yellow, tapering to a long cuneate base. *Stamens*, distinct. *Ovarium*, sessile, oblong. *Silique*, rather more than an inch long. *Dissepiment*, thin and transparent. *Seeds*, usually 5.

This species inhabits wet places on the prairies, in the vicinity of Fort Towson, Arkansas: also in Texas, and in Jefferson County, Alabama, where it was observed by Dr. Leavenworth. Of only botanical interest.

L. Michauxii *Torrey*

Syn: *Cárdamine uniflora* *Michx.*! *Fl. Bor. Am.* II, p. 29; *Pursh, Fl.* II, p. 439, *D. C.*! *Syst.* II, p. 251.

Found on rocks about Knoxville, Tennessee *Michx.*! *v. s.* in *Herb. Mus. Paris.* On wet rocks, Kentucky; very rare *Dr. Short.*!

Extremely similar to the *L. aúrea*, but appears to be distinct. Resembles it in the form and size of the leaves and flowers. The style, however, is very evident in the latter, but is always wanting in *Michauxii*.

Dr. Torrey states that this is the only species of this family with which he is acquainted, in which the embryo (except in its earliest state,) is straight. Thus, according to De Candolle, the plant cannot be referred to either of his great suborders of *Cruciferæ*, *Pleurorhizæ* and *Nortorhizæ*. Respecting the

value of characters derived from the embryo as the basis of classification in this large order, there is a great diversity of opinion among botanists; and Dr. Torrey quotes the ideas of several. He, however, seems to adopt De Candolle's system.

The affinities of the order are, disregarding the peculiarity of the embryo, the only tribe of Pleurorhizæ with which it can be compared is Arabidææ, among Nortorhizæ. It has but little resemblance to any except a small section, (*Arabidopsis*), to the genus *Sisymbrium*, all of which have white flowers. Dr. Torrey considers it more nearly related to *Selénia Nutt.* than to any other known genus. Like the *L. aúrea*, only interesting in botanical collections.

Empetrææ.

EMPETRUM *Conradii* Torrey

Specific character. Evergreen, procumbent, and much branched; branches verticillate and fasciculate. *Leaves*, coriaceous, crowded towards the summit of the branches, opposite somewhat verticillate, and alternate. **MALE FLOWERS**, sessile in the axils of the leaves of the lower branches. *Perianths*, composed of five or six oblong or obovate oblong, smoothish scales, the inner ones scarcely petaloid, forming an oval bud, from the apex of which the stamens protrude. *Stamens*, mostly three, sometimes four; *filaments*, two lines long, slender, smooth, inserted into a minute receptacle; *anthers*, roundish, 2-celled, opening longitudinally on the outside, no rudiment of an ovary. **FERTILE FLOWERS**, inconspicuous, collected in very small heads at the summit of the branches. Each head composed of ten or twelve flowers, surrounded with a number of short, brownish, concave bracts. Scales of the perianth, about five, obovate, obtuse; the inner ones smaller, tinged rose-color, nearly smooth. *Ovary*, obovate, 3—4 celled, each cell containing a single ovule; style three times as long as the ovary, purplish-red, cleft below the middle.

This species inhabits sandy fields in pine barrens, near Cedar Bridge, Monmouth County, New Jersey! also near Pemberton Mills, about ten miles from Burlington in the same state.

A pretty and interesting plant, first discovered by the late S. W. Conrad, Esq., Professor of Botany in the University of Pennsylvania, a short time before his death. Dr. Torrey gives the following account of the plant:—

“My friend Dr. Pickering, of Philadelphia, supplied me with some of Mr. Conrad's specimens, on which were a few male flowers, and afterwards the same plant, without fructification, was communicated to me by Mr. Rafinesque. A careful examination of the scanty materials placed in my hands, soon convinced me that this little evergreen belonged to the order *Empetrææ* of

Nuttall, and that it was a new species of *Empetrum* itself, or possibly of *Ceratiola*; but the want of more perfect specimens, and especially of the fertile flowers, prevented my determining the genus with certainty until the present spring. About two years ago I made a visit to the locality at Cedar Bridge, pointed out to me by Mr. Rafinesque, for the purpose of obtaining the fruit. A large patch of it was found about one hundred yards south of the western tavern, near the road-side, and, on further search, a considerable quantity was discovered about four hundred yards south-east of the same tavern, in an open sandy space; but I was unsuccessful in my search for the fructification. It is a true evergreen, growing prostrate in the pure white sand of that singular region, and forming dense circular mats, a yard or two in diameter. The following year I procured a supply of the living plants, which, under the care of my friend A. J. Downing, Esq., of Newburgh, have lately produced abundance of pistillate blossoms, but, for want of the staminate flowers, they will prove abortive."

It seems singular that such a plant should have remained so long unknown, when New Jersey has been explored by so many botanists; but many of the plants of the pine barrens are extremely local. De la Pylaie, in an account of his botanical discoveries in Newfoundland, published in the *Transactions of the Linnæan Society of Paris*, enumerates the *E. rubrum*, noticed in our I, p. 423. It possibly may be the *E. Conrâdii*; for, if identical with the *E. rubrum*, a South American species, it affords a remarkable example of the geographical distribution of plants. We hope Mr. Downing will give us some account of the success which he experienced in cultivating the *E. Conrâdii*.

Scrophulariæcæ.

MACRANTHERA *Lecóntii* Torrey

Specific character. *Root*, perennial. *Stem*, herbaceous, from two to three feet high, simple, somewhat pubescent, obtusely quadrangular. *Leaves*, nearly smooth on both sides. *Flowers*, in a terminal raceme, erect. *Peduncles*, about an inch long, declined at the base, and curved upwards towards the summit. *Calyx*, sub-campanulate, deeply cleft, about one third the length of the corolla. *Corolla*, deep yellow, an inch long, and 2—3 lines diameter, somewhat cylindrical and incurved, of a thick and pretty form and texture; border 5-toothed; segments ovate, oblong, spreading. *Stamens*, nearly equal, at first included, but at length much exerted, scarcely declined; *filaments*, woolly, rather thick; *anthers*, sagittate. *Ovary*, ovate. *Style*, long and slender. *Stigma*, simple. *Capsule*, short, ovate.

A most beautiful plant, found in dry pine woods, on the Altamaha, in Liberty Country, Ga., by Major Le Conte, and in

bogs in Middle Florida, by Dr. Clapman. Flowers in September.

Dr. Torrey received specimens of this plant from Major Le Conte, marked "a new genus, allied to *Gerardia*." He proposed for it the name of *Macranthera*; "but refrained from publishing it, in the expectation that the discoverer himself would describe it, which, however, he declined doing, kindly permitting me the favor of making known to botanists this interesting addition to our Flora." A second species was a short time after received from Dr. Gates of Alabama, specimens of which were distributed by Dr. Torrey, under the name of *Macranthera*; but before he was prepared to publish his account of the new genus, Mr. Nuttall described it in the *Journal* of the Academy of Philadelphia, (vol. VIII, p. 88, t. 2 and 12,) under the name of *Conradia fuchsoides*, he not being aware that there was a genus by this name. Mr. Bentham, in his revision of the order Scrophulariææ, has adopted Dr. Torrey's name as Mr. Nuttall's, but Sir W. J. Hooker has corrected the error in the *Companion* to the *Botanical Magazine*, in a recent synopsis of the *Gerardiææ*.

Macranthera differs from *Gerardia* in its deeply parted calyx; tubular corolla, with a small spreading border and exserted stamens. Like most of the tribe *Gerardiææ*, both species of the *Macranthera* turn black in drying. It is a fine plant, and if it can be made susceptible of cultivation we hope it will soon be introduced to our gardens. We hope Dr. Torrey will furnish some of his friends with the seeds of the *M. Lecóntii* if he has them.

AMPHIANTHUS pusillus Torrey

An annual herbaceous plant, throwing up filiform scapes, with solitary, minute white flowers. Found in small excavations on flat rocks, when the soil is wet, during the summer flowering season: Newton County, Ga.: flowers in March and April: by Dr. Leavenworth. We annex the characters of the genus only.

Generic character. *Calyx*, 5-parted and unequal. *Corolla*, tubular, infundibuliform: limb somewhat bilabiate, 4-lobed; inferior lobe somewhat larger. Stamens, two, superior included: inferior ones wanting. *Style*, simple; *stigma*, minutely bifid. *Capsule*, obcordate, compressed, 2-valved, opening at the summit; valves entire. *Seeds*, numerous, naked, anatropous.

Nearly allied to *Verónica*, but differs in its tubular infundibuliform, 5-lobed and somewhat bilabiate corolla. The most remarkable character of the plant is its two-fold inflorescence, on short naked pedicels, which originate among the radical leaves, while others are supported on long, capillary, bibracteate scapes. The flowers in both situations perfect. Probably of but little beauty, from its minute flowers, but interesting to botanists.

This species has hitherto been found only in one spot, where it occupies a space of four or five feet in diameter, to the exclusion of all other plants. At first sight it resembles a *Callitriche*, and, when overflowed, the slender scapes probably become nantant.

The *Empetrum Conrădii* and *Macrănthera Lecóntii* are two species deserving of introduction into our gardens.

ART. VII. *Notes on Gardens and Nurseries.*

Mr. Towne's, Snowhill Street.—Since we last had the pleasure of visiting Mr. Towne, he has added many new species of heaths to his already choice and varied collection of this tribe. Some are seedlings, and may not prove to be true to the names attached; but they are entirely different from the others both in foliage and in growth. We believe Mr. Towne's collection has tended greatly to increase the taste, which is now spreading, for this lovely group of plants; for it is here that many of the finest kinds have been received and bloomed for the first time in the vicinity of Boston. We do not know exactly the number of species and varieties the collection contains, but it is upwards, we believe, of sixty; Mr. Towne has, however, promised us a list of all that he has, which we shall take an early opportunity to present to our readers.

Mr. Towne, besides adding to his heaths, has been very zealous in introducing many of the New Holland shrubs, such as the chorizemas, pimeleas, polygalas, &c. &c., and he has some very choice specimens. In calceolarias he has done considerable: many beautiful varieties will flower in the spring. But his room is so circumscribed, that he has to forego the pleasure of possessing many beautiful things.

Among the heaths we found several in flower: *E. tubiflora*, two plants of, were truly elegant objects; and a plant of *E. pubescens*, about three feet high and well branched, was one mass of bloom, disputing the palm with the *tubiflora*: we cannot say which we admired most; the former, with its thousands of tiny bells, exquisite under the most minute inspection, or the latter, bearing up its tall erect spikes of gracefully pendant tubular corols; both should be in every collection of heaths laying any claim to choiceness. *E. persoluta* is another charming species,

somewhat similar to the one called *cáffra*, but with pale pink or flesh-colored bells; it is called the garland flower, and well deserves the name: *E. rubida* and *versicolor* were in flower, but the plants were not strong, and consequently not fair specimens: *metulæflòra*, a very fine one, and *mammòsa*, have been superb all the fall and early part of winter. *Arbòrea* had been pretty, but the flowers were now nearly gone: plants of the *cáffra* were blooming beautifully; this, though one of the most common about Boston, is yet one of the most pleasing—it is a rapid grower and early bloomer, and of easy culture; some species are so difficult of growth that it is almost impossible to keep them alive; and when one of this kind gets into a collection, it is apt to dishearten the cultivator, or give him an impression that the tribe is one of difficult management: such, therefore, as are handsome, and at the same time of easy growth, should be first sought for, and the more delicate ones afterwards. *E. báccans*, one of the most exquisite of all, does not seem to flourish with Mr. Towne, while with us it appears to require little attention to grow it well. To understand the management of heaths, perfectly, much practice and careful observation is necessary: some flourish in a very sandy soil, while others require a stronger one; some require but little water, while others need a more liberal supply. It cannot be said that the plants are as easy to grow as a camellia or a geranium; but they are not so difficult of cultivation but what a little experience will overcome a major part of the obstacles to their successful management.

Among the other plants in bloom we noticed *Polygala cordifolia*, *Indigófera coccínea*,? *Crotalària élegans*, a beautiful plant, *Díósma capitata*, and *Gnídia pinifolia*, lovely with its heads of snowy blossoms. *Prostránthera purpúrea* and *Corræa pulchélla*, speciòsa and *viridiflòra*, each of which had been superb, but rather past bloom now; *Lechenaúltia formòsa*, in flower the whole season; *Kennédya coccínea*, *monophylla* and *monophylla* var. *Tòwneii*, a seedling, from the *monophylla* impregnated with some other variety, raised by Mr. Buist; it is very similar to its parent. *Acàcia verticillàta*, a small plant of, was covered with bloom. *Pimelèa ròsea* and *decussàta* will both be in flower by the time this appears in print. *Azàlea hybrida* was finely in flower; Mr. Towne prefers this to the *phœnicea*, both on account of the buds expanding before the leaves appear and the great exuberance of its blossoms, which give the plant the appearance of being one mass of flowers. We have never seen a plant of the *E'pacris grandiflòra* so truly splendid as one in this collection; some of the branches were thickly and regularly clothed, with its beautiful blossoms, for more than *fifteen inches* in length. The camellias have been handsome, but a great portion of Mr. Towne's attention is devoted to the heaths, which are admirably grown.

When the old plants become straggling and unsightly, as they always will, they are replaced by young and thrifty ones, raised either from layers or cuttings: by this mode his collection is always in health and vigor, and no naked branches and sickly foliage are to be seen, to impair the freshness of the luxuriant plants.

There are a great number of fine things crowded into this small house, but we have not the time nor room to enumerate only the more interesting. When the calceolarias are out there will be a rich treat.

Mount Washington garden, South Boston, Mr. McCullough.—Last year we noticed the establishment of this garden, and intended, long ago, to have given our readers some information respecting it; but we have from time to time put off our visit, from other engagements, until the present moment. Our account, however, though rather brief, will, we hope, be not the less interesting.

The range of houses comprises two separate buildings, each divided into two compartments. The first is the green-house, which is one hundred and two feet long, and about fifteen feet wide. The other is the forcing-house, and is seventy feet long, and of nearly the same width as the green-house. They are neatly erected, with a good slope to the roofs, and are warmed with brick flues. The compartments are divided by glass partitions.

The inside of the green-house, which we shall speak of first, is fitted up, in one part, with a back and front stage, with a walk between and a walk in front; in the other there is a stage at the back, corresponding with the one in the first part; but, in place of the front stage, there is a pit for the purpose of growing vegetables, or for plunging plants in pots. A small place at one end of this pit, over the flue, is partitioned off and covered with a sash, for the purpose of striking cuttings of various plants, which was at this time filled with heaths, diosmas, &c. Both ranges are entered from the ends, upon a level with the ground, and are only slightly sunk, so as to enable persons to stand in the front walk, without inconvenience. The walks are laid with strips of plank, so as to allow the water to pass off freely.

In the first green-house the back stage is filled with camellias, rhododendrons, acacias, and miscellaneous plants, in excellent health. *Acacia longifolia*, eight or ten feet high, and reaching to the roof, was blooming beautifully: a smaller one was also handsome. *Sparrmannia africana*, a plant which should be oftener seen in collections, was about throwing up flower-buds. Some of the camellias, most of which were white ones, were blooming. One of the most vigorous growths we ever observed on a camellia we noticed on a large plant here: two years ago the plant was imported; it lost all its leaves and many of the terminal wood-buds,

and all the branches were immediately cut in; the first season some of the young wood measured fifteen inches in length, and the second the growth was still greater, the wood of both years measuring, in some of the strongest branches, three feet or more in length, and nearly half an inch in diameter at the base of each. Camellias, when unsightly, from their crooked branches, should be always well pruned, and they may be brought into almost any shape the cultivator may fancy: when in ill health the surest method of a speedy recovery is to lop off all the branches; if the roots are in tolerable order, and the plant carefully repotted, a good growth is generally a certain result: no plant that we are acquainted with appears to bear the knife better than the camellia, excepting, however, the *C. reticulata*.

Mr. McCullough has a very good collection of geraniums, which occupy all of the front stage, except that part which is covered with a small collection of heaths. They are exceedingly well grown; indeed we have rarely seen geraniums with the wood so stocky and short jointed. Of heaths, the collection is somewhat reduced, from the sale of many of the best specimens; and few were left of sufficient size for blooming. A small plant of *E. cæffra*? in flower, and a large one with the buds not yet open, were all that will make any display. Among the small plants we noticed *E. mammòsa*, *ventricòsa* and *ventricòsa superba*, *cruénta*, *herbàcea*, *arbòrea*, and seedlings of a species with white flowers, with foliage like triumphans. We were happy to learn from Mr. McCullough that the sale of the plants has been beyond his expectations, and he intends to lay in a large stock for next season.

In the second compartment we found the pit filled with roses, for cutting the flowers, which were opening finely. The kinds were principally the common cabbage or undulàta, and the sanguinea, which, for its profuse and constant flowering, is not excelled by any rose: Lady Banks's yellow and white roses were also showing buds on small plants in pots. The place being a new one and the houses large, Mr. McCullough was under the necessity of preserving more common plants to fill the house than he otherwise would have done. Geraniums, however, are a very saleable plant. Under the stage, planted in the earth, and not in pots, as at Mr. Williams's, we observed a quantity of roots of the rhubarb; they were just pushing their leaves. A fine crop was procured last season in this manner.

Passing into the forcing-house, which has pits both at the back and in front, we found it filled with radishes, lettuces and parsley. The first pit at the back was planted with radishes, some twenty or thirty dozen having been already pulled: that in front was filled with parsley; in the second a crop of radishes had been pulled, and another was just coming on; in the front pit lettuces

had just been set out, and mushrooms were springing up in abundance from the spawn which was in the manure with which the pits were partly filled. For the latter Mr. McCullough has found a ready sale.

The place is yet so new, that not much can be expected from it; but taking into consideration the embarrassed state of the times for about a year, of the less than two of its existence, and we must award to Mr. McCullough much industry and perseverance. Every thing in the houses looked in good health, and cleanliness and neatness are preserved in every part. We have no doubt that, ultimately, it will yield a handsome income to him for his labor, and prove a source of attraction to the beautiful house to which it is attached, but by its name only. To the Mount Washington House, during the summer season, will resort many of the Southern and Western travellers, who usually, either for pleasure or business, visit this part of the country; and this garden will form a pleasant morning or evening walk to those who, either from interest or inclination, may frequent it. A good collection will serve to spread a taste for plants, and many persons may be induced to purchase who would otherwise, perhaps, have never scarcely looked at a plant. Its proximity to the city, and the easy and convenient conveyance thereto at all times, will also render it, particularly in summer, a place of great attraction. We wish Mr. McCullough every success.

Charlestown Vineyard, Messrs. Mason.—We found but little here to attract attention; the house is filled with various plants, including an abundance of roses, geraniums, stocks, &c. for the purpose of cutting bouquets; but Mr. Mason junior informed us that they had never, since they had carried on the place, done so little in this way; indeed, the call for bouquets has been so limited, that, for the last few weeks, they have not been called upon to furnish but two or three ordinary sized ones. The white camellias were falling from the bushes. Thus we see the effects of the deranged state of business upon the nurserymen: there are other causes which have tended to diminish the sale of bouquets, but the main one has been, the past winter, owing to the almost universal stagnation of trade, the very few private parties and public balls, and the little desire individuals have to purchase luxuries, when the difficulty seems to be to procure the necessaries of life. But we look to the brighter side of the picture, and hope for a renewed and active state of things, when the present gloomy times shall have passed away.

When we said that we found but little that was interesting here, we intended to except a most superb hybrid rhododendron now in bloom. The plant is not more than four or five feet high, and well branched, and has now open upon it about twenty-five heads of its brilliant blossoms, and upwards of twenty more will

be expanded by the time this notice sees the light, forming one of the most magnificent objects. The plant stands in a pot not more than a foot across, and, from the cramping of its roots, Mr. Mason attributes its profuse flowering: the foliage of the plant, however, shows the effect of their confinement in so small a space. It has been, and still is, a question, upon which cultivators are divided, whether rhododendrons should be planted in large pots, and allowed a vigorous growth, or whether they should be kept in small ones, to make them produce their flowers. We can hardly say that we are ready to give our opinion. We have seen them managed in both ways, and with good success; with the Nepal species we do believe that the plants should be allowed an abundance of pot room; but with the hybrid varieties between that and the *máximum* and *catawbiéense*, we are inclined to think that it is in accordance with their natural habits to confine the roots. We have seen the *R. máximum* growing on the pine barrens in New Jersey, where it would seem that its roots could not procure the least nourishment whatever; still the plants were from six to ten feet high, and every branch terminated with a bud: thus it would appear that they require less nourishment for their roots than some would suppose. Whatever may ultimately be found the most successful mode of growing rhododendrons in pots, we must own that we have never seen a plant, of twice the size of Mr. Mason's, which exhibited such a quantity of flowers.

Among the plants in flower we noticed *Erica báccans*, arbòrea and mediterrànea. *Acàcia longifòlia*, azaleas, *Calceolària pàllida*, *Mimulus Smithii*, &c. *Virgìlia lùtea* had been beautiful with several racemes of its elegant yellow flowers. Messrs. Mason have a good stock of purple and white azaleas, roses, including the Lamarque and other fine ones, and an abundance of the more common plants. The house is kept rather cool, so as not to excite the vines, which are of more importance than the plants. The wood is large and well ripened, and a fine crop is anticipated. In the peach-house, in the rear of the green-house, the trees began to swell their buds during the warm weather of January.

Hawthorn Grove, Mr. Wilder's.—Since the fall of 1836 we have not had an opportunity of visiting the fine collection of plants here but once; this was in the succeeding spring, but we had no time to enumerate any thing except the camellias which would then bloom, and of which a list was given in vol. III, p. 68.

Since our last visit Mr. Wilder has made some alteration in the internal arrangement of the house. In the camellia compartment, between the stove and green-house, the back stage has been entirely removed, and a border substituted, on which the

plants stand; to make this of proper width, the walk, which formerly ran directly from one end of the range to the other, (see plan, vol. II, p. 203,) has been removed farther front, so that, upon entering from the first apartment, or what was once the stove, it turns to the left, and the eye rests upon the camellias now, where it once, at the first view, discerned only the walk. In the place, too, of the old front stage and walk, a small stage is now erected, which slopes up from the walk to the front of the house. In the stove there is a pit in the centre, about five feet wide, and a walk around three sides of it: against the back wall is a low stage, about four feet wide, on which are placed the large plants. By referring to our plan of the range, except the stove, which has been added since, some idea will be formed of the alteration in the camellia-house, which we think vastly for the better; it is what we informed Mr. Wilder he would ultimately have to do; for it could not but be foreseen that the large plants could not be placed on stages without touching the roof. In describing Mr. Sweetser's house, in our second volume, (p. 5,) we have advanced our ideas on this subject.

The first part of the range, which has two stages, one in front and one at the back, is filled principally with geraniums and heaths. About the whole of the back stage is devoted to geraniums, one or two of which had just begun to open their flowers. Mr. Wilder has been at some trouble and considerable expense to procure the finer varieties, and probably possesses the best collection in the vicinity of Boston. Mr. Donald, the gardener, has raised forty or fifty seedling plants the past year, which give promise of being fine: they were raised from seed of superior kinds, which were impregnated with others equally fine: a few were raised from Dennis's Perfection, which have the appearance of the finest. We hope we shall have the opportunity of seeing them when in bloom. The heaths, which were mostly raised from seed, were looking well, but not so vigorous as we should like to have seen them: few were in bloom. Some of these were injured last summer by mildew. *E'pactris impréssa* and *paludôsa* had both been beautiful, but were now fading. *Gnîdia pinifôlia*, several pots of, was one of the most charming things in the house; it should be found in all collections. *Corræa speciôsa*, one of the best grown specimens we have ever seen, was also full of flowers. One of the most showy plants was the *Ribes speciôsum*; two years since it was imported, and was but about six inches high; it now has two branches about four feet high, which were covered, from the pot to the tips of the shoots, with its beautiful drooping scarlet flowers, very much resembling a fuchsia; though considerably coarser in its foliage, the flowers contrast with more effect, with its deep green, than the fuchsia, with its brown and rusty leaves. Mu-

ráltia *Heistèria*, *Prostránthera purpúrea*, and several other plants, were beginning to flower, and *Lechenaúltia formòsa* has been in bloom all the fall and winter: it is an exquisite little plant.

Passing into the camellia-house, the *coup d'œil* was delightful. We were struck with surprise at the great quantity of fine specimens which Mr. Wilder has spared no pains nor expense to procure. The standard plants, which we have before noticed, were mostly in bloom; two of them in particular, *flórida* and *Welbánkii*, were indeed magnificent. We have never seen such flowers as were produced on these plants. On *Welbánkii* we counted upwards of twenty, some of which were between five and six inches across; the plant was literally white with the abundance of blossoms: *Greville's* red and *Lady Hume's* blush had each been superb, but were now past their height of bloom. Of the smaller plants, arranged in front of the tall ones, *C. reticulàta* was the most prominent. Two plants had each two flowers expanded, and for gorgeousness none of the other species or varieties anything equal it; one of the flowers measured six inches across: they were easily seen nearly the length of the house. A specimen of this species, eight or ten feet high, with twenty or thirty flowers open, would be a grand object. It would be impossible to enumerate all the camellias that we observed in flower, but we add a few of the best; *C. j. var. Vandèsia* was exceedingly elegant; *concinna* superb; some of the flowers had been on the plant for weeks: it is one of the best of *Chandler's* seedlings: *Buckliàna* is a French one of much merit. *Dorséttii* has also been fine: one called the Prince of Orange was spotted somewhat in the way of a fine double-striped: two plants of *imbricàta* will soon be superb. The more rare ones, still to flower, were *francofurténsis*, *ròsea*, (of China,) *Donckelaèri*, &c. Many of the French varieties are synonymous with the English names, and many of them are single ones; a few only will rank high in comparison with the English sorts: they will all be described in Mr. Wilder's papers, one of which will be found in a preceding page. While speaking of camellias, we may mention that Mr. Wilder has lately received from the continent a lot of plants, embracing varieties which are now selling at enormous prices. He has briefly described several of these already, p. 22. The plants are remarkably small, with a few exceptions, and if the weak ones succeed, he will have a most magnificent addition, if we can place any confidence in the foreign descriptions: *ochroleuca*, *Palmer's Perfection* and *King* were mere buds, with scarcely a leaf; the two latter are now selling at from two hundred to four hundred francs each in Germany, no larger than Mr. Wilder's. Some of the plants have started well, and we hope they will all succeed. Mr. Wilder showed us some

seedlings of the present season about three inches high, which had the appearance of partaking of the character of the *C. reticulata*; the stems were pubescent and reddish, and the leaves somewhat reticulated. A seedling of *Colvillii*, impregnated with *élegans*, will be likely to produce something fine.

Since last season we think the health of the camellias, under the care and attention of Mr. Donald, has been improved in a great degree; and they now present a most luxuriant appearance; a few plants look ill, as there always will be some in great collections; but, taken as a whole, few equal Mr. Wilder's.

But the camellias were not the sole attractions of this department. Three or four acacias appeared, from the loveliness and delightful odor of their blossoms, to vie with the superb camellias; nor could they be considered less attractive. *A. lanceolata* was an exquisite one; from the bottom to the top of the plant, which was eight feet high, and to the tips of all the lateral shoots, extended the flowers, which are produced in small racemes, about an inch and a half in length, and of a very pale yellow tint; *rigida*, with stiff and spare foliage, but with axillary balls of deep yellow flowers, was charming: but the two best were the *A. pubescens* and *conspicua*; the foliage of the former is charming, and the flowers also are most delicate; yet the *conspicua* excels all the others; the flowers are produced in small globular heads, in very large pendulous clusters, presenting one mass of odorous deep yellow blossoms. The *A. spectabile* is a lovely one, but hardly so superb as this. Mr. Wilder also has several which he raised from seeds which have not yet flowered. We hope that, now we have the fine kinds introduced, they will become general favorites: no plants can give more satisfaction in a collection than the acacias.

Rhododéndron hybridum, eight or ten feet high, was covered with buds, which will be out by the time this appears in print. *Magnòlia Soulangeiana* was breaking one or two buds, but they were not open sufficiently to judge of its beauty. *Azàlea punicea*, *hybrida*, &c. will each be elegant in a few days. *A. indica Smíthii coccinea* was blooming charmingly, as was the *indica ignescens*, which greatly resembles the former. Mr. Wilder showed us a plant of the *Bignònia jasminoïdes*, which we noticed a short time since. One charming plant we had nearly forgotten; this was the *Caméllia euryoides* var. *rosea*: it has the same pendant and graceful habit as the *euryoides*, but the flowers are of a soft and lively pink. It is probably the first time it has ever flowered in this country. We could mention many other things in the camellia-house, but we have no room.

The stove is so full of various plants, including some of the new camellias, that Mr. Wilder informed us he had found no

room to place his beautiful amaryllises: they have consequently lain in the back shed all the season. Of the more showy things, *Myrtus tomentosa* has reached the height of six feet and upwards. *Brugmansia sanguinea* has opened some flowers, and had numerous buds upon the plant; it is a handsome species. *Blètia Tankervilleæ* had thrown up three spikes of its superb flowers. The *Doryánthes*, *Strelitzia augústa*, &c. have made very luxuriant growths, and are in fine condition. A fine *Pandanus* has been added to the collection. *Clíanthus puniceus*, planted in the border, and brought through, into the stove, and trained up a rafter, has made an excellent growth, but shows no signs of flowering. This Mr. Wilder attributes to the heat of the stove being too great for the plant, which keeps it constantly growing. It has been very generally flowered in England the past year, and we hope soon to see its noble blossoms ourselves. Two species of *Limònia* were bearing each a large and rich looking fruit; they were the *L. monstrósa* and *rubescens*. *Epiphyllum truncátum*, grafted on *Céreus triangulàris*, had made a fine head and blossomed well the past winter; we have before recommended this mode of cultivating the truncátum. *Justícia coccínea* was just showing a spike of its brilliant corols. The orchideous plants were doing very well, as were all the plants. We have not noticed half of the fine things, but want of room compels us to abridge our remarks, much against our will.

We are glad that Mr. Wilder has so good a gardener as Mr. Donald, and we are sure that Mr. Donald could find no one who would better appreciate his labors than Mr. Wilder. The collection of plants is, however, so much increased, that it requires great attention and constant labor to keep every thing in proper order. When plants are imported at great expense, alive, it is disheartening to lose them by bad management, and we are gratified to believe that this will not often be the case with those under the care of Mr. Donald. It must be a source of no little pride with him to have the charge of so fine a collection.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

Climate of St. Augustine, Florida.—After giving the extracts from Dr. Perrine's letters in our last, the following, which we extract from a daily paper, will be read with interest. In such a delightful climate the raising of the mulberry and the producing of silk must be a successful and profitable employment.

"I believe I informed you that I had about twenty acres of land in the city, with an orange nursery, and also one of mulberry. I found the difficulties connected with building so great, that I embraced an opportunity of purchasing a good new house, with a garden well filled (yes, in January,) with vegetables ready for use, and we are now snugly located in our own domicile, on the margin of the bay, within a hundred feet of the sea wall, and in plain view of the ocean, and have abundance of peas, turnips, radishes, cabbages, &c. &c. in the highest perfection in our garden. I have got my planting and farming under good way; have succeeded in hiring a few good men; have planted my early potatoes, and begun to set out orange trees, and next week will commence making garden for spring.

"In this climate there are two regular seasons for gardening, and peas can be raised every month in the year. I have them full grown, and also in blossom, in my garden at this time. The orange, fig and olive thrive here well. The frost which, in 1834, for the first time in ninety years, destroyed the orange trees, spared the fig. Little attention has been paid to growing them. I shall plant an acre or two in figs, and ten acres in orange trees, this winter. This will not lessen the value of the land for corn, vegetable or cotton crops. I can also plant about five thousand mulberries along my fences, which, in addition to what I have growing, will furnish leaves say for two hundred thousand worms. The leaves will be fit for use the first of April, or perhaps the middle of March, and continue until the first of November, so that several crops of silk can be obtained during the season. I hope to be able to test in a small way the adaptedness of the country to the silk business. I subjoin a statement of the temperature of the weather, since the year commenced. You will be astonished that we are here in the midst of summer, while you are shivering around your fires, and pitying the poor who have none. The poor! what a country this for the poor. It is a singular fact that there is not a beggar seen, nor a person supported by charity, in this city. The aged and infirm are supported by friends or relatives, and the healthy can raise vegetables, and take fish and oysters so easy, that begging would indeed save them but little labor, and clothes to cover their nakedness is all that they require.

"You may think me dealing in fiction—not so, nor do I wish to represent this as a paradise; there are some discomforts; now and then a mosquito, an ant, a cockroach, a lizard, and a few other of the reptile and insect families, more than desirable in summer, (not in winter.) But even these may be thinned off. A society in London for the promotion of natural science, has sent out a Mr. Doubleday to catch insects, who is now in the country; but if the bugs are as unwilling to leave Florida as the Mickasoukies, and as good at hiding, he will get but a few, and those by stratagem.

* * * * *

"You may suppose, that although the winters here are so delightful, the summers are the same as in New Orleans, or other southern climates. Not so. It is the exemption of this place from every kind of summer fevers which prevail on all the southern rivers, which makes it the fit abode for the invalid. I do not include the interior of Florida, but this and some other points on the Atlantic coast. The whole low country west of the St. John, and the low country of Georgia, South and North Carolina, and even a part of Virginia, is so sickly during the summer months, that those who can, leave the country, and retire to the highlands, or to the seashore, and even some of the sea islands are not considered safe for summer residences; but this place has been noted as a healthy post. When under the Spanish, and during its occu-

pany by the British, they had extensive accommodations provided for the invalids, particularly the officers of both army and navy, who resorted here from England, the West Indies, and the United States, before and during the revolutionary war. Several gentlemen who reside here, have travelled for their health over the south of Europe, South America, and the West Indies, and give a decided preference to this place over all others, for a summer and winter residence. Persons visiting this place as a remedy for pulmonary complaints, ought by all means to spend the summer, which they can do as safely as in Boston or Nantucket. Physicians, and those invalids who have recovered their health here, all concur in the opinion that a summer residence is more favorable to health than even the winter. An impression has prevailed that East Florida is a barren, sandy plain, interspersed with swamps, or hammocks and lagoons, and can be but partially inhabited. This is a great mistake. True, (and strange it is so,) but little of the country has ever been until recently explored by white men, and very much of that is sandy and poor. But even in the portion of the country well known, much valuable hammock land is found, both on the coast and between that and the St. Johns, and also west of it. But the recent discoveries of the sources of the St. John, between two and three hundred miles south of Lake George, (its supposed head until lately,) has given a new and highly interesting character to this country. Large tracts of the richest sugar land, heavily timbered with live oak, hickory, ash and magnolia, are found. This part of Florida lies south of the region of frost, and here the fig, citron, orange, date, olive, plantain and banana will find their natural soil and climate, and in a few years render the United States independent of foreign countries in the supply of these articles. Florida, and particularly the newly discovered portions of it, will undoubtedly settle rapidly as soon as the Indians are disposed of, and a most favorable opportunity will be presented for those to settle in this country whose health requires a southern climate.

“ January, 1838—Thermometer, noon, above zero—

1st, . . . 60	6th, . . . 69	11th, . . . 61	16th, . . . —
2nd, . . . 66	7th, . . . 72	12th, . . . 56	17th, . . . 74
3d, . . . 69	8th, . . . 75	13th, . . . 62	18th, . . . 74
4th, . . . 70	9th, . . . 66	14th, . . . 63	19th, . . . 76
5th, . . . 70	10th, . . . 62	15th, . . . 70	20th, . . . 58

Ancient Pear tree.—There is now growing, near the house of Mr. Kenney, in Eastham, Mass., a pear tree, imported from England by Governor Prince, and planted by him. Governor Prince removed from Duxbury to Eastham, in 1640 or 1645, and, leaving Eastham, returned to Plymouth in 1665, so that the tree is at least one hundred and eighty, and probably two hundred years old. It appears to be in a sound and perfectly healthy state, very lofty, and near the ground is of the circumference of ten feet. The fruit is small, but very fine, and the tree, according to the statement of a very aged man, had, ever since his recollection, borne on an average fifteen bushels annually; and that tradition, going back more than one hundred years before his remembrance, represented the tree as equally productive; so that this tree must have borne about three thousand bushels of this delicious fruit since it was first transplanted.—(*Yarmouth Register.*)

Extraordinary rapidity in the growth of a Cucumber.—A little time since a bet of £5 was made with Mr. Ely, that he could not produce by his system of culture a cucumber twenty inches in length, in the space of eight days from the time of setting the blossom. The wager was accepted; and, within five hours of the period named, as choice and handsome a fruit as was ever seen, and in length twenty-one inch-

es, was cut from the vine. It ought to be mentioned that no lining was used, and that the frame in which it was grown was of the commonest description, and not the better for its wear.—(*Suffolk Chronicle.*) [Mr. Editor: The above scrap I copied out of an English paper. Can you explain what Mr. Ely's system of culture is?—*Yours, G. B.*]

ART. II. Faneuil Hall Market.

		From To				From To	
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
<i>Roots, Tubers, &c.</i>				<i>Pot and Sweet Herbs.</i>			
Potatoes, new :				Parsley, per half peck,	50	75	
Common, { per barrel,	1 00	1 25		Sage, per pound,	17	20	
	40	50		Marjorum, per bunch,	6	12	
Chenangoes, { per barrel,	1 25	1 50		Savory, per bunch,	6	12	
	37½	50		Spearmint, per bunch,	6		
Eastports, { per barrel,	2 00	2 50					
	1 00			<i>Fruits.</i>			
Sweet, { per bushel,	none.			Apples, dessert :			
	50	75		Common, { per barrel,	1 50	2 00	
Turnips, { per bushel,	17	20			75	1 50	
	50	75		Russets, { per barrel,	2 00	2 25	
Ruta Baga, per bushel,	50	75			1 00	1 50	
Onions :				Baldwins, { per barrel,	2 00	2 50	
red, per bunch,	4	6			1 25	1 50	
white, per bushel,	none.			Bellflowers, { per barrel,	none.		
yellow, per bushel,	1 25	1 50			per bushel,		
Beets, new, per bushel,	50	75		Golden pippins, per bushel,	1 50		
Carrots, per bushel,	50	75		Pears :			
Parsnips, per bushel,	75	1 00		Chaumontel, per dozen,	37½	50	
Horseradish, per pound,	8	12		St. Germain, per dozen,	75	1 50	
Radishes, per bunch,	12½			Prince's St. Germain pr doz.	none.		
Shallots, per pound,	20			Winter Katin, per doz.	25		
Garlic, per pound,	14			Baking, { per barrel,	5 00	6 00	
					2 00		
<i>Cabbages, Salads, &c.</i>				Quinces, per bushel,	none.		
Cabbages, per dozen :				Pine-apples, each,	25	50	
Savoy,	50	75		Grapes, per pound :			
Drumheads,	1 00	1 25		Malaga,	25		
Red Dutch,	75	1 00		Cranberries, { per bushel,	2 00	2 50	
Cauliflowers, each,	12½	25			50	75	
Brocolis, each,	none.			Oranges, { common, per doz.	25	50	
Lettuce, per head,	10	12			50	75	
Celery, per root :				Lemons, per dozen,	25	37½	
Giant,	8	12½		Cocoanuts, each,	5	6	
Common,	6	10		Shaddocks, each,	25		
Spinach, per peck,	50			Walnuts, { per barrel,	5 00	6 00	
Rhubarb, per lb.	37½				2 00	3 00	
				Chestnuts, { per barrel,			
<i>Squashes and Pumpkins.</i>					4 00	5 00	
Squashes, per pound :				Almonds, (sweet,) per pound,	12	14	
Autumnal marrow,	none.			Filberts, per pound,	4		
Lima,	4	6½		Castana,	4		
Winter crookneck,	4			English walnuts, per lb.	5½	6	
Pumpkins, each,	12½	20					

REMARKS.—A duller month than the present, up to this date, has not been experienced for a long time. The weather has been steadily cold, totally unlike the warm days of last month, and no activity seems to

have animated buyers or sellers. Very little has been done in exports, as the Southern markets seem to be tolerably well filled with the stock sent away in the early part of the season. We have never known two successive months when the prices of productions did not undergo a greater change than during the last and present. Usually the supply of many vegetables and fruits is brought down rather low by February; and if the weather is cold, so as to prevent farmers and marketmen from bringing in their articles freely, the prices soon advance. But there seems to be scarcely one thing which commands a higher price now than it did in December. In truth, were the supply extremely small just now, it would be equivalent to saying the article was all sold to greatly increase the price; as purchasers appear to have a limit which they will not go beyond, whether what they want is to be had in scarcity or abundance.

Potatoes are dull: none of any consequence have been received since our last, but yet there appears a plentiful stock; no alteration of prices. The Swedish turnips, or *Ruta Bagas*, were very large and fine last season: this vegetable is getting into more extensive cultivation, as it should. No white onions in the market; of yellow and red a good supply in bunches. Radishes come to hand slowly, in sufficiency, however, for all demands at the present moment. Cabbages are abundant enough, excepting Savoy, which have been pretty much sold off, especially the best; they have slightly improved. Lettuce is most excellent and cheap for the season. Good celery is getting scarce. But little spinach has been received. Some excellent forced rhubarb has come to hand this week, it being probably the earliest of any that was ever brought into the market.

The stock of squashes is more reduced than usual. There has not been one received from the West Indies for a long time; autumnal marrows and Limas are both about gone; only now and then one can be had, and all that remain are a few superior common crooknecks, which command our quoted prices freely. A stock is anticipated from the West Indies: if a quantity comes to hand prices will diminish.

There is very little doing in fruit; apples of all sorts remain the same and sales dull; the Baldwins are all picked over with great care. Pears are about done; a few of the "Winter Katins" remaining. A few dozen pine-apples have been received from Havana. Grapes are scarce. Cranberries have advanced a mere shade for good quality: ordinary may be had at the rates in our last. Some beautiful Havana oranges have come to hand, and sold quickly. Walnuts and chestnuts continue scarce. Of castana, filberts, &c. &c. a great abundance.—*Yours, M. T., Boston, Feb. 23, 1838.*

HORTICULTURAL MEMORANDA

FOR MARCH.

March is a busy month with the gardener. Hot-beds should be prepared, seeds sown, &c. The green-house at this time requires more attention to airing and watering, and inarching, grafting, propagating by cuttings, &c. should now be done. The quicker the better: an open

month, or mild weather at the close, will draw attention to the open garden, if it is of any size, and the consequence will be a neglect of other things.

FRUIT DEPARTMENT.

Grape vines in green-houses will be soon starting: keep the branches tied down, to make them break even; but, as soon as the eyes fairly burst, tie them neatly and carefully up to the trellis or rafters. If the house should be dry syringe once a week. Cuttings may be put in in hot-beds, and plants in pots may be introduced into the green-house, if there is room. Native kinds, where neglected in the fall, may now be pruned. Uncover foreign kinds in the open air at the close of the month.

Raspberry vines should be uncovered the last part of the month.

Strawberry beds should also be uncovered unless very cold.

Gooseberry plants should be dug between as early as the ground will permit.

FLOWER DEPARTMENT.

Camellias now begin to shoot and make new wood: repot such as need it, and give an abundance of water. Inarching should now be performed.

Dahlia roots, wanted for early flowering, should now be brought into the green-house. Sow seeds in pots now for producing new sorts.

Tulip and hyacinth beds should be uncovered the latter part of the month if mild.

Amaryllis formosissima should now be set out in pots for early flowering.

Azaleas should now have considerable water.

Polyanthus and auricula seeds should be sown this month.

Amaryllis: continue to pot all that show buds.

Alstræmerias should now be potted in rich light turfy soil.

Heaths coming into bloom should be watered carefully. Cuttings may now be put in successfully and the seeds sown.

Pansy seeds now planted in pots will bloom early and fine if transplanted into the border.

Chinese primrose seeds should be carefully looked after.

Ixias and other Cape bulbs should receive a good supply of moisture.

Cactuses should yet be kept dry and cool until they show their flower-buds.

Oxalises, in pots, should be sparingly watered.

Annual seeds of many kinds may now be sown.

VEGETABLE DEPARTMENT.

Cucumber seeds should now be sown in a brisk hot-bed. For directions see Vol. II.

Radishes, lettuce, &c. should now be planted for early crops.

Celery, for an early crop, should be planted now.

Tomato and egg plants should be planted immediately.

Asparagus beds will need forking over lightly the latter part of the month.

Rhubarb in the open ground may be forwarded, towards the close of the month, by placing over the roots a tub or pot, and around this two wheel-barrow-ful of fresh manure.

THE MAGAZINE
OF
HORTICULTURE.

APRIL, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Live Hedges.* By WM. KENRICK, Newton.

LIVE hedges constitute the most durable and effectual, as well as the most beautiful fences known, when properly managed and trained. A perfect hedge should form a barrier, close and compact to the surface of the earth. But every thing depends on proceeding aright in the beginning; it is rarely we see a hedge perfectly well trained, and managed, in all respects, as it ought to be.

Mr. Russell, in one of your late numbers, has given some excellent directions for their management,—I have therefore little only to add, and shall make but a very few brief remarks.

The most suitable time for planting a hedge is in spring. The ground should be prepared in the autumn previous, by throwing out the upper or black soil to the width of three feet: this may be in part effected by the plough. The yellow or sub-soil is next to be cast out, to the depth of eighteen inches from the surface, and to be thrown away to a distance. Early in spring, fill in the trench with black loam, intermixed with a suitable portion of compost manure, the whole to be thoroughly incorporated with the soil.

The plants should be strong, of two or three years growth, and such as have been before transplanted are to be preferred. These are to be *sized*; all of equal size being placed contiguous; one third of their tops, and no more, may be cut off at the time of planting. The trees are to be set in a single row, at the distance of eight or nine inches asunder, by a stretched line. Early in the spring of the second year from planting, proceed to fill all gaps, from trees which should always be in reserve, and

shorten every tree to within three or four inches of the ground, and during summer they will each throw up from two to four strong shoots. This operation should never be performed at the time of planting, as trees thus shortened, and cut down at planting out, and before they have taken root, are liable to die, or to become stunted, growing feeble and throwing out not more than two or perhaps only one feeble shoot.

In the third year, and early in spring, cut down anew those few over bearing shoots, as Mr. R. has directed, which incline to ascend above the rest; and give the hedge a very moderate pruning, with a sharp and keen instrument, in form of a *bill*, striking upwards, and never apply the shears to a hedge. Lower the top shoots a little, to compel the hedge to expand at the sides, rising to a point at top, and assuming the precise form of a very steep, sharp-pointed roof; this form is given to the hedge by the eye, and is to be forever preserved.

Early in spring, as soon as the frost is out of the ground, is the most suitable time to prune the hedge, lowering the top at each annual pruning, sufficient to cause suitable expansion at the sides. Thus, in about five or six years from planting, a hedge the most beautiful may be formed, of as many feet in height, which will finally become impassable to man or beast. So impassable may a hedge be formed by this mode, as to exclude even a rabbit or a cat.

During the first few years, the ground must be kept clean to the distance of three feet on each side, until of sufficient strength, and cattle must be excluded until this period. When hedges are pruned flat on the top, and vertically at the sides, snow is not only liable to lodge on the top during winter, but the lower limbs perish for want of sun and air, and rain and dew, and the hedge becomes imperfect at bottom; and in time the lower limbs invariably perish, leaving naked and unsightly stems.

Early in spring, and just after the frost is out of the ground, and before vegetation commences, is the most suitable time to shorten in the hedge on both its sides, and to cause it gradually to assume the suitable form as before described. Straggling shoots may be occasionally shortened during summer. But a regular and complete pruning, or dressing, should never be given to a hedge during the summer months, or during the occasion of its rapid growth, as this causes a sudden stagnation of the sap, and operates to stint or to ruin the growth of the hedge. A tree cut down early in spring, will start up vigorously from the root; but a tree cut down or severely topped during June, July or August, commonly dies outright, or, if it lives, it sustains irreparable injury.

The English white thorn does not bear well our summer's sun, and is therefore unsuitable. It is also liable to be annoyed

and devoured at the root by the borer. The Washington thorn, so called, grows vigorously and forms an excellent hedge, but is also liable to the attacks of the same destructive insect.

The Osage orange, (*Maclura aurantiaca*), is a native of Arkansas; the leaf is beautiful, of a deep shining green, resembling that of the orange, and the wood, like that of the orange, is covered with long sharp spines. It is said to form the finest hedge in the world. On my hill I have trees over a dozen feet high, which have borne the winter uninjured during eight years; but in my low grounds, during the winter of 1836-7, I left five thousand very small trees exposed,—these were killed quite down in that winter, but grew again vigorously, in the following summer, and this winter they escaped, with a partial injury at the tips. Therefore the Osage orange can only be recommended in high grounds, where I am persuaded it will answer well.

Mr. Russell and many other gentlemen have recommended the buckthorn, *Rhamnus catharticus*, as the most suitable of all plants for our climate. This plant has much to recommend it. It is perfectly hardy; it grows well in all soils, and even rapidly in a soil that is moist; it is never browsed by cattle, on account of the extreme bitter taste and medicinal qualities of the bark and wood; and owing to this cause it is never annoyed either by mice or the borer. The thorns of this plant are few in number, and these grow, like those of the pear tree, only at the tip ends of the twigs.

The cockspur, or Newcastle thorn, (*Cratægus Crús-gállí*), is a handsome plant, perfectly hardy, and well suited to our climate; of rapid growth; the leaves are very beautiful, dark green and shining; the thorns numerous, very sharp and strong. It makes a hedge the most beautiful and substantial.

John Prince, Esq., of Jamaica Plain, has tried a hedge of this thorn during nineteen years, and esteems it the best of all thorns for a hedge; and though his grounds were much infested by the borer, they have never touched this plant. I think this thorn and the buckthorn the most suitable and valuable for our climate of all I have ever seen tried. The red cedar is said to make a fine hedge, if properly trained.

WILLIAM KENRICK.

*Nonantum Hill, Newton, }
March, 1838. }*

[Those of our readers who are seeking for information on planting hedges, will, we doubt not, feel highly gratified for the addition of Mr. Kenrick's remarks to those of Mr. Downing and Mr. Russell. They are in themselves complete.—*Ed.*]

ART. II. *On the Pruning of Apple Orchards, with hints on Pruning Trees in general.* By J. W. RUSSELL.

SIR,—Passing through Brighton and Brookline, to Roxbury, about a fortnight since, I noticed several old orchards of apple trees. One, in particular, in the last mentioned place but one, close to the side of the road, attracted my attention. The trees were promiscuously scattered over a grass-field, and had evidently been the tenants of the soil fifty or sixty years: the pruner was at work, cutting, apparently, without paying any regard to age or quality; for aged they assuredly were, and, as to the quality of the fruit they bear, no person, I should suppose, could possibly entertain a doubt of its goodness, owing to the situation being not more than five miles from Boston, where there is every chance of obtaining scions from the Horticultural Society's room, from the *seed-stores*, or from amateurs and nurserymen, in the spring of the year, at a cheap rate, —therefore, taking into consideration the ease and facility of procuring *scions* of the very best sorts of apples, as well as any other kinds of choice fruits, and the trees, from the best of my judgment, not having the slightest appearance of having been grafted or renovated the last twenty years, I concluded that the fruit they produced was of a good quality.

“What can be the motives of this man,” said I to my brother, who accompanied me, “for lopping off those large branches, that look so clean and healthy, and so thickly studded, too, with fruit buds, when all that is really necessary to be done to such old trees is simply to take out the dead wood, and those branches that cross and rub against each other, and the summer shoots, that spring from the *main stems*, in the *centre* of the trees?” The suckers, that spring from the roots, should be also carefully grubbed up; and the rough bark ought to be scraped from the trunks and stems of the trees, in order to dislodge the eggs of insects which are generally deposited in such places.

The cutting out of large branches, (from four to six inches diameter,) from trees the age spoken of, is in my humble opinion an unpardonable fault, i. e. if the trees are worthy of remaining in the ground at all. In the first place, by taking off a branch the size just mentioned, the wound will hardly if ever heal over; therefore, if a number of such cuts are made on the same tree, the injury done is irreparable, and finally premature disease and death are the consequence. In the second place, by divesting the tree of its *arms*, as it were, the protection that it has been wont to have heretofore, in storms and sunshine, is gone, and the poor helpless old tree is buffeted about by every strong wind that blows, to its no little injury.

However simple the pruning of fruit trees may appear to some persons to be, I still think we have much to learn; trees that have been for a number of years neglected, and left to grow *wild*, should by no means be thinned out so much as appears to be necessary, either the *first*, *second* or *third* season. A tree ought to be brought into a good shape by degrees, by the cutting out of a small portion only of the useless branches annually: by so doing the tree is hardened gradually, which should be borne in mind to be a very necessary process. The practice of cutting probably one half of the branches from a tree, the first year, cannot be too much deprecated; for by so doing the tree is too suddenly exposed to the hot rays of the sun, which burn or scald the main stems, which may be readily known by their turning black, and the bark blistering and cracking. The frequent practice of *not* cutting *close* to the part from whence the branch is taken should never be overlooked; indeed, no person can have the least pretensions of being a pruner of trees who is not already acquainted with this fact.

By proper attention being paid to the apple orchard annually, there will seldom be any necessity to take off any thing but suckers, and such annual growths as may impede the well doing of the trees. I would by no means recommend the system of dishing an apple tree in the centre, like a bowl, or, in other words, leaving the tree open in the centre. I do not wish to be understood as preferring an apple tree to be formed like a button-wood or Lombardy poplar; on the contrary, I am an advocate for a spreading habit. All I contend for is, the filling up of the centre of the tree, as a partial shade from the hot rays of the sun which affect the main branches that ramify off horizontally. I am convinced, from general observation, that the main *stems* that are *naked*, in the centre of an apple tree of *spreading* habit, ought (in this country) to be partially shaded from the direct rays of the sun, more especially if the season is hot and dry. Finally, a medium system of pruning is much the best in this climate: allowing trees to grow close and crowded, or to be pruned out very thin and open, are, both, equally objectionable.

J. W. RUSSELL.

Mount Auburn, March 10th, 1838.

[The above remarks of Mr. Russell are founded in truth. American cultivators have been guided altogether too much by English practices. In our climate, where the sun shines not only much more intensely but ten times as much, a tree does not require to be pruned as openly as in England, where everything is done to catch the least ray that glistens.—*Ed.*]

ART. III. *Observations on the Cultivation and Management of Dahlias.* By the EDITOR.

THE dahlia is so well known and generally cultivated, that it may seem almost superfluous to devote an entire article to their management. Already several papers have appeared in our previous volumes, in which have been detailed their propagation and growth, and some account of the first introduction of the original species into Europe. With the information contained in these articles, which have been contributed by the most successful growers, it would seem that any one, who has had much experience in gardening, might gather a knowledge therefrom sufficient to render his practice successful, and that even those who have never cultivated a plant at all, by following the rules laid down would meet with partial success. But the dahlia, like every other plant, has its favorite soils and situations, and there are many circumstances connected with their growth, which often, under what would appear the very best management, cause them to fail altogether.

It is but a few years since the double dahlia was first introduced to this country; but so safely are the roots conveyed to any distance, with such facility are they increased, and so easily are they cultivated, that they have been spread from one end of the Union to the other. In town and in city—decorating alike the cottage of the humble, and the mansion of the wealthy—often flourishing with the same vigor on the partially barren plain as in the highly cultivated garden, they have become, as their splendor fully entitles them, one of the greatest and most valuable ornaments of the garden. Blooming at a season when the flower border is fast fading in beauty, increasing in splendor until the frosts and chilling winds of autumn cut them suddenly off, and more varying in the richness and brilliancy of their colors than any other plant, they can justly claim a great portion of attention at the hands of the cultivator.

But we need not stop here to eulogize their merits; what all concede to be superb, who have ever had an opportunity to see the flowers, it is unnecessary for us to praise. The varieties increase in splendor every year, and to such perfection has their cultivation arrived, that it is difficult to select out of thousands of seedlings only a few which are superior or even equal to those previously produced. Hitherto the production of seedlings, particularly of those considered by good judges as worthy of cultivation, has been confined almost wholly to England. The Dutch florists and the French amateurs and nurserymen have each raised thousands of very elegant *double* dahlias; but for symmetry of form, variety of color, and elegance of habit, the

English have very far exceeded the Continental growers. Before the properties of a dahlia were established by the English gardeners, a double one, no matter how irregular its petals, was considered as a flower of great beauty. Acres of seedlings are now grown every season.

In this country few persons have attempted to produce seedlings, with a view to raise those which would excel the English varieties. Mr. Buist and Mackenzie of Philadelphia, and Mr. Feast of Baltimore, are, we believe, the only growers who have, as yet, produced any that are remarkable: those of Mr. Buist are highly spoken of, (vol. III, p. 457,) and some of Mr. Mackenzie's were exhibited last season, and commanded a great deal of admiration. The encouragement is not sufficient here to warrant their growth. In England, where there is such a number of the trade to supply, a superior new variety is sold at the liberal price of £10, and the whole stock of a kind, unless very extensive, is seldom ever sufficient to supply all demands. It is there made a profitable business, while, with us, such practices are generally confined to amateurs and others, who have plenty of leisure time, and who raise new varieties for their novelty, rather than their intrinsic value. Still, we believe, the time is at hand when our own gardens will produce dahlias equalling the English. The demand is rapidly increasing; and when the dahlia shall be as generally cultivated as in England, and the same encouragement afforded by our Horticultural Societies, we may expect first rate American varieties.

We have said that the cultivation of the dahlia was of the most simple nature. We have seen the plants flourishing in dry soils and wet soils, in exposed and sheltered situations, in sunny and shaded aspects, and without the least care, and apparently in such splendor as to force one to believe that there is no necessity of extra pains to procure an abundance of blossoms. We have also seen them in the same soils, the same situation, and nurtured with unusual care, as barren of flowers as if it was not the nature of the plants to produce any. Like almost every plant with which we are acquainted, they often present these peculiarities of culture; but that the roots have a preference to particular soils and situations, in which they will invariably flourish, is as certain as that they can be made to grow at all.

In detailing our mode of cultivation we shall divide our subject into several heads, in order to be more distinctly understood. These will be as follows:—Soil and situation; Mode of propagation; Planting the roots; Summer management, Pruning, &c.; Taking up the roots, and best method of preserving them during winter.

Soil and situation.—Soil is the most important thing, in our opinion, in the cultivation of the dahlia: something depends on

the situation and other circumstances, but if the soil is good and of a nature suited to the plants, they will flower in good perfection. In connection with this it may not be out of the way to notice some facts connected with our own experience. Three years since, when dahlias were first extensively cultivated around Boston, we procured one of the best collections to be found. Relying upon making a superb display, the roots were planted with what we thought to be the greatest attention; the plants were turned out of the pots; they soon rooted, grew finely for a week or two, and then all at once came to a stand; they were duly watered, occasionally with liquid manure, but all seemed to have no effect. The lateral shoots soon commenced to grow; these were trimmed out, in hopes of starting the main shoot; but in scarcely an instance did it have any effect. Thus the plants lingered through the summer and fall, only a few out of upwards of a hundred producing blossoms, and those miserable specimens: in fact, some of the plants were no higher at the end of the season than when planted, though they were much more stocky, or rather *stumpy*. What could be the occasion of this we could not conceive. The soil where they were planted was a light sandy loam, about twelve inches deep, on a dry, firm, sandy bottom: when they were planted holes were dug fifteen inches deep, and filled with manure, and the soil taken out mixed together; the plants were carefully transplanted. The roots, when taken up, were not more than half grown, and many died during the winter.

The spring arrived, and we were determined, if possible, not to again suffer such disappointment. The ground was prepared for planting; a good quantity of old manure was spread on, and the surface spaded over. In the mean time we endeavored, if possible, to discover from what cause the plants failed the preceding year; and after looking through all the various English works, we came to the conclusion that the *shallow* soil alone prevented their success. Upon this we decided to have the ground *trenched*. It was done. The loamy soil was thrown into the bottom of the trench, (two feet deep,) and the sand at the top; a light dressing of manure was then dug into the sand, and when the holes for the plants were marked out, and dug, they were also partly filled, at the top, with very rotten manure. The plants were set out and grew vigorously; week after week they continued to advance rapidly, and August found them well budded. In September they were in full bloom all the month. The roots ripened very well, considering the early frost of that year.

The last spring the same ground that was trenched the previous season, after being lightly manured was trenched again, and the sand and soil well incorporated to the same depth as before. The plants were raised in pots, as usual, and turned im-

mediately into the soil. No plants, we will venture to say, ever grew more thrifty than these: the leaves were large and of a deep color, the stems short-jointed and stout, and the roots soon made their appearance upon the surface of the soil. The plants were treated precisely as in the year previous, and as we shall soon particularly notice, but they produced a much greater abundance of blossoms; indeed we doubt whether a more profuse display of perfect flowers was ever seen on plants. From this experiment, and others which we have tried, and from the various success of plants which have come under our observation, (and they have not been few,) we draw our conclusions as to the kind of soil a dahlia most delights in.

A greater portion of the English writers upon dahlias invariably recommend a rich loam, varying in depth from eighteen to thirty inches. For peculiar kinds leaf mould and heath soil have been stated to answer a good purpose, but not for general cultivation. There is no doubt but that a good light, deep, loam, upon a dry sub-soil, is as favorable a soil as can be selected for the dahlia: but it does not follow that without a "rich loam" they cannot be grown in perfection; we have shown to the contrary. In old gardens, in low situations, where the soil (which is generally black and fine,) has been made, by repeated additions, the dahlia does not flourish well. The plants grow luxuriantly and rapidly, are exceedingly brittle, and the branches are broken by the slightest wind. What flowers may be produced, and they are generally but few, often show a yellow disk. We would caution cultivators to avoid such a soil as much as possible. The greatest attention in planting often ends in disappointment.

There is scarcely a garden but what has several varieties of soils: when a choice can be made, we should always give preference to that which is sandy and light; if shallow it can be easily trenched and enriched, and made one of the most suitable; if loamy, all that need be done is to dig and manure its surface, unless heavy, when the plants will flourish all the better if it is trenched. A cultivator of our acquaintance, in the vicinity of Boston, who gives much attention to his dahlias, trenched a border, composed, naturally, of a rich loam, to the depth of three feet! The result was, as might be expected, an unusual display of blossoms. The one great cause of failure, among dahlia growers, is simply the neglect of planting in a soil sufficiently deep for the fibrous roots to run and ramify, and gather nourishment. Too many there are who imagine that a hole, a foot wide and ten or fifteen inches deep, answers every purpose. Whatever the soil may be, whether rich or poor, it should be *light* and *deep*.

The best manure for dahlias appears to be, as far as our practice extends, that from old hot-beds; or, if this cannot be readily procured, well decomposed stable dung of any kind. De-

cayed leaves are also an excellent manure, and are the most suitable of any for placing immediately around the roots, especially when it is desirable to encourage a small plant. We have experienced very bad effects from the too free use of strong heating manures; when the young roots come in contact with such, they are apt to rot and lose their extremities. Street sweepings should be used very sparingly. An amateur friend of ours tried that fertilizing substance, bone dust, the past season, with very good effect. Let such manure as is made use of, in all cases be *well* rotted, and no fears may be entertained.

There are various opinions respecting the situation and exposure of dahlias; all agree that it should be sheltered from the winds as much as possible. Some prefer a very sunny aspect, others a partially shaded one; some plant exposed to the North, others to the South and West. For our own part we prefer a perfectly open situation, where the air circulates freely, and, if there is any choice, a Southerly aspect. We never plant near high fences, or under the drip of trees, unless with some poor sort, which we are indifferent about, merely to fill up a border. In both places they draw up slenderly, the colors of the flowers are faint, and the branches weak. We have always noticed that an airy situation is the most beneficial. When planted in beds we prefer to have the rows and walks run from East to West.

Propagation of the roots.—After what has been given by Mr. Putnam and Mr. Mackenzie, (vol. I, pp. 130 and 172,) it would be mere repetition for us to detail the various modes of propagation. By cuttings and separation of the roots are the methods. For all ordinary purposes the dividing of the roots answers well; if the object is simply to duplicate or triplicate a variety, separate the roots, which can be done without trouble; but if the object is to raise plants to sell, especially of rare varieties, they should be grown from cuttings. Let it be always borne in mind, when cutting the roots asunder, to leave a *prominent eye* on each tuber. Cuttings cannot be easily rooted without the aid of a hot-bed. Some cultivators prefer cuttings; others tubers. Either the one or the other, properly treated, will produce an abundance of flowers.

Planting the roots.—We will suppose the plants to be standing in pots: whether raised from seed, cuttings or tubers, is immaterial. We will also suppose the soil to have been duly prepared, as we have before mentioned. Mark out the rows where the plants are to stand; dig the holes, and, carefully turning the plants out of the pots, place them therein; fill up with fine soil, and finish with a light watering. The depth of planting depends somewhat upon the plant; we generally set from one to two inches deeper than the surface of the soil in the pots: if the

stems are weak we increase the distance slightly; if tubers are set out, they should be covered about two inches.

The planting season may commence early in May, and be continued until July. A succession of roots may be set out every fortnight for six weeks; for a main bloom, however, to be in full splendor by the middle of September, from the 1st to the 15th of June is the most proper time, that is, supposing the plants to be growing and well rooted in pots, and four or five inches high. We have some data, which have been taken by ourselves, of the progress of plants. They run thus:—

Dahlias planted the 20th of June were budded the first of August, and in full flower about the 25th of September.

A few plants set out the 5th of July, and carefully attended, were in bud the 10th of August, and in full bloom the 30th of September.

A few others planted the 18th of July, and encouraged as much as possible, flowered in good perfection the 15th of September; these were dwarf varieties, (about three feet.)

But we merely insert these facts, that those who desire it may have some guide to the time of their flowering, from the period of setting out the roots.

Summer management, pruning, &c.—Considerable depends, for the well doing of the plants, upon the summer culture, pruning, &c. Few cultivators trim off the branches sufficiently to keep the plants in good shape; and a larger portion of the growers, in this country, never take a single lateral shoot from a plant. Some kinds need but little pruning, while others require a monthly cutting away of half the superfluous branches. We shall mention some varieties which particularly need it. After the plants have become established, and acquired the height of ten or twelve inches, they should each be carefully staked with strong poles, cut to or near the various heights which it is supposed the respective varieties will attain. These should be driven into the ground sufficiently to hold them firm: tie the plants neatly to them as they advance, and allow no lateral shoots to grow within three or four feet of the surface of the soil, for the tall growing kinds, nor within fifteen or twenty inches for the dwarfs. If the weather should be dry they will need water, and some old coarse manure, laid at and around the base of the stems, will keep the soil cool and moist, and enhance the beauty and brilliancy of the blooms. When the buds appear occasional supplies of liquid manure, perhaps twice a week, will also be very beneficial. Keep down all weeds, and no other care is requisite until the roots are taken up.

To prune dahlias judiciously requires some judgment and considerable practice: it is always best to be on the safe side; and to cut away too much is worse than too little. Commence with

lateral shoots: only one main stem, *in any case*, should be allowed to grow; when the laterals appear, nip them out with the thumb and finger, in preference to using the knife, up to the desired distance from the soil. Three or four should then be suffered to proceed and be carefully tied to the stake; when these in their turn throw out their laterals, they should also be divested of them to a degree, and the centre of the plant kept open to the sun and air; not so much open, we do not mean, as to take out the whole centre of the bush, but to cut away all cross branches and weak shoots. Dodds's Mary is an example of excessive growth and profusion of both branches and buds; and without considerable trimming the blooms are very inferior. Criterion is another, and we might name many, but these, we presume, will be sufficient to illustrate our remarks. On the other hand, some require but little pruning; Princess Victoria, (Widnall's,) Rising Sun, King of Dahlias, &c. should be cut very cautiously. It is impossible to lay down any rules for pruning, otherwise than to note, that those which are disposed to branch very freely require the most; and those which make erect growths with few laterals the least. Once a fortnight, certainly, the plants should be looked carefully over, pruned, divested of superfluous buds, (particularly imperfect ones,) and tied up safely to the stakes. One sudden and violent wind, when unprepared, might destroy all the labors and cherished expectations of a whole season.

Suckers often spring from the root, and if allowed to grow take away considerable nourishment, which would otherwise pass into the main stem. When such suckers begin to grow they should be immediately taken off. If it is desirable to increase the variety, a small portion of the root should be slit off with the sucker; plant in a pot, and with proper attention it will form handsome tubers by October. If plants are not wished for, cut them off close up to the place from whence they issue. Some kinds appear to throw up suckers from a constitutional habit. Jupiter (Widnall's,) and Dodds's Mary are two of this character.

In dry soils moss may be used very advantageously. The past season we spread about two inches on the surface of the soil around the plants; this kept the earth constantly moist, thus not subjecting the roots, which always, when the plants are vigorous, approach the surface, to the alternations of drought and wet. It also prevents the soil from becoming baked, as it frequently will when the plants are abundantly watered. In the moss the roots run freely, and when the water is administered the points, or spongioles, as they are termed, take it up more readily than they would if turned upon a dry surface, where it immediately passes away, or is quickly evaporated. We have only tried the experiment one season: we shall endeavor to continue it the coming summer, and we would commend it to the notice of cul-

tivators, more particularly amateurs. Continual watering washes the soil from the roots, and disfigures the appearance of the beds, while clear moss has a freshness and neatness about it which amply repays for the trouble of procuring it.

Taking up the roots, their preservation, &c.—We have thus arrived at the close of the season—to the time of taking up the tubers. There are various opinions respecting the time of taking up the roots; some cultivators say as soon as the branches are destroyed by frost, and others not until cold sets in and the ground freezes. The advocates of the former system state that the roots immediately push new shoots if allowed to remain in the ground, while those who advocate the latter affirm that they are better ripened, and thus rendered more certain of being safely kept during the winter. We have tried each mode, but not sufficiently to pronounce the one or the other to be the most safe; considerable depends upon the growth of the plants and the dryness or wetness of autumn. If the autumn has been very dry, and the plants have suffered for water, until the time when the frost has killed the tops, and heavy rains ensue afterwards, it would most certainly be a judicious mode to take them up immediately; but, on the contrary, if the fall has been wet, and, after frost, dry and fine weather ensues, then, undoubtedly, it would be as well or better to let the tubers remain a few weeks in the ground. Judgment alone is the guide in this case as in others: to be on the safest side, we should prefer taking up early than late. The most important thing to guard against is the premature starting of the eyes of the tubers.

When the frost has destroyed the leaves and stems they should be immediately cut away as close to the surface of the soil as possible, below, if it can be done, where the frost has reached; then let a little earth be drawn over the crowns of the root, so as to throw off the rain, and all is done till such time as the operation of taking up is decided upon. For this purpose a dry day should be selected, and the work carefully performed. With a spade take away the soil from the roots: lift them steadily, and shake off as much of the soil as possible. Carry them into an airy shed or other dry situation, out of the way of the hot sun, and there let them remain a few days: then pack them away in the cellar, the green-house, or wherever it is intended to keep them.

The modes of preserving dahlias during winter are many and various. If the roots are well grown, well ripened, and well taken up, they will keep almost any where out of the danger of frost. But this is so seldom the case, that some more particular precautions appear to be necessary for their safety during their dormant season. One cultivator has informed us that he barrels the roots up, like potatoes; another that he packs or throws them

in *with* potatoes: a third places them in dry sand in a dry cellar; a fourth keeps them on trellised shelves in the same situation; a fifth under the stages of a green-house, and others in ovens, &c. &c. We have generally kept ours, or at least the more choice ones, in the green-house, where, we think, if it is a dry one, they keep as well as any where: we have also kept them in a cellar, laid on shelves, with good success. In cellars where there are furnaces they keep remarkably well. But as there are but few cultivators who possess green-houses, and fewer who have cellars with furnaces, we can only say that, as far as we are informed, they will keep well in boxes, or on shelves in any ordinary dry cellar. In a damp one they are almost sure to perish. In whatever situation they may be placed, no frost or dampness should be allowed to penetrate. Look them over, at least, *once* a month, and if any sign of decay appears it should be cut away. Preserve their names carefully.

We have thus been explicit, though at the sacrifice of considerable space, in order that every thing in relation to their cultivation might be understood. Many of our friends have given up the growth of this most splendid flower, on account of the ill success which they have experienced. We hope that what we have said will explain away all the difficulties in cultivation which have been encountered. We are confident that the dahlia can be grown in *any* soil, even where it is not, naturally, more than six inches in depth: and the want of proper soil, we believe, has been the one great obstacle to their growth. Insects have been supposed to have caused disappointment in many instances, but we are firm in the belief that the dahlia is so rapid a grower, when flourishing in vigor, that the attacks of these insidious foes are rendered comparatively harmless. The worst results which we have ever experienced by them, has been the destruction of the petals of some choice and beautiful flower, upon which we had set our hopes, while anxiously awaiting its full expansion. But in one night all our highest expectations have been destroyed, and morning has revealed to our eyes a disfigured flower, which, the evening previous, bid fair to excel all that we had imagined lovely in the dahlia. The first time we have perceived these insects was the past season, and so late that we had not time to institute any experiments. In England they are troubled in this way with *earwigs*, which they catch by hanging some hollow reed upon the stake, into which they enter during the day, and are thus entrapped and destroyed.

It may be supposed that we should say a few words respecting the new varieties. But every year brings forward something superior in beauty, and we have thought it best not to occupy our pages with mere catalogue descriptions. Hoping that what we have written may be the means of extending the cultivation of this magnificent flower, we close our observations at this time.

ART. IV. *Notes on Gardens and Nurseries.*

Belmont Place, Mr. Cushing's, Feb. 28th.—We have never visited this fine place when the collection of plants looked better than they do at the present moment. The specimens of the various plants have continued to increase in size, and have now acquired sufficient strength to bloom abundantly and with full vigor. Some new additions have been made, though not to any great extent, and those who seek for new varieties will find less at Mr. Cushing's than at some other private gardens and nurseries.

Several improvements have been made, the past year, on the place. Since our last visit Mr. Cushing has erected a large, convenient and well constructed dwelling for Mr. Haggerston, at the opposite point from where he formerly resided, situated on the main road to West Cambridge: attached to the dwelling is a fine dairy, erected in a beautiful style, and finished in a superior and workmanlike manner. It will serve as a model to all who may feel desirous of adding such structures to their farms. We hope, at some future time, by permission of Mr. Cushing, to offer our readers a plan of this building. Many more improvements are contemplated and making; the more important of these is the erection of a new mansion, upon, or near, the site of the present one, which, we have understood, will be razed to the ground in the spring. But we reserve our remarks on this subject until another opportunity.

The green-house, or large centre house of the main range, which we entered first, is arranged in excellent order. Geraniums and roses cover the two first stages, and the miscellaneous plants occupy the back stage: one of the small end stages is filled with heaths, and the opposite one with various plants,—the whole flourishing in full health, and displaying one dense mass of luxuriant foliage and beautiful flowers. Entering the house from the front, the first plants that strike the eye are an *Azàlea indica hybrida*, and *A. ledifolia*, both covered with a profusion of crimson and white blossoms. A plant of *Erica cóncolor*, about five feet high, and one sheet of bloom, was one of the most beautiful and surpassingly elegant objects we have ever seen. The flowers are produced in threes upon the point of every terminal shoot; they are tubular, slightly curved downward, a little open at the mouth, of a brilliant and glossy red, tipped with pale yellow. It is decidedly one of the showiest in cultivation: the plant was imported from Liverpool two years since, and is probably (with the exception of one or two small plants,) only in this collection. On the back stage, immediately in the rear of these plants, the lemons and oranges were literally loaded with their golden fruit: several small plants of rhododendrons

were superb with from three to ten heads of flowers each: we could not observe, out of several plants in bloom, any two which were alike, though they were mostly imported for one kind. One received for the *R. Russellianum* has not proved to be true.

The geraniums had scarcely begun to open their buds, but a fine show may be expected from the middle of March until the middle or end of May. The heaths looked, generally, very well, and several were in flower. *E. cáffra*? and *persolúta* both charming, as was also the *arbòrea*, which was raised from seed: *E. resinòsa*, which we have heretofore called *árdens*, has been lovely for a long period, and will remain so for some time to come; it is one of the most desirable: *E. Bowieàna*, with white flowers, had been elegant: *E. ventricòsa supérba* was finely in bud. Mr. Haggerston informs us that he cannot see any difference between this and the *ventricòsa*; at any rate it is a valuable plant, and should be extensively spread about in all collections. *Azàlea indica* var. *Smithii coccinea* and *ignéscens* were each coming into flower: they somewhat resemble each other both in the color of the flowers and the habit of growth; the former is, however, the most abundant bloomer, often producing six to eight blossoms in a cluster. A strong plant of either kind would have an imposing effect in full bloom, and contrast finely with the snowy blossoms of the *ledifòlia*, or the light rosy purple tints of the *indica hybrida*.

But the most gorgeous of all the plants was the *Rhododéndron hybridum*, the largest in the vicinity of Boston. The plant has been in ill health, but is now fast recovering. Two years since, in the winter, at which time we made mention of it, this very plant was turned into the border, in one of the compartments next to the green-house; but it soon showed signs of disease, and Mr. Haggerston had it taken up and potted: it soon began to mend, and every branch has produced a cluster of buds, which were now expanding: more than *forty* of its brilliant hued umbels presented as magnificent a sight as could be imagined, and more than fifty more will be added to this great number by the middle of March; and from that period until early in April it will preserve all its attractions. No one who looks upon this plant, and possesses a green-house, can be contented to rest satisfied until he obtains one; and indeed those who do not own so desirable a structure need not be denied the gratification of beholding its great beauty, for any ordinary cellar will preserve a plant in good health, which will display its blossoms by being brought into the parlor in March, or in the open air in the month of May.

In small pots, upon the front shelves, plants of the *Lobèlia bicolor* were profusely laden with its blue and silver flowers:

gracefully declined in its habit of growth, but with the flowers on upright peduncles, it formed one of most exquisite objects which we noticed. *Gnida pinifolia* here, as well as at other places, we found in full flower. The double furze, or whin, of which there is here a small but thrifty plant, added gayness, by its golden tints, to the sombre foliage of the camellias, rhododendrons, &c. A species of *Spiræa* from China, which we have also previously noticed, was full of its pretty flowers. But we need not enumerate all the plants, as they have principally been noticed at length heretofore. On the rafters Mr. Haggerston has trained a *Greville*, multiflora and Lady Banks's yellow and white roses, and the *Wistaria Consequana*. The Lady Banks's white had opened a cluster of its tiny blossoms, and in a few weeks there will be a very pretty display. The multiflora reaches to the top of the house. We hope Mr. Haggerston will bud the strong shoots of this plant with the various tea roses the coming season; nothing could exceed it in beauty when in flower.

In the compartment adjoining the green-house, between that and the stoves, where the large rhododendron, just mentioned, was formerly planted, and which at this time has two large camellias growing in the border, we found two splendid pæonies in bloom; *P. Moulan papaveræa* had upwards of fifteen flowers expanded, and some buds yet to open, and the var. *Banksia* was literally breaking down with more than *twenty-five* blossoms, fully open, some of which would measure twenty-five inches in circumference: so heavy were the flowers, that some of the greatest of them it was found necessary to tie up to stakes, to prevent them from drooping, and to make them show to advantage. The *papaveræa* was equally as superb, and we scarcely know which we should choose were we compelled to cultivate but one of the two. Both varieties are among the showiest plants which ornament either the green-house or the conservatory. It is true their blossoms are rather fugitive, but their enormous size and the profusion of them repay in a degree their short duration. The large single camellia which Mr. Haggerston inarched last season had been in great beauty, from the number and variety of its blossoms: many of the inarchings flowered very handsomely. Some peach trees in pots, standing here, were setting their fruit finely. A *Greville* rose, trained to the back wall, was showing several clusters of buds.

The stoves afford less gratification, now that the pines take up so much room, than heretofore: what space there is, however, on the shelves on the back wall and the curb to the pit, is stocked with pretty things. Among others *Blètia Tanker-villæ* was very conspicuous. *Allamanda cathartica*, with its yellow blossoms, was beautiful. *Petùnia Blócki*, raised from

seed last summer, and a very handsome variety, made a fine appearance. *Passiflora phœnicea*, which was received from Liverpool about two years since, has not yet flowered; the plant has made a very vigorous growth, and Mr. Haggerston hopes to see its blossoms the coming summer, which are said to be the most elegant of all the species. *P. Kermesina* is so weak a growing species, that notwithstanding the individual beauty of the blossoms it will not, we fear, become a very great favorite in collections. It probably requires a somewhat different treatment from the *quadrangulàris* and its allies.

Combrètum purpùreum was just putting out its new wood, and, in a few instances, its flower buds. *Astrapæa Wallichii* has flowered the present season. The cactuses are looking well and showing flower buds. *Cereus phyllanthoides* flowered here not long since, and the tube of the blossom was upwards of ten inches in length; Mr. Haggerston informs us, however, that it is not worth growing, and the plant, which is large, will be grafted in a few weeks. On a plant of *C. speciosissimus* Mr. Haggerston has been trying an experiment; this is to give it a sunny and warm situation, so as to harden and ripen wood, when, it is stated, it will produce flowers as freely as the *Epiphyllum speciosum*. Mr. Haggerston has, as well as ourselves, much doubt respecting its utility: it is wholly artificial, and will not answer any good purpose. *Cereus grandiflorus* has ripened seed.

The pines are doing well, and are preparing to throw up fine buds. On the rafters the vines had pushed several inches, and were showing many fine clusters of buds, and a good crop may be anticipated very early. We shall endeavor to note Mr. Haggerston's practice, in order to see what success will attend the raising of grapes in pineries.

From the stoves we visited the graperies, at the opposite end of the range. Here we found the experiment about being put into operation for the retarding of the grape crop. The mode is that communicated by Dr. Torrey, at page 12 of the present volume, translated from the German. It is gratifying in a high degree to see this system about to be tested here, and we are glad that Mr. Cushing is the first one to make the attempt; if it succeeds, as we have no doubt it will, (and whether it does or not we shall inform our readers,) we shall feel gratified in knowing that through our Magazine the method was given to American cultivators. Mr. Haggerston will pursue a somewhat different course from that of the system alluded to; it is this: the vines are already buried in the earth, and as soon as warm weather advances he intends to cover the border, as well as the plants, with ice; on this leaves, and on the whole boards.

It will be recollected, that, last year, the crop was considerably retarded by simply covering the house and border with

boards: this will be favorable to the success of the system now under practice, as the vines will not be near so easily excited as those grown in the ordinary manner. Mr. Haggerston stated to us that grapes were cut, in most excellent order, from these very vines, as late as the *first* of February of the present year. We feel a great degree of interest in this experiment, and shall endeavor to make ourselves informed of the progress of the vines through the season; and we shall, if possible, induce Mr. Haggerston to give us a *diary* of the daily, or, at least, monthly, progress of the vines subjected to the new system.

In the back sheds of the houses we found two fine beds of mushrooms, which have produced freely all the winter: bushels have been picked from them. We were ignorant of the fact that they were grown upon the place, and we are glad to find that they are getting to be an indispensable article for the table. We wish to see them grown for the market, and hope Mr. McCullough or Mr. Mason will take the hint from this to do so. The pits, in the forcing ground, are in operation, and we found two different plantations of cauliflowers coming on; the plants of one of them were quite large. Beans, in pots, were also coming forward, and at one end of the pit preparations were making for planting cucumbers. This pit answers every purpose for early forcing.

Mr. Haggerston intends making a short visit to New York in a few days. We have no doubt he will be highly pleased with his journey. Every head gardener of such places as Mr. Cushing's and Col. Perkins's should make at least one annual visit to New York and Philadelphia. Their employers, as well as themselves, would reap great advantages from such visits. We wish him a pleasant journey.

Oakley Place, Mr. Pratt's, Feb. 2.—The collection here has received but few additions during the past two years. There are, however, some excellent specimens of various plants; among others two white azalcas, which we have before noticed: one was at this time displaying its snowy blossoms in great profusion; the other was coming forward: a very large phœnicea was also nearly in bloom. The large *Acacia longifolia*, which has been repeatedly headed down, was showy with its yellow racemes of flowers. A very pretty species of *Babiàna*, with large deep blue flowers, also attracted our attention. Lady Banks's double white rose had expanded a cluster of blossoms: Mr. McLennan showed us a plant upwards of four feet high, which has been grown from a bud since last July, at which time a Boursalt rose in a pot was made use of for the stock. The plant is full of buds, which will open in a few weeks: it is trained round a few stakes, and will be a lovely object. We cannot too highly recommend the practice of budding the weaker growing roses on

strong growing stocks; all the tea roses, particularly the yellow, the noisettes, and many others, produce much finer specimens of flowers. The Lady Banks rose, both the white and yellow, are shy in producing flowers on small plants, but when budded they bloom the first season.

But the finest display which will be made here will be the *Wistaria Consequana*, which is trained to the trellis on the back wall: it has now upwards of thirty large clusters of buds upon it, and it is probable it will be the first plant which has flowered in the vicinity of Boston, except the premature blossoms of one or two plants in small pots. It is one of the finest green-house climbers known, and no one should be without a plant. We have no doubt that all who see this plant when in full beauty will be anxious to possess it. We have before alluded to the fact that it has stood out in New York for several years, and flowered well every season: it will undoubtedly, with slight protection, succeed as well, and flower equally abundantly, planted on a South border, where it could be trained to a wall or fence. It is of slow progress until it attains a little size, when it is one of the most rapid growers.

The camellias have flowered well, but were now done. *Polygala grandiflora* was opening. Mr. McLennan has raised some seedling heaths, which look exceedingly well: we hope there will be some new kinds; it is desirable that seeds of all the more choice should be procured from abroad, as it is next to impossible to import a plant alive. We predict a pretty general cultivation of the heaths when they are known, and we are anxious that many of the best should be introduced by the means of seeds. An abundance of stocks, roses, geraniums, &c. were blooming finely. The grape vines on the rafters were breaking well, and denoted a good crop. Every thing is kept in the nicest order by Mr. McLennan.

In the forcing-ground Mr. McLennan showed us cucumber plants in pots, which were throwing out their second rough leaves. The beds were ready for hilling out: a warm day was all that was wanting to perform the operation of transplanting. Mr. McLennan always produces cucumbers in good season, and raises very beautiful specimens.

Messrs. Hovey's, Cambridgeport.—The largest sale collection of heaths in the vicinity of Boston is to be found here, embracing several of the most beautiful kinds. *E. tubiflora*, *pubescens*, *pubescens major*, *caffra?*, *herbacea*, *arborea* and *baccans*, are now in bloom. The plants of the latter are large and well formed, and are entirely covered with its charmingly beautiful, globular, rosy corols: though less brilliant than the *E. concolor*, which we have before mentioned, it is not less attractive: there is a grace in the formation and disposition of the flowers, and a live-

liness in their rich tints, which are found in but few species. The only objection to it is, the faded appearance of its foliage, when the plants begin to form their buds, and until they have finished their blooming; but this is more than a hundred times compensated by its every other claim to admiration. This species has also been found, so far, in this collection, of simple culture, the only precaution necessary being to water cautiously, and to give the pots a good drainage of nearly or quite half their depth. *E. concinna*, *conferta*, *ericoides*, *gilva*, *margaritæa*, and many others, are growing vigorously, and will probably attain sufficient size to flower profusely next season. *Azalea indica phœnicea*, and *p. élégans*, *Gillinghâmi*, *pûlchra*, *Yóungi*, *hybrida*, &c. are each in flower. The *phœnicea* still stands superb, and we are not sure that it would not bear away the palm from every other variety.

Harrison's yellow rose, budded on a tall stock, and placed in the green-house, has been very gay with an abundance of its golden flowers, which, we think, open better in the month of March, in a cool green-house, than they do in the open air, during the hot weather of June and July. Several pots of *sparaxis*, *ixias*, &c. are now beginning to throw up their flower-spikes; and some buds have already opened: there will be a pretty display in a few days.

In the stove that new and desirable plant, the *Verbena Tweedieana*, (of which there is here a fine stock,) is displaying its exquisite deep crimson blossoms, almost approaching scarlet. The *chamædrifolia*, though more dazzling in its tints, is yet less beautiful, both on account of its spare blooming, the smallness of its flat umbels, and its straggling and shabby habit, especially during winter; while the former is a most abundant bloomer, nearly to a fault, the umbels very large, compact, and handsomely shaped, and the habit erect, with neat foliage, of a deep green shade. It does not seem near so liable to the attacks of the red spider as the *chamædrifolia*; it also flowers well in a much lower temperature than that species, and is kept through the months of December and January in any good green-house. It is one of the richest acquisitions to our collections which has been lately made. *Lantana Sellowi* is a decidedly fine plant at this season; it is also stated by Mr. Paxton, in a late number of his *Magazine of Botany*, to be peculiarly suited to the open garden, where it may be planted in a dry situation, and the shoots pegged down like the *Verbena chamædrifolia*, with which its beautiful purple heads of flowers form a pleasing contrast. *Manettia cordifolia*, just commencing to flower, after a lapse of about two months, is a fine twining plant for the stove; its scarlet tubular blossoms, on long slender peduncles, produced plentifully, have a rich appearance. It should be found in every green-house collection, where,

during summer, it would form one of the showiest ornaments. *Burchélla élegans* and *Myrtus tomentosa* have both been pretty. *Amaryllis Johnsòni* and some others have also added to the display. *Brugmánsia sanguinea* and other new things are showing buds. In the course of a few weeks the cactuses will begin to open their blossoms.

At Mr. Leathe's green-house there is now a fine display of cactuses. *Cereus Vandèsia*, *Jenkinsòni*, Nos. 1, 2 and 3, *Ackermáni* and *speciosíssimus* will each be in splendor for some time. *Echinocátus Eyrièsii* is also budded strongly, and will undoubtedly produce some fine large flowers. They are the principal objects of attraction, excepting a few geraniums, among which are some very fine kinds.

Mr. Winchester's, *Franklin Place*.—We have been highly gratified with a view of this fine private collection. Since last season many beautiful plants have been added, and the house is now filled to overflowing. The camellias have blossomed well, and at this time *Amaryllis psittacina*, *Acàcia longifòlia*, *Pæonia Moútan papaveràcea* var. *Bánsia*, and many other other pretty things, were expanding their flowers. Innumerable quantities of bulbs, of all sorts, particularly hyacinths, have enlivened the house by the elegance and odor of their blossoms. We have often been astonished to see how few hyacinths are cultivated: when good kinds are procured, and they are well grown, we do not know of a richer addition to the green-house than a few mixed in with the other plants, diffusing their grateful odor throughout the house, and in the beauty of their flowers equalling many a new or rare plant.

Mr. Winchester has already become satisfied of the want of a larger house, and he informs us that, the ensuing fall, it is his intention to enlarge it to more than twice its present size. It will be attached to the dwelling, and thus be of easy access throughout the winter. We shall notice it more at length at another time.—*Ed.*

Salem, March, 1838.—A few days ago we embraced a favorable opportunity to look into the private collections of several individuals in our goodly and ancient city. The first that attracted our attention was that of E. Hersey Derby, whose garden and whose success in the growth of the buckthorn for hedges are both so familiar to the lover of horticulture. The two houses are separated by a high brick wall, on which we noticed some very fine peaches, apparently well covered with fruit buds, and on which we had the pleasure of seeing very handsome fruit last summer. The success in growing the peach on brick walls seems encouraging to the lovers of this fine fruit, who have been deterred by the inaptitude of past seasons to its producè on standards. Probably high fences would answer the same pur-

pose, as affording temporary protection from the late vernal frosts.

The green-houses were in good condition. We were happy to meet with an old acquaintance in Mr. Willott, (so well known to gardeners and lovers of fine flowers,) whose services Mr. Derby has secured. The collection of geraniums, and indeed of most of the plants, was of the older kinds and varieties, but well grown. We noticed several new and undetermined species of New Holland and other shrubs, which were raised from seed, and whose names were either lost, or were not sent. *Bulbine speciosa*, with its pretty golden flowers, not unlike the asphodel, has been sending up prolific spikes during the entire winter. A fine plant of *Passiflora racemosa cærulea*? was trained to the wall. We noticed *Sophora australis* shooting from the root, and making its second growth. Young seedlings of *Zephyranthes Atamásco*, sown last December, were vigorous, and had produced three and four leaves. Much taste was displayed in the arrangement of the stages and plants: and as a private conservatory, it affords an agreeable recreation and employment amid many a cheerless day of winter.

Our next call was on Mr. Wm. Gardner, whose floral taste is better known among his friends than it is abroad. This gentleman has been unusually successful in the growth of the camellia, and showed us numerous fine seedlings which promise much, raised from impregnated seed. Very many others were rising in his seed-bed, which is very ingeniously supplied with constant heat by the use of steam circulating under the pots. *Azalea phœnicea* was superb. Pelargoniums of many of the finer sorts, exceeded, in size of leaf, anything we ever witnessed: the foliage of *P. Daveyanum* was so excessive in luxuriance as to have completely rendered it undistinguishable to a common observer, regarding its identity. A few only were showing flower, the house being not forced during the winter. A beautiful *Melaleuca* retained a few lingering blossoms. A large plant of the far-famed Greville's rose was showing its semi-double and varied colored flowers. Pots of healthy *Mimuli* were conspicuous, among other herbaceous and pretty annuals. The old *Primula prænitens* retained its place near the newer variety with fimbriated flowers. The collection will probably increase in number and variety, by the choice taste of its proprietor.

In the comparatively new formed collection of Mr. W. W. Palfray, very prettily arranged in a house erected during the past summer, we observed many beautiful and some interesting specimens. His pot roses, budded on other varieties, somewhat after the plan of Mr. J. W. Russell, (superintendent of Mount Auburn, [vol. I, p. 217,]) looked finely, and were showing good flowers and strong shoots. We observed a flower on a pale straw-colored China rose, either the yellow tea or something re-

lated to it, of great size, and prolific in the calyx leaves issuing from the centre, affording an instance of the proof De Candolle affords, of the theory that petals are nothing but colored and metamorphosed leaves! Mr. Palfrey's amaryllises were looking well, and some were pushing up flowers. Several cacti were producing fine fruit. *Primula prænitens* var. *fimbriata* was making good seed. *Oxalis cernua* was exuberant in flowers and strength. Several beautiful *mesembryantheums* were in full blossom. We trust that the success of Mr. P. in the occupation of floriculture, as an elegant relaxation, will encourage him to renewed efforts, to keep pace with the spirit of the times, in the acquisition of whatever is beautiful and lovely in the kingdom of Flora.

A peep into the compact and crowded house of Messrs. Putnam, revealed to us very many attractive and superb specimens. For pelargoniums the public demand was so great this spring as to nearly drain his stock. Superb roses were blooming, on the stage, amid which were the tall stems of *Amaryllis psittacina*, and a good seedling of Colville's, raised, as we should judge, from impregnated seed of the first mentioned species. It possessed the figure of *A. psittacina*, but only exhibited an uniform color, having none of the beautiful markings peculiar to the original. *Passiflora alata* looked vigorous. The finer *Cactææ* were in excellent condition. *Cereus Mallasoni* was showing large buds nearly expanded, and the long pendant stems of *C. flagelliformis* were covered with crimson flowers. Messrs. P. excel in their *Cactææ*, both as regards their cultivation and number of varieties. Great number of pots of *Cyclamen persicum* were fading after profuse flowering. *Azalea phœnicea*, so attractive every where, lost none of its interest here. We were struck with seedling pæonies, from carefully selected seed, several months old, and having several vigorous leaves each. Perchance from some one of these individual plants these gentlemen may give to this city *its* pæony, as well as its dahlia, known to cultivators as the Beauty of Salem.—***

[We are exceedingly happy to receive, from our kind correspondent, so agreeable an account of the progress of horticulture in our sister city. We have already stated that a taste for horticulture was rapidly gaining ground here, and we are glad to offer so good evidence that we were not mistaken in our remarks. Mr. Derby, with Mr. Willott to manage his fine collection of plants, will be able to offer to the citizens a good example of neatness, and what a green-house should be; and an inspection of some of the fine specimens, under Mr. Willott's attentive management, will undoubtedly be the means of creating a greater desire to excel in cultivation. Messrs. Putnam's collection of plants embraces many fine things, and they are continually adding many new and choice articles, which, through them, will be diffused among all the amateur cultivators. We hope Messrs. Putnam will favor us with their mode of cultivating the family of cactuses, in which they greatly excel—*Ed.*]

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Effect of Carbonic acid on vegetation.—M. Treviranus, in his *Physiologie Végétale* has stated that vegetation is not so active near springs where carbonic acid is disengaged. In reply to this assertion, M. Schleiden has inserted, in Wiegmann's *Journal of Natural History*, a note to prove to the contrary. According to M. Schleiden, the numerous springs in the valley of Göttingen contain a great quantity of disengaged carbonic acid gas, and some carbonate of lime in solution; and the vegetation of their waters and on their sides is always vigorous, more advanced in spring and prolonged in autumn, than in other situations. Amongst the plants growing in water was *Sium angustifolium*; and among those growing on the sides of the springs were *Ranunculus lanuginosus*, the pilewort, the Marsh marygold and *Primula elatior*. It appears from this, that carbonic acid, either when disengaged, or when absorbed by water, exerts a beneficial influence on vegetation.—(*Gard. Mag.*, trans. from the French.)

Silkworms fed upon Rice.—In a Chinese work on the culture of the silkworm, lately translated into French by M. S. Julien, a curious process is mentioned, the correctness of which has been proved by experiment. It is said that in China, in order to supply more nourishment to the silkworms, the mulberry leaves upon which they feed are powdered with the flour of rice. But M. Bonafons of Turin, who translated the work into Italian from the French, wishing to prove the truth of the Chinese process, powdered the mulberry leaves with the flour of rice, with wheat flour, and with other fecula; and found that these various substances, which otherwise are not eaten by the silkworms, become, in this case, excellent nourishment, and cause the worms to develop themselves more rapidly. The cocoons of the silkworms fed upon rice flour are much finer and heavier than usual. The other kinds of fecula did not produce a satisfactory result; but it is to be hoped that, by experiments made among European growers of silkworms, with different farinaceous substances, some substitute may be found for the rice.

Preservation of Plants.—M. D'Eaubonne prepared a case in such a manner as to entirely exclude the air; he then mixed potters' clay and cows' dung together, with water enough to render them liquid; with this he covered the stems of some young trees which he wished to convey to the Mauritias, and he also steeped in it the roots; he then covered them with common moss, and filled up all the interstices with straw. He closed the case hermetically; and, when it was opened at the end of the voyage, not only were the trees alive, but bearing both leaves and blossoms.—(*Athenæum.*)

Errors of the French Florists and Nurserymen.—Mr. Rivers states, in his new work on roses, that "in forming a collection of roses from the French gardeners, great difficulty is often experienced by their incorrectness in the names of their plants; this inattention, to call it by no worse name, has long been the bane of commercial gardening. In this country [England] almost every nurseryman is now aware of the great responsibility he is under as to correct nomenclature. But, in France, they manage things differently, certainly not 'better;' for if a Parisian cultivator raises a good rose from seed, and gives it a popular name, a provincial florist will immediately give some of his seedlings, perhaps a very inferior rose, the same name, so that there are often two or three

roses bearing the same name; and, if the original, or most superior variety, is ordered, ten to one if you can get it; as the French florist generally gives you that which is most convenient for him to send, quite regardless of what you wish for. This is carried to an extreme of which only those well and intimately acquainted with roses can form a just idea.”—(*Gard. Mag.*) [We have found this, ourselves, to be precisely the case. But not only does the practice prevail with roses, but with almost every class of popular plants. The catalogues of camellias, in particular, abound with synonyms: we have known one kind to have been received under *four* names. We have been disappointed in the same way in which Mr. Rivers remarks; out of a large collection of superb roses which were received, but few of them were distinct. The *penchant* of the French florists to acquire a speedy fortune and then to retire from the trade is so great, that they resort to every means to do so. The English gardeners have, heretofore, had but little to do with the French cultivators, on this account, except in roses, in which flower they so greatly excel. Those who import plants from the French nurserymen must prepare themselves for disappointment.—*Ed.*]

Discrimination of Soils.—“Define your terms.” Nothing can be wiser than this precept; for “confusion worse confounded” cannot *be*, than that which prevails in the attempts made to describe soils. *Loams* of all textures, *marls*, *chalky*, *sandy* soils, all are involved in perplexity and mystery; and these can only be removed by a due attention to chemical analyses. On one subject only it is the object of the present notice to insist; because it may, without much waste of room, be immediately understood.

Gardeners are constantly using the word *peat*! Now what do they intend to express? Peat—properly so called—is the stiff adhesive mass of decayed vegetation which is dug out of peat-bogs or tubaries: people burn it, and the ashes prove a valuable manure to cold stiff lands. But fresh *peat* is to the gardener a vile inert mass—a substance so infinitely super-charged with swamped vegetable matters, when compared to the small proportions of earthly constituents in union with them, that decomposition cannot proceed. Time and long keeping will, however, render bog-peat a valuable soil to some plants. But gardeners allude to something else when they talk or write about *peat*! We presume, then, that they mean *heath or moor soil*—that light, black, very sandy earth which is found *on*, not below the surface of heath-commons. Now, as no two soils can be more antagonist to each other other than are those of the moor and the bog, for the sake of precision and of good faith, let us express our real meaning.

We have urged this point on every occasion, and in every publication within our influence, and now take advantage of this widely diffused periodical. “*Verbum satis*”—a word to the wise. But our purpose will not be effected till we come to the charge again and again, and make good, by chemical proof, that *peat-bog* is any thing but *heath* (sandy moor) soil!—(*Hort. Jour.*)

ART. II. Foreign Notices.

ENGLAND.

Prize Dahlias.—We subjoin the following lists of the names of dahlias which gained the premier prizes at several of the principal shows

in England. At page 72 those of the Birmingham and Oxford exhibitions were given. The following have since been received:—

Lynn Horticultural Society.—Best 24 blooms—Mary, (Dodds's,) Warminster Rival, Mary of Little Park, Sir H. Fletcher, Miss Hortense, Countess of Morton, Dr. Hawtry, Hermione, Secundus nulli, Madonna, Victory, Fisherton Rival, Countess of Dunmore, Shakspeare, (Squibb's,) Ariadne, (Harris's,) Beauty of Lullingstone, Lord Nelson, Glory of the West, (Dray's,) St. Leonard's Rival, Beauty of Belmont, Exquisite, Blandina, (Dray's,) Marquis of Northampton, Sarah.

Ashborne Floral and Horticultural Society.—Best 50 dissimilar blooms—Lady Dartmouth, Shakspeare, Ruby, (Girling's,) Giraffe, Conqueror of Europe, Rose Incomparable, Beauty of Bedford, (Mayle's,) Queen of Perfection, Springfield Rival, Elphinstone's Rosa superba, Sir Edward Sugden, Perfection, Metropolitan Perfection, purple Perfection, (Elphinstone's,) Dodds's Mary, Metropolitan white, crimson Perfection, purpurea superba, Adippe, Girling's white, Lord Liverpool, Mrs. Long, Lord Derby, Conquering King of Yellows, Willison's Perfection, Rosa mundi, Countess of Sheffield, Hector, Don Juan, Defiance, Gem, Queen Elizabeth, Glory, Clara, Phyllis, Vandyke, Premier, Mrs. Harris, Mrs. Clifford, Juliet, Lady Georgiana, Milo, Levick's Triumphant, Mrs. Wilkinson, Lady Heygate, Vicar of Wakefield, and four unknown.

Bedford Dahlia Show.—Best 24 blooms—Duke of Bedford, Napoleon, Lady Dartmouth, Juliet, Ruby, Suffolk Hero, Springfield Rival, Warminster Rival, Topaz, Conqueror of Europe, Granta, Glory of the West, Addison, Lady of Oulton, Lilac Perfection, Madonna, Elphinstone's purple Perfection, Sir Walter Scott, Diadem of Flora, Paris, Countess of Sheffield, Sir H. Fletcher, Dodds's Mary, Seedling.

Cambridgeshire Horticultural Society.—Best 12 blooms.—Widnall's Marquis of Tavistock and Sylvia, Springfield Rival, Duke of Bedford, Topaz, Warminster Rival, Dodds's Mary, Exemplar, Conqueror of Europe, and three seedlings to Mr. Widnall.

North London Amateur Floricultural Society.—Best 12 blooms—Glory, Beauty of Dulwich, Ipswich Beauty, Granta, Sir H. Fletcher, Ruby, Sulphurea elegans, Mount Pleasant Rival, Springfield Rival, Metropolitan Blush, Suffolk Hero, Harris's Conqueror.

Oldham Dahlia Exhibition.—Best 24 blooms—Squibb's purple Perfection, Vandyke, Beauty of Lullingstone, Clara, yellow Perfection, Dodds's Mary, Champion, Earl Grey, Alpha, lilac Perfection, Glory of the West, Suffolk Hero, Sir H. Fletcher, Henrietta Temple, Victory, Jeffrie's Triumphant, Maria Edgeworth, Bianca, Springfield Rival, Granta, Perfection, Gem, Prince of Orange, Napoleon.

The above will give the dahlia cultivators in this country some idea of the kinds which have taken the lead, the past season, in England.—*Ed.*

Widnall's Princess Victoria.—This most superb dahlia, of which we have incidentally spoken, is priced, in Widnall's Catalogue for 1838, at the same rate as Lady Dartmouth and the Marchioness of Tavistock. This shows in what estimation it is held in England.—*Id.*

New mode of propagating Plants by Cuttings.—A correspondent of the *Gardener's Magazine* gives the following as his mode of propagating plants. A common sized pot [No. 4,] is taken; in this a thumb pot is turned upside down, exactly in the centre of the bottom; around this the space is filled with small pebbles or potsberds; on top of these moss and coarse sandy heath soil, and then the sand for the cuttings. He says that "the channel which is given for the escape of all overwatering, by the inverted pot, will be found to be most useful for such species as are liable to damp off; and, when the pots are plunged in gentle heat, the vacuity thus obtained, being filled with the moist warm va-

por, it ascends through the pebbles and moss, and will be found greatly to forward the growth of the cuttings. This method answers well for cuttings of heaths. Every one who has been in the habit of propagating heaths must be aware that, when not properly drained, or if water is allowed to stand about them, they turn black, and at last damp off. By using the inverted pot, a good quantity of pebbles, with a covering of spongy peat, [heath soil,] and about two inches of sand, no bottom heat being required, any gardener may be successful in propagating all the Cape ericas. Particular care ought to be taken, in watering cuttings of heaths, never to allow them to be completely dried up, as nothing is more injurious to this tribe of plants in all stages, whether cuttings or specimens." [We should think this mode to be of considerable value. Any system which has the appearance of being new is deserving of extensive trial, and its merits fully ascertained. It is well known that of the heath cuttings which die, nearly all are caused by dampness. We shall be glad to know the results, if any of our friends adopt the mode.—*Ed.*]

The Cactus tribe.—I am a great admirer of the Cactus tribe, of which we have a very good collection; but none of them, in my opinion, can claim our admiration more than *Epiphyllum truncatum*, particularly when grafted on any other kinds, such as *Pereskia aculeata*, *Cereus speciosissimus*, or, what is the best of all stocks, *Opuntia brasiliensis*, of which I have several grafted plants, and on which stock *E. truncatum* does, indeed, grow to very great perfection. I have one plant, which I grafted, two years since, on a stock four feet high, which has now one hundred and nine flowers open upon it. Nothing can be more splendid than this plant, when well grown, with its pendulous branches falling in all directions. This is, also, by far the best way to grow *Cereus flagelliformis*, &c., which can be trained very gracefully on a light wire trellis, ascending to the taste of the grower.—(*Gard. Mag.*)

Royal Society and Central School of Horticulture and Agriculture.—This is the name of a new society which has lately been established in London, under the highest patronage. The objects are general. It is not intended as a rival to either the London Horticultural Society or the Metropolitan Society of Florists and Amateurs, but is established for the sole purpose of encouraging a greater taste for gardening, and by the liberal award of premiums in every department of both horticulture and agriculture, to create emulation and consequently improvement in the science. The principal features which will distinguish it are the following:—A Library of Reference; Lectures on Botany; Horticulture and Agriculture; Exhibitions of fine specimens of Produce and Implements of Husbandry, and Improvements in Horticultural and Agricultural Apparatuses.

The days of exhibition are fixed on the third Saturday in each month, the year round, and not to be altered. The society has taken the Egyptian Hall, Piccadilly, a central situation. It has been got up by individual enterprise, and Mr. Glenny, the editor of the *Horticultural Journal*, has been one of the most active. We have no doubt it will become one of the most useful societies in Britain. The third exhibition was held on Saturday, Dec. 9, 1837, and was one of the finest displays ever seen. We shall occasionally notice these exhibitions, and give the results when interesting.—*Ed.*

AFRICA.

Hydrangea hedges in the Island of Madeira.—All the hedges of hydrangea planted on the mountains around Funchal bear only blue flow-

ers, and the blue is of a beautiful deep shade; those, on the contrary, planted in the gardens of the city of Funchal itself, retain the pink color, or at most assume a pale dirty shade of blue. Must we conclude that the soil above is much more rich in iron than the soil below, and that the latter contains more of vegetable and animal matter? or is it because the air on the heights contains much more oxygen than the atmosphere of the city? or do both causes concur simultaneously in producing this constant effect? Many amateurs have assured me that they have never been able to preserve the natural color of the pink hydrangea on the mountain. Another remarkable fact is, that the foliage of these blue hydrangeas is astonishingly vigorous, and of an extremely dark spinach green. The soil in which they grow is never changed; though, in Europe, gardeners and amateurs are of opinion that, to produce hydrangeas of a blue color, they should not have ferruginous earth many years in succession; but, on the contrary, should be allowed to repose in common mould, before exciting them again with ferruginous soil. Is this true or false? or can it be that artificial ferruginous mould can never equal soil naturally ferruginous? This may be probable from the analogy of artificial mineral waters, which are never equal to those naturally mineral. In short, are there amateurs in England who would wish to import mould from the mountains of Madeira into England for growing blue hydrangeas? If that is the case, amateurs should address their orders, by letter (post paid) to me, within three months from this time (October 2, 1837,) so that I might be able to execute their orders before my departure for the Canaries, which will probably take place next spring.—(Dr. Lippold in *Gard. Mag.*)

ART. III. Domestic Notices.

Rohan Potato.—We had but just sent our article to press respecting new vegetables, under which we spoke of this potato, when the following met our eye, in the *Yankee Farmer*, copied from a French journal. It gives a much more favorable account of it than we gathered from Judge Buel's paper, and, if true, gives it a place among the very best kinds of potatoes which have ever been imported into this country. We shall endeavor to make a trial of it ourselves the coming season:—

“I send you, through my friend, M. Romilly, the potato I promised you; and to which my name has been given in this country. The history of the potato is not less singular than the potato itself. The man who obtained it from seed in Holland four years ago, shows it, but will not give it to any person: he has refused it to King William. He has cultivated it in a little walled enclosure; he only wishes to see it in perfection, and the seed of the following year. He causes them to be taken up in his presence, and keeps them under lock and key. It is at great risk that I have been able to procure two tubers. This exclusive amateur having learnt that I had some cactuses, which he wished much to have, begged of me to give him some. I wished no money, but very much to have some of his wonderful potato. He gave me two of them, and made me give my word of honor, that I would never send any of them to Holland, Belgium, England, Prussia or Germany. Happily he has not thought of Switzerland nor France; for without this omission I could not now have the pleasure of offering them to you.

“This is the mode of cultivating this potato: The earth is dug to the depth of twenty inches; make the distance between the holes four feet, and put two or three eyes or sets in each hole. Earth up frequently. The stalks reaching six or seven feet in height, need to be supported on transverse stakes. The potato being late, the tubers, which are very farinaceous, or mealy, should only be taken up about Martinmas, when the stalks wither.

“To give you an idea of the extraordinary produce of this potato, I give three examples at random. M. F. Martial, of Alais, gathered last autumn, tubers weighing thirteen pounds seven ounces, eleven pounds nine ounces, and nine pounds twelve ounces. M. de Montel, a proprietor near me, asked me for tubers, when I could not give him more than a single small tuber having four eyes. He weighed it for curiosity, and found it lacked a few grains of half an ounce. This small tuber being planted, produced forty-eight pounds. The attorney of the abbey of Autrèrive, canton of Fribourg, to whom I gave two tubers two years ago, and who, delighted with his fine harvest, after having eaten and given some to his friends, planted the rest, and obtained last autumn six double horse-loads and eight scuttle-fulls. It is not the largest tubers that succeed best as seed.”

Growth of Phlox repens in January last, in the open air.—At Charles-town Vineyard, in a rather warm situation in the flower-border, a patch of this early creeping phlox began to vegetate; and just as the cool weather appeared, at the close of the month, it showed buds. Mr. Mason junior took up a piece of the plant, and we saw it in bloom in the green-house some time since. If the warm weather had held only a few days longer, many of the perennials would have been exceedingly injured.—*Ed.*

Pæonia Moultan papaveræcea var. Banksiæ.—A fine plant of this superb variety is now in full bloom at Mr. Sweetser's. It has on it upwards of fifteen flowers, some of which are eight inches across; the narcotic odor arising from such a number of flowers is quite disagreeable after the house has been closed an hour or two. It is a beautiful plant for green-houses, and we should think might be grown well in parlors.—*Ed.*

Early spring flowers.—March 23. I have *Galanthus nivâlis* L. (snow-drop,) in bloom, to me the first flower of the spring of 1833.—*J. L. R.*

Rouge Charmante hyacinth.—We recommend to the lovers of the hyacinth, *Rouge Charmante* as an elegant red variety, and sufficiently double to be beautiful.—*R.*

New Dahlias.—At page 72, where we noticed several varieties of dahlias, we mentioned that we should, in a future number, notice some of the new kinds which have not been introduced into this country, and which are equal or superior to those which were cultivated in our gardens the past summer. We do not wish to occupy our pages with catalogue descriptions only, as it would be an utter waste of room to give the same here that may be found in our advertising sheet: but we may offer some additional observations which may be of interest, and perhaps of some value, to our readers, and form a guide to the selection of varieties for cultivation. The past year has been less prolific in first-rate new varieties than the year previous; some most superb ones have been produced, excelling any thing before known, but the number has been more limited. Mr. Widnall appears again to have been the most successful grower, and has raised five very magnificent ones, if we may place any reliance on his descriptions, for which he gained several prizes. These are as follows:—

- Widnall's Conductor, fine purple, (a very superb variety.)
 — Ne plus ultra, crimson, shaded with rosy purple (extra.)
 — Rienzi, crimson, shaded with dark purple.
 — Reliance, orange, shaded with purple.
 — Cambridge Hero, dark claret.

The following are also the names of a few others which have obtained prizes as seedlings:—

- Whale's Royal Standard, a rich purple.
 Neville's Hope, or Metropolitan Rose.
 Glenny's Duke of Devonshire, yellow tipped with red—Springfield Rival form.
 Ansel's Unique, yellow, occasionally tipped.

Each of the above are offered at £10 per dry root, or 10s. 6d. for a young plant, delivered in May.

The taste among growers seems to incline towards self-colored dahlias, and of dark shades. Very few superb light colors have been raised the past year.

All the above command such a price, that probably but few of them will be imported until the next season.

In the *Horticultural Journal* of last season a descriptive list of nearly all the most superior varieties was given; these descriptions have proved in a great degree correct, and we therefore copy from the same a list of some of the new varieties which are advertised for sale in the catalogues in this country. Such of them as have been grown here equal the descriptions. The remarks respecting the cutting away of the shoots of many varieties are exceedingly judicious, and deserve attention.

Shakspeare (Squibb's,) three to four feet, raised in 1836, not a profuse bloomer, exhibited in August, September and October, at the Hants and Southampton shows, cupped petals, well up in the centre and always perfect in the eye, crimson and orange shaded, for a seedling of one season only it exhibited all the signs of being permanent.

Glory of the West, (Dray's,) four to five feet, abundant bloomer, raised in 1835, exhibited at Salisbury, won first prize, cupped petal, fine form, three fourths of a globe, bright scarlet.

Blandina, (Dray's,) free bloomer, fine habit, flowers above the foliage, requires early planting, raised in 1835, exhibited at Salisbury and Southampton, round flattish petals, inclined to cup, clear white.

Ruby, (Girling's,) a seedling of 1835, and of very superior habit as a garden plant, as well as of high quality as a show flower. Exhibited at all the principal shows, took prizes at the Metropolitan Show and Vauxhall; color bright ruby, cupped petals, flowers above the foliage. The size, as well as the form, places it among first-rate show flowers.

Suffolk Hero, (Girling's,) a splendid variety, possessing all the properties of a good show flower. Raised from seed in 1835, and has been exhibited at almost every show, in considerable numbers; took seedling prize at Twickenham, in 1835, and was shown in boxes of half a dozen or a dozen all the season 1836. The habit is excellent, height four to five feet; displays all its flowers equal to the Springfield Rival, and has been esteemed one of the best self-colored show flowers."

Middlesex Rival, (Pamplin's,) height three to four feet, flowers freely, habit good, blooms free from the foliage, requires no cutting out, form of Springfield Rival, always perfect in the eye, beautiful puce color, exhibited at Kingsland, Hackney, Kingston, Twickenham and Salthill, and obtained prizes at the three latter places.

Topaz, (Girling's,) height four feet, displays its flowers well above the foliage, inclined to be bushy, plant the better for thinning, raised in 1835, exhibited at Ipswich, Bury, Dis, and at the Metropolitan Shows,

Salthill, and London and at Twickenham, nearly the form of Granta, bright yellow, obtained prizes at Vauxhall.

Queen's Superba, (Wilmer's,) named by the Queen at Salthill, raised in 1835, and exhibited in 1835 and 1836; splendid habit, flowers rather inclined to show the eye, but magnificent form; took extra prize at Salthill, where twelve blooms were shown.

These are only a few of the more remarkable which have been in almost every stand of dahlias exhibited the past fall in England, and are undoubtedly the finest kinds in cultivation, excepting, of course, the new seedlings of 1837 which we enumerated at the commencement of this notice. Mary, Mary Queen of Scots, Sir H. Fletcher, Juliet, Mrs. Broadwood, Princess Victoria and others, are too well known, from the specimens exhibited by Messrs. Hovey & Co., and other growers, at the annual exhibition of the Massachusetts Horticultural Society, to require to be mentioned here. Lady Dartmouth and Marchioness of Tavistock, possessed only by them in the vicinity of Boston, did not attain sufficient size to bloom finely at the time of the exhibition in September, but they subsequently opened some of the most superb blossoms we have ever seen. We look forward with a great deal of interest to the dahlia exhibitions of the coming season; and we have no doubt but that they will far excel all previous displays. The liberal premiums to be awarded by the Society will stimulate both amateurs and nurserymen to greater exertion, and the result will be a spirit of emulation which will be most favorable to the spread of a taste for this splendid flower. In another page we have recorded the names of the flowers which were exhibited in the best stands in England last fall.—*Ed.*

A preventive against the ravages of the borer.—The following paper from E. M. Richards, was read before the Massachusetts Horticultural Society, at a late meeting. It is worthy of attention.

"Last week in a neighboring town, I was conversing with a person, whose apple trees, I had formerly known, had been much injured by the attacks of the borer; he mentioned that he had put clam shells round them, rock weed, had earthed up the ground about them, and had made excavations round them, with a view to arrest the destructiveness of the borer; the above methods were tried at different times and at the suggestion of dealers in trees, but to no good purpose, excepting that he thought that the rock weed might possibly have been of a very little service. He thinks that by an accidental circumstance, he has discovered a simple and complete remedy for the attacks of the borer. Having a quantity of Southern wood, *Artemisia Abrotanum*, which he wished to remove, he transplanted some round one of his apple trees, quite near to the trunk; he very soon discovered that the borers had ceased their depredations, which induced him to adopt the same mode with his other trees, and the same result was produced—the *extirpation of the borers*—he lets the Southern remain; last year his trees produced very abundantly. I would merely suggest whether wormwood, *Artemisia Absinthum* would not be equally efficacious—would they not be worth the trial to quince, peach trees, &c.

"If a plant of easy culture should be discovered which should have the effect of keeping off canker worms, curenlio, &c. would it not be very desirable? it is hardly to be hoped; it is possible that the above communication may be the means of turning attention to the subject, and with this view I submit it to your disposal."

Philadelphia Florists.—In our article in the commencement of this volume, in speaking of the progress of horticulture in Philadelphia, we remarked that our correspondent, Mr. Mackenzie, formerly of Lemon Hill, had entered into the trade, and erected a small green-house,

&c. Since that time we have received a letter from him, giving us the dimensions of the range, with a list of several plants in the collection, and also informing us that he has since taken into partnership Mr. Isaac Buchanan, formerly gardener to Dr. Wood, and previously of the Royal Botanic Garden of Edinburgh: the business is now conducted under the firm of Mackenzie and Buchanan, as will be seen by a reference to our advertising sheet. The following is a list of plants of which they possess a good stock:—

Alstònia macrophylla	Manéttia cordifòlia
Brugmànsia sanguínea	O'xalis Bowièi
Combrètum purpùreum	— floribúnda
Coccolòba uvífera	Pimelèa decussàta
· Cactus Boydsii	Ruèllia ciliàris
— Napièri	Russèlia júncea
— Vandèsia	Swietènia Mahágoni
— Ackermáni màjor	Silène lasciniàta
— Scóttia	Tropæolum tricolòrum
Cactus melocactus	Witsènia corymbòsa
Gloxínia grandiflòra	Verbèna Tweedieàna
Gardoquià Hookèri	and many other fine and
Lechenaúltia formòsa	new plants.
Lantàna Sélowi	

The range is built with a double pitched roof, and is sixty feet in length and eighteen feet wide, and is already stocked with a very choice collection of plants.

We wish Messrs. Mackenzie and Buchanan success in their new avocation.—*Ed.*

New Camellia.—Mr. Boll, nurseryman, of New York, has sent us a short description of a new and beautiful camellia which he has raised from seed, and which has flowered this season. It is pronounced equal to the double white. We shall give the description in our next.—*Id.*

Caméllia Flòyi.—This superb camellia, which has been sent both to England and the Continent, has already obtained, in the latter, the name of Frederick the Great! under which it is placed in some catalogues. This is perfectly in accordance with the practices of the Continental gardeners, as has just been stated in a preceding page. At some future time we shall give the synonyms of all the camellias in cultivation. Were the French catalogues correct, they would not contain half the names they now do.—*Id.*

Seedling Pinks.—Mr. Miller of Roxbury offers for sale several of his seedling pinks. He has been quite successful in his seedlings, and a few of the number are very fine. They were exhibited last season, and commanded much admiration. The following are the names of the purple and red laced varieties:—*Purple laced:* Gen. Washington, Daniel Webster, Miss E. Watkins, Miss M. Rock, Conqueror, Highland Lad, Lafayette, Roxbury Beauty, Gen. Warren. *Red laced:* Cleopatra, Beauty, Blazing Comet (!), Gov. Everett, Cardinal, Nimrod, Lord Nelson, Trafalgar, Midshipman.

We hope Mr. Miller will meet with a ready sale for these varieties; the pink is a favorite with us, and we shall be glad to see their cultivation become more general. Mr. Walker has also raised some fine kinds, which he has named. Among the plants for which premiums are to be awarded by the Massachusetts Horticultural Society, we hope the pink will be included, and thus render their cultivation a matter of more interest.—*Ed.*

ART. IV. *Retrospective Criticism.*

ERRATA.—In the February number, p. 64, eleven lines from the bottom, for “J. D. Williams,” read J. D. W. Williams.” In our last number, p. 97, thirteen lines from the top, for “Auguste St. Hilloise,” read “Auguste St. Hilliare.”

Victoria regalis Schomburgk.—We have observed that this splendid new plant is identical with the Euryale amazónica of Pœppig, which this botanist discovered in the river Marañon, and described in a letter dated from that stream, March, 1832. A fuller description is given by him in No. 757 of V. Froriep's *Notizen aus dem Geb: d. Nat. u. Heilkunde*, 1832. “Leaves orbiculate, peltate, dichotomously nerved, warty above and cellular underneath. Stem none. Entire plant, except petals, thickly clothed with sharp spines,” &c. &c.—*Mag. Nat. Hist.*, 1837, p. 606.

One species of Euryale is described by Loudon as indigenous to India, viz. E. ferox, which, he tells us, is easily cultivated in the stoves. It may be confidently hoped that our American species can be naturalized, by introduction into the lagunes and ponds of the Southern states, and add a new ornament to the superb flora of North America. With the *Nymphæa* and *Nûphar* of the North, and with the *Nelumbium luteum* of the Middle States, the Euryale of the Marañon would shine quite as conspicuously as if it were bearing the regal synonym of *Victoria regalis*!!!—*J. L. R.*

Horticulture in New York.—Mr. Editor: In your Magazine for January, pages 4 and 5, you say that “New York has improved less in the science of horticulture than her sister cities, particularly Boston and Philadelphia,” and that “she cannot indeed be said to have ever taken so much interest in gardening as” the above-mentioned cities. Now, sir, we ought to esteem those our best friends, who kindly and faithfully tell us our faults; reformation cannot be expected in individuals, nor communities, unless some person or persons point out to them their defects; for it is much to be regretted that we are too often insensible to them ourselves; we therefore thank you very kindly for your faithfulness in pointing out to us our deficiencies in the science of horticulture, as compared with Boston and Philadelphia; for I must confess some of us had the vanity to imagine that we were moving along in a very steady and progressive manner, and were much pleased with the growing taste manifested by our citizens in all the branches of the science. Our vegetables and fruits, we thought, were much improved, and we were delighted to see several splendid conservatories, graperies and green-houses springing up around us during the past year; not only so, but we had prided ourselves much on recent acquisitions of new and rare plants to our collections. I had thought myself very fortunate in this respect. I had raised from seed several new and beautiful verbenas. *Nierembérgia filicaulis*, and another species, which, I thought, surpassed all others I had seen, (Mr. Buist has had both species from me,) and also a number of other new and rare plants obtained from seed imported from Mr. Tweedie, Brazil, and from Mexico. I likewise thought I had made great additions to my former list of roses, and had likewise raised from seed a very fine rose warratah camellia; and my neighbor, Mr. Floy, also thought that he had been very successful in his seedling camellias, one in particular, which he has named Washington, which is very large, regular, and double, of a light red or rose color. Mr. Thorburn and Mr. Boll also thought that they had

added a considerable number of new and rare plants to their collections;—in short, we began to have a little vanity about it—so much so, indeed, that we had serious thoughts of making a noise about what we had; but again we thought you might come upon us in this way, and use the old proverb, by saying that “shallow waters make the greatest noise,” and that “hens that cackle most lay the least.” We therefore tender you our heartfelt gratitude in curing us of our vain self-conceit, and shall be still further obliged to you, if, in your next, you would give us a list of such plants as you possess in Boston that are not to be had in New York, in order that we may have an opportunity to enrich our collections, such, for instance, as dillias, geraniums, camellias, roses, Cape, New Holland, South American, Mexican, perennial or annual plants, shrubs, fruits, vegetables, ornamental trees, &c. &c.

Mr. Floy has solicited me to furnish you a list of his seedling camellias, as follows:—

a'lba, semi-double, two rows of petals, pure white,	Jacksoni, fine rose, centre white and very double
— simplex elegans, cupped petals,	Jeffersoni, carmine, white and crimson stripe,
— simplex grandiflora, large and expanding,	leucantha, deep crimson, white spots, [once called Lorillardii]
— simplex punctata, white, scarlet spotted,	Margarètha, novaboracensis, large scarlet and white,
— simplex striata, riband stripe,	Ohio,
Aurora, single, beautiful rose scarlet, light shading,	Oseola,
Black Hawk, maroon, forming a ball, very double,	Philadelphia, glittering scarlet, regular and double,
bostonia, beautiful light rose, very double,	Pink and rose warratah, fine,
Chippewa, like Wardi, scarlet and double,	Pocahontas, deep crimson, white centre,
Cleopatra,	Powhattanii, deep maroon, very double,
Clintonia,	provincialis, fine rose, shaded, very double,
coruscans, rich deep crimson, double,	Rhodia, rich rose, rayed white, double,
crassiflora, deep crimson, forming a ball, [very good,]	Stevèni, crimson and scarlet, shaded,
Fairy Queen, flowers small, scarlet and white, pretty,	Tappanii, rich crimson, thick petals,
Flòyzi, flowers large, [magnificent]	triangularis, single, very curious,
Franklinii, pink, shaded rose and white	tricolor warratah, beautiful,
fúsa, fine maroon, very double	virginica, flowers large, light rose,
Hoffmanii, brilliant scarlet,	Wardi, bright red, regular,
Hopsòni, scarlet and white centre.	Washingtoni, superb rose pink, centre scarlet, very double,
Hosáckii, fine scarlet [!],	Warratah Mignonne, maroon, small, very double.
Irènea	

Yours, respectfully,

THOMAS HOGG.

New York, February, 1838.

We are happy to receive the above, and always stand ready to be corrected in any of our statements. But as respects the paragraph

which our correspondent has made the subject of his criticism, we are not aware that we were mistaken. We had supposed ourselves to be sufficiently well informed respecting the progress of the science of gardening in New York to speak correctly. We have no desire to underrate the amount of taste in our sister city; neither have we the least wish to make Boston or Philadelphia appear more advanced in horticulture than they really are. We feel as much for New York, and we speak in her praise as frequently, as if we were an inhabitant of this city; as if we were one of the number of her amateur and practical cultivators. We have not lacked opportunities to know just how far, and how fast, she has advanced in gardening: we have watched the progress of the art, not only here, but every where in the Union, with no little attention, during the last five or six years; and on the strength of our own knowledge and what we have learnt from our friends, who are among the most active of horticulturists in the vicinity, we have based our observations. If we have, after all, advanced an incorrect opinion, we shall be as ready to make a full acknowledgment, as we were deliberate in putting forth such a statement. Mr. Hogg's criticism would imply that we have been much mistaken: let us see, as briefly as possible, on what grounds.

It would be impossible here to go back any length of time, and review the advancement of gardening in New York, even if we were disposed so to do. We will allow that, at one period, New York took a higher stand than Boston. The first Horticultural Society in the country was formed here; the most extensive nurseries in the Union are located in its vicinity; and the facilities for the importation of plants are much greater than in either Boston or Philadelphia. We will allow all this; and here we stop. Date our period six or ten years since, and now compare the two, or three, cities.

It is true that Mr. Floy has raised a number—a great number—of seedling camellias. It is true that our friend and correspondent himself has had, and has now, the best collection of geraniums in the Union; and it is equally true that Mr. Boll, Harrison and others, have done much in importing plants and raising new kinds from seed. All this is well. Mr. Floy's camellias are, some of them, handsome—one in particular, *Flôyi*, is as magnificent a flower as has ever been raised. But although he has produced such a great number, and many of them so long since, yet few collections in the country possess more than four or five of the best. All these fine things have been kept at home—as a light under a bushel;—we do not doubt our New York friends have raised many beautiful things, and been gratified, nay, delighted, with their own plants, but they have not certainly afforded that pleasure to others which they should have done, if they possessed extraordinary merits. In Boston, a plant of any beauty is no sooner known, than it is sought after by every amateur and cultivator of flowers.

“Comparisons are odious,” and we wish to make none individually; but we would ask our friends to compare the plant structures of Boston, their style, size and number, with those of New York. And then the collections of plants—their extent and variety, with those of the latter city. To say that the plant edifices in the vicinity of Boston are superior to anything in the country is unnecessary, as, with two or three exceptions, they are acknowledged to be so by all. To say that the establishments of Mr. Cushing and Col. Perkins; the camellias of Messrs. Wilder and Hovey & Co., the heaths in the private collection of Mr. Towne, are superior to any thing of the kind in New York, is equally needless. We have no time nor space now to give our friends a catalogue of the plants which are possessed in Boston, and thus afford them the opportunity to enrich their collections. But at a fu-

ture time we will endeavor to do so. With the exception of geraniums, or pelargoniums, of which Boston amateurs cannot begin to make any display, compared with our correspondent's beautiful and most rare collection, we believe that our friends in New York may enrich their gardens in some degree by applying to Boston cultivators.

But we have extended our remarks beyond our proposed limits, and have no desire to prolong a controversy which, though written in the best friendship, will not be of much profit. We do hope we have been mistaken in our remarks which were the subject of Mr. Hogg's criticism; and we shall be glad to be able, by the return of another year, when we shall give another retrospective view of gardening, to allow our friends to be placed at least on a level with Boston. Let the Horticultural Society be resuscitated, or a new one got up to take its place, and, by the interest which it excites, we shall draw an inference of the progress of the science among the community at large.—*Ed.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, March 3d, 1838.—This was a stated meeting of the Society for the transaction of business.

The Financial Committee made a report, from which it appears that its pecuniary affairs are in a flourishing condition.

It was voted, at this meeting, that the sum of \$275 be placed at the disposal of the several fruit, flower and vegetable committees, for the purpose of awarding suitable premiums during the present year. Upon the passage of this vote some discussion took place in regard to its division among the committees, and it was finally distributed as follows:—

To the Flower Committee, \$125; to the Fruit Committee, \$100; to the Vegetable Committee, \$50. In our next number we shall endeavor to give the reports of the several committees, enumerating the articles for which prizes will be offered.

Exhibited.—A few varieties of apples, from B. V. French.

Read.—A letter from E. M. Richards, describing a mode for preventing the ravages of the borer. This will be found in another page.

We anticipate some very excellent displays of flowers and fruits, and even vegetables, the coming season. The Society's new room is commodious, and the various productions will appear to much better advantage than they did in their former place, where there was neither space for the articles exhibited, nor for the numerous assemblage of persons who attended the weekly meetings of the Society the past season. We have understood that there will be probably some alteration as respects the exhibitions, and that there will be four monthly ones of great beauty. But of this we shall inform our readers hereafter.

ART. VI. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>	From To		<i>Pot and Sweet Herbs.</i>	From To	
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
Potatoes, new :					
Common, { per barrel,	1 00	1 25	Parsley, per half peck,	50	75
{ per bushel,	40	50	Sage, per pound,	17	20
Chenangoes, { per barrel,	1 25	1 50	Marjoram, per bunch,	6	12
{ per bushel,	37½	£0	Savory, per bunch,	6	12
Eastports, { per barrel,	2 00	2 50	Spearmint, per bunch,	6	
{ per bushel,	1 00				
Turnips, { per bushel,	£0	75			
common, { per peck,	17	20	<i>Fruits.</i>		
French, per bushel,	50	75	Apples, dessert :		
Ruta Baga, per bushel,	50	75	Common, { per barrel,	1 50	2 00
Onions :			{ per bushel,	75	1 50
red, per bunch,	none.		Russets, { per barrel,	2 00	2 25
white, per bushel,	none.		{ per bushel,	1 00	1 50
yellow, per bushel,	1 50	2 00	Baldwins, { per barrel,	2 00	2 50
Beets, new, per bushel,	50	75	{ per bushel,	1 25	1 50
Carrots, per bushel,	50	75	Bellflowers, { per barrel,	none.	
Parsnips, per bushel,	75	1 00	{ per bushel,	1 50	
Horseradish, per pound,	8	12	Golden pippins, per bushel,	1 50	
Radishes, per bunch,	8	12½	Pears :		
Shallots, per pound,	20		Chaumontel, per dozen,	none.	
Garlic, per pound,	14		St. Germain, per dozen,	75	1 50
			Prince's St. Germain pr doz.	none.	
<i>Cabbages, Salads, &c.</i>			Winter Katin, per doz.	none.	
Cabbages, per dozen :			Baking, { per bushel,	3 00	
Savoy,	50	75	Quinces, per bushel,	none.	
Drumheads,	1 00	1 25	Pine-apples, each,	25	50
Red Dutch,	75	1 00	Grapes, per pound :		
Cauliflowers, each,	12½	25	Malaga,	25	
Lettuce, per head,	6	12	Cranberries, { per bushel,	2 50	3 00
Celery, per root :			{ per peck,	75	
Giant,	8	12½	Oranges, { common, per doz.	25	50
Common,	6	10	{ Havana, per doz.	50	75
Spinach, per peck,	50	75	Lemons, per dozen,	17	25
Rhubarb, per lb.	25	37½	Cocoanuts, each,	5	6
Dandelions, per half peck,	37½		Shaddocks, each,	25	
			Walnuts, { per barrel,	5 00	6 00
<i>Squashes and Pumpkins.</i>			{ per bushel,	3 00	
Squashes, per pound :			Chestnuts, { per barrel,		
Lina,	4		{ per bushel,	4 00	5 00
West India,	4	6½	Almonds, (sweet,) per pound,	12	14
Winter crookneck,	4	6½	Filberts, per pound,	4	
Pumpkins, each,	12½	20	Castana,	4	
			English walnuts, per lb.	5½	6

REMARKS.—Another mild month has tended to keep the supply of vegetables sufficiently abundant for the season. But very slight alterations have taken place in the price of any of the articles, and a larger part of them are plentiful enough to last until the new crops come in. The month has been equally dull with that of February; no large sales have been effected, but little doing in exportation, and the retail trade extremely limited. The more luxurious productions find but a slow sale this year, so far, though they are to be had at very moderate rates.

There has not been the slightest improvement in potatoes since our last, though, generally, at this season, prices advance. The stock is ample. About five hundred hampers of Lancashire potatoes were sold the past week, and commanded from sixty to seventy-five cents the

hamper: we have understood from those who have tried them, that they were quite ordinary to those usually brought from that district of England. They will not equal the forty-fold, which, by the way, should not be forgotten by our marketers or farmers at this season. Onions have become quite scarce, and scarcely a bunch of reds or whites are to be found in the market: yellow ones are alone to be had: the stock of these has been received from Danvers, where the onion is now pretty extensively grown: less quantities have come to hand from Connecticut this year than formerly. Beets, &c., plentiful. Horseradish good and abundant. Radishes are more abundant, and will soon come in freely; prices are now moderate for the season. Cabbages, of good quality, are scarce; of ordinary there is a plenty. Lettuces are cheap and of fine appearance now. Celery is getting very scarce, especially that of first-rate excellence. Spinach quite scarce, and prices advanced; the open winter has injured the crop materially. Rhubarb more abundant, though it is yet produced from forced roots. Dandelions have made their appearance within a few days, since the frost has disappeared; but they have been cut from cultivated roots, and are of fine quality.

Since our last report there has been one or two arrivals, of small lots of West India squashes, which may be had at our quotations; of crook-necks but few remain on hand. The appearance of the West Indies has caused less demand for the latter. We hope the autumnal marrow will be more cultivated the ensuing season. It sells well.

Apples are almost a drug: there has been no change, nor do present appearances indicate any for the better. There is an abundance on hand. The last dessert pears have been disposed of this week: they were the St. Germain: common baking are very scarce, and we believe none to be had, unless by the bushel or smaller quantity. Pine-apples scarce. Grapes rather scarce: about a hundred jars and half jars were sold at auction early in the week, probably not in good order from the long passage. Cranberries have advanced a little from the lateness of the season. Of oranges and lemons a good supply. Walnuts scarce, and but few excepting the Ohio to be had. Chestnuts exceedingly scarce. Of other sorts an over plentiful supply.—*Yours, M. T., Boston, March 23d, 1833.*

HORTICULTURAL MEMORANDA

FOR APRIL.

With the advance of spring the work of the garden commences, and a great variety of operations have to be performed. The attention to hot-beds—the green-house—the stove and the open garden; the planting of seeds—of bulbs—the pruning of trees—and the innumerable other trifling things which press upon the mind of every good gardener, keep him constantly employed, not bodily alone, but mentally. We have before urged upon the gardener the advantages which are to be derived from keeping a diary or calendar of every thing done in the garden the year round; such a diary is extremely useful, and that of one season may form a good index by which the gardener can guide his operations the next. He can see what was omitted that should have been done, and what was done that might have been put off until a later period. Indeed, we are fully satisfied, that when a calendar is once begun, a good gardener will always feel at a loss without continuing it.

The weather, up to this date, (March 24,) has been mild, and appearances now indicate a tolerably favorable spring. The frost is about out of the ground, and in some warm situations potatoes and peas have been planted. We hope April will be a genial month.

FRUIT DEPARTMENT.

Grape vines, in the grapery or green-house, will now have started considerably, and will soon be showing buds. Give an abundance of air as the shoots progress: when the flower-buds are well advanced, raise the temperature slightly, and give a syringing once a week, if the weather is very dry. Keep the new shoots tied up, and take off all superfluous buds. Cuttings may be put in in the open ground the latter part of the month, or in hot-beds at any time. Tie up vines in the open air, and trim such as have been neglected.

Raspberry vines should be manured and dug between as soon as the earth is in a fit state.

Strawberry beds should be cleaned, and have a light dressing of old decayed manure.

Gooseberry and currant bushes should be pruned and dug between, and manured.

Peach, plum and other trees should receive all proper attention this month: grafting may be performed the last part of the month: cut the scions now.

FLOWER DEPARTMENT.

Dahlias should now be potted, if it is desirable to have them flower very early. Separate the tubers, reserving such as have prominent eyes. For full directions see their cultivation, p. 126 of the present number. The seeds may now be sown in hot-beds.

Camellias will require liberal supplies of water until they have completed their growth.

Cactuses will soon begin to bloom; give them more water as they commence opening their buds.

Ericas should be attended to, and the soil not allowed to become dry.

Amaryllis formosissima bulbs may now be potted.

Gladiolus natalensis and *floribundus* bulbs may be planted in the border the middle of the month.

Tiger flowers may be set out in beds the latter part of the month.

Tulip and hyacinth beds will require attention; as soon as the shoots appear an inch above the soil, let the earth be gently stirred with a trowel to the depth of two or three inches.

Annual flower seeds may be planted now in hot-beds or green-houses, for spring blooming.

Perennial plants: towards the last end of the month will be a favorable time to commence the removal and separation of them.

Pæonies may now be successfully transplanted.

Roses should be pruned and replanted if they require it.

Shrubs of all kinds may be successfully transplanted after the middle of the month.

VEGETABLE DEPARTMENT.

Asparagus beds may now be made and planted. For ample directions see Mr. Walker's article, p. 91.

Rhubarb beds may be prepared and got in readiness for setting out the roots by the middle of the month.

THE MAGAZINE

OF

HORTICULTURE.

MAY, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Observations on the Culture of the Strawberry.* By
A. J. DOWNING, Botanic Garden and Nurseries, Newburgh,
N. Y.

THE strawberry is certainly one of the most valuable and delicious of all the smaller fruits. It is not only easily cultivated, yielding an abundant crop in a short time, from a very limited space of ground; but while its pleasant sub-acid flavor is agreeable to all palates, and forms one of the most delightful additions to the dessert in summer, it is also extremely wholesome, never, as is the case with most other fruits, undergoing the acetous fermentation. In some diseases it has ever been found highly beneficial, and it is affirmed that Linnæus was cured of the gout by abundant use of the berries.

The strawberry, though a low herbaceous plant, sends down remarkably strong roots. In good soils these are often found to penetrate to the depth of eighteen inches or more in a season. It is necessary, therefore, to produce a fine bed, that the soil be deep as well as rich. Where the sub-soil is not positively bad, the ground is always much improved by trenching, (two spades deep,) before setting the plants. In doing this a good coat of manure should be deposited between the two spits: old garden soils which have been long cultivated are astonishingly improved by this practice, the whole becoming renewed by the presence of the fresh soil; and the growth of plants in such mould, when again acted upon by the sun and air, is of course proportionately vigorous. A deep mellow loam, rather damp than dry, is undoubtedly the preferable soil for this plant, but almost any soil for so limited a species of culture, may, in the hands of a judi-

cious gardener, be rendered suitable for it. We have seen very splendid crops of fruit upon a very stiff yellow clay, mellowed down by mixing with it anthracite coal ashes and manure.

The best season for making new plantations of the strawberry is either in spring, at a pretty early period, or directly after the beds have ceased bearing, in August. If the latter time is chosen, the plants generally get sufficiently well established to bear a considerable crop the ensuing year.

There are various modes in which to plant the beds when formed. Some arrange the plants so as to be kept in hills, others in rows, and others, again, allow them to cover the whole surface of the bed. We consider the first method preferable, as in that way the ground can be kept cultivated between the plants; the fruit is generally larger and finer, being more exposed to the genial influence of the sun, and the duration of the bed is greater. Three or four rows may be planted in each bed, at a suitable distance apart, and the runners from the rows should be shortened or cut off about three times during the season. If the plants are not thriving well, a light top dressing between the rows in autumn will be of great advantage. Burning off the upper surface of the bed in the spring has been highly recommended by some persons, but we have never found it to answer our expectations upon trial.

This fruit receives its name from the very ancient custom of placing straw on the beds, between the rows of plants, to preserve the berries clean. The custom is not yet too antiquated to be of less value to those who desire the fruit in its greatest perfection. Clean wheat or rye *chaff* may be substituted for straw, and it has the very great additional advantage of not only preventing most weeds from growing, by excluding the light, but also, by decomposing with considerable rapidity after the fruit season is past, it contributes much to the enrichment of the surface soil of the bed. Young and strong runners, well rooted, should in all cases be chosen to form the new bed, and not old plants, or those offsets which grow near them.

There is a fact with regard to the strawberry plant little known, the ignorance of which puzzles many a good cultivator. This is the existence of separate *fertile* and *sterile or barren* plants in many of the varieties, otherwise plants which produce chiefly male, and others that produce only female, flowers. Botanically, the strawberry should produce both stamens and pistils in each flower, and the blossoms should consequently all mature fruit. This is really the case with the alpine, the wood strawberries, &c., but not entirely so with the large scarlet and pine strawberries. These latter sorts, it is well known, produce the largest and finest fruit; but we very often see whole beds of them in fine flourishing condition, almost entirely unproductive. The

common parlance in such cases is that the variety has "run out," or degenerated, but the idea is a confused and ignorant one while the healthy aspect of the plants fully proves the vigor of the sort.

The truth is, that in all strawberries of the foregoing classes, although each blossom is furnished with stamens and pistils, yet, in some plants, the pistils are so few that they can scarcely be perceived; in others, there are scarcely any stamens visible. When the plants bear blossoms furnished with stamens only, (or in a large proportion,) they are of course *barren*: when pistils only are produced in abundance, they are fertile. To have a bed planted so as to bear abundantly, about one plant in eight or ten should be staminate or *barren* blossoming plants; the others the *fertile* ones—for if the latter only be kept, they alone will also be found unproductive.

If any person will examine a bed of the Hudson, or any of the large scarlet strawberries, when they are in blossom, he will discover a great number of plants which bear large showy blossoms filled with fine yellow stamens. *These are the barren plants.* Here and there, also, he will discover plants bearing much smaller blossoms, filled with the heads of pistils, like a small green strawberry. The latter are the fertile ones. Now the vigor of the barren plants is so much greater than that of the fertile ones, and their offsets are so much more numerous, that, if care be not taken to prevent this, they soon completely overrun and crowd out the fertile or bearing plants, and to this cause only is to be attributed the unproductive state of many beds of the large fruited strawberries, which are in many instances perhaps entirely devoid of fertile plants.

The proper method undoubtedly is to select a few fertile plants of each kind, plant them in a small bed by themselves, and allow them to increase freely by runners; then, on planting, the proper proportion could be made and kept up by the regular clipping of the runners.

Many of the fine English varieties of strawberry, (Wilmot's superb, for instance,) are generally found worthless here. This is owing, in some cases, to the ignorance or want of care of those persons who export the varieties, in sending, often, *no* fertile plants; in other instances it is equally owing to our negligence here, in not preserving the due proportion of *barren* and *fertile* plants.

This peculiarity in the blossoms is very little known or understood, even among scientific cultivators. It was first pointed out to us by our esteemed friend, N. Longworth, Esq., of Cincinnati, one of our most distinguished Western horticulturists. Its truth we have repeatedly verified, and a slight examination

will convince any person of the cause of the numerous worthless yet thrifty looking strawberry beds throughout our gardens.

The finest of the large English varieties of this fruit which we cultivate here is the Bishop's. It is remarkably large, a most abundant bearer, and of superior flavor. Many of the larger berried sorts, as the Methven Castle, have been hollow and comparatively tasteless, though of uncommon size. This variety, however, appears to us to unite all that can be desired, to constitute a truly fine and delicious strawberry.

A. J. D.

ART. II. *Method of Planting the Forty-fold Potato, as practised by Mr. Burns, late gardener at Elm Hill, Roxbury.*
Communicated by MR. BURNS.

WE have already said so much respecting this potato, and have praised its qualities—its earliness, productiveness and general character, as a superior variety—so often, that it may seem but mere repetition to add anything further in relation to it. But although it is now tolerably well known, and its cultivation somewhat extensively disseminated, still there is wanting some knowledge to grow large and fine specimens. Some cultivators who have tried them have almost given up their growth, on account of the great profusion of small ones which they often produce, on whatever kind of soil or in whatever situation they may have been planted. All who have tried them acknowledge their superior qualities, but having failed, for some reasons, to procure large potatoes, have become prejudiced against them; but their great reluctance to part with a variety excelling, certainly, any of our old sorts, has alone induced them to continue their cultivation, though attended with only partial success.

The great fault in the cultivation of the forty-fold potato seems to have been the planting of too many in a hill; observing the same system as is practised with the more common kinds, that is, planting from two to four in a hill, or strewing them very thickly in rows. This mode will not answer for this variety; but, on the contrary, wherever *more than one* has been planted in a hill, in every instance which has come to our knowledge, the potatoes have been extremely small, yielding in *number* more than an hundred fold, but not producing scarcely one sufficiently

large for eating. This it is that has caused this variety to be less estimated by many who, as we have just hinted, though liking it better than any other, have been tempted to discard it altogether.

But that the forty-fold potato can be grown to a large and handsome size is certain. We have seen too many evidences of it ourselves, to listen to anything to the contrary; and it is therefore with great pleasure that we inform those who have only seen small sized potatoes produced, of a system which has been practised by Mr. Burns, on the farm of J. D. W. Williams, Esq., of Roxbury, and which has afforded a most excellent crop of large and fair specimens.

It is probably well known that one end of all potatoes, and in particular the forty-fold, has a very large number of small eyes, amounting, in the latter variety, to some fifteen or twenty in a moderate sized potato. Now, if only one good sized potato is planted, from this will spring, in all, twenty or twenty-five sprouts —altogether too many for a hill. Mr. Burns adopted the following method:—the end of the potatoes containing the great number of eyes was cut off and thrown away; the remaining part was then divided into three portions, with two or more eyes to each: these three sets were planted in one hill, in the ordinary way. The result was most favorable; but a few sprouts came from each; the hill was not thus choked up with vines; and the roots, having more room to extend themselves and gather nourishment, the tubers were formed of fine size, with very few small ones, not more than is usually found in other varieties. Some of these potatoes we have seen and examined ourselves. The after treatment of the plants was the same as that adopted for all ordinary kinds, and the product immensely great. We would recommend a trial of this system by all those who have failed, in the common way of planting, of raising potatoes of fair size.

In giving Mr. Burns's practice, we do not mean to be understood as intending to say that no other mode will produce a good crop. A farmer of Lancaster, who has raised them every year since their introduction, succeeds in producing a great crop of very large potatoes. Only one moderately sized one is planted in a hill, and the crop is good and profuse. The soil is rich, light and deep.

We have also stated, in another page, that forty pecks of large potatoes had been raised from one peck the past season. This is an enormous quantity, but no more than, we believe, can be always produced with ease. In England, one pound has raised seventy, and other experiments have been detailed, where the same proportionate quantity was raised. We shall be glad to see this excellent potato take the place of the nondescript varieties which are every where grown, that our markets may be abundantly supplied with this valuable vegetable.

ART. III. *Remarks on the cultivation of Ericas or Heaths, their propagation and general management.* By J. W. RUSSELL.

As this splendid genus of plants is now beginning to attract the attention of the lovers of choice and elegant flowers, in this country, I beg leave to present you with a few brief remarks, on their general treatment, propagation &c., which may not be unacceptable to that portion of your readers who are not already acquainted with this family of plants. About *twenty* years since ericas were held in great esteem in England, but more especially those varieties that are indigenous to the Cape of Good Hope, from whence all the most beautiful of the family have been obtained. A *heathery*, or in other words, a house built expressly for the growth of heaths, was of common occurrence, at the time above mentioned; but from some cause, of late years, their cultivation has been on the decline, and the reason has been, probably, from the supposed difficulty of their culture. However, at the present day, in England, some fine collections are still kept up, and are highly prized by the proprietors; more attention has also been bestowed upon the plants generally within a very short period.

In order to be successful in the cultivation of heaths, the soil that is the best adapted for their growth, should be the first consideration. It must be borne in mind, that it is of the utmost importance to make a judicious selection of this material, for on it rests, in a *great measure*, the success of the undertaking. We cannot readily find in this country, as in England, where whole tracts of land are completely covered with the *Erica vulgaris* or *Ling*, and where a plenitude of it can be secured, what might be called, strictly speaking, *heath* soil, none of this genus to my knowledge having as yet been discovered in America. Therefore, since we have not our black heath, Wimbleton common, &c. as a store-house, we have no alternative but to select the best that it is in our power to obtain. *Peat* or bog soil, taken from localities where the *andromedas* and *menziesias* are found growing spontaneously, is probably the best we shall be able to find in this country for the general culture of heaths. Be very careful to give the preference to the *black* soil, that is of a loose pliable nature, where it is rarely, if ever, covered with *water*. Clear pit or fresh water sand must be well blended with the soil, if it is naturally deficient of this ingredient; about one third or one half sand should be used; at any rate a goodly portion is indispensably necessary, and the operator must here use his own judgment, as the quantity to be added will depend altogether on the presence or absence of sand in the original soil. In order to be more distinctly under-

stood, the subject will be given under separate heads, commencing with the propagation of the plants.

Propagation.—Ericas are propagated from cuttings of the young growths that have advanced from an inch and a half to two inches in length, being mindful to take off the cuttings from the plant, at the *part* from whence they started to grow. The next process is to cut off the leaves with a sharp knife, about an inch from that part of the cutting which is to be placed in the sand; the cutting off of the leaves is rather a tedious process; nevertheless it must be done with both care and patience, for if the stem is wounded with the knife in the operation, it should be remembered that the cutting will not grow. *Pure sand* (without any mixture of peat soil) is the best for the cuttings to strike root in; the pot, before the sand is put into it, must have a good drainage of potsherds placed at the bottom; then fill up with the sand to within half an inch of the top of the pot, and place the bell-glass on the sand, in order to ascertain how near the side of the pot you may insert the cuttings; this done, place them at regular distances, of about a quarter or half an inch apart, beginning in the centre of the pot and so continue on, till you come near to the mark made by the glass; and by giving the whole a gentle watering with a watering-pot, through a very fine rose, the work is finished. The glass should be put over the cuttings as soon as they become dry after watering, and taken to the place where they are to remain until rooted. The east end of the green-house is probably the best situation; shading the cuttings from the hot rays of the sun until rooted must never be neglected. I would here observe, that a hot-bed, or any kind of artificial bottom heat, should never be used, in the propagation of this tribe of plants.

The cuttings, as soon as rooted, which may be known by their starting to grow, should be potted off singly into the smallest sized pots (thumbs,)—making use of the soil recommended, and shaded from the sun a week or a fortnight until they recover; a sufficient quantity of small potsherds must be placed even in the small pots for drainage, or the plants will not thrive. From April to June is probably the best period to take off cuttings.

The best system that I am acquainted with in the propagation of ericas, is, in the first place to select a No. 3 or 4 pot or larger; then place a pot inside of it two sizes smaller (say No. 2,) and so go on sizing or arranging until you come to the centre of the large pot with the smallest sized thumb pot; or, in other words, as I wish the reader to understand my meaning, place one pot inside of the other, so as to leave a cavity about an inch apart between each, for the reception of the sand: little drainage of potsherds at the bottom of each must not be overlooked. Supposing the pots to be all rightly adjusted, the inside ones as near on a level as possible, and an inch and a half *below* the top or rim of the outside

one; place the sand between them and press it down with your fingers pretty solid, and insert the cuttings close to the sides of the pots, at the distance before recommended; then, instead of a bell glass, place a pane of common glass over the whole, sufficiently large to cover the large pot. If the glass does not lay close to the rim of the pot, a little soft paper or cotton batting must be put round the rim in such a manner as to give the pane a regular bearing on every side, in order to exclude the *air*. If this is done right, the tops of the cuttings will stand within half an inch of the glass. The glass must be turned over every morning, in order to keep the moisture, that settles on the under surface, from damping off the cuttings, and if a bell glass is used it ought to be frequently taken off and wiped dry.

When the cuttings are rooted they must receive the treatment before stated. If the cuttings are potted and taken out of the house in the summer season, a north aspect should be chosen in preference to any other, and the pots all neatly plunged to their rims in sand.

J. W. RUSSELL.

Mount Auburn, Cambridge, April, 1838.

[*To be continued.*]

ART. IV. *Some observations on the general treatment of Verbena Tweediana, chamædrifolia, vendsa, and other species, with a few hints on their cultivation in the flower border.* By the EDITOR.

THE genus *Verbena*, which, not many years since, contained few species but little better than mere weeds, is at the present time one of the most valued in our collections. Since the *V. chamædrifolia* has been introduced, a new charm has been given to the tribe. Several other species and varieties, very beautiful, have successively been added to our gardens, and lately the *V. Tweediana*, vieing, if not surpassing, as a whole, the *chamædrifolia*, has been received: another, equalling either of these, has just been figured in the London periodicals, called the *V. incisa*. These three alone possess sufficient beauty, both as hot-house, parlor, or garden plants, to stamp the genus with a character which shall make it known wherever there is a

spot of ground of sufficient size to place either one of these species upon. The *Alòysia citriodòra*, which was once classed under the genus *Verbèna*, has already given it a degree of notoriety which few other genera attain; but it will, we doubt not, hereafter, be as universally known as that of the rose or the geranium.

The cultivation of all the verbenas, so far as we have tried them, is quite simple, unless we except the *V. chamædrifòlia*, which is difficult to keep through the winter season, except in a high and dry temperature, which it is not very convenient for all cultivators to possess. In any damp situation, as a cellar, a cold green-house, or a room not sufficiently warmed, it is apt to die off. With this exception, it is as easy of growth as any plant that we are acquainted with. The annual species are readily raised from seeds, and require no other attention than to be transplanted into a good soil, where they flourish without the least care.

We have so often noticed the treatment of the *V. chamædrifòlia*, that it may appear quite unnecessary to add anything here upon its management. We have recommended its growth both in pots and in the border; and though it is frequently seen in great beauty in both situations, still its cultivation is by no means so general as its merits entitle it to be. It is true that, in a measure, this arises from the repeated loss of the plants during the winter season, when the stock is destroyed: but its limited growth in beds or in borders, in the summer season, is undoubtedly owing to the want of a knowledge of its cultivation in such a situation, and its adaptation to the purposes of border culture. The *V. Tweedieana* is entirely new, and is yet, perhaps, scarcely known, except in the vicinity of Boston, New York and Philadelphia, and in but few of the more choice gardens around these cities. The *V. incisa* is not yet in the country, but will probably be speedily introduced. Some of the annual species, as the *V. Aublètia* and *venòsa*, are tolerably well known, and their beauty duly appreciated. There are, however, many species, which have not been added to our collections, equally as handsome as the two latter. With the hope that our present remarks may extend the growth of all the species, and be of some assistance to these who have not heretofore possessed any of them, we shall give the treatment due to each under the separate species. We commence with the *V. chamædrifòlia*.

V. chamædrifòlia.—This species is not adapted to pot cultivation in the winter, except when placed in a stove. In green-houses the plants look unsightly, and the flowers are few and possess but little brilliancy. In the stove, however, properly managed, it is a gem of rare beauty. We have often noticed

the flourishing state of the plants in the stoves at Belmont Place, under the excellent management of Mr. Haggerston, and also at some other establishments. But the instances have been few, owing to the very limited number of stoves which are attached to the private residences or public gardens in this country. In the summer season we have seen it frequently, but under such circumstances that but half of its splendor has been developed. We shall first give its management in pots, and afterwards in the open border.

Plants destined for pot culture should be selected from a strong and vigorous stock, and whether from a layer or a cutting is immaterial. If an old plant is growing in the border, let a few No. 1 pots be filled with a compost of loam and old manure, or decayed leaves, with a small portion of sand. This should be done in August or early in September, so that the plants may have a chance to get well established before winter sets in. The strongest shoots should be selected, and small pegs should be prepared to fasten them into the pot, which should be plunged into the soil, on a level with the surface. They will root in a fortnight or three weeks, and may then be taken off, and the plants placed in a warm situation for another fortnight, occasionally watering them as they require it. If the layers were put down the first of September they may be cut off by the 15th or 20th. It will now be the 1st of October, and they should be potted off into No. 2 pots, in the same soil as before mentioned. If the weather proves cool after this they had better be removed to a frame, where they may stand till the 1st of December, being careful, however, to water very sparingly, and at no time to give them but just enough to keep them from drying up. After this they may be removed to an airy place in the green-house, where they should also receive little or no water. Here let them remain until the first of February.

At this time the plants should be removed to the stove. Gradually give them more water, and as the season advances be liberal in the supplies. Let the plants stand *near the glass*, and where they will have an *abundance* of air, otherwise they will fail to flourish. A profusion of buds will soon be developed, and by the 1st of March the plants will be in fine bloom. They should now be repotted into No. 3 pots, still keeping them in the same situation and giving moderate supplies of water, being guided, however, somewhat by the state of the weather; if dull, water cautiously. The shoots will now have reached the length of one or two feet with numerous laterals; they may either be allowed to hang gracefully over the rim of the pot, or trained upright to neat trellis work, just as suits the taste of the cultivator. We are inclined to believe, however, that the plants flower more freely when allowed to assume what appears to be their naturally pendant or trailing habit.

By the middle of April they should again be repotted into No. 4 pots, receiving the same treatment as regards air and water as before, and in May or about the 1st of June the plants should be placed in the next size pots. A final shifting may be made in July, into pots a foot in diameter, and a plant standing in one of these, elevated upon a pedestal of some kind, with the shoots hanging over the sides to the distance of two or three feet, is one of the most surpassingly brilliant objects imaginable. To heighten their effect vases of classic models may be adopted, either for putting the plants directly into, or for setting a common pot inside.

In August another stock of young plants should be taken off, and the same course of cultivation pursued the next season. It should be carefully remembered not to over water the plants during their dormant season; for if their roots are once destroyed, it is difficult to bring the plants into a healthy state.

But it is in the open border where we shall find this plant contributing its greatest splendor and brilliancy,—almost as dazzling as the sun's rays, whose presence alone can cause it to display its vivid tints, it enlivens the border and adds gayness to all around. We have seen patches of it four feet in diameter, with hundreds of its blossoms expanded at once, and with only ordinary care it may be easily made to extend its shoots to this distance. When, however, plants do not make such rapid growth, they are not less attractive, and we had rather see a small patch thickly covered with flowers, than a large one with blossoms spread thinly round.

Plants for placing in the open border should be taken up as has just been recommended for pots, and preserved in a frame or green-house, or even a parlor, though in the latter they do not add any thing to the beauty of the room. Their presence, however, will undoubtedly be allowed, as a remuneration for their charms during the summer season. In either of the places they should be watered with the utmost care. Keep them near the light, and let them have as much air as possible.

In the month of May the plants should be turned into the border. Select a *dry*, warm, and, above all, a *sunny* situation. If the soil is not naturally light and sandy make it so by the addition of the proper materials, and if the situation is low let a little mound be raised, about six inches high in the centre, gently sloping it off, so that all superfluous wet may pass away. Set a plant in the centre of this, and as its shoots progress let them be pegged down to the soil; proceed in this manner, all summer, and by September the whole space all around will be covered. No watering is necessary; keep the weeds out, and nothing else need be done. In September take off a quantity of young plants for another season, as the old one will be of no use.

V. *Trecedicàna*.—By our placing the *V. chamædrifolia* first, it may be supposed that we admire that species more than the

Tweedieana. This, however, is not the case. We do so because it is much better known. We have, in speaking of the latter, previously to this, remarked that, as a whole, we like it far better than the former. Its growth is more free; its umbels of flowers much larger, more profuse and finer formed: its habit upright and more graceful; and its blossoms remain in perfection a longer period. *V. chamædrifolia* is more dazzling in its color; but in every thing else it is inferior to the *Tweedieana*. Both are superb, but the latter, we think, will be the most generally admired.

After detailing all the particulars of the cultivation of the *chamædrifolia* it would be needless to repeat the same again here. Suffice it to say that the *Tweedieana* may be treated in the same manner, with some exceptions. It is less difficult of cultivation, and does not require so much care in watering during the winter season. It is upright in its habit, and well adapted for training on trellises. Its growth is more rapid, and the plants, when growing in pots, will require more frequent shiftings.

The *Tweedieana* may be kept through the winter season in perfect safety and in good condition in an ordinary green-house, and, we doubt not, a parlor. It may be propagated either by cuttings or layers in the same manner as has been recommended for the *chamædrifolia*. Set the plants in any place either in the frame, green-house or other situation. About the first of February they will begin to grow, and from this period they should have frequent shiftings. Plants may be grown to the height of two or three feet by the middle of May, if they are duly encouraged, and if trained to a trellis, tastefully made, will present a most gorgeous array of its splendid crimson blossoms.

It is only a short time since this fine species was introduced into the country; and we have therefore had no experience upon its growth in the border; but, reasoning from analogy, we have no doubt it will flourish in such a situation, treated just like the *chamædrifolia*. It will probably grow much more vigorously and require more attention; the shoots extending themselves faster, will need to be oftener tied up if trained upright, or pegged down if trailing upon the surface of the soil. It will also need more pruning, and the old flower stems should always be kept cut off. As regards the method of training the plants it is altogether a matter of taste. In pots we prefer its naturally upright habit; but in the border we think it would display its attractions to better advantage when trailing on the ground. A bed of this and another of *chamædrifolia* would be two superb objects. The latter would afford a more glittering array of individual flowers; but the former, in the redundancy of its rich corols, and in all that constitutes gracefulness of habit, would claim the admiration of all.

The species will no doubt be considerably cultivated the com-

ing season, and we make these remarks that those who are unacquainted with it may know how far it is adapted to border growth. Every garden of any pretensions should be ornamented with a patch of both this and the *chamædrifolia*. The *V. Tweediana*, as we have just observed, can be grown successfully in parlors. An amateur of our acquaintance has had a plant with upwards of a dozen heads of blossoms open at a time for several weeks.

V. incisa.—We mention this in anticipation of a notice which we shall give as soon as the late numbers of our periodicals shall reach us. It has rose-colored flowers, of the same habit and character as the *Tweediana*, and is every way as hardy and easy of growth. We shall speak of its treatment hereafter.

The above constitute the more elegant species of the genus. The other showy ones are nearly all annuals, and are very interesting plants. In a future number we shall continue our remarks upon these.

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, *Florist's Register*, and *Royal Ladies' Magazine*. Dedicated to the Queen, Patroness, the Rt. Hon.

the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo numbers, with a plate; 1s. each.

Floricultural intelligence.—The *Botanical Register* and Sweet's *British Flower Garden* are hereafter to be united, and published at the reduced price of 3s. 6d. each number. In an address to the patrons of the former work, in the concluding number of the last volume, the prospectus states that "the present limited number of descriptions in each number (eight,) is by no means sufficiently extensive for a record of the rare and beautiful plants submitted to their notice; and on the other hand, feeling anxious to diminish rather than increase the expense of the work, Dr. Lindley has suggested the plan of increasing the number of descriptions as much as possible, and instead of giving a figure to every description, as formerly, to figure such only as force themselves upon the attention of the botanist or amateur, either by their surpassing beauty, or some rare and curious quality." Under the title of "Botanical and Horticultural news," a monthly register will be added, containing the most rare and interesting matter relating to these subjects. It is also proposed, in all cases, to give precise directions for the cultivation of the plants that may be introduced into the work. This will greatly enhance the value of the work, which has heretofore been a sealed book, so far as relates to anything connected with the management of the plants figured. We shall endeavor to extract all the useful information from these two combined publications.

Mr. John Gibson, the Duke of Devonshire's collector, who has lately returned from a successful botanical tour in the East Indies, whither he was sent for the express purpose of introducing a number of plants which have been found there and described by botanists, brought home with him a great quantity of rare plants,—among others the thibaudias, which are represented as of surpassing beauty. Three species have been introduced by him, and are now flourishing in the Duke of Devonshire's collection at Chatsworth, under the care of Mr. Paxton, who intends to give the history, culture and merits of all the plants brought home by Mr. Gibson. The following is Mr. Gibson's description of the *Thibaúdia setigera Wallich*:—A very bushy, tallish shrub, attaining the height of five or six feet, with large lanceolate, entire, dark green leaves, produced in irregular clusters round the branches; the flowers are of a beautiful brilliant red, slightly variegated, and produced in the greatest profusion, in loose panicles, on the young shoots: these panicles are axillary. When the blossoms are at the greatest height of perfection, the whole plant appears one complete mass of flowers. It has not yet flowered in England, but as soon as it does it will undoubtedly

be figured in the *Magazine of Botany*. It belongs to the natural order *Vacciniææ*.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

MÁLVA

Munroana Lindl. Mr. Munro's Malva. A half hardy shrub; growing about two feet high; with scarlet flowers; appearing in summer; a native of Columbia River; introduced to England in 1826; cultivated by seeds, in a rather poor soil. *Pax. Mag. Bot.*, Vol. IV. p. 269.

One of the prettiest species of *Málva* we have ever seen. The flowers are of a light bright scarlet, tolerably large, and produced in abundance all over the plant. Mr. Douglas discovered it in 1826, and sent seeds to the London Horticultural Society, where the plants flowered for the first time in 1829. Mr. Douglas has observed that this plant was one of the most beautiful he collected in 1826. Mr. Paxton states that it "will do well, perhaps best, treated as a green-house plant, being less exposed to violent rains, &c.; but it grows very vigorously and flowers profusely at almost any season, if planted in the border." In the latter situation the plants prefer a soil somewhat poor, in preference to that which is rich. When grown in pots, the plants should be watered freely.

This is a species, which, we hope, will be introduced and generally grown; a bed of it would form a pretty contrast with the *Málope trifida* var. *grandiflora*. (*Mag. Bot.*, Jan.)

HIBISCUS

lilacinus Lindl. Lilac Hibiscus. A green-house shrub; growing four or five feet high; with lilac flowers; appearing in spring; a native of Swan River. *Bot. Reg.*, 2009.

A pretty species, obtained from seeds sent to England from Swan River, by Sir James Sterling. The leaves are tripartate and filiform; the flowers are produced on axillary peduncles, solitary, of a fine lilac color, and about two inches in expansion. It will form a pretty species for turning out in the border in summer, but will require protection during winter. (*Bot. Reg.*, Dec.)

Onagræææ.

FUCHSIA

fulgens D. C. The Glowing Fuchsia. A green-house plant; growing three or four feet high; with vermilion-colored flowers; appearing in April and May; a native of Mexico; increased by cuttings, and cultivated in loam and peat. *Bot. Reg.*, n. s. 1.

"This is probably the most brilliant plant of the *Temperate Flora of Mexico*." It was originally met with by Mocino and Lesse, two Spanish naturalists, and has very lately been introduced to Britain. The flowers are produced in profusion on axillary peduncles, towards the extremities of the branches, pendulous, very long and tubular, and open at the mouth. The leaves are rather large, opposite, denticulated and glabrous. A plant, well grown and in full bloom, would be a superb object. Dr. Lindley states that it is difficult to conceive anything more brilliant than the appearance of this species, when its rich vermilion-colored flowers are formed beneath the influence of a

Mexican sun; but if grown in a shaded situation, with too much heat and moisture, the bright colors inevitably fade, and the plant is deprived of half its beauty." It grows freely in a mixture of loam and peat, and is about as hardy as the *E. arboréscens*.

In conclusion, Dr. Lindley remarks that "this plant may serve as a specimen of what the genus *Fuchsia* is still able to yield of novelty and beauty." The species now figured only forms one of several that are able to rival it in appearance, and he especially directs the attention of those who have commercial relations with Peru to the fuchsias inhabiting that part of South America. In the woods about Huassa-huassi and Muna, in particular, are some of the most magnificent species, one of which, called *Mollo Ccantu*, or the *beauty plant*, was found by Mr. Mathews, at Huamantanga. It would remunerate any nurseryman for the expense of a Peruvian collector, if he could only bring back alive five species of *Fuchsia* figured in the *Flora Peruviana*, not to mention the *F. dépendens*, of which a plate will be found in Sir W. J. Hooker's excellent *Icones Plantarum*, and some others. (*Bot. Reg.*, Jan.)

This splendid species, we hope, will soon be added to our collections.

Rosàcæ.

SPIRÆA

barbata Wall. Bearded Meadow-sweet. A perennial herbaceous plant; growing from three to four feet high; with white flowers; appearing in summer; a native of Japan. *Bot. Reg.*, 2911.

Syn: *Spiræa japonica* Hort.

"Beyond all comparison the handsomest herbaceous spiræa yet in our gardens; for to all the pure and brilliant whiteness of *S. filipéndula*, it adds the graceful plume-like appearance of the American *S. arúncus*." The panicle or spike of flowers is much more spreading than the *S. filipéndula*, and the foliage more delicate. Dr. Wallich originally discovered it in Nepal, Kamaon, &c., but it was not introduced to Europe until Dr. Von Siebold brought it from Japan. The plant has hitherto been wintered in a frame, but there is not much doubt that it is perfectly hardy. In its natural state, the snow-white plume is two feet long. No tribe of hardy herbaceous plants are more ornamental than this species, and we hope this will be added to our stock. (*Bot. Reg.*, Dec.)

Rutàcæ.

BORONIA D. Don

crenulata Pazt. Crenulate-leaved Boronia. A green-house shrub; growing two feet high; with pink flowers; appearing in spring; a native of New Holland; increased by seeds and cuttings, and grown in sandy peat. *Pax. Mag. Bot.*, Vol. IV, p. 267.

A very neat and pretty little plant, of an erect habit, with opposite crowded leaves, obovate and crenulate, and numerous axillary pink flowers towards the extremities of all the branches. It was raised from seeds received by the Messrs. Loddiges some

years ago, and is supposed, by Mr. Paxton, to be the *B. crenulata* Smith, as described by that author in the *Transactions of the Linnæan Society*. It is yet a rare plant, being only in the possession of Messrs. Loddiges. In cultivation it requires nearly the same treatment as all the delicate New Holland plants, viz. a soil composed of "nice fine sandy peat, [heath-mould,] not over full of fibres," well drained and not over watered. The plants should not be encroached upon by others, in whatever situation they may be placed. (*Pax. Mag. Bot.*, Jan.)

Geraniaceæ.

Before this article appears in print, the first geranium show will have taken place at the Massachusetts Horticultural Society's room. From this time we may date the spread of a greater taste for this beautiful tribe, and it would not astonish us much if a few years should find our collections abounding with seedlings, the production of our amateurs and nurserymen, equalling those now imported from England and the Continent. A liberal award of premiums, by our horticultural societies, for specimen plants, will tend to hasten the diffusion of a taste for the family which will lead to their very general cultivation; and the result will be a desire to possess only the more beautiful and choice varieties, while, at the present period, there appears to be but little desire, except among a few amateurs, to grow only the more common sorts: this, however, arises, in a degree, from the newer kinds not being sufficiently known. But, by annually bringing before the public fifty or a hundred of the very rarest kinds, an opportunity will be offered for all to view them and judge of their excellence. We shall notice the kinds exhibited, and give the names of those considered the most beautiful.

Mr. Haggerston, in his late tour to the South, procured several of the finest kinds in the collections of Mr. Hogg and others, which are now coming into bloom, and promise highly: we have not learnt the names, but shall endeavor to procure a list of them from Mr. Haggerston, for insertion in a future number. Mr. Wilder possesses a fine collection, and his gardener, Mr. Donald, has raised a quantity of seedlings, which will bloom the present spring, and from which some superb sorts are expected. Others have added to their stock, and preparations will undoubtedly be made for a splendid display another season.

In the collection of Hovey & Co., Boll's General Washington is in flower: this is a superb variety, raised by our correspondent, Mr. Boll, florist, of New York. It is pronounced, by good judges, to be superior to Dennis's Perfection, which was, last season, styled the "Prince of Geraniums," and we believe Mr. Hogg, who is allowed to be a good judge, stated to us, last spring, that he thought it a more excellent flower. It is in

the same style, a fine bold flower, a near approach to the hemispherical form, color bright rose, with dark lines, and a beautiful, compact and erect truss of blossoms. After the exhibition we shall notice this and other kinds at greater length.

Passifloræcæ.

Mr. Knight, of the Exotic Nursery, has raised a new hybrid *passiflora*, between *P. alata* and *princeps*: the foliage bears some resemblance to that of *P. alata*, and the flowers partake of the elegant form of *P. princeps*, but are of a beautiful white or cream color: it is a free grower, and produces an abundance of flowers, and has bloomed splendidly in the stove. In its profusion of blossoms it probably partakes of the character of the *alata*, as the *princeps* in the stove at Mr. Cushing's has not yet flowered, though it has been planted out some time, and made a vigorous growth. (*Pax. Mag. Bot.*)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Lobeliæcæ.

LOBELIA

heterophylla *Labillard.* Varicous-leaved *Lobelia*. A half hardy herbaceous plant; growing 7 feet high; with blue flowers; appearing in September; a native of Van Dieman's Land. *Bot. Reg.*, 2014.

“It is much the handsomest of the herbaceous lobelias. The flowers are of a particularly clear rich blue, and so large as to produce a very rich and gay appearance, either when the plant is grown singly or in beds.” The leaves are both linear and pinnatifid; the stem simple, slender, and terminated with two racemes of flowers: the blossoms are large, somewhat expanding, and gracefully drooping on peduncles half an inch or more in length. It was raised from seed received from Van Dieman's Land. Dr. Lindley states that the specimen from which the figure was taken was received by him from Mr. Veitch of Exeter, “with a memorandum that the plant *had been hung up in the stove for more than a month without the least soil, and without ceasing to flower:*” a very singular fact, he adds, and quite new in plants of this description. We have no doubt it will prove one of the most beautiful and valuable plants for pot cultivation either in the stove or green-house, and, from its slender habit and size, and brilliancy of its flowers, add greatly to the gayness of its winter habitation. (*Bot. Reg.*, Dec.)

Asteræcæ.

COSMUS *Car.* (from *Kosmos*, beautiful, in allusion to the appearance of the species.)

tenuifolius *Lindl.* Fine-leaved *Cosmos*. An annual plant; growing two feet high; with purple flowers; appearing in autumn; a native of Mexico; increased by seeds. *Bot. Reg.*, 2007.

A beautiful annual, with rich purple flowers, an inch and a half in expansion, with a yellow disk, heightened by black anthers. They rise up on very long and slender peduncles, above the bipinnatifid foliage, and have a showy appearance. It is

generally raised from seeds, but the plants have heretofore flowered so late as to prevent their ripening. It is difficult to keep during winter, and the only way to preserve it will be to plant early, and thus enable the seeds to perfect themselves before frost. (*Bot. Mag.*, Dec.)

Jasminiæcæ.

JASMINUM

glàucum Hort. Kew. Privet-leaved Jasmine. A hardy green-house plant; growing five or six feet high; with white flowers; appearing all summer; a native of the Cape of Good Hope. *Bot. Reg.*, 2018.

Syn: *Jasminum ligustrifolium Lamark* *Mogòrium myrtifolium Lamark* *Jasminum africanum Commel. pl. var. f. 5.*

An old plant, in the English collections, but one of considerable beauty, with numerous fragrant white blossoms, and small privet-looking foliage. The flowers are produced on short axillary peduncles, two or three in number on all the terminal shoots. These, from their abundance, give the plant a lively aspect, and, by their odor, render it desirable in all gardens. As it is an hardy green-house plant in England, it will undoubtedly flourish in the same situation in this country, and, perhaps, keep well in an ordinary cellar, from whence it may be removed into the border, in May, where it will grow rapidly, and flower the whole summer season. It is a native of the Cape of Good Hope. Of easy cultivation. (*Bot. Reg.*, Dec.)

Gesneriæcæ.

DRYMONIA (from *drumonia*, woodland: this species inhabits forests) *Martius*

bicolor Lindl. A stove climber; growing ten or twelve feet high; with pale yellow flowers; appearing in September; a native of the West Indies: increased by cuttings or layers, and cultivated in loam and vegetable mould. *Bot. Reg.* 4.

Syn: *Besleria serrulata Jacq. & Willd.*

“Although not a showy plant, it may be found useful to cover the back wall of a hot-house, or any similar place, where there is not light enough for other plants to grow. In such situations it spreads rapidly, like ivy.” It is easily grown and easily increased. It succeeds best trained upon a wall in a moist stove. The flowers are axillary, solitary, campanulate, about the size of *Bignonia*, pale yellow. The leaves are large, oval-lanceolate, green on the surface and brown underneath. It is a native of the West Indies, where it creeps upon the ground or climbs the trunks of trees, by the aid of the numerous roots, which are pushed out from the stem. Figured from the hot-house of Mr. Knight. (*Bot. Reg.*, Jan.)

Scrophulariæcæ.

PENTSTEMON

gentianoides Humb. Bonp. and Kunth Gentian-like Pentstemon. A half hardy perennial; growing three feet high; with crimson purple flowers; appearing from July to October; a native of Mexico; increased by seed and cuttings, and grown in common garden soil. *Bot. Reg.*, 3. *Pax. Mag. Bot.*, Vol. IV., p. 255.

An exceedingly beautiful species, with slender pubescent stems, ovate-lanceolate leaves and handsome crimson blossoms, slightly pendulous. It is a native of Mexico, but it was introduced into the English gardens from Belgium. It seeds freely and will

probably soon become common. The seeds should be sown in May in a bed of light rich soil, (covering them with a little sandy peat,) in a situation not exposed to the mid-day sun: the plants will be fit to pot in September, and should be kept in a frame during winter and turned into the garden in the following April, where they will commence blooming about the end of June, and continue in flower till destroyed by frost. A stock should be annually raised from seeds or cuttings, as the profuseness of the blossoms exhausts the old plants. Humboldt and Bonpland discovered this species on the slope of the snow-capped mountains, 10,500 feet above the sea. (*Bot. Reg.*, Jan.)

Cobæa Nutt. *Cobæa-flowered* Pentstemon. A hardy perennial; growing two feet high; with pale purple flowers; appearing in August; a native of Texas; increased by seeds. *Pax. Mag. Bot.* Vol. IV. p. 243.

A much stronger species than the above, resembling in the size of its blossoms the *Cobæa scândens*, from whence its name. The flowers appear in a terminal panicle, each peduncle bearing from three to five; the outside of the corolla is pale purple; the inside nearly white, striped with red lines which extend to the edge. Mr Drummond sent the seeds of this from the interior of Texas, but we believe Mr. Nuttall previously discovered it on the prairies of the Red River, and gave it the above specific name. It probably requires the same treatment as the other species, and may need the protection of a frame in our climate; but it is amply worth any trouble in cultivation. It is more splendid than any which we have heretofore seen figured. All the pentstemons are beautiful plants, and many of them perfectly hardy. They should be better known. (*Pax. Mag. Bot.*, Dec.)

Solanaceæ.

BRUGMANSIA.

Waymânii Paxt. Mr Wayman's Brugmansia. A green-house shrub; growing two feet high; with purple flowers; appearing during summer; a native of South America; increased by cuttings and grown in peat, loam and decomposed manure. *Pax. Mag. Bot.* Vol. IV. p. 241.

This is the plant we noticed at p. 73 under the name of *B. Whymânii*, and which, it was stated in the paragraph we quoted, was identical with the old *Datura Stramonium*. But according to Mr. Paxton it is quite a distinct species. It is not certainly the *D. Stramonium* as that has white flowers. The only purple flowered one in the genus is the old *D. fastuosa*.

The present subject, the *Brugmansia Waymânii*, is a very elegant plant. It presents the uncommon character of funnel shaped flowers becoming semi-double; that is, one perfect corolla placed inside of the other; as an example of this we may mention the polyanthus, one variety of which, very common in gardens, possesses the same habit. A specimen from the same plant from which this drawing was taken, Mr. Paxton adds, contained, besides the stamens and pistil, "three corollas growing within each other and surrounded by a purple calyx, but connected only at the base."

Nearly every bloom displays its double character. The interior of the flower is pale purple, and the funnel shaped part, externally, is deeply blotched with the same color. It was raised from seeds, received from South America, by Mr Wayman, gardener to Sir H. Digby, and is named in compliment to him. In its cultivation it should be allowed plenty of pot room and abundance of water both at its roots and over the foliage. (*Pax. Mag. Bot.*, Dec.)

Brugmânia sanguinea is in several collections in this country, and is deserving of a place in every good garden.

MONOCOTYLEDONOUS PLANTS.

Hæmorodæcæ.

ANIGOZANTHUS (From *anigo*, I raise up, and *anthos*, a flower; but with what application is not evident) *Labill.*

Manglésii var. *angustifolia*. Narrow-leaved Manglesian Anigozanthus. A frame or green-house plant; growing 2 feet high; with red and green flowers; appearing in ? a native of Swan River; cultivated in chalky loam and peat. *Bot. Reg.*, 2012.

A curious and pretty plant with simple racemes of green flowers, slightly nodding, often red at the base. The foliage is sparse, ciliate and acute. The clusters of flowers have a neat aspect, and though not showy still sufficiently beautiful to recommend it. Of easy culture. (*Bot. Reg.*, Jan.)

Amaryllæcæ.

STERNBERGLA (In compliment to Count Caspar V. Sternberg, a learned botanist) *W. & K. colchiciflora* Meadow saffron-flowered Sternbergia. A frame ? bulb; growing about 4 inches high; with yellow flowers; appearing in autumn. A native of the Crimea.

“A charming little autumnal flowering bulbous plant,” perfuming the fields of the Crimea, especially about the Bosphorus, with its fragrant jasmine scented flowers, which are yellow, somewhat resembling the crocus. It blooms in the months of September and October. It is also found in Hungary. It will probably be a hardy plant, but at the present time, when the stock is small and the plant rare, it would be better to guard against danger by planting in a frame. From its pleasant odor it will undoubtedly become a great favorite in our gardens. (*Bot. Reg.*, Dec.)

Orchidæcæ.

CATTLEYA

Perrinii Lindl. Mr. Perrin's Cattleya. A stove epiphyte; growing from one to two feet high; with lilac and purple flowers; appears in ?; a native of Brazil. *Bot. Reg.*, 2.

A pretty species, “not unlike *C. labiata*, although inferior to it in beauty.” The sepals are oblong and linear, of a lilac shade, and the lip beautifully marked with deep violet. This species has been in English collections for some time; but the figure was taken from a plant which lately flowered at Mr. Knight's of the King's Road. It requires the same treatment as the rest of the genus, and should be grown in a moist stove, kept from 60° to 70° in winter, and from 70° to 100° in summer. The soil should be good peat, cut or broken into pieces about an inch or an inch and a half square. The pots should be filled half full of

potsherds, and the plant raised considerably above the surface of the pot. (*Bot. Reg.*, Jan.)

Harrisoni Paxt. Mrs. Harrison's Cattleya. A stove epiphyte; growing sixteen inches; with rose-colored flowers; appearing in autumn. *Pax. Mag. Bot.*, Vol. IV, p. 247.
Syn. *C. Loddigesi* var. *Harrisonii* of the gardens.

Another splendid variety or species, with large and beautiful flowers, almost equalling the *C. labiata*. The lip has not that brilliant marking which is the peculiar charm of the *C. labiata*, but the whole flower has a very showy appearance. Added to this, its rather robust growth often producing, under good management, forty or fifty blossoms, and it is a desirable plant. The drawing was taken from a plant at Chatsworth, which produced nine spikes, nearly all with five blossoms each. It is grown like the other species. (*Pax. Mag. Bot.*, Dec.)

ANETOCHEILUS Blume (apparently from *anoiklos*, open, and *cheilos*, a lip, in allusion to the spreading apex of that organ.)

setaceus Blume Fringed *Anatocchilus*. A curious epiphyte; growing eight inches high; with white and pink flowers; appearing in June; a native of Ceylon. *Bot. Reg.*, 2010.

Of no great beauty, the flowers being "white and green, and very inconspicuous. But the leaves are singularly plaited with golden veins upon a brownish purple ground." It is a terrestrial species, and requires the same treatment as *Goodyera*, &c. (*Bot. Reg. Dec.*)

ZYGOPETALUM

maxillare Tooth-like-flowered *Zygopetalum*. A stove epiphyte; growing a foot high; with blue and chocolate flowers; appearing in ?; a native of Rio Janiero. *Pax. Mag. Bot. Vol. IV.* p. 271.

Z. Mackaui is tolerably well known for its great beauty, but although the flowers are considerably larger than the present species, still it cannot lay any more claims to beauty. The present species is truly elegant. The lip is full and of a deep rich blue; the sepals are green, spotted with chocolate, the scape of flowers pendant and racemose. Mr Paxton states that it remains in bloom upwards of two months. It was sent to Messrs Loddiges from Rio Janiero in 1829. (*Pax. Mag. Bot.*, Jan.)

STANHOPEA

quadricornis Lindl. Four-horned *Stanhopea*; a stove epiphyte; growing a foot high; with yellow and red flowers; a native of the Spanish Main. *Bot. Reg.* 5.

"An exceedingly pretty species of *Stanhopea*, allied to *S. oculata*." The flowers are very large, of a bright yellow, and the sepals and petals spotted with chocolate. It is a very desirable species. The drawing was figured from a specimen furnished by Sigismund Rucker, Jr., Esq., of Wandsworth.

Appended to this is an article by Mr. Paxton upon the management of this most beautiful tribe of plants; and as many of them are now about being added to our collections, we offer no apology for making an extract therefrom.

"Over the drainage hole of the pot to be used, is inserted one of a smaller size, generally covering about half the bottom of the pot; over this is carefully thrown a quantity of broken pots, sufficient to fill the former to within one third of the top. A suf-

ficient quantity of fibrous, moderately sandy peat, is next selected and placed on the top of the drainage, being first broken into various forms and sizes, but none of them less than a walnut; in placing these, care is taken to dispose of each, so as to leave a passage for the escape of water; this is more effectually secured by putting in, as the process of potting goes on, a few pieces of broken pots, say between every layer, more or less, according to the size of the plant; indeed I find it an excellent plan to continue a connection of broken pots all the way up the centre to the bottom of the pseudo-bulbs. After the peat becomes level with the pot, the successive external layers are made fast by means of small pegs, varying from four to six inches long, then pegs run through the layers of peat, and thus secure the whole firmly together. At eight inches above the line the plant is placed on the top; the roots are carefully laid out and carried up to the place of the bulbs, very carefully, with smaller pieces of peat and potsherds, continuing to fasten the peat as before described, until the whole is finished, when it will be a foot or fifteen inches from the top:—small plants are not potted so high. When I commence potting a small plant it is not raised more than three or four inches at first, but as it grows larger it is progressively raised in building up, as here described, with peat; it does not terminate in the shape of a cone, but is carried up nearly square, being merely rounded a little at the top. Unless the plants are very healthy, but very little water is given at the root, and in winter very little or none, the desideratum in the cultivation of the *Orchidaceæ* being to preserve the roots, which, germinating especially in winter, are almost sure to be destroyed.”

The after management is simply to keep the temperature of the house at from 60° to 85° in winter, and from 70° to 100° in summer, and the air during the growing should be kept constantly moist by repeated sprinklings of water upon the paths and flues of the house; in the winter season they are kept rather dry. The following brief notes should be carefully observed by all who cultivate the terrestrial species, in applying the four great elements of vegetable life, viz. air, light, heat and water:—

Air.—Terrestrial *Orchidaceæ* should never have a great volume of external air admitted at once, however fine the weather may be; to prevent the house becoming too hot, a thick canvass shading should be covered over it during sunshine.

Light.—The best aspect for an orchidaceous house is due South, and the house should be made to admit as much light as possible. In summer a thick canvass is always put on the house, to prevent the bright sun from damaging the plants. In winter every ray of light is advantageous to the plants.

Heat.—During the growing season *Orchidaceæ* require a moderately moist heat, varying from 65° to 85° degrees; in the dor-

mant season from 65° to 75° is quite sufficient; in the season of rest the house should be kept dry.

Water.—With this element more damage is done than by all the others put together. *Orchidaceæ* in pots should be sparingly watered in the growing season; in the dormant state little or no water should be given. The secret of growing these plants is to take care *never* to kill the old roots; when too much water is applied while the plants are not in a growing state, almost all the old roots invariably perish.” (*Bot. Reg.*, Jan.)

EPIDENDRUM.

The following epidendrums are enumerated under the head of miscellaneous notices, taken from Mr. Bateman’s *MSS.*

Epidéndrum

papillòsum	<i>Bateman MSS.</i>
tessellàtum	“ “
rhizophòrum	“ “
aurantiacum	“ “
tibéicis	“ “

The latter is stated to be “by far the most magnificent of the genus.” Flowers of the size and color of *Cattleya labiàta*. The flower scape is *three yards* long.

All the most beautiful will be figured in Mr. Bateman’s most superb work, the *Orchidaceæ of Mexico and Guatemala*, of which one part only has yet appeared. The publication of this work will establish the cultivation of the whole tribe of epiphytes, and render them the most fashionable, as they are truly the most singularly curious and gloriously, splendid, plants in cultivation. We look anxiously forward to the period of their general growth in this country, and we hope that, now the experiment of steam navigation between England and this country is found to be entirely practicable, all the more rare and elegant will be introduced.

Scitaminiàceæ.

COSTUS

speciòsus Showy Costus. A perennial green-house plant; growing two to three feet high, with white flowers; appearing in August and September; a native of the East Indies. Soil sandy loam and peat. *Pax. Mag. Bot.* Vol. IV, p. 245.

A “truly splendid” plant. The leaves are entire, and silky on the under surface. Every shoot is terminated with a cluster of large white flowers, collected in heads, which have a very showy appearance. It is a common plant in England, but is rare here. It flourishes in sandy loam and peat, with the pots well drained. The plants should stand in a warm situation in the stove, where they will generally bloom freely. Give plenty of water and air after the plants have got established. (*Pax. Mag. Bot.*, Dec.)

REVIEWS.

ART. I. *The Book of Fruits; being a descriptive catalogue of the most valuable varieties of the Pear, Apple, Peach, Plum and Cherry, for New England culture.* By Robert Manning. To which is added the Gooseberry, Currant, Raspberry, Strawberry and the Grape, with modes of culture; also, Hardy ornamental Trees and Shrubs. With plates. First series, for 1838, 12mo. 118 p. Salem: Ives & Jewett. 1838.

The cultivation of the choicer varieties of fruit is beginning to be quite general in this country. It is not many years since, that our gardens and nurseries could boast of but few varieties, in comparison with the immense number which may now be procured. With but a slight knowledge of the quality of the more choice fruits, our cultivators remained contented with selecting a few of the best, of such as were generally known, and few were sufficiently zealous to be at any great expense or uncommon pains, to procure novelties. Gradually, however, some of the best foreign kinds were introduced to our gardens, and were disseminated in different portions of the Middle and Eastern States. Superior in their qualities to a greater part of the old and established kinds, they were much sought after, and when it was ascertained by trial, how much more valuable such kinds were to the cultivator, the desire to possess them rapidly increased, and new varieties were in demand.

But it was not until the successful experiments of the venerable Van Mons, in raising new pears, were made known to the public, and the truth of his theory verified in the appearance of the excellent fruits raised by his own hands, that cultivators became impressed with the importance of procuring them, to the exclusion of the older kinds. Producing fruit with certainty, of great excellence, the trees hardy and coming into bearing at an earlier age, they soon were widely distributed, and a collection of pears of any extent can scarcely be found, without containing one or more of his fruits. Mr Knight, and several Belgian horticulturists, have also raised a number of fine pears, but these have been exceedingly limited in comparison with those of Dr. Van Mons.

American cultivators have had much to contend against. Separated so far from the field of labor of the enthusiastic horticulturists of England and the Continent, and procuring their trees from so great a distance, in the importation of them, mistakes have been made, and numberless errors have crept in, which have

left the nurserymen, in this country, in great confusion in their nomenclature. To arrive at more correct conclusions, works have been published, to facilitate the gentleman or the amateur, in the selection of such as possess all the good properties of a fruit. The first of them of any importance was that of Mr. Cox, of New Jersey,—subsequently, those of Mr. Prince, and Mr. Kenrick, and lastly, the one which stands at the head of this article. The works of Mr. Prince, and of Mr. Kenrick, have been composed, in a degree, of descriptions of fruits taken from foreign works, and which have not been printed in this country. They have, however, contributed somewhat, to assist cultivators in the selection of the best varieties.

A complete work is yet wanting upon the subject; but our stock of knowledge is yet altogether too limited, to attempt to make such a one what it should be. Experience alone,—an examination of every variety described,—is necessary to render a work of this kind truly valuable to the American cultivator. And it will necessarily be a long period, before this can be done with accuracy. In the absence of such knowledge, the little work of Mr. Manning comes opportunely to our aid, and it will serve, in a degree, to supply the deficiency which already exists.

Mr. Manning is well known, as one of the best practical cultivators of fruits; and, undoubtedly, a greater variety of kinds have passed under his observation, than that of any other person in this country. He has labored long and assiduously, in procuring all the choicest varieties from abroad, and his correspondence with Mr. Thompson, and Dr. Van Mons, has enabled him to procure all the new and first rate sorts. He has also procured from the various nurseries of this country, all the approved kinds, with a view of identifying them, and ascertaining their proper and correct names. To our readers Mr. Manning is well known; his list of pears in the commencement of our third volume is one of the most valuable papers we have ever published, as the varieties have all produced fruit with him, from which the descriptions and remarks were taken. Lists of other fruits were kindly promised us, and they will undoubtedly appear in our next volume.

To give our readers some idea of the character and objects of the work, we extract a part of the prefatory remarks of the volume.

“The Pomological Garden was commenced in 1823, with the design of forming a large collection of specimen trees of such varieties of foreign and native fruits, as were hardy enough to endure the inclemency of a northern winter. After a strict examination of the produce of these trees, carefully comparing the wood, the leaf and the fruit, with the figures and descriptions in the most popular works on pomology, it was intended to select for permanent cultivation, those varieties which were at once fitted to the climate of New England, and of high merit in them-

selves. In furtherance of this purpose, we have assiduously culled from American catalogues all that we judged worthy of trial, and imported from the first European establishments, the fruits most in repute with the writers of their respective countries. We have never limited ourselves to one specimen, but have, in every instance, procured trees of each name from many different sources, in order the more surely to arrive at correct conclusions respecting their identity, as well as to multiply our means of estimating their comparative value.

“For donations of scions we are indebted to the liberality of many gentlemen of our own country, who have imported choice fruits from Europe for their own gardens; to the London Horticultural Society, and to the learned Doctor Van Mons, of Brussels, from whom we have received most of those new and admirable pears which he has, for many years, produced on his own grounds, or obtained from the horticulturists of Belgium and Germany. We have also annually collected scions of all the new fruits of American origin, and propose to continue the collection both of these and of trees from the best foreign and native sources. We shall subject their produce to the same rigid scrutiny with the contents of the present volume; and shall offer those which prove most valuable and hardy to nurserymen and amateurs, who will thus be enabled to obtain varieties of tried merit, without danger of the necessity of a renewal, at a future period, after waiting many years for the appearance of fruit.

“A supplement to this work will be published at the close of every fruit season, describing each desirable kind which has been proved during the season. With the exception of peaches, we recommend no fruit that will not ripen in any part of New England or New York, and in the southern part of Canada. Our selections have been made from nearly four hundred kinds, which we have raised yearly. Experience has taught us that many fruits, highly extolled by European writers, and doubtless of great excellence in their native soil, either perish or degenerate in our colder regions; and of these and all others which we have found in any respect improper for cultivation, we design hereafter to publish a catalogue.

“We do not claim for all the varieties herein enumerated, the distinction of first rate fruits; some are second rate, admitted in consideration of their size, beauty and abundant bearing, though their flavor is not the most delicious. The essential characteristics of a first rate tree are, health, vigor, and fertility; those of a first rate fruit are, magnitude of size, beauty of shape and color, and richness of flavor. But a small number of fruits, uniting all these qualities, is known to horticultural science throughout the world. Besides, in regard to the taste of a fruit, the judgment of individuals greatly varies; what one person would pronounce exquisite, might to another seem merely tolerable. In commendation, however, of the kinds described in this manual, we confidently declare our conviction, that no possessor of any or all of them would willingly relinquish their culture for the purpose of regrafting his trees with any other varieties.

“There is one circumstance to which we venture to call the attention of our readers—that while some recent works on pomology are compiled from earlier authors, or from information derived at second-hand, the writers themselves seldom having the means of observation in their power, we have in these pages described no specimen which we have not actually identified, beyond a reasonable doubt of its genuineness. We offer these notices merely as matters of fact, without embellishments. Recording nothing that we have not ourselves witnessed, we have quoted no synonyms, and referred to the authority of preceding writers no farther than to adopt the names by which the fruits are known in the

catalogue of the London Horticultural Society, the most complete work on this subject hitherto offered to the public.

“The innumerable errors in the names of fruits, and the perplexity and disappointment arising from this cause, are inconceivable to any but a collector. It is very desirable that there should be some acknowledged standard, to whose authority, in doubtful cases of this nature, we might appeal. Nurserymen and cultivators have generally deemed it a point too trifling for consideration. If a fruit was good, the name was supposed to be of no consequence. A better state of things is, however, beginning to prevail, especially in the United States, where a knowledge of the subject is widely diffused, and a laudable solicitude is felt that catalogues should contain no varieties but what are actually cultivated, and ascertained to be identically the kinds which their titles proclaim them to be.”

We differ from the author, in regard to the propriety of excluding the synonyms of fruits. In our opinion, a work of this kind cannot be perfect without them, inasmuch that the mere describing of a variety, however so valuable such a description is, to select trees by, is no guide to the correcting the names of such fruits as already exist in our gardens, and which, not being known, might again be purchased for another sort. We will note an instance. There is a plum, cultivated quite extensively in the vicinity of Boston, and found in all the nursery catalogues, called the *Semiana*. Now this variety and the blue *Imperatrice* of Mr. Manning, are one and the same: but as no synonyms are given, and nothing is said about its cultivation under another name, any person wanting a late fruit might order this, when he already possessed it. To guard against such mistakes, is one of the principal uses of synonyms. So far, therefore, as this work goes, it is but a descriptive catalogue, where persons wanting fruit trees will find their qualities fully and correctly given.

In this volume 180 varieties of apples, pears, peaches, plums and cherries are described, the whole of which have produced fruit in Mr. Manning's collection; of apples there are 51; of pears, 81; of peaches, 15; of plums, 20; of cherries, 14.

The pears are nearly all included in the list in our Magazine. The apples which have been proved, are the following:—

- | | |
|----------------------------|----------------------------|
| 1. Early Harvest | 14. Red Doctor Apple |
| 2. Early Bough | 15. Boxford |
| 3. American Red Juneating | 16. Red Astracan |
| 4. Summer Queen | 17. Oslin |
| 5. Early Red Margaret | 18. Kilham Hill |
| 6. Summer Rose | 19. Lyscom |
| 7. Summer Pearmain | 20. Porter |
| 8. Rambour d'ete | 21. Duchess of Oldenburg |
| 9. Fall Harvey | 22. Yellow Ingestrie |
| 10. Drap d'or | 23. Red Ingestrie |
| 11. Hawthorndean | 24. Franklin Golden Pippin |
| 12. Williams' Favorite Red | 25. Kerry Pippin |
| 13. Benoni | 26. Gravenstein |

27. Ribstone Pippin	40. Pennocks
28. Golden Russet	41. Baldwin
29. Blue Pearmain	42. Lady Apple
30. Red Quarrenden	43. Bellflower
31. Wine Apple	44. Swaar
32. Fameuse	45. Danvers Winter Sweet
33. Menagere	46. Pickman Pippin
34. Rhode Island Greening	47. Mela Carla
35. Lovett Sweet	48. Roxbury Russet
36. Murphy	49. Hubbardston Nonsuch
37. Ortle Pippin	50. Minister
38. Newtown Spitzenburg	51. Green Sweet.
39. White Winter Calville	

We are glad to notice, that the Petre pear, which we stated, at p. 83 in our pomological notices, to be a fine fruit, and worthy of general cultivation, is highly recommended by Mr. Manning. He states that it is a pear of the "very first rank." It produced fruit in Mr. Manning's garden for the first time the past year.

As a specimen of the descriptions, we extract the following list of plums.

1. *Italian Damask*.—Fruit of medium size, round; skin dark blue, nearly black; stem half an inch long, inserted in a small round cavity; flesh yellow, juicy and high flavored. A freestone, a great bearer, and one of the best early plums. Ripe in August.

2. *Morocco*.—A fine and very productive variety; the size is rather small, nearly round; the skin a dark purple, covered with a blue bloom; flesh greenish-yellow, juicy and good. A clingstone—ripening in August.

3. *Prince's Imperial Gage*.—Originated at the Nursery of Wm. Prince & Sons, Flushing, N. Y. Fruit nearly as large as the yellow egg plum; of an oval form; when fully ripe the skin is yellow, with streaks of bright yellow and green indistinctly seen; the flesh rich and sweet. The most productive and profitable of all the plums. Ripe in August.

4. *Brevoort's Purple Washington*.—Produced from the stone of Bolmar's Washington, by Mr. Brevoort, of New York. Fruit of large size; form round, and nearly oval; skin dark blue, covered with a blue bloom; the flesh sweet and good. A freestone, ripening in September. The tree is of vigorous growth and very productive.

5. *Orleans*.—This is a well known and productive plum; the fruit is sometimes large; the form round; the skin dark, approaching to a purple, with a thin blue bloom; the flesh yellow, firm and good, with some astringency near the stone, from which the flesh separates. Ripe in August.

6. *Kirk's Plum*.—Fruit large, round; skin dark purple, covered with a dense bloom, which adheres firmly to the skin; flesh yellow, juicy and rich. A very productive freestone plum—ripening in August.

7. *Purple Gage*.—Fruit of medium size, nearly round, a little flattened at the ends; skin of a violet color, with a light blue bloom; the flesh greenish, rich and high flavored. A first rate freestone plum; a great bearer; ripe in August.

8. *Large Long Blue*.—The origin of this fine plum is uncertain; the tree which produced the specimens was procured from the nursery of the Messrs. Landreth, Philadelphia. The size is large; the form oval,

very long; the skin blue, nearly black, covered with a thick bloom; the flesh yellow, rich and excellent; it hangs a long time on the tree, ripening gradually, and is well adapted to the market, bearing carriage better than most other plums. It is a great bearer; a freestone. Ripe in September.

9. *Green Gage*.—The finest of all plums; of medium size, round; the skin a greenish-yellow, when very ripe nearly yellow, mottled with red near the stem; flesh sugary and of delicious flavor. In our own exposed grounds, and in grass, it bears abundant crops, not being subject to rot like many fine plums. A freestone, ripening in August and September.

10. *Bleeker's Gage*.—Produced from seed by the Rev. Mr. Bleeker, of Albany, N. Y. The form oval, nearly round; skin a dark yellow, with dark red spots and blotches; the flesh is rich and excellent. A great bearer. Ripe in September.

11. *Cooper's plum*.—Produced from a stone of the Orleans, by Mr. Joseph Cooper, of New-Jersey; the size is very large, round, a little oblong; the skin a dark purple; flesh greenish-yellow, rich and good. It ripens in September; produces abundant crops; but is very subject to rot at the period of ripening.

12. *Elfrey*.—This is a plum of small size and oval form; the skin dark blue; the flesh dry, firm and of fine flavor. The trees produce abundantly. A freestone—ripening in September.

13. *German Prune*.—Fruit of medium size; form oval, diminishing towards the stem; the skin purple, with a blue bloom; the flesh rich, sweet and delicious. It produces abundantly; it begins to ripen in August, and can be eaten from the tree for a month or more.

14. *Duane's Purple*.—This is a plum of an extraordinary size; the form round; the skin a dark purple; flesh sweet and good. The origin of this plum is uncertain; it ripens in September, and has the reputation of being a fine fruit.

15. *Bingham*.—Fruit large; the form oval; skin a bright yellow, spotted and blotched with red; the flesh yellow, rich and delicious. A clingstone—ripening in September.

16. *Washington*.—This very superior plum originated in New-York; the size is very large; form oval; skin an orange yellow, speckled with red; the flesh yellow, sweet and excellent; highly esteemed as a first rate plum. Ripe in September.

17. *Italian Prune*.—The size is large; form oblong; the skin dark purple, covered with a bloom; flesh greenish-yellow, firm, dry and fine. It bears well, and the fruit ripens in September and October.

18. *Diamond*.—This new plum originated in England; it is of the largest size, oblong; the skin purple, nearly black, covered with a thick bloom; the flesh firm and good, but not rich; the tree is of rapid growth—an extraordinary bearer. The fruit ripens in September.

19. *Blue Imperatrice*.—Fruit of medium size; shape oblong, tapering to the stem; the skin a dark purple, covered with a light bluish bloom; the flesh yellowish-green, firm, rich and sweet. A clingstone. A great bearer. It hangs on the tree a long time, and is in use in October and November.

20. *Coe's Golden Drop*.—This beautiful new plum is of large size; the form is oval, with unequal sides; the skin a golden yellow, spotted with rich red points and small blotches, on the sunny side; the flesh yellow, sweet and delicious. A clingstone—an abundant bearer. Ripening gradually in September, October and November. Of all the late plums this is decidedly the best and the most profitable which can be cultivated.

We commend the work to all who wish to make selections of fruits. It is neatly got up, and is embellished with four very excellent lithographs of the following fruits:—Williams's Bon Chrétien, and Easter beurré pears; Coe's Golden Drop plum, and black Tartarian cherry. A continuation of the work will appear every autumn, enumerating and describing only such fruits as have passed under the inspection of Mr. Manning. Preceding the descriptive lists, are a few general remarks, containing the substance of the practice of various cultivators, in regard to the cultivation of the different fruits, contributed by Mr. J. M. Ives. Appended to the whole, is a list of ornamental trees and shrubs.

Mr. Manning has been at great expense in getting up his collection of fruits, and we hope the sale of this work will in a degree remunerate him for his trouble.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

Metropolitan Society of Florists and Amateurs.—The anniversary meeting of this society was held the latter part of February; officers were chosen for the ensuing year, and a statement of the financial affairs of the society read before the members. From this, we learn that the amount of money expended for prizes the past year was £346 (upwards of fifteen hundred dollars.) It was given at the different shows, as follows:—Hanover Square Rooms, £55, 2s; at the Hampton show, £27, 15s; Beulah Spa, £69, 16s; Carnation show, £6; Beulah Spa, second exhibition, £70, 15s; Salt-hill anniversary, £110, 7s; Evening shows, £5.

The society may be considered as one of the most flourishing in England, and as exerting a most powerful influence upon the spreading of a good taste for the more choice floral productions. The labors of the London Horticultural Society are known to all who have taken any interest in gardening, and it has been the means of diffusing a great quantity of information upon horticulture. But the objects for which such a society labors are so many and diversified that it is impossible to devote that attention to each which would be bestowed upon them by societies instituted for that purpose. The Metropolitan Society was established for the express purpose of bringing forward the most choice specimens of flowers alone; and by continuing to adhere to this, it has acquired a high reputation. Its decision in all matters connected with floriculture is considered as the best authority. The high state of perfection to which the dahlia has attained, has in a great degree arisen from its liberal award of premiums. We hope something of the same kind will be got up both in Boston, New York and Philadelphia. We are

convinced it would tend to rapidly disseminate a better taste for floriculture. Our horticultural societies, in aiming at so much, accomplish less. Their funds do not allow them to award a sufficient amount in premiums, there are so many objects to be embraced. Flowers in themselves are so various, that to encourage any class there should be a liberal sum devoted to them alone.—*Ed.*

An evening meeting of the society was held Feb. the 20th, when some varieties of flowers were exhibited. Among others, Mr. Glenny exhibited a splendid seedling camellia, of a dark crimson color, which, for symmetry of form, obtained universal commendation. A conversation took place, on a gall, discovered on the leaves of the camellia, the work of an insect, which does not, however, appear to extend its ravages far, but the economy and nature of which, would form interesting matter of investigation. This gall, as it is called, is found only on such plants as are infested with the scale, or stand near such. Though injurious, in our opinion, only, as keeping the plants in a state of uncleanness, it can only be got rid of, by the total destruction of every scale. It is caused by their excrements, which are deposited upon many of the leaves, where the insects are most thickly congregated, and which, from its adhesive nature, is not readily washed off, and the plant soon assumes a mouldy and blackened appearance. We have been troubled with this scale, more or less, but we have found a careful washing of the plants, with a sponge, of both stems and leaves, in the fall of the year, before they are placed in the house, a very sure way of destroying them. Washes of any kind are apt to injure the plant, and, after all, do not wholly destroy the insects. When any of this "gall," as it is called, is observed on a plant, the insect that causes it should be sought out, and destroyed. By pursuing such a course, they will soon be exterminated.—*Ed.*]

London Horticultural Society.—The most interesting displays the past winter, before the society, have been the great variety of pears, and other fruit, from the garden. Among the pears little known, was Dowler's seedling, called one of the best varieties, keeping well. The varieties of apples were very numerous. The exhibitions of flowers have been rather meagre.

Royal Society and Central School of Horticulture and Agriculture.—This flourishing society continues to hold its meetings and exhibitions, and, the past winter, a series of interesting lectures have been delivered before the members by Professor Johnson. A synopsis of the lectures is in the *Horticultural Journal*, but it would be impossible for us to present even a very condensed account of the same. We shall notice the published report of each lecture, and, if we perceive anything particularly interesting, shall extract the same in a future number.

An exhibition of the society was held on Saturday, Feb. 17, 1838. The principal flowers were the camellias, of which a most splendid display was made of both plants and cut blooms. Five new and fine varieties were among the number: two of them are named Cardinal (a single one, we believe,) and Louis Philippe, neither of which are yet in the trade: two beautiful rose-colored varieties, in the collection of Mr. Glenny, and probably raised by him from seed: and a superb crimson one from Mr. Luttinan, which gained the Victoria silver medal. Messrs. Chandler exhibited a collection, embracing, with others, imbricâta, punctata, Colvillz, Donkelaèri, double white and double striped. Mr. Glenny displayed thirty-seven plants in seventeen varieties: Messrs. Bowler, Upright, and Redding, each, exhibited twenty or thirty fine specimens. Twelve varieties of cut flowers, of great elegance, were contributed by Mr. Glenny and Mr. Allnutt, for the gold medal. The specimens of both the exhibitions were so beautiful that the committee

found it difficult to decide to which to award the prize. A splendid nosegay was cut from Mr. Redding's plants, and, together with the twelve prize camellias, was sent to the queen. This exhibition was to be repeated. The display must have been exceedingly splendid, from the great number of camellias which were contributed, amounting in all to above two hundred plants, besides a great quantity of cut blooms. Another year we anticipate the offer of a valuable premium, by the Massachusetts Horticultural Society, for the best twelve cut flowers. We have no doubt but that a magnificent show of cut blooms could be made by the amateurs around Boston.—*Ed.*

Protection to Nurserymen in Great Britain.—A writer in the *Horticultural Journal* expresses a hope that English nurserymen may receive some protection against Continental competition. The immense quantities of plants which are annually imported from the Continent, where glass is without duty, fuel cheap, and labor cheaper, renders it impossible for the English nurserymen to procure a reasonable price for their articles. The writer recommends a duty of one shilling a plant on all quantities under one hundred, and nine pence per plant upon all quantities above that number. It is recommended that all nurserymen and gardeners petition parliament for a protecting duty on plants.—(*Hort. Jour.*)

Chances of obtaining superior new dahlias.—Mr. Girling, the grower of the superb dahlias, Ruby, Suffolk Hero, Topaz, &c., advertises eight new ones this year of his own raising, and states that they were selected from 20,000 seedlings. Those who wish to grow seedling dahlias, can judge from this, what proportion of flowers worth naming they may expect. The nearer the flowers approach all the requisite properties of a dahlia, the less will be the proportion of fine ones; and if only eight out of 20,000 can now be procured, in a short period, not more than three or four, out of the same number, may reasonably be expected to possess superior properties. 20,000 plants set at the distance usually allowed for dahlias, would occupy, at least, two acres of ground. This, however, we hope, will not deter our nurserymen, or amateurs, from making the attempt to raise seedlings.—*Ed.*

Lownde's Perfection geranium.—A variety under this name is offered in the English catalogues, of this season, at 105 shillings *sterling*, or £5, 5s. the plant. The color of the flower is not stated.—*Id.*

Buist's and Mackenzie's Seedling dahlias.—Messrs. C. J. & Peter Young, nurserymen, of Epsom, London, we observe, in their late published catalogues of dahlias, offer for sale, among others, Buist's Washington and Mackenzie's Perfection dahlias, at 7s. 6d. each. Buist's Washington is said to be a very fine white flower, in the shape of Criterion. Undoubtedly Mr. Buist found a better sale for the roots in England than in this country. It was not in the trade in this country, last season, though we presume it will be this. Mackenzie's Perfection was exhibited at the Massachusetts Horticultural Society's room, last fall, but was not greatly admired. Mackenzie's Contender is a very pretty quilled variety of good form, a free bloomer, and well worthy of cultivation in a select collection.—*Ed.*

New Seedling dahlias.—We believe we stated, in our last number, that the number of new seedlings for 1838 was not so great as that of the year preceding. Since that time, however, we have received a great number of catalogues, which contain the names of many new and high priced kinds. Elphinstone has raised a few, which are described as very fine. Girling, Jeffries, Young, Squibb, Rendle, Brown, Smith, and Barrett, each, enumerate several varieties of their own production. Smith's Lord Byron, a beautiful light ruby crimson one, is figured in the *Horticultural Journal*.

In order that those of our readers, who are selecting dahlia for planting, may see what new kinds are principally enumerated in the English catalogues, we give the following:—

Lady Dartmouth	Beauty of Dulwich
Marchioness of Tavistock	Yellow Perfection
Princess Victoria	Lavinia
Conqueror of Europe	King Otho
Mary	Ruby
Mary Queen of Scots	Suffolk Hero
Dutchess of Sutherland	Blandina
Juliet	Glory of the West
Rosa superba	Napoleon
Marquis of Northampton	King of Beauties
Mrs. Broadwood	Shakspeare
Purple Perfection	Aurora
Sir Henry Fletcher	Addison
Sulphurea elegans	Beauty of Bedford
Triumphant	Champion
Warminster Rival	Gem, &c. &c.

These are only a few of the *very finest*. Others exceedingly beautiful are to be had at less prices than the above.—*Ed.*

GUATIMALA.

The Banana.—The following interesting account of the banana we copy from a paper in the *Horticultural Journal*, contributed by Mr. Mackenzie. It is a continuation of his article on the Vegetable and Forest Treasures of Guatimala. The banana is one of the most delicious fruits, when eaten in its ripe state; but it is rarely or never found so in this country, as the fruit is picked green, in order that it may not be over ripe when it arrives here. All the bananas may be made to ripen good crops in our stoves; but as yet few gentlemen have attempted to grow the plants. A new species called *M. Cavendishii*, has been fruited in England, by Mr. Paxton, which contained upwards of one hundred and twenty-five fine fruit in one cluster. The plants have a noble appearance, with their tall stems, and broad and stately foliage, and are highly ornamental, from the oriental aspect which they convey to the stove. The plants are easily cultivated, and when once in a collection, there is not much danger of losing them. The various uses for which the fruit may be employed, render it one of the most valuable tropical plants:—

“Of the species of fruits, which are numerous, delicate, and wholesome, the *plantain* deserves particular notice—it is, in Escuintla, called *Gordo*; but in other provinces *banana*, in order to distinguish it from the other kinds of plantain. This fruit is preferred by the natives, on account of its medicinal qualities, to many others that are more common and well known; and it ranks higher in general estimation, as regards taste and flavor, to many, even to the *anana* or pine-apple. In delicacy of flavor, indeed, it is superior to the *pine*, the *guanabana*, and the *chicosapote* or medlar; in beauty of color to the scarlet *sapote*; and is, perhaps, more extensively useful and used than any other fruit whatever. This kind of plantain forms a principal article in the traffic of the province of Escuintla. A description of it is to be found in ALCEDO’s *Vocabulary of the provincial words of America*; but some of its various uses may be here noted down. In the first place, then, it furnishes a very substantial food; each fruit yielding a large portion of nutritive matter, without skin, stone, or other inedible part; and poor per-

sons eat it both in the ripe and unripe state: others use it only in the mature state, as then it has a most delicious flavor. Dried in the sun it has a most exquisite taste, being greatly superior to the dried figs of Europe and Asia. It is also eaten *boiled, roasted, and fried with sugar*; and it furnishes the chief material for several kinds of excellent and savory stews and other dishes. Lastly, it supplies the place of maize, or Indian corn, whenever or wherever that necessary of life may happen to be wanting. Fuentes states, in his *second* volume, that when plantains have been partly dried in an oven—then peeled and pounded into a paste—afterwards pressed or packed into a vessel, and kept there during a fortnight, and then dissolved in water and strained—a wine may be made from the liquor, which is not to be distinguished from the famous and delicious wine called *Ojo de Gallo*. It is very singular and lamentable, however, that notwithstanding the above mentioned advantages—so manifest to both natives and strangers in these provinces—the real worth of the plantain is but little appreciated, and its utility much neglected. This is the more extraordinary, when we take into account the great facility of cultivating so valuable a fruit, and the great abundance of its produce.” (*Hort. Jour.*)

ART. II. *Domestic Notice.*

Public Garden.—We had intended several times to have made mention of the efforts which have been set on foot to obtain subscribers to establish a public garden at the foot of the Boston common (!) on what is now called the Back Bay. The prayer of the petitioners to the city for the use of the land, and the subsequent acts of the mayor and aldermen upon the same, have, however, been so generally made known in the morning newspapers, that our merely noticing them would have been information of little interest. But we had intended, as soon as our engagements would allow, to have offered some remarks upon the plan and objects of this garden. We shall yet do so. The necessary number of subscribers has not yet, we believe, been procured, and, consequently, nothing has been done. A meeting of all those interested in the subject is advertised to take place at the Massachusetts Horticultural Society’s Room, on Saturday, May 5th, and we shall endeavor to ascertain what progress has been made.—*Ed.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, March 31st, 1833.—Exhibited. Fine specimens of Rhode Island greening apples, from S. Walker.

Presented.—Chinese mulberry seed, from J. M. Ives, Salem.

The various committees to whom was referred the subject of selecting the objects for which premiums are to be offered by the Society, held a meeting for this purpose, and reported the following list:—

FRUITS.

Pears.—For the best summer pears, not less than one dozen, a pre-

mium of \$5.00. For the best autumn pears, not less than one dozen, a premium of \$5.00. For the best winter pears, not less than one dozen, a premium of \$5.00.

Apples.—For the best summer apples, not less than one dozen, a premium of \$5.00. For the best autumn apples, not less than one dozen, a premium of \$5.00. For the best winter apples, not less than one dozen, a premium of \$5.00.

Cherries.—For the best cherries, not less than two quarts, a premium of \$5.00.

Peaches.—For the best peaches, open culture, not less than one dozen, a premium of \$5.00. For the best peaches, under glass, not less than one dozen, a premium of \$5.00.

Plums.—For the best plums, not less than one quart, a premium of \$5.00.

Apricots.—For the best apricots, not less than one dozen, a premium of \$4.00.

Nectarines.—For the best nectarines, not less than one dozen, a premium of \$4.00.

Quinces.—For the best quinces, not less than one dozen, a premium of \$5.00.

Grapes.—For the best foreign grapes grown under glass, a premium of \$10.00. For the best foreign grapes, out door culture, a premium of \$5.00. For the best native grapes, a premium of \$5.00.

Gooseberries.—For the best dessert gooseberries, not less than two quarts, a premium of \$5.00.

Raspberries.—For the best raspberries, not less than two quarts, a premium of \$5.00.

Strawberries.—For the best strawberries, not less than one quart, a premium of \$5.00.

Currants.—For the best currants, not less than one quart, a premium of \$2.00.

FLOWERS.

Roses.—For the best display of blooms, \$5.00. Best twenty-four hardy varieties, \$3.00. Best twelve hardy varieties, \$2.00. Best twelve China, and other tender varieties, \$3.00.

Hyacinths.—Best display of, \$5.00.

Carnations.—Best display of, \$5.00. Best six varieties, \$3.00. Best seedling, \$3.00.

Pinks.—Best display, \$5.00. Best six varieties, \$3.00. Best seedling, \$3.00.

Tulips.—Best twelve varieties, \$8.00.

Dahlias.—1st prize, best display, \$10.00; 2nd prize, best display, \$6.00. 1st prize, best twenty-four varieties, \$8.00; 2nd 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.

Violas.—Best display, \$5.00. Best seedling, \$3.00.

Geraniums.—Best display, six varieties, in pots, \$5.00. Best seedling, \$3.00.

Herbaceous plants.—Best general display during the season, \$10.00.

VEGETABLES.

Asparagus.—Earliest and best in open ground, \$4.00.

Cucumbers.—Best pair on or before the first Saturday in July, \$4.00.

Cabbages.—Early, the best four heads, \$2.00.

Carrots.—Twelve roots, the earliest and best, \$2.00.

Beets.—Twelve roots, the earliest and best, by the first Saturday in July, \$2.00.

Rhubarb.—Six spears of the best, \$3.00.

Potatoes.—Early, one peck of the best, by the first Saturday in July, \$3.00.

Celery.—Two plants, earliest and best, \$2.00.

Beans.—Large Lima, two quarts of shelled, \$3.00. The earliest and best, dwarf shell, two quarts, \$2.00.

Lettuce.—Four heads, the finest and heaviest of the season, \$2.00.

Cauliflowers.—Two heads, finest and heaviest of the season, \$3.00.

Brocoli.—Two heads, \$3.00.

Squashes.—Winter, the largest and best pair, \$3.00.

Peas.—One peck, the earliest and best, by the first Saturday of June, \$4.00.

Melons.—Water, the largest and best pair, \$3.00. The finest green-flesh in the season, \$3.00.

Indian corn, for boiling; twelve ears, having regard to the size of the ears, their earliness, and the quality of the corn, \$2.00.

Discretionary premiums will also be awarded for such articles as the committees may deem worthy of such distinction.

April 28th.—The first exhibition of the season, and the first geranium display ever made by the Society, took place on the 28th. The weather was very fine, and the number of visitors much greater than we had anticipated. It was with feelings of delight that we witnessed such an interest taken by the public in this early exhibition, when there could not, possibly, much be expected. If the thronged state of the room can be considered any thing, we augur well for the success of the weekly shows, during the ensuing summer, and in particular the late exhibitions, when the dahlia will be displayed in greater perfection, and we doubt not profusion, than it has ever been heretofore.

As the exhibition of geraniums was for premiums, we shall probably have the report of the committee at a future meeting; but as our readers may have anticipated some account of the exhibition, we give the following, from our own memorandums:—

Exhibited.—From M. P. Wilder, about twenty pots of geraniums, viz. Hill's Champion, *Hericiartianum*, Lord Denman, Admiral Codrington, diversum, *Celestia*, Admiral Nelson, Mary Queen of Scots, *Adelina*, *albidum*, Rob Roy, *Diadematum*, and three or four seedlings. Also, a fine specimen of the *Triumph de Luxemborg* rose.

From S. Walker, *Alyssum saxatile*, and three seedling pansies, in pots; Mrs. Cushing and Granta were two of the kinds; the former is a beautiful variety. These attracted much attention. From Mr. Miller, four or five varieties of geraniums in pots, and cut flowers. From T. Mason, cut flowers of geraniums. From Mr. Cowan, a great variety of cut flowers, including a seedling.

From T. Lee, a variety of flowers, among which we noticed *Gailardia bicolor*, *Chryseis crocea*, *Verbena Tweediana*, and *chamædrifolia*, *Fuchsia globosa*, *Calandrinia discolor*, *mimuluses*, new dark nasturtium, *Clarkia pulchella*, and *p. alba*, the latter a charming variety, *calceolarias*, and roses.

The kinds of geraniums, among Mr. Wilder's, which struck us as fine, were, Lord Denman, *Diadematum*, *Hericiartianum*, and one unknown variety. None were shown in pots, excepting by Mr. Wilder, and Mr. Miller. The award of the committee will probably be made known at a subsequent meeting.

Fruits:—From S. Downer, Spitzemburg, and Lady apples, and an unknown kind, called the golden russet, but not the one properly so named; also, Easter beurré pear, in excellent preservation. From E. M. Richards, Lady, Swaar, Roxbury sweet, and Roxbury russet apples; also, beurré de Bolwiller pear, a small, good looking fruit.

ART. IV. Faneuil Hall Market.

	From		To			From		To	
	\$	cts.	\$	cts.		\$	cts.	\$	cts.
<i>Roots, Tubers, &c.</i>					<i>Squashes and Pumpkins.</i>				
Potatoes, new :					Squashes, per pound :				
Common, { per barrel,	1	00	1	25	Lima,	4			
{ per bushel,	40		50		West India,	3		4	
Chcnangoes, { per barrel,	1	25	1	50	Winter crookneck,	5			
{ per bushel,	37½		50		<i>Pot and Sweet Herbs.</i>				
Eastports, { per barrel,	2	00	2	50	Parsley, per half peck,	25		37½	
{ per bushel,	1	00			Sage, per pound,	17		20	
Nova Scotia, { per barrel,	1	50			Marjorum, per bunch,	6		12	
{ per bushel,	50		75		Savory, per bunch,	6		12	
Turnips,					Spearmint, per bunch,	6			
Common, { per bushel,	50		75		<i>Fruits.</i>				
{ per peck,	17		20		Apples, dessert :				
French, per bushel,	50		75		Common, { per barrel,	1	50	2	00
Ruta Baga, per bushel,	50		75		{ per bushel,	75		1	50
Onions :					Russets, { per barrel,	2	00	2	25
red, per bunch,	6				{ per bushel,	1	00	1	50
white, per bushel,	6		8		Baldwins, { per barrel,	2	50	3	00
yellow, per bushel,	2	00			{ per bushel,	1	25	1	50
new, per bunch	8		12½		Pears :				
Beets, new, per bushel,	50		75		Baking, { per barrel,	none.			
Carrots, per bushel,	50		75		{ per bushel,	2	00		
Parsnips, per bushel,	1	00			Watermelons, each,	20		25	
Horseradish, per pound,	8		12		Cucumbers, each,	25		37½	
Radishes, per bunch,	6		10		Quinces, per bushel,	none.			
Shallots, per pound,	20				Pine-apples, each,	25		50	
Garlic, per pound,	12½				Grapes, per pound :				
<i>Cabbages, Salads, &c.</i>					Malaga,	25			
Cabbages, per dozen :					Cranberries, { per bushel,	2	50	3	00
Savoy,	75				{ per peck,	75			
Drumheads,	none.				Oranges, { common, per doz.	25		50	
Red Dutch,	75		1	00	{ Havana, per doz.	50		75	
Cauliflowers, each,	12½		25		Lemons, per dozen,	17		25	
Lettuce, per head,	4		8		Cocoanuts, each,	5		6	
Celery, per root :					Shaddocks, each,	25			
Giant,	none.				Walnuts, { per barrel,	5	00	6	00
Common,	none.				{ per bushel,	3	00		
Spinach, per peck,	25				Almonds, (sweet,) per pound,	12		14	
Rhubarb, per lb.	25				Filberts, per pound,	4			
Dandelions, per half peck,	17		20		Castana,	4			
Turnip tops, per peck,	20		25		English walnuts, per lb.	5½		6	
Cabbage sprouts,	25								

REMARKS.—The unusually mild winter and the continued pleasantness of the weather during March, had led us to anticipate a warm April and a genial May. April, however, so far from being a mild month, has been quite cool, with several severe frosts, to the no little injury of many vegetables. Early cabbages have been cut off, in some instances, and peas, cauliflowers, &c., have been much injured and retarded in their growth. The weather has been altogether too cool to proceed with planting, and we suspect that little has as yet been done, except to prepare the soil for the seed. Last year, when we made our April report, asparagus had appeared in the market. Up to this date of the same month of this year there has not been any brought in, nor do we think that any has appeared above the soil, except in very warm

aspects. Should warm weather soon ensue, the excellent state of the earth will cause vegetation to advance with redoubled force.

Since our last there have been arrivals of Nova Scotia potatoes, to the amount of two or three thousand bushels; these have taken the place of the Chenangoes in a degree: this supply has kept prices stationary, and we have no alterations to note. There are but few St. Helenas about. Turnips plentiful. Onions have continued to advance in price, from the lateness and consequent scanty supply: a fine lot of bunched Connecticut rareripes and silver-skins have, however, arrived since our last, and are selling readily at quotations: a few bunches of this year's crop have been received. Parsnips are scarce, and prices have advanced. Radishes are more plentifully furnished, which has caused a depression.

Of cabbages there remain but few on hand: what Savoys there are to be had are small; no drumheads, and the stock of red Dutch is quite limited. Some fine cauliflowers have come to hand. Lettuce now comes in as fine as we have ever had it at this early season, at reduced rates. Celery is all gone. Spinach and dandelions in quantity. Rhubarb is yet cut from forced roots. Turnip tops have also made their appearance. The continued arrivals of small lots of West India squashes has caused prices to fall off a little: what crooknecks remain on hand have in consequence been in less demand. Pumpkins are finished for this season.

In regard to fruit there is not much to note. Apples are plentiful, particularly russets, with which the market appears to be overstocked. The season for Baldwins drawing near to a close, and the stock light, an advance upon our last quotations has taken place. Some baking pears are to be had in small quantities, but no other. Pine-apples scarce. A few Malaga grapes yet remain on hand. Cucumbers have come to hand, within the past fortnight, in small lots, and have sold readily: had the weather been warm, the stock would not have been adequate to the demand. Some very good watermelons have been received from the West Indies, and taken at quotations. Prices for cranberries are fully sustained, and a steady though limited demand. Oranges abundant; the season, however, for Havanas, is about over. The stock of nuts of all kinds ample. A few Spanish chestnuts have arrived, but in miserable order.

Within the past week or two the market has assumed a more animated character, which, it is hoped, will continue. With the return of the banks to specie payments, and the restoration of that confidence which is the basis of all trade, there is reason to believe that things may resume that healthful state from which they have relapsed for the last eighteen months.—*Yours, M. T., April 23d, 1838.*

HORTICULTURAL MEMORANDA

FOR MAY.

The cool weather of April has retarded vegetation so much, that, as soon as warm weather ensues, it will proceed rapidly, and the gardener will have much to attend to. The severe frosts in April have prevented the sowing of seeds and the completion of a great deal of labor which is usually done in that month. Transplanting of all kinds of plants

should now be performed, and seeds of all hardy plants should be communicated to the earth as soon as possible. Seeds of tender plants, particularly annuals, should not, however, be too hastily sown, as there will be nothing gained. Clearing and digging the borders—resetting all fine plants—transplanting trees and vines—repotting and propagating plants, will be a portion of what is necessary to be done. Nothing, if possible, should be neglected.

FRUIT DEPARTMENT.

Grape vines, in the green-house, will now be in bloom: keep up the temperature, with less quantities of air than usual: omit all syringing until the fruit is set. Cuttings put in early may now be potted off. Cuttings may now be put in in the open ground.

Peach trees, in pots, will now be in flower; give them good supplies of water.

Strawberry beds may yet be planted, and will do well. Old ones should be dressed, and, if needed, slightly manured.

Raspberry plants may yet be set out.

Fruit trees of all kinds may yet be transplanted.

Grafting may still be successfully performed.

FLOWER DEPARTMENT.

Dahlia roots for early blooming may be set in the ground at any time. But for a general bloom in August and September, from the 20th of May to the 20th of June is the best period.

Annual flower seeds of all hardy kinds should be sown now in the open border; those more tender may be planted in pots, or, towards the latter part of the month, in the border.

Hyacinth and tulip beds will need to have the surface carefully stirred with a trowel. The former will soon be displaying their flowers.

Tuberose and tiger flowers may now be planted.

Amaryllis formosissima may be set out at this time.

Gladiolus natalensis and floribundus may be planted now.

Fuchsias for planting in the open ground should now be propagated.

Heaths are more easily grown from cuttings now than at any other season. See Mr. Russell's remarks in another page.

Chrysanthemums: cuttings should be put in now, or the suckers potted off singly into small pots.

Verbenas, in pots, may be now turned into the border. See our remarks in another page.

Pansies may now be transplanted into beds.

Camellias will continue to need liberal supplies of water.

Pinks and carnations, if wintered in pots, should now be turned into beds prepared for them.

Ranunculuses will require water if the weather should be dry.

Roses will need pruning and resetting early in the month.

VEGETABLE DEPARTMENT.

In the garden all kinds of hardy vegetables should be sown. Cucumbers, melons, beans, and such tender kinds, should not, however, be planted until the weather appears warm and settled.

THE MAGAZINE
OF
HORTICULTURE.

JUNE, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Notice of the grafting of Evergreen Trees, as practised in Europe.* By A. J. DOWNING, Botanic Garden and Nurseries, Newburgh, N. Y.

THE operation of grafting upon deciduous trees, which lose their leaves at the approach of frost, and which are submitted to this process before or upon the commencement of vegetation in the spring, is sufficiently familiar to all horticulturists. Applied to *evergreen trees*, however, the ordinary methods of grafting have failed almost entirely, owing to the difference in organization and growth between these two distinct natural divisions of vegetation.

Failing in the ordinary methods, recourse has been had, on the continent of Europe, to a kind of *herbaceous* grafting, which is performed when the young wood is yet in a tender and succulent state. From the following account of this method, which we extract from that splendid work, the *Arboretum Britannicum*, of Loudon, now publishing, it will be perceived that it has been practised abroad, not only as a matter of experiment and connoisseurship, but upon a large scale, in altering the character of whole forests. Perhaps some of your readers, who have an abundance of the more common species of the pine genus, as the white and yellow pines, may be induced, by its perusal, to put it in practice, by engrafting some of the rarer foreign species on these native sorts. The magnificent species of pine discovered by Douglas, on the north-west coast of America, which are yet extremely rare here, might undoubtedly be extensively propagated here in this way.

The application of this mode of propagation to the pine and fir tribe was first made by the Baron Tschondy, probably about the end of the last century, and practised by him on his estate at Colombey, near Metz, and in the botanic garden of that city. It is described at length in the *Traité Pratique* of Delamerre, the essence of which is as follows:

“The operation of herbaceous grafting is performed in the cleft manner: the slit being made a little deeper than that part of the scion to be inserted in it. The time of performing the operation is, when the leading shoot of the stock has attained the length of from eight to twelve inches, and will break over (without tearing the bark) like a piece of glass, or the most succulent part of a shoot of asparagus fit to gather for the table. The time during which any given species has its leading shoot in a fit state for being broken over in this manner, is not more than fifteen days; and as the scions from the species to be grafted are equally tender with the stock, they will not remain longer in a fit state for the operation than about the same period. The graft is always inserted in the leading shoot; the greater number of the side shoots are either removed altogether or shortened; and the young shoots produced from the stocks, during the season, are pinched off with the finger and thumb at about half their length. In performing the operation, the first step is to break over the leading shoot with the hand so as to reduce it to the length of from four to six inches; the leaves are next removed from this remaining portion, with the exception of about an inch at the top, on which they are left for the purpose of drawing up the sap. The scions should have been procured the same day, or the evening before, from the extremity of the branches, of the kinds to be grafted; and they should be preserved in a vessel of water, and covered with grass or leaves to exclude the sun. The scions need not be above two inches in length, the lower half of which should be deprived of its leaves and cut in the form of a thin wedge, the operator using a very sharp knife. The scion should be rather narrower than the stock, in order that it may be more completely tied into it, which is done by a ligature of matting or woollen twist. After this is done, the graft is covered with a cornet of paper, slightly tied to the stock so as to exclude the sun, but yet admit the air. From ten to fifteen days after grafting, the cornet may be taken away; about fifteen days later, the ligature may be removed; and in six weeks or two months afterwards, the upper part of the stock left with the leaves on may be trimmed off on both sides of the scion, and all the shoots which have been produced on the lower part of the stock removed, so as to throw the whole of the sap into the scion. A good workman will, it is said, graft two hundred or two hundred and fifty subjects in a day,

provided he have an assistant to cut side shoots from the stock, and prepare the scion; leaving him nothing to do but to break off the leading shoot of the stock, make the slit in it, insert the scion, tie the ligature around it, and fix on the paper envelope. The shoot made by the scion is little or nothing for the first year; but the second year it is considerable, and the third a foot or more, and most frequently from two to three feet in length. The future shoots (says Delamerre) are truly admirable for their length, their thickness and their great vigor. The most suitable stocks are plants sown where they are finally to stand, and of four, five, or six years' growth, the object being to make the graft three or four feet from the ground, to avoid the necessity of stooping on the part of the operator. Grafting in this manner has been carried to a great extent by M. de Larminat, in the forest of Fontainebleau. In the *Bon Jardinier*, for 1826, it is stated that about ten thousand scions of *Pinus Láríco* had been at that time grafted on the common wild pine (*P. sylvéstris*) in that forest; and M. de Delamerre informs us, in 1830, that the process had been continued up to that time, at the rate of several thousand trees every year.

This mode of grafting was practised by the Baron Tschondy, who gave it the name of herbaceous grafting, not only with the pine and fir tribe, but with every other class of ligneous plants, and also with herbaceous vegetables. It is very generally practised by the Paris nurserymen, and especially by M. Soulange Bodin, though it is, as yet, but little known in British gardens.—
Arb. Brit. Abietinæ. A. J. D.

ART. II. *American Seedling Camellias.* Translated from the *Annales d'Horticulture* of Paris, by the Hon. E. Vose, President of the Massachusetts Horticultural Society.

IN the last number of the *Annales* of the Horticultural Society of Paris, I find a notice by the Abbé Berlese, (of which I send you a translation,) of some seedling camellias, produced by those worthy and successful cultivators of that beautiful plant, Mr. Floy, of New York, and Mr. Landreth, of Philadelphia, and transmitted to Europe by Col. Wilder.

Perhaps no one has paid more attention to the camellia, than the Abbé Berlese. His opinion, therefore, is of high authority; and it is a source of gratification, that we, in this country, are so

soon enabled to transmit to Europe new varieties of that fine plant which there take so high a rank, as well as being very creditable to those immediately concerned in their production; and may it not be hoped, that this may be the harbinger of future contributions, which we may be enabled to make in return for the many valuable acquisitions we are constantly receiving from abroad. This is the more likely to be the case, from the increased attention, which, it is understood, has recently been directed in various parts of our country, to the propagation of new varieties of plants from seed; a practice, which is certainly not only highly commendable, but is also equally certain to be successful, here as elsewhere. It is however to be regretted, that the custom of changing names should still continue in flowers, as well as fruits; it is in bad taste, producing, as it does, confusion with cultivators, and being, also, often an act of injustice to the original grower, by depriving the object of his own cognomen.

Whoever will look back to a period of ten years past, and enumerate from his recollection the number of the varieties of camellias, then known to exist in this country, and compare the meagre list with the fine collections now in the possession of cultivators among us, may form a pretty correct idea of the progress which has been made in horticultural pursuits, especially in the floral department, within that period; and the same remark will apply to other interesting objects of that department, and especially the rose and the dahlia.

May, 25th.

E. VOSE.

Camellia Floy, or *Grand Frederick*. By the Abbé Berlese.

This vigorous shrub is at once known, by the size of its leaves, which are six inches in length by three and a half broad. They are of a roundish oval, slightly *lanceolate*, thick, quite smooth on the upper surface, horizontal, flat, *nerves* very apparent, regularly indented, of a deep green, and very glossy. These leaves, although of much larger dimensions, strongly resemble those of the *Camellia Derbiàna*.

The bud is very large, of an obtuse oval, firmly attached to the axils, with greenish scales. The flower is also very large, being five inches and a half in diameter, very full, and of an admirable contour. Its color is at first sight a brilliant clear red, often blended with orange red, and almost always spotted with white towards the centre. The petals of this flower are in five rows, numerous, thick, glazed. The first are more than two inches broad at the disk, deeper in color at the summit than the base; the others diminish as they approach the centre, imbricated with regularity, but largely, somewhat as in certain dahlia. The *corolla* is a perfect *rosace*, a little tunnel-shaped, and presents, by the whole exhibition of its petals, a magnificent effect.

This plant was obtained from seed by Mr. Floy, of New-York, where it flowered the first time in 1835. We have been advised that its owner refused a thousand francs for a single plant, of only a foot in height, and with but one flower.

The *Camellia Floy* was introduced into Europe the past year, (1836) by M. Alex. Vershaffelt of Gand. That gardener sold it, at a very high price, to M. Makoy of Liege, who afterwards gave it the name of *Grand Frederick*.

The description of this plant was transmitted to us, a few days past from the United States, by a skilful cultivator, Mr. Wilder, of Boston, who has added to his rare plants the finest collection of camellias at present in his country. This worthy horticulturalist had the goodness to send me, not only a strong plant of the *Camellia Fløyii*, but also a fine one of the *Camellia Landréthii*, a new variety in America, and not yet introduced into Europe. Mr. Wilder has also transmitted to me some notes on three other rare camellias, a description of which will appear in the continuation of my *Monographie*, already augmented to more than one hundred new varieties.

L'ABBE' BERLESE.

We are highly gratified in presenting the above translation to our readers, as it gives us an early opportunity of correcting one or two mistakes, which the L'Abbé Berlese has been led into, in regard to this flower. We saw the original plant in bloom in Mr. Floy's collection in the spring of 1834, at which time it had expanded upwards of a dozen flowers. The plant was then at least six feet high, very strong, and well branched, and had probably flowered several years previous, though we did not inquire of Mr. Floy respecting this, taking it for granted, that a plant as vigorous as the one we saw was, that it must have bloomed long before. The original plant must be, at this time, as much as twenty years old. A friend of ours saw it in 1823, when the plant was not more than a foot high, and it then had one terminal bud upon it. Admiring its superb foliage, which differs so much in size from all other camellias that we have ever seen, he inquired of Mr. Floy what it was. He answered that it was a seedling; and in reply to a question in regard to its value, he stated that he esteemed it very highly, as he expected great things from it, and would not part with it for a hundred dollars. It is natural for all growers of seedlings, let them be what plants they may, to consider them as above all price, but we know not in this instance, what reason Mr. Floy had to prize this so very highly. At any rate, his expectations of procuring a fine variety were not disappointed, and we doubt much whether he will ever produce another equalling this. It is to be regretted that Mr. Floy does not recollect the variety from which the seed was saved, or with what kinds the flower was, if at all, impregnated.

This variety was scarcely known in the vicinity of Boston, before the spring of 1834. At that time we visited most of the nurseries in the vicinity of New York, and took a few brief notes of all we saw. Mr. Wilder had then just commenced making a collection of plants, and the whole number of his camellias, at that period, was not above a hundred and fifty. At his desire, he wishing to be informed of all the beautiful plants around New York, we gave him a very condensed account of our tour through the gardens of that city. We have no copy of this, as it was written very hastily, but among other plants, which we more particularly mentioned, was the *Camellia japonica*, var. *Fløyii*. We were enraptured with its magnificence, and though our admiration was expressed in no exaggerated terms, yet those who had not seen it could scarcely believe us. In consequence of our description of this camellia, Mr. Wilder, in the fall of the same year, while on a visit to New York, purchased a fine plant of Mr. Floy, at the high price of fifty dollars: it was the only plant he had remaining of any size. In the spring of 1835, when we visited Mr. Floy again, we were also desirous of possessing a plant. But having none, only those of one year's inarching, we declined paying the large sum demanded. Fortunately we procured a plant of Mr. Russell, florist, now at Brooklyn, N. Y. which he had purchased of Mr. Floy, with another just like it, the year previous, to send to London. It is now the largest plant in the country, excepting the original plant; Mr. Wilder having worked several inarchings off of his, and reduced its size.

We merely mention the latter circumstances, as through our Magazine this variety has become better known than it would have otherwise been, for some time. At a future time, when we hope to offer our own remarks upon the history and cultivation of the camellia, we shall endeavor to give a more complete notice of this superb variety.

In regard to the introduction of this variety into Europe, we believe the L'Abbé Berlèse is incorrect. We think Mr. Buist told us in the spring of 1835, that he had sent several plants to his friends and correspondents in London; and we are inclined to believe that Mr. Floy or Mr. Russell sent it out previous to this. Messrs. Cunningham, nurserymen of Liverpool, wrote us in a letter dated Feb. 1835, that they had seen a plant of it which had been sent to a gentlemen by a friend of his in New York. This would make its date of introduction as early as 1834, and perhaps previous to that. We notice these errors here, in order that the L'Abbé Berlèse, who will probably see this before another edition of his *Monographie* goes to press, may make the necessary corrections. In the course of the present volume, we shall present to our readers, translations of such portions of this *Monographie*, as will be interesting to all lovers of the camellia.

—Ed.

ART. III. *Some observations on the general treatment of Verbena, Tweediana, chamaerifolia, venosa, and other species, with a few hints on their cultivation in the flower border.* By the EDITOR.

[Continued from p. 173.]

IN our last we gave the mode of treating the *Verbena chamaerifolia* and *Tweediana*, and these two with one lately figured, called the *incisa*, we stated constituted the more elegant species of the genus. Within the short period which has elapsed since our article appeared, we have learnt that Mr. Hogg, of New York, has raised some very beautiful species or varieties from seeds which he received from Mr. Tweedie, now resident collector in South America.

These seedling plants are not yet named by Mr. Hogg, but one of them is offered for sale by Mr. Buist, under the name of *V. araniana*. The habit of the plant is very good; the cluster large, and the color dark purple, inclining to a bluish tint. It flowers freely, and we are informed by those who possess it that it is a very desirable species.

One other is a scarlet one, very brilliant, and otherwise in habit and character somewhat like the *Tweediana*. It is a very handsome species, but is not yet named. Of its treatment we know nothing, but if we find it different from the other species, we shall continue this notice of the family, until our observations embrace all that are worthy of cultivation.

We now come to the more hardy species. In our I., p. 132, when speaking of the treatment of several of the most beautiful annuals, we have given some hints on the mode of treating the *V. Aubletia*, one of the oldest of the species worthy of growing. Since that period, many others have become known to cultivators, in this country, by the representations of them in the various floricultural and botanical periodicals. One of the most desirable of them is the *V. venosa*.

Verbena venosa.—The first knowledge which we had of this plant, was from observing several which were raised from seeds, brought from Liverpool, by Mr. McCullough, in the spring of 1836. We were much pleased with it, and in the succeeding season (1837) we raised an abundance of plants. The seeds were sown in a pot early in May, or perhaps the latter part of April, in light, loamy, rich soil, and were transplanted into the border the latter part of the month, or early in June. They grew vigorously, throwing out stiff horizontal shoots, and beneath

the soil extending themselves, by means of stolones, very rapidly, a single plant, where there was room allowed, covering the space of two feet or more. In this manner the plants flourished and came into bloom the latter part of August, and remained in flower until after several frosts.

In the month of November, the foliage looking bright and vigorous, although the flower stems had been withered up by repeated frosts, we took up nearly all the plants; there being an abundance, we were not particular to remove all, and accidentally four or five remained in the ground. The plants were placed in moderate sized pots, (No. 3) in a soil composed of loam, leaf mould, and a very small portion of sand. After standing in the back-shed of the green-house until January, they were removed to the green-house. Here they commenced growing rapidly, and soon attained the height of nearly two feet. In the month of February they began to bloom, and have continued to throw up a succession of flowers, which they will undoubtedly do the whole summer. The plants should be very carefully watered during the months of December and January, and at all times be placed as near the glass as possible, giving them an abundance of air and light, or the flower stems will run up so weakly as to either damp off, or fall over from want of strength to support them. After the first of March the plants should be more liberally supplied with water and shifted into the next size pot. In the month of May they may be turned into the border, where they will display their elegance to the best perfection. Though flowering the first season from seed, it is in the second year that the greatest profusion of flowers are produced. It is easily increased by the seeds, which are freely ripened, or by taking up the underground stolones any time during summer.

With us this species has proved hardy. We have just remarked that, accidentally, a few remained in the ground last fall. In digging the soil we were astonished to find the roots perfectly vigorous, and ready to throw up an innumerable quantity of shoots. The past winter has been so uncommonly mild, that it can hardly be considered as a fair trial; but if it will stand our winters as unharmed as it has the past, we may class it among our most valuable plants.

The flowers are produced in a kind of forked cluster; four or five laterals proceeding from close beneath the first head of blossoms, in a nearly erect position, each bearing a head or truss of deep lilac-colored flowers, not large, but quite compact. The leaves are stiff and rigid; roughly serrated, with very prominent veins; habit erect, attaining in the green-house the height of two feet; but in the open border its branches are more diffuse, and it does not grow but about a foot high.

V. *Aublètia*.—It is unnecessary for us to detail the cultivation

of this species again. It will be found in our I, p. 132. It is a very beautiful plant, treated as an annual. When grown in pots it may be managed like the *V. venòsa*. Plants in pots have a neat appearance when in full bloom.

V. multifida.—This is another very pretty species. It requires similar treatment to the *V. Aublètia*. It is dwarfer and more spreading in its habit. In the color of its blossoms it resembles the *V. venòsa*, but is much brighter. It is raised from seeds or cuttings with facility. There is a variety of this, called the *V. multifida* var. *contracta*, which is noticed in a previous volume, (I. p. 382.) Mr. Carter, of the Botanic Garden, we believe, received the seed of the *multifida* from London three or four years since.

These three are all the kinds we have yet seen in this country, and which we are tolerably sure are all that have been introduced. A number of species have been figured, notices of most of which we have already given under our floricultural head. But we will again enumerate them, with the hope that they may, another season, find their way into our gardens.

V. Drummòndi.—This is stated to be a very pretty variety, with pink blossoms, delightfully fragrant, and to form a fine companion to the *V. chamædrifòlia*. It is noticed in our II. p. 374.

V. Sabìni.—A species under this name is highly praised in London's *Magazine*, vol. IX., for its beauty, and for its adaptation to pot culture, being of a very graceful habit.

V. sulphùrea.—This is a perennial species, figured in the *Botanical Register*, t. 1748, probably as hardy as the *V. venòsa*. It grows quite prostrate upon the ground. The heads of flowers are of a rich sulphur yellow, and about the same size as the *venòsa*. It would be a desirable kind for planting in beds, wherever the *chamædrifòlia* is grown, as its yellow blossoms, though not so conspicuous as that species, would present a great contrast. We hope to see it introduced.

V. pulchella is a very pretty species, with pale lilac flowers, forming a good companion to the *chamædrifòlia* or *Tweddieàna*.

V. pulchèlla àlba.—Out of four plants, raised from the seed of the *pulchèlla* in 1834, two proved to be white flowered. It is said to be a very valuable addition to the flower garden; its snowy corols contrasting beautifully with the glittering scarlet ones of the *chamædrifòlia*. It grows about a foot high. It succeeds well, planted in beds like the *venòsa* and the other species.

These are, we believe, all that have been introduced—or rather all that have been made known—into the British gardens, of any great beauty. We presume, however, that many more species will soon be added to the genus, and that ere long new varieties will be procured from seed by the more skilful and zealous

of the English gardeners, who, when new species appear to be exhausted, look to this mode for procuring novelties.

The verbenas will hereafter occupy a place in every good garden; for there are few plants which more amply repay the trouble of their growth. In beds, in patches, in pots, either in the green-house, hot-house, or parlor, (where some one of them will thrive,) they will be pleasing ornaments for a greater portion of the year, and contribute, in no small degree, to the liveliness of whatever situation they may be placed in.

We shall endeavor to keep our readers informed of every new species or variety, which is introduced or raised from seed. These, will be found, as usual, under our head of floricultural notices. If, in the treatment of any new kind, we discover any peculiarity of management, we shall give such information to our readers.

In conclusion, we recomend to all, the cultivation of the beautiful and showy *V. Tweedieana*. It is a truly rich plant, and is doubly valuable on account of its easy treatment, and its capability of enduring parlor cultivation with perfect success. It may be trained to any manner of trellis the fancy of the cultivator may prefer, and will at all times, from February to October, present as profuse and brilliant a mass of blossoms as can be desired.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, Florist's Register, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo. numbers, with a plate; 1s. each.

Floricultural Intelligence.—Messrs. Young, nurserymen of Epsom, England, have received from Philadelphia several new plants, probably sent by Mr. Buist, and part of those raised by him, from seeds brought from California by Mr. Nuttall. We are not informed what particular plants they are, but Mr. Paxton states, that among them is one called *Anémia californica*, and “great expectations are entertained of it.” We should suppose that if it had been any thing very remarkable, Mr. Buist would have informed us of it. Mr. Buist has, probably, plants of it for sale. We have not read any description of the flower.—(*Pax. Mag. Bot.*)

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculaceæ.

ACONITUM

chinense *Part.* Chinese Aconite. A hardy perennial plant; growing from four to five feet high; with blue flowers; appearing in autumn; a native of Japan; introduced about 1833; cultivated in common garden soil; increased by seeds and cuttings.

“A new and highly ornamental species,” introduced from Japan by Dr. Von Siebold. The plant grows from four to five feet high. The flowers are somewhat similar to the common species in our gardens, but rather larger, and of a very deep blue. The terminal blossoms expand first, which, if our memory serves us, in the common kind do not, and soon after the whole flower stalk is clothed with its beautiful blossoms, which expand on lateral branches, springing from the axil of every leaf, even to the very base of the stem. This character gives it an additional interest, and a greater claim upon our care. It remains in bloom about two months, and is probably quite hardy, though it would undoubtedly be best when introduced to our gardens, to keep it in a frame or in the green-house, until a stock was secured, for fear of losing it. It was received from the continent, and flowered in the nursery of Messrs. Young of Epsom, who furnished the specimen from which the drawing was made. It ripens seed freely, and may thus be speedily introduced to our collections.—(*Pax. Mag. Bot.*, Feb.)

Nymphæacæ.

VICTORIA régia Lindl. memoir, &c.

Syn. Nymphaea Victòria Schomburgk in litteris ? Euryale amazónica Pappig reise in Chili, &c. Vol. II. p. 432.

We noticed the discovery of this splendid flower (III. p. 426,) and, subsequently, gave Mr. Schomburgk's account of his meeting with it, p. 70. At p. 154, a correspondent has questioned

the distinctness of this plant from the *Euryàle amazónica* of Dr. Pœppig. It appears however, from Dr. Lindley's memoir lately published, and from which we make the following extracts, that if Prof. Pœppig was correct in referring the plant which he describes to *Euryàle*, the one discovered by Mr. Schomburgk is quite a distinct genus. It is probable, however, that the *Euryàle amazónica* of Pœppig is identical with the *Victòria règia*, or is a nearly allied species, and that Prof. Pœppig was wrong in referring it to the genus *Euryàle*.

So much interest has been excited by the stories told in the newspapers, of this extraordinary plant, that Dr. Lindley drew up a memoir respecting it, of which twenty-five copies only have been privately distributed. Believing that considerable interest is felt for a further knowledge of this splendid plant, we have copied largely from this memoir:—

“An undoubted addition to a tribe of plants, at once so beautiful and so circumscribed, as that of the Nymphs or water-lilies, would be an event of interest, even if it only related to a distinctly marked species of some well known genus. But when the subject of the discovery is not only a new genus, but a plant of the most extraordinary beauty, fragrant, and of dimensions previously unheard of, in the whole vegetable kingdom, except in the colossal family of Palus, an interest must then attach to it, which can rarely be possessed by a novelty in natural history.

“Such a plant is the subject of the following notice; a water-lily, exhibiting a new type of structure, of the most noble aspect, of the richest colors, and so gigantic that its leaves measure above eighteen feet, and its flower nearly four feet in circumference. It was met with in British Guayana, in lat. 4° 30' N., long. 58° W. nearly, by Mr. Robert Schomburgk, a German gentleman, travelling on account of the Royal Geographical Society, assisted by her Majesty's government, for the purpose of examining the natural productions of that part of the British dominions.”

Next follows Mr. Schomburgk's account of the discovery of the flower, given at p. 70, already referred to.

“Some drawings were sent home by Mr. Schomburgk, in illustration of the previous account. He considered the plant a species of the genus *Nymphæa*, and was desirous that it should be distinguished by the name of the Queen, a wish with which her Majesty has been graciously pleased to comply. But it proves, upon an examination of the drawings and papers, which the Royal Geographical Society has placed in my hands for publication, that the plant is not a *Nymphæa*, as Mr. Schomburgk supposed, but a new and well marked genus; for this reason, it has appeared to me that the object of its discoverer will be best attained, by suppressing the name of *Nymphæa Victòria*, by which he had proposed to distinguish the plant, and by embodying her Majes-

ty's name in the usual way, in that of the genus. I have therefore proposed to name it *Victoria régia*.

"This noble plant corresponds with the genus *Euryàle* in the spiny character of the leaves and stalks, and to a certain extent in the great development of the former organs; but it is, in fact, most nearly related to *Nymphæa* itself."

This is from the original memoir, as published some time ago by Dr. Lindley. In the *Botanical Register* to the above extracts, he adds the following:—

"At the time when this was written, I knew nothing of the plant, beyond what could be learned from Mr. Schomburgk's description and figures: these, however, contained abundant evidence upon which to establish the genus. I was therefore a little surprised to find, soon after the account above quoted had been printed, either that this very plant, or one nearly allied to it, had been called *Euryàle amazónica* by Prof. Pœppig. In the second volume of the travels of this distinguished naturalist, mention is made of a nymphaceous plant of extraordinary dimensions, rivalling the East Indian *Rafflesia* in size, but far superior in richness of color, inhabiting the Igarape river, one of the branches of the Amazon. The leaves are described as covered with prickles on the under side, the flowers snow-white, purple in the middle, and from ten to eleven inches in diameter. It flowers in December and January, and bears in Ega, the name of Mururú.

"It is impossible not to recognize a plant extremely like *Victoria* in this sketch: and I cannot doubt that the Mururú is either the very same, or a nearly allied species. That Prof. Pœppig was wrong in referring this plant to *Euryàle*, must have been evident to any one acquainted with Roxburgh's detailed description of that genus, and has been rendered still more certain, in consequence of the Royal Geographical Society having received from Mr. Schomburgk some flowers sent over in salt and water. I am indebted to the liberality of the Society for these specimens, which, although in a very decayed state, in consequence of the manner in which they were packed, are botanically examinable; and they show, that *Victoria* is not only quite distinct from *Euryàle*, but highly curious in structure. They moreover confirm Mr. Schomburgk's account of the size of the flowers, for one of the expanded calyxes measured fourteen inches in diameter, and an additional inch for the overlapping of the petals, is little enough to allow.

"With regard to the genus—*Euryàle* is an East Indian water plant, with very large floating leaves, sometimes as much as four feet in diameter, bright purple underneath, and these, reticulated with numerous very large prominent veins. It is moreover covered with sharp prickles, on the under side of the leaves, the leaf

stalks, flower stalks, and calyx. In these particulars, it agrees with *Victòria*—and little else.

“*Victòria* has the inner petals rigid, and curved inwards over the stamens, into which they gradually leaf; in *Euryàle* there is no transition of this kind.

“In *Victòria*, there is a double row of horn-like stout stamens, curving over the stigmas, and adhering firmly to their back; *Eury-àle* has no such structure.

“*Victòria* has thirty-six cells to the ovary, and about twenty-eight ovules in each of its cells; *Euryàle* has only from six to eight cells, with six to ten ovules each.

“And, finally, to say nothing of minor distinctions, which will be sufficiently collected from the following description, the ripe fruit of *Victòria* lies at the bottom of a regularly truncated cup, which stands high above the water, while the blossom of *Euryàle* sinks into the water after flowering, and the fruit, when ripe, is inserted with the irregular decayed remains of the calyx and corolla.”

From Mr. Schomburgk’s papers, Dr. Lindley has drawn up a description of the leaves of the plants, the other characters having been taken from the specimens just referred to.

The description of the genus and the species is not given in English, and being quite detailed we therefore omit it.

A copy of Dr. Lindley’s memoir was sent by him to Baron Delessert, and by that gentleman it was communicated to the Academy of Sciences, of Paris, upon which occasion an interesting fact was added. It appears that, as much as ten years ago, a plant, either identical with, or very similar to, the *Victòria*, had been discovered by M. D’Orbigny, in a river in the province of Corrientes, whence dried specimens had been sent to the Museum of Natural History of Paris; and that M. Bonpland had also remitted seeds to M. de Mirbel, but they had not germinated. M. Adolphe Brongniart stated, that the plant is well known to the natives of the country where it grows, by whom the seeds, as large as peas, are used as food under the name of water maize.

We are not yet informed whether living plants have yet been introduced into England. But we presume they have; and we have copied this information in regard to it, that a plant of such magnificence may be generally known.

Grossulàcea.

RIBES sanguineum

This most beautiful species of currant has been superbly in bloom, in the collection of Messrs. Hovey & Co. The plants which stand in the open ground, have hitherto been nearly destroyed during the winter season; and, in order to make certain of an opportunity to observe its elegant blossoms, two plants were laid down, and nearly covered with garden soil. They kept well,

not an inch of the wood having been destroyed: and they have been one mass of bloom. All the remaining plants, several in number, were taken up and laid in the cellar, so that a fair opportunity has not been offered, to ascertain whether they would have stood the past mild winter, unharmed. We think, however, they are rather too tender to stand even such a winter as the last, unless in very sheltered and warm situations. But its great beauty will claim for it all the attention that is necessary to make it flower in profusion and perfection. For if it does not prove to be hardy, a simple covering of earth, leaves or straw, will preserve the branches from all danger of frost. It should be in every choice collection.

Cactææ.

Among the various plants, which display their flowers at this season, none are more gorgeous than several of the species and varieties of the group of cactuses. *Cereus speciosissimus* is one of the most splendid; *C. Ackermáni*, *Jenkinsòni*, *Vandèsia*, &c. &c., are each beautiful; *Epiphyllum speciosum*, though well known, is nevertheless very fine, and there are others of considerable merit.

In the collection of Mr. Putnam, of Salem, there is now a great number of plants in bloom, embracing a large number of distinct kinds. Mr. Putnam is very successful in his mode of treating this tribe, and we hope to communicate to our readers, ere long, the details of his practice. At Mr. Cushing's, *C. Ackermáni*, grafted on the large *C. grandiflorus* last year, has produced fine blossoms. Plants of *C. speciosissimus*, quite small, have also blossomed finely.

Mr. Sweetser has probably as great a number of species and varieties of the family, as is to be found in the vicinity of Boston. But the plants have not been treated with a view to produce many blossoms, but rather to grow them hastily to a good size, when they will not only more abundantly bloom, but much finer. Some new ones are about opening, but as we have had the promise from Mr. Sweetser, of a list of all his kinds, with his mode of management, which is also good, we defer enumerating them at this time. In the small collection of Mr. Leathe, besides several kinds in full bloom, the lovely *Echinocactus Eyrièsii* has three or four flower buds developed. Messrs. Hovey & Co. have also *C. speciosissimus*, *Ackermáni* and *Jenkinsòni* superbly in flower.

Echinocactus tubiflorus.—A beautiful species under this name, very much in the way of the *E. Eyrièsii*, with white flowers, is figured in the *Botanical Magazine*. The flower is, however, larger, and the tube longer and more slender. It will be a valuable acquisition.

Under this head, we take the opportunity to extract, from *Paxton's Magazine of Botany*, some remarks on grafting many of

the tribe. We have previously noticed several methods, which have been tried, but we believe the following to be quite new. At any rate, it is deserving of trial. All the echinocactuses and mammillarias, would be much more interesting and imposing in their appearance, growing and blooming upon the tall stalks of the *Pereskia aculeata*. We know not what could surpass a specimen of the *E. Eyrièsii* so managed, with two or three of its snowy blossoms expanded. The pereskia is easy to grow, and may, in a short period, be run up to a large size. The following is the extract referred to:—

“Although great success has already resulted from, and great progress has been made in, the practice of grafting various species of *Cactææ*, on others of stronger and more succulent habits, as well as on stocks of *Pereskia aculeata*, there can be little doubt that much yet remains to be done, and many experiments yet remain to be tried, in the interesting subject. Every person, who is at all conversant with floriculture, or who is accustomed to visit the gardens of noblemen, gentlemen or nurserymen, in the spring season of the year, must have been struck with the peculiarly curious and beautiful appearance of many species of *Cactææ*, which have been ingrafted into other sorts of opposite characters; and by the judicious management of the cultivators in placing weak and slow growing sorts in those of stronger habits and more rapid growth, the great superiority and extraordinary beauty of the flowers produced, cannot fail to have been noticed and admired. But, we presume, few persons have yet practised the system we are about to detail, or have yet made the experiment of grafting the different species of *Echinocactus*, *Mammillaria* &c., on stocks of *Pereskia aculeata*. This has, however, been effected by Mr. Knight, of Chelsea, and the plants so treated have grown in the most luxuriant manner, and have a very novel and highly interesting appearance. To all persons acquainted with the habits of the various species of *Echinocactus*, *Mammillaria*, and other cactaceous genera, which do not produce flat or angular leaf-like stems, but form themselves into spherical heads, it is a well known fact that they produce their roots so scantily, as, in many instances, to be almost entirely destitute of them; and, consequently, the plants make little progress in their growth, and seldom attain to any considerable size: but, treated according to the system we have just alluded to, the strong and vigorous roots of the pereskia supply them most abundantly with nutritive matter, and accelerate their growth in a most surprising manner. The mode of practising it is very simple. Having prepared a quantity of stocks of *Pereskia aculeata*, which have been previously divested of all their branches, and have attained the height of eighteen inches, or two feet, cut the extremity of the stem nearly to a point, and then take species of *Mammillaria*,

or others of a similar nature, and, cutting off all the roots, make a hole in the centre of the base of the plant, and simply insert the stem of the pereskia thus prepared into it, taking care to shade it from the influence of the sun, and keep it in a moist heat. In this manner, the species used for the graft, and the plant which is grafted upon, will soon become firmly united, and grow and flourish in a vigorous manner." (*Pax. Mag. Bot.*)

In a future number some additional information will be given, which we shall extract if interesting to our readers.

Myrtææ.

CALLISTEMON (from *Kallistos*, beautiful, and *stemon*, in allusion to the rich vivid colors of the stamens.)

macrostachyum Lindl. small-spiked Callistemon. A green-house shrub; growing four or five feet high; with crimson flowers; appearing in March; a native of New-Holland; propagated by cuttings, and grown in sandy peat. *Bot. Reg.*, n. s. 7.

A new and very splendid species of the Callistemon, a genus heretofore united with *Metrosideros*, lately introduced from New-Holland, and flowered for the first time in Europe, in March, 1837, in the garden of William Harrison, Esq. of Cheshunt, at which time it was exhibited before the London Horticultural Society, where it gained a medal.

The foliage is quite small and close, and the plant of an erect and neat habit. But it is most remarkably striking, "on account of the clear vivid crimson of its flowers, which are certainly the most brilliant of this brilliant genus, so that, although the spikes are much smaller than in some other species, the general effect of the blossoms is not equalled." It is a very desirable species.

Plants of this fine and showy genus are not often seen in our collections in any great perfection, which, we apprehend, arises in part from their not being very well known, and from the difficulty of propagation, by which a stock of plants is kept up. The following remarks, therefore, appended to the description of this plant, we hope will be of interest to our readers, and be the means of rendering them more frequent inmates of our green-houses:—

"The cuttings by which this plant is propagated, should be the points of young shoots, and, if possible, should be taken from young plants. This is of considerable importance, because it not unfrequently happens, that the failure in striking cuttings is owing to having taken them off old plants. The best season for propagation is the spring; the young plants then become rooted before the following winter. They will strike root best in silver sand."

The cuttings, when rooted, should be potted off into "good peat, and if it is not naturally mixed with sand, a little of this must be added. The pots should be well drained, in order to carry off the superfluous water. It will thrive best, as will all the species, in a good airy green-house." (*Bot. Reg.*, Feb.)

Fabacæ or *Leguminosæ*.

CHORÓZEMA

cordatum *Lindl.* Mr. Mayles's Chorozema. A green-house shrub; growing three feet high; with red flowers; appearing in April; a native of Swan River Colony; increased by cuttings; grown in peat and sand. *Bot. Reg.*, n. s. 10.

A slender, but pretty species of this elegant genus, lately introduced to England. It is very distinct from all the species hitherto known. It is, also, the freest grower of the whole genus. The plant from which the drawing was taken, when only twelve months old, "was two feet and a half high, and, although it does not seem strong enough to support itself, yet it clings to nothing for aid;" it seems also to have the habit of abundant blooming. The flowers are produced in slender terminal racemes, not large, but of a deep rich red. "The plant is easily propagated by cuttings, which may be taken off at any season of the year; but the best time is early in spring. The soft newly formed parts of the plant should be used for this purpose, as they are found to strike root more readily than older wood; they should be inserted in silver sand, and covered with a bell-glass; a little artificial heat will be found useful if the cuttings are put in, in the early part of the spring, but if in summer it will be unnecessary. They will root in a few days, and should then be potted in peat soil, mixed with a little sand." (*Bot. Reg.*, Feb.)

Chorózema Henchmánni, which we have noticed (II., p. 23,) has flowered in the collection of J. W. Boot, Esq. of Boston, and we hope it will soon be so generally distributed, as to be found in every good green-house. It is a truly charming species.

Euphorbiacæ.

EUPHORBIA (so called after Euphorbus, the physician of Juba, King of Mauritiana) *venêta* *Willd.* Venetian Euphorbia. A half hardy trailing perennial plant; growing over two feet high; with ? flowers; appearing all summer; a native of Venice; increased by division of the roots; growing in any common soil. *Bot. Reg.*, n. s. 6.

A very pretty species, usually considered a variety of the *E. characiás*, growing in any stiff soil and dry situation, "particularly well adapted for rock-works, along with sedums and similar plants, never suffering in the driest parts of summer, but very impatient of much wet in winter." It grows easily, and it may be most readily increased by a division of the long stolones which the plant throws out during the season in the greatest abundance. The greatest difference between this species and the *E. characiás*, is the leafy and compact mode of its inflorescence, which is very dense. (*Bot. Reg.*, Feb.)

Geraniacæ.

In our last, we gave the names of most of the varieties of geraniums or pelargoniums, which were exhibited at the late show, at the Massachusetts Horticultural Society's room, for premium. Since that time, we have examined some choice new kinds at Mr. Cushing's, which Mr. Haggerston procured, while on his journey to the south, and which are among the very finest that

have been introduced. Believing a short description of a few of them will be interesting, as serving to guide amateurs and others in the selection of the plants, we have given the following. They were hastily made, but will convey a general idea of the flowers:—

Amelia, blush, with rose-colored spots, flowers very large.

Van Huysen, rosy purple, good sized flower.

Charles X., very fine one, similar to *Macranthon*, but the plant has a much neater habit, and the flower stems erect.

Lord Denman, crimson purple, with large blackish spots, fine habit and profuse flowerer.

Vulneratum, blush, mottled or shaded with rose, large flower, and quite distinct from any other we have seen.

Jack of Newbury, rosy purple, very handsome.

Blue Beard, a beautiful crimson purple, good formed flower, and handsome truss.

Virginus, fine rose, spotted.

Pulcherrima, bright rose.

Hericiartianum, crimson purple, beautiful habit, well formed truss, and large round flower.

Duchess of Plymouth, blush, very distinctly and boldly lined.

Tory, dark red, very handsome, large flowerer.

Imogene, fine white.

Gen. Washington, (Boll's) rosy purple, fine habit, free flowerer, large and handsome truss, a superb variety.

Diadematum, beautiful pink flower, the lower petals elegant shaded, flower stems erect, and truss very full and large.

Gen. Mina, fine purple.

Several others had passed their bloom, and we therefore did not have an opportunity of obtaining a description of the flowers. Another season we shall endeavor to give accurate descriptions of all the new and fine varieties.

In the collection of Mr Wilder there are some very superb ones in bloom, but we have not yet had an opportunity to see them. Mr. Donald has raised one beautiful seedling, of which we shall speak hereafter.

In New York we presume Messrs. Hogg and Thorburn have made, and still are making, a splendid display. In an advertisement of Mr. Thorburn's, giving notice that the plants were in bloom, and inviting the public to view them, he enumerates, as in flower, among others, *Gem*, *Speculum Mundi*, *Lovely Anne*, *Ne plus ultra*, *Tam O'Shanter*, *Lautum*, *Pixy Queen*, *Incarnatum superbum*, *Belladonna*, *Sancho Panza*, *Beauty of Cambridge*, *Dennis's Perfection*, and *Queen of Scots*. The most rare of these are *Incarnatum superbum*, and *Beauty of Cambridge*,

(Widnall's) the latter of which is said to be better than Perfection. The plants will undoubtedly remain in beauty, until the middle of June.

In another page will be found an account of the first monthly meeting for the present season, of the Pennsylvania Horticultural Society. It will be seen that many of the above enumerated geraniums were among the number displayed by the best growers in Philadelphia, together with other new ones. The exhibition must have been exceedingly fine, and we hope the amateurs and nurserymen of Boston and vicinity, when they read the account of it, will be induced to make preparations to have as fine a display, next season, as can be made in the Union.

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Asteràcææ.

MÓRNA

nivea Lindl. Snow-white Morna. An annual plant; growing about a foot and a half high; with white flowers; appearing from June to September; a native of Swan River; increased by seeds; grown in loam, peat and leaf mould. Bot. Reg., t. 9.

An annual species of this pretty genus, somewhat resembling in habit the *M. nívida*, noticed in our III., p 223, but differing in the flowers, which are white instead of yellow, and also in their being quite entire. The flowers are very numerous, in a capitate head and of a pure white. It will form a good addition to our annuals. "What renders the beautiful species of *Mórna* the more interesting, is the unfading brightness of their flowers, which will retain their shape and color for years, if carefully prepared, and thus form a charming addition to the interesting flowers already known."

The plant may be treated as follows:—

"The first sowing [of the seeds] should take place about the beginning of September—the second about the middle of February, or beginning of March; the first crop of plants flowering in May and June, the other in autumn. The seeds should be sown in pots, and placed in the green-house, in a mixture of loam, sandy peat, and leaf mould; the young plants should be potted off when small—for if allowed to remain long in the seed pots, they get stunted—into sixty pots, putting two plants into each pot close to the side, shifting them into large pots as they require it, always keeping them near the glass, in a dry airy part of the green-house. The plants blossom in the greatest perfection, in the green-house in the summer, but will grow and flower tolerably well, if planted in the open border, not however earlier than the end of May, for a slight frost is fatal to them; in the latter situation they are the most likely to produce seeds. When grown in the green-house, they require particular attention, as too much or too little watering will, in a few hours, destroy the healthiest plant; particular care should therefore be taken to drain the pots

carefully at each shifting, and not to give too great a shift at any one time." (*Bot. Reg.*, Feb.)

Verbenacæ.

Our correspondent, Mr. Hogg, has raised some very fine verbenas, from seed received from Mr. Tweedie, collected by him in Buenos Ayres. Those who have seen them, pronounce them exceedingly beautiful. One called the *V. araniàna*, is of a deep purplish color, with fine heads of flowers, a neat habit, and profuse bloomer. We shall speak of them more particularly, when we are better acquainted with them.

MONOCOTYLEDONOUS PLANTS.

Orchidacæ.

CIRRHOPETALUM (From *kirrhos*, tawny, and *petalon*, in allusion to the prevailing color of the flowers.) *Lindl.*

Thouàrsii Lindl. Insular Cirrhopetalum. A stove epiphyte; growing about a foot high; with buff-colored flowers; appearing in July; a native of the Society Islands; increased by division of the roots. *Bot. Reg.*, x. s. 11.

A curious, though not very ornamental, orchidaceous plant. The flowers are produced in a sort of whorl, on a slender scape, and are pendulous. "Nothing can be more singular than the long strap-shaped sepals growing from one side of the flowers, and almost bearing them down with their weight; they offer a singular instance of the unequal force with which the phenomena of development are exerted in one and the same flower." It is one of the most extensively diffused of all epiphytal *Orchidacæ*. The mode of treatment given at p. 183 will apply to this species; a good portion of broken pots may, however, be mixed in with advantage. (*Bot. Reg.*, Feb.)

CATTLEYA

crispa Lindl. Curled-petalled Cattleya. A stove epiphyte; growing two feet high; with white and purple flowers; appearing in summer; a native of Rio Janeiro. *Pax. Mag. Bot.*, Vol. V. p. 5.

One of the most superb species of this most superb genus. The specimen from which the drawing was taken, was grown at Chatsworth, the Duke of Devonshire's place, the past year. The flower spike does not generally produce more than three flowers; but here are seven! Mr. Paxton considers it a "striking illustration of the high degree of perfection to which orchidaceous plants may, and will eventually, be brought, when their habits, and the treatment they require in cultivation, become understood, among the admirers of this, the most beautiful, and by far the most interesting, family of plants, known in the vegetable world. The flowers are large, the sepals, which are undulated, are pure white, and the lip is elegantly shaded with purple.

The cattleyas are easier to grow than some of the other genera. They do not require so much heat as many of the tribe. As regards the cattleyas, the majority err in keeping the temperature too hot and humid, and in giving too much water when

they should be dormant. They should always be set in the coldest end of the hot-house. The method of potting will be found at p. 183. (*Pax. Mag. Bot.*, Feb.)

Liliæcæ.

THYSANOTUS (from *Thysanotus*, fringed, in allusion to the margin of the petals.)
proliferus Lindl. Proliferous *Thysanotus*. A green-house perennial; growing from twelve to eighteen inches high; with purple flowers; appearing in spring. A native of Swan River; propagated by division of the root. *Bot. Reg.*, n. s. 8.

A pretty plant, very attractive on account of its fringed petals. The stem grows about two feet high, and the flowers are collected into two or three dense heads. The sepals are linear, acuminate, petals oblong, of a rich purple, beautifully fringed. Dr. Lindley states that "it is much to be regretted, that the many beautiful species of this genus, to be found in New Holland, should be unknown in our gardens; for neither the size, nor the brightness of the petals in the species now figured, are at all to be compared with those of several others. They have from time to time been introduced, but they have always been speedily lost, after their importation. It is a green-house perennial, requiring a strong, rich, loamy soil. It may be grown in pots, or planted in a pit kept dry, and well protected from frost during winter, for the least frost or wet destroys the roots. Repot the plants in March, and place in a warm part of the green-house; they will flower in August; after which period, they should be kept rather dry until February. Sow the seeds in loam and peat, with a small portion of sand." (*Bot. Reg.*, Feb.)

Lilium speciosum, which we noticed at p. 62, is also figured in *Paxton's Magazine of Botany*, where it is stated that a plant in the collection of Messrs. Loddiges had five flowers open at once. This additional number of flowers, which was undoubtedly owing to its being planted in a border, in the green-house, will make it still more desirable. If grown in pots, it will require an abundance of pot room. (*Pax. Mag. Bot.*, Feb.)

At Mr. Cushing's, *Crinum amabile* has thrown up one of its monstrous flower stems, with fifteen or twenty buds, which will be fully expanded by the time this is read. *Ipomæa insignis* is now full of flowers, and will remain so for a long time. *I. Horsfallæ* has been added to the collection.

Mr. Lowell has lately returned from the West Indies, where he has passed the winter, and has brought home with him twenty or thirty kinds of cactuses, cereuses, and others of the family. We have not understood whether any of them are entirely new, but presume they may be, especially to our gardens. If they should prove so, we shall endeavor to inform our readers.

REVIEWS.

ART. I. *First Report on the Agriculture of Massachusetts.*

By HENRY COLMAN, Commissioner for the Agricultural Survey of the State. County of Essex, 1837. 8vo. 140 pages.

WE have for some time had before us this report, but have been unable to notice its contents heretofore, other subjects perhaps more interesting to our readers, and more immediately within the scope of our Magazine, having engrossed our attention and occupied all our space. We feel, however, too much interested in the cause of agriculture, to pass it by without offering some few observations upon the object of the agricultural survey, of which this is the first report for the county of Essex.

The resolves for an agricultural survey of the state were passed in April, 1837. In the ensuing May, towards the latter part of the month, the Rev. H. Colman was appointed commissioner, and he received his instructions for the prosecution of the same, about the middle of June.

The object of the survey is to ascertain the agricultural resources of the state—to collect accurate information of its state and condition, and every subject connected with it—to point out the means of improvement—and to make a detailed report of the same to the Legislature. With such instructions, the commissioner began his survey as soon as circumstances would permit, and commenced with the county of Essex, the report of which was submitted to the Governor and Council, in February last; and soon after ordered to be printed by the Legislature.

The mass of information collected in this report will at once show the great and lasting effect which this survey will have upon the agriculture of the state. It will develop the resources of every county; it will show to the intelligent farmer how much may be reaped by enterprise and industry; and it will convey to all who read it, the important results arising from a greater attention to agricultural pursuits.

Heretofore agriculture has been practiced altogether experimentally, without any systematical mode of cultivation. The farmer has pursued the same course marked out by his predecessors, in but few instances admitting any innovations whatever. Book farming, as it is generally termed, has been viewed with a jealous eye, and those who have looked for assistance from such a source, though less experienced than their neighbors, have, in most instances, succeeded far better than those, who, disproving such aid, have still adhered to their former prejudices and opinions.

One great object of the agricultural survey, if no other, will be, not only to dispel the idea that too many have, of the inutility of books; but, on the contrary, it will convince those, who have heretofore held such opinions, of their error. It will, in truth, be the means of causing farmers to think, as well as to act; and that either the one or the other alone will avail him little in the pursuit of the art.

Another tendency that the survey of the state will have, is that of making the occupation of the farmer more respectable and respected than it has generally been considered.

Too many are accustomed to consider the business of the farmer, as one requiring little judgment, or but a limited knowledge: others view him as a mere digger of the soil. Such an idea of the station of the farmer has tended greatly to allure many from its pursuit, who would have been zealous promoters of its cause. This survey, we repeat, will do away in a great measure with such ideas, and substitute in the minds of those who have such opinions, the important place which the real farmer occupies in the community. The agricultural survey of England, a few years since, was attended with the most beneficial results, and we doubt not the same will be the case in this country.

The report commences with a description of Essex county, the extent of its cultivated, pasturage, and other lands, and of its peculiar soils. This is followed by a statement of the kinds of crops most generally cultivated, with details of such as have proved large and excellent. Next are reports of the dairy, sheep husbandry, beef, swine, neat cattle, manures, fruit trees, forest trees, fences, farm buildings, implements, weeds, bees, miscellaneous matter, improvements, &c. &c. We have little room for extracts, but the following description of Essex county may prove interesting to many of our readers:—

“Essex county lies at the northeastern part of Massachusetts; and is bounded on the northwest by New Hampshire, on the east and northeast by the Atlantic Ocean, and southeast by Massachusetts Bay, and on the southwest by the county of Middlesex. It embraces in extent 360 square miles. Its population in 1830 was 82,887, its present population 93,689; being about 260 inhabitants to a square mile. It contains twenty-six towns. It is intersected through its whole width by the river Merrimack, which empties into Massachusetts Bay at Newburyport, and the rivers Shawsheen and Agawam or Ipswich. Parker and Saugus rivers are likewise found, but are inconsiderable in length and magnitude.

“The general surface of the county is uneven; but there are no hills of great elevation, and few which may not be cultivated to their summits. The county, for its whole length on the eastern side, is washed by the Atlantic Ocean. Cape Cod, its eastern extremity, projects into the sea, a distance of sixteen miles; and the coast is lined with a rocky shore or extensive beaches, and pierced by innumerable inlets and creeks, on which are extensive tracts of salt alluvial meadow. The county abounds likewise in tracts of a greater or less extent, of fresh meadow or peat-bog. A considerable amount of this land has been drained, and

by the application of sand, gravel, or loam to its surface, has been converted into profitable mowing. Much of this same description of land remains to be redeemed, and will fully compensate for the expenditure which this improvement may require. There are considerable tracts on the Agawam river, the waters of which are forced back by the mill-dams thrown across it near its mouth, which must be regarded as irreclaimable while those obstructions remain.

“The climate of Essex county is affected by its maritime situation. The proportion of snow which falls in the course of the year is considerably less than falls in the interior and western parts of the state; the proportion of moisture, in the form of vapor, snow, and rain, is greater. The degree of cold is sometimes as intense, but not as long continued. The spring is in advance of the interior of the state generally, from a week to a fortnight; and the frosts, excepting in some particular localities, are not so early, nor severe. For healthiness, as far as this may be determined by the tables of longevity, this county may be safely compared with any part of the known world.

“The whole number of acres in Essex county, according to the reports of the valuation committee in 1831, is as follows:

Tillage,	.	.	.	.	.	Acres	.	14,118
English and Upland Mowing,	.	.	.	.	.	“	.	31,947
Fresh Meadow,	.	.	.	.	.	“	.	15,471
Salt Marsh,	.	.	.	.	.	“	.	14,139
Pasturage,	.	.	.	.	.	“	.	100,309
Wood,	.	.	.	.	.	“	.	22,058
Unimproved,	.	.	.	.	.	“	.	34,281
Unimprovable,	.	.	.	.	.	“	.	10,417
Owned by the Towns or other Proprietaries,	.	.	.	.	.	“	.	3,604
In roads,	.	.	.	.	.	“	.	6,606
Covered with water,	.	.	.	.	.	“	.	17,176
							Total,	270,121

“The soil of Essex county is of primitive formation; and of various character. There is a locality of limestone mentioned, by the geological surveyor, in Newbury and Bradford; but it is believed of small extent. There is little purely sandy land, excepting on the sea-shore. There are extensive tracts of peat bog. The soil on the sea-shore among the projecting cliffs and ledges, on the peninsulas and islands on the coast, with the exception of Plum Island, which is almost unmixed sand, is a deep rich loam, highly productive in grass, corn, oats, and potatoes. On the main eastern road from Salem to the extreme line of the county, there prevails generally a gravelly loam from six inches to a foot in depth; not difficult to be worked, and productive under good cultivation. The lands bordering on the Merrimack are much broken; but the hills are generally rounded, of not difficult ascent, and composed of a rich dark clayey loam. They ordinarily produce good crops of wheat, barley, corn, oats, and potatoes. This variety of soil embraces an extent of three or four miles from the river on the south side. On the west side the land is much more charged with sand, and is not so fertile. With the exception of a considerable tract in Haverhill, and an island of fifty acres lying below the bridge in Haverhill, there is no fresh alluvial meadow on the river. The towns in the interior of the county are of various character, in some places presenting long strips and high eminences of rich clayey and gravelly loam: and in other parts a broken, thin, hungry and stony soil, the cultivation of which is difficult and unproductive. The primitive forests have been long since removed; but there are extensive tracts of wood in different parts of the county. The maritime parts are principally supplied with fuel by im-

portations of wood from Maine, or coal from Pennsylvania. The interior have a supply from their own wood lots, or their peat bogs, the value of which is becoming more highly appreciated.

"The soil has in parts of the county become exhausted; and in no part of it can it be advantageously cultivated without manure. The stony and rocky character of the soil is in some places an impediment to cultivation; but a large proportion of the land in the county is already under partial improvement, or susceptible, at present prices of labor, while present prices of produce remain, of profitable culture.

"The county is well watered, and contains several ponds of some extent, the scenery in the neighborhood of which is picturesque and beautiful. Some of the situations on the Merrimack, and many on the sea-shore, are commanding in their position, and present views of large extent and great variety and beauty.

"The farmers in Essex are particularly favored in respect to markets. Boston is easily accessible to most parts of this county, being from its farthest point not more than forty miles distant; and the large commercial and manufacturing towns of Salem, Lynn, Newburyport, Marblehead, Danvers, and Lowell, furnish a ready demand for whatever the farmer will produce. Of the whole population in Essex, there is reason to believe that not one-fifth part are engaged, properly speaking, in agriculture. The remaining four parts are consumers not producers. The county of Essex is essentially a commercial and manufacturing district. Besides what may be called marketing, including the selling of hay, she sends no agricultural produce away; and she imports largely of bread-stuffs, vegetables, dairy-produce, mutton, beef, and pork, together with a great amount of oats and corn for horse-feed. Rye is cultivated to a small extent, and the bread of the population is almost entirely composed of the superfine flour of western New York and the middle States."

The report of the survey of Berkshire county will be next submitted, and probably after this, that of Middlesex county. We shall notice each as they appear.

We should not conclude this review without speaking in terms of commendation of the commissioner. Mr. Colman set about his operations with spirit, and we hope they will be continued with the same vigor. No person could have been selected better competent, both from practical and theoretical knowledge, to perform this task. He has already delivered several addresses upon the subject of the survey, before the members of the Legislature, and in some of the principal towns which he has visited, has invited many farmers to meet him, in order to obtain all the information which has been sought.

The survey, it was supposed by the committee who reported the resolve for the same, would occupy about three years, but the Governor, in his letter of instructions to the commissioner, expressed his opinion that two years would be sufficient for the purpose. We hope it will be fully and thoroughly accomplished, even if it should take the longest period.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Statistics of the Woods and Forests of Europe.—It has been ascertained that forests occupy a third part of the soil of Russia, Sweden, Norway and Germany; a fourth of Austria and Prussia; a fifth of Belgium; a sixth of Switzerland; a seventh of France, (four hundred square leagues;) a ninth of Italy; and a twelfth of Spain. In the British isles they only occupy a twenty-fifth part of the soil, which is fortunately the richest in Europe in coal mines. (*L'Echo, &c., trans. in Gard. Mag.*)

The surface under cultivation in Britain, Italy, Prussia, the Netherlands, Austria, Bavaria, and Wurtemberg, occupies a third of the soil, in France more than one half, (14,572 square leagues;) in Germany, in the kingdom of Naples, and in Sicily, a quarter; in Austria and Illyria, less than a fifth; in Russia in Europe, and Hungary, a sixth; in Sweden and Norway, a ninth. The remainder consists of forests or of barren and uncultivated tracts. (*Id.*)

Temperature of the past winter in Europe.—At Paris, in January, 1838, the temperature was 14° below zero of Reaumur, which is only 4° less than it was in 1795, the coldest year in Paris on record. These records, as to temperature, commenced in the year 1763; and in no year from that period to the present, except 1795, does the temperature appear to have been so low as in January last. (*Id.*)

In the Berlin Botanic Garden, in Germany, on January 16th, 1838, the temperature was 22° Reaumur below zero, (18° below zero Fahrenheit,) with two and a half feet snow and very little dew. At Vienna, in January, the cold varied from 8° to 9° below zero, Fahrenheit. At Frankfort, on January 16th, the cold was 16° below zero, Fahrenheit. The mean temperature of some parts of Britain was 25—61°, which is 3.31° below the mean of any corresponding month during fourteen years. (*Gard. Mag.*)

Grafting the Orange on the Pomegranate.—Mr. Andrews of Boston, U. S. Consul at Malta, was recently in this city, and confirms the fact I formerly stated to you, on the authority of a friend who had visited that island some years since, viz. that the red flesh oranges of Malta derive their hue from the pomegranate stock, on which they are engrafted, and promises to send you undeniable certificates of it. Brydone, in his fifteenth letter, also says, that "the Maltese oranges deserve the character they have, of being the finest in the world: many of them are of the red kind, and much superior to the others, which are too luscious. They are produced, I am told, from the common orange, but grafted on the pomegranate stock. The juice of this fruit is red as blood, and of a fine flavor." It is singular, that the call you made on the cover of this magazine, for a reference to some work, in which the fact was stated, should not have produced one to Brydone. That author, however, was not the one in which I saw it, and which, with the oral testimony of my commercial friend, induced me to use it as argument in favor of the opinion, that the stock improved the fruit. (*M. J. S. Philadelphia—Gard. Mag.*)

ART. II. Foreign Notices.

ENGLAND.

The severe weather of January, 1833, has killed or greatly injured almost all the half-hardy ligneous plants in the neighborhood of London. The foliage of the trees, on the walls of the Botanic Garden at Kew, and also on those of the Horticultural garden, is quite black; and common laurustinus, the common laurel, the Portugal laurel, the phillyreas, the alaternus, and other such shrubs, are blackened, or killed down to the ground. Even the acacia and arbutus have had their hardy foliage injured; and, in short, so much damage has scarcely been done to evergreen shrubs within the memory of any gardener living. It is interesting to observe the different degrees of hardiness in different individuals of the same species, and in the same garden, where the plants have been raised from seed, as in the case of the Portugal laurel, the arbutus, the evergreen oak, the cork-tree, &c. Some individuals of these species, standing in nursery lines, among others in all respects similarly circumstanced, are scarcely injured at all; while others are partially blackened, their wood being alive, and some are killed down to the ground. (*Gard. Mag.*)

Kew Gardens.—These old and established gardens, which have been in a rather poor condition for some time, are about to be extensively reformed. By an order of the Lords of the Treasury, Mr. Paxton, well known as the head gardener to the Duke of Devonshire, and Mr. Wilson, gardener to the Earl of Surry, have been appointed to report upon the state of these gardens. Hitherto there has been much complaint of the selfish manner in which new and beautiful plants have been withheld from gentlemen and nurserymen, and many have been lost to England, by their not being in any other collection, and have here been so neglected as to cause their death. Mr. Aiton will probably retain his situation, as he has been found altogether blameless, as regards the conducting of the establishment. (*Gard. Mag.*)

Cárica Papàya, the papaw tree, of which we gave an engraving at p. 96, has fruited in England, at Ripley castle. A figure, from some of these specimens, will appear in the *Gardener's Magazine*. The conductor recommends it as an object of luxury, and worth cultivating "as one of the very few, which ripen a handsome edible fruit in the winter season." (*Ed.*)

Cultivation of Mignonette.—Mignonette is considered a very simple plant to grow, and so it is in fashion. We generally see it during winter; but a celebrated grower of forced flowers for Covent garden, told me, that he had never had but one really good crop of mignonette, and by it he made a good sum of money. "After four winter's growing without the least failure, I consider my system established; and by it I have had, without the least variation, forced mignonette in flower by Christmas, and as strong as border mignonette. On the 20th of August, I sowed one hundred pots of thirty-two's [No. 3] filled with the following compost; half sandy loam, the other half made up of leaf mould, and road sand, not sifted, but very dry when used, and pressed into the pots up to the brim. When the seeds are sown, a little compost is sifted over them. The pots are then put into a pit or frame, and set very near the glass. The lights are kept off at all times, except during rainy weather, when they are always put on; as, above all things, a drop of rain is never allowed to fall upon the pots, for several reasons. The first of them is, because rain is often very heavy, and washes the seed out of the pots; secondly, the rain is often too little, and only moistens

the surface; and, thirdly, after the first of October, rain is too cold and chills the plants. I water the plants with a very fine rose, and always twice over, but never until they are on the point of flagging; and, after the first of October, I either warm the water, or use it out of the stove. I remove the mignonette to the front of the green-house, about the first of November, for fear of damps. If a succession is wanted, I cut down as many as may be necessary, about the middle of December, and these will make a better blooming and thicker pot of mignonette, than a second sowing, and will save trouble. In thinning, I leave only six or seven plants in each pot; five of them about one inch from the rim, and one or two in the centre. In order to show gardeners how wrong it is to let rain fall upon their frame plants during winter, I had two pots of mignonette put on the vine flue of an empty pit in November, giving them no water and no covering; and upon the first of February brought them into the green-house; and now (Feb. 5) they are looking well. This speaks volumes; if mignonette will stand 30° of frost, merely because it is kept dry, what will cauliflowers, lettuces, radishes, &c., not stand? The above may appear a simple story to many; but I am obliged to be more particular with winter mignonette in pots than with the finest stove plants." (*Gard. Mag.*)

FRANCE.

Method of training the Vine in the Pyrenees.—"The valley of Arrège between Tarascon and Foix, assumes a more quiet and gentle character; mountains and steep rocks giving place to hills, the slopes of which are productive in grain, and the warmer and more sheltered rocks clothed with vineyards. The manner in which the vines are planted and trained, is peculiar. In all the corn-fields, the stones, which would otherwise encumber the soil, are gathered in heaps of various forms and sizes. Among these heaps of stones, the vines are planted and trained over them on poles or espaliers. The effect of this arrangement is beautiful; and the corn-fields may be taken for a garden; the knots of vines for its parterres." (From Murray's *Summer in the Pyrenees*,—in *Gard. Mag.*) The conductor remarks that this extract may "afford useful hints to British gardeners, in training both ornamental and fruit-bearing plants." We may add that the American amateurs and gardeners may also derive much benefit from the above hints, not only in training ornamental and other fruit-bearing plants, but particularly in the culture of foreign grapes in the open air. It has been, and still is, generally supposed that when a vine is planted out, of any of the foreign or English grapes, as they are more frequently termed, in distinction to our native kinds, it must have a rich soil, both deep and light, or it will not flourish. A situation very dry, or the soil thin and rather poor, is deemed wholly unfit for growing the vine. Now this is just contrary to what should be done; and the consequence is, that the vines make a very vigorous growth, with large stout wood, and roots which penetrate into the deep and rich soil prepared for them; their robust growths rarely get more than half ripened, and are either killed by our severe winters, or, if protected, the half mature wood produces small crops, with the fruit gross and insipid, rarely ripening well. If they were planted according to the mode in the above extract, or in one somewhat similar, we should hear less complaint of poor vines, small crops, and unripe and mildewed fruit. We have yet to learn, both the mode of cultivating foreign grapes, and our native kinds also, which, by most persons, are treated just like the former, with the exception that they need no protection. We shall extend our remarks on this subject at some future period, and, in the meantime, we hope cultivators will profit by the above extract.—*Ed.*

ART. III. Domestic Notices.

Seedling Roses.—Messrs. Noe & Boll, Florists, New York, have sent us their catalogue of roses for 1838. It contains a very fine collection of Bengal, tea-scented, Noisette, Isle de Bourbon, hybrid, Scotch, moss and annual roses, with a great number of seedlings, of their own production. We have heretofore noticed this collection, which is one of the best in the country. Mr. Boll, being well acquainted with the French florists and rose growers, has an excellent opportunity of obtaining every thing that is fine. In the cultivation of roses, Messrs. Noe & Boll display much knowledge. We have never seen better plants, or any more profusely laden with blossoms, than those in this collection.

Fifty tea-scented roses are enumerated, among which are several new and very fine ones.

The seedling roses are all of them yet in the possession of Messrs. Noe & Boll. They are upwards of a hundred in number. We hope that a ready sale will be found for these, which, we have no doubt, are all very beautiful kinds. We recommend those who are in want of fine roses, to this catalogue.—*Ed.*

Combrètum purpureum.—This most gorgeous species is again in beautiful bloom, at Mr. Cushing's. When we saw it a few days since, we counted, then open, at least twenty of its graceful racemes of blossoms. The plant has extended itself very rapidly, and now covers a good space of the back wall. It will remain in perfection a long time.—*Id.*

Early cauliflowers.—Some of the finest cauliflowers we have ever seen, we observed a week or two ago at Belmont place. Mr. Haggerston had cut a great number, (raised in the pit, which we have previously noticed,) and many of them were of large size, and most excellently grown. The plants were not set out until the first of February.—*Id.*

Early Strawberries.—Four weeks since, a quart of strawberries was gathered, at one time, from plants growing in the stove at Mr. Cushing's, and since then large quantities have been picked. The plants stand on shelves, near the top of the back wall of the stove, and produce abundantly. The kind is the Keen's seedling, which Mr. Haggerston prefers to all others for forcing.—*Id.*

Transplanting Evergreens.—The following very judicious remarks on transplanting evergreens, are from the pen of Gen. Dearborn. If attention were paid to the few particulars which he mentions, we should hear less complaint of the loss of evergreens.

“In the cultivation of the coniferous trees, and especially the pines, hemlocks, spruces and firs, great care must be observed, in their removal, not to injure the *root, branches, or bark*; and by no means should *any of the branches be cut off*, as is too generally done. They have the greatest aversion to amputation, and resent the lopping of *their lower limbs* so stubbornly, that they never grow thriftily, or make fine looking trees; and the fir is so sensitive on this subject, that it sickens, lingers and prematurely dies, if its under branches are cut off. In selecting any of this class of trees, for transplantation, be sure to take only such as grow in *open and airy situations*, where they find *ample room* for the extension of their far-reaching *lower limbs*, and such as on which these limbs *grow close to the ground, and by no means cut off any of them*, if you wish to be eminently successful in their culture, and to have thrifty and beautiful samples. The great want of attention to these particulars, is the cause that so many persons fail in the cultivation of the fir balsam, as it is called in Maine—the silver fir, [*abies balsamifera.*] They take them from thickets, where they have run up tall and slim, with short

and diseased limbs, while for several feet they have already perished; and to complete the natural evils, the trees are pruned up, some five or six feet, which not only renders them unsightly, but is giving the blow of death, when long life is the desirable attainment.

The best time to transplant all the evergreen trees is later than that for the deciduous, and is *just before they commence vegetation*,—at the moment they make the first effort to open their leaf buds. They should not be over five or six feet in height; it will be best, in all cases, to set them twice as near as they may be required ultimately. So doubtful is their life the first season; and if more live than are required for the ground, they can be transplanted to other places; for when they have grown two or three years, after the first taking up they can be transplanted with greater certainty of life. (*Extracts from Gen. Dearborn's Letters to the Bangor Ornamental Tree Society, in the Mechanic and Farmer.*)

New native Pears.—At a late meeting of the Massachusetts Horticultural Society, the President read a letter from John Prince, Esq. respecting several new native pears, some account of which is given in an address delivered before the Horticultural Society of New-Haven, by Prof. Ives. The following is the letter alluded to:—

“In the past winter some unknown person (to me) sent me a pamphlet, containing extracts from an address by Professor Eli Ives, of New Haven, before their Horticultural Society in October last, which gives notice of many different sorts of pears, (all *natives* there,) particularly in the garden of Gov. Edwards; I had, three years past, a report of them, but being confirmed from such a source as Professor Ives, of their fine quality, induced me, although an entire stranger, to write him on the subject, and ask him to procure and send me a few scions particularly of fine winter table fruit; early this week I received some in fine order; and to make a greater certainty of succeeding in cultivating them, after having engrafted only one head of each sort, I send the residue to you, either to make use of yourself or for dissemination where you think they will best be taken care of.

“The following were the kinds sent:—John pear, Cantelope, Henrietta, Citron, William, Edwards, Punderson.

“I fear they are mostly autumn fruit; they are not all labelled as to season, and therefore, possibly, some may be winter fruit.—*Yours, John Prince, Jamaica Plains, May 11, 1838.*”

In our pomological notices, next season, we shall endeavor to notice these varieties, and ascertain something respecting their real qualities. It has been already stated (vol. III. p. 327,) that Dr. Ives has raised a seedling pear of considerable excellence.—*Ed.*

Mr. Wilder's collection of Plants.—We are informed that Mr. Wilder is about disposing of his very fine and rare collection of plants, (particularly of camellias,) to the subscribers—or the trustees of the corporation, when it shall have been formed—to the public garden, which is now under contemplation, and of which we made mention in our last. What could induce Mr. Wilder to consent to dispose of his plants we are not informed; but we presume the collection has become so extensive that it requires great labor and unremitting attention to keep it in order, and, consequently, an annual expenditure of a considerable amount. We hope, however, that it is not Mr. Wilder's intention to give up gardening pursuits entirely; he has been a very zealous promoter of its cause and devoted to the collection of rare things—and we should regret to lose his assistance, which has been exerted in no small degree in spreading a taste for flowers and plants. To the garden under contemplation this collection will, however, be invaluable, and it will enable them at once, should they erect a green-house or conservatory of large dimen-

sions, which they will undoubtedly do, to make a fine display the ensuing winter.

We attended one of the late meetings of the subscribers; the requisite sum had not been procured, but the most sanguine hopes were entertained that it would be. We have no doubt ourselves but the subscription list will be filled up entirely, and, when the garden is laid out and ready for inspection, that an additional sum could be easily procured. We hope it will, for the amount to which it is now limited, \$20,000, is altogether too small, being barely sufficient to put the land in order, fence the grounds, and erect other buildings, including the green-house. We have not yet seen any plan of the garden, but we hope no one will be adopted without it possesses considerable merit both for its picturesque beauty and its adaptation to the purposes of a public promenade. It is intended, if possible, to make preparations to set out a collection of dahlias, so as to have a fine show even as early as the coming month of August. We hope the corporation will be organized before our next number appears.—*Ed.*

Columbian Horticultural Society.—The fifth annual exhibition of the Columbian Horticultural Society, will be holden in Washington, at Carusi's saloon, on the 13th and 14th of June. This society is in a flourishing condition, and their annual shows have, heretofore, been of the most gratifying description. We hope that the secretary of the society, or Mr. Buist, or some other of our friends, in Washington, will not omit to send us a detailed notice of the exhibition.—*Ed.*

ART. IV. *Retrospective Criticism.*

Comparisons are odious.—Mr. Editor: If the above motto had been strictly adhered to you would never have been troubled with any remarks from me. You have an undoubted right to extol the advancement of horticulture either in your own city or in that of any other; but, in my opinion, you have no right to make comparisons, and even if you had, the exercise of it would only injure the cause you profess to advance. In reply to what you say of us, putting our "light under a bushel," I have only to observe, that it is true our light has not illuminated the pages of your Magazine: but is it a fair inference that we, on that account, hide it? Is there not a possibility of persons having a defect in the organs of vision?—yea, there is a possibility of persons being altogether destitute of the said organs. I make no allusions, but only for argument's sake; the best argument, however, in our favor is, an appeal to facts, namely, the yearly amount of our sales of green-house plants, shrubs, fruit and ornamental trees. I was going to make a "comparison," but I forbear,—it would be "odious." If, however, our light is hid to the Editor of the Magazine of Horticulture, we do not think it so to others.—*Thomas Hogg, New York, May, 1838.*

After the remarks we appended to Mr. Hogg's former criticism, we think it unnecessary to extend them at this time.

As regards the yearly amount of sales of plants, as testing the advancement of New York, in Horticultural science, we think it has no weight at all. With all the advantages which it possesses, and the great

number of persons who visit the city, from the East, the West, and South, it would be indeed singular, if the annual amount of sales was not very much greater than that of Boston; even if the collections in the latter place were much more extensive. But these sales are not composed of rare plants, excepting new and fine geraniums, but rather of a great quantity of the more common kinds, for which there is, we well know, a very good demand.

Passing over the remarks of our correspondent, wherein he doubts our possessing the organs of vision, "merely for argument's sake," as we do not feel disposed to discuss that point, we leave the subject to the judgment of our readers.—*Ed.*

ART. V. *Great Horticultural Society of the Valley of the Hudson.*

By the kindness of our correspondent, A. J. D., of Newburgh, N. Y., we have been furnished with a circular, proposing the formation of a Horticultural Society, to embrace the whole river counties of the Hudson. We some time since were informed that a society of this kind was contemplated, and would, if possible, be carried into operation the present spring. We are exceedingly happy to learn that it is likely to succeed, and that, from the number of practical and scientific gentlemen engaged in its cause, it will constitute, by far, one of the most useful societies in the country. We have no room now to make any further remarks, but present to our readers the circular, which we are confident will be read with great interest. It will be seen that in addition to the objects which generally come within the scope of such an institution, that of furnishing essays and practical information is among the most important. We anticipate rich results from the society's labors, and trust that through our Magazine, we shall be enabled to assist in disseminating the great mass of useful and important information which will be brought together.

"It is proposed, during the present season, to organize and establish an association for the promotion of horticulture, on a more extensive scale than has yet been attempted in this country; the whole of the river counties of the Hudson being the boundaries intended to be embraced within the sphere of its influence, and its active members to be composed of gentlemen residing in all these different counties.

"The advantages of such an association, to the country at large, and to the individual members, are highly obvious. The culture of the soil, and the enjoyments flowing from rural pursuits, are in themselves so important and so delightful, as almost to appear to be, the natural taste or inclination of the mass of mankind. The pleasures of a country life are so innocent, so alluring, and so natural, that sooner or later, they enter into every man's scheme of happiness. And horticulture, in particular, ministering as it does both to the necessities and the refined luxuries of life, pouring out before its votaries its rich and abundant stores, numberless vegetables, wholesome and nutritious, a vast profusion of fruits highly flavored and delicious, and an endless variety of singular and curious plants and flowers, of surpassing beauty and fragrance, is certainly one of the most rational and agreeable of all pursuits or recreations.

Its promotion, either as an art, a science, or an elegant taste, conduces greatly to the happiness and enjoyment of country life. And while it adds largely to our comforts, it contributes also to the improvement and embellishment of the country generally; tending at the same time, to attach us more closely to our homes, and to elevate and refine the character of our population.

“The great and incalculable advantages of societies for the promotion of such pursuits are now too well known, to require detailed enumeration here. By presenting stimulants to improvement, by comparative exhibitions, by eliciting and diffusing information, and by the dissemination and interchange of rare and valuable fruits, plants, or vegetables, they further more powerfully and more constantly the objects aimed at, than is possible by individual exertion.

“Most of the horticultural societies hitherto formed in the U. States, and especially in this State, have probably been too *local*, in their character and influence. Embracing but a small extent of soil and surface, the objects and improvements coming properly within their scope were too scanty, and too easily exhausted, to keep up a constant interest in their proceedings, and they have consequently perished, or yet linger in imbecility, for want of support.

“It is confidently believed, by a considerable number of gentlemen residing on the banks of the Hudson, that the region of fine and diversified country, composing the fertile valley of this river, presents a grander and more favorable field for the active and prosperous exertions of a horticultural association, than can elsewhere be found in the Atlantic states, or even in Europe.

“The numerous fine country residences; the variety of climate, soils and productions; the large number of persons here situated who take a lively interest in the *arts of culture*, united with the unparalleled facility with which the various articles can be rapidly transported, to any given point throughout the whole river;—all these together distinctly point out this section as one admirably adapted to furnish both the *material* and the members, for a great, important and flourishing horticultural association.

“It is proposed, that when the society shall be fully established, there shall be *three* great annual meetings for the purposes of exhibition, &c. The *vernal meeting* for early vegetation, the smaller fruits, &c.; the *summer meeting* for those of a more advanced period; and the *autumnal meeting*, at which the richest treasures of Pomona and Flora shall be brought together. These meetings should take place at three principal points on the river, in succession, viz: Albany, New-York, and some intermediate town, as Newburgh or Poughkeepsie. At these thrice-yearly meetings, not only would large and splendid exhibitions take place, but addresses would be delivered, essays read, and practical information brought forward, on various subjects in horticulture. Seeds, plants and grafts of valuable new varieties of fruits and vegetable productions, could also be distributed among the members, thus disseminating over a large territory, valuable articles now only locally known. Attempts at the acclimation of various exotic species of vegetation, and the introduction of desirable new species, that might become valuable to the country at large, could also be brought about by means of such an association, in an energetic and vigorous manner.

“*Pomology* would undoubtedly be one of the leading subjects, to which the attention of the association would be devoted. The valley of the Hudson abounds in the finest fruits, native and naturalized here. Many fine varieties have had their origin here, which are now celebrated both at home and abroad. And many others are to be found in several of the counties, but little or scarcely at all known, which are highly deserv-

ing of more extensive circulation. These the association will endeavor to bring into notice and distribute, as well as encourage the further introduction of all celebrated and valuable foreign varieties, suitable for our soils.

“By the comparative exhibitions of the various fruits and plants, produced upon so extended a range of country, new facts will be elicited respecting their growth and culture, which will undoubtedly contribute much to the promotion of scientific and practical horticulture.”

ART. VI. *Pennsylvania Horticultural Society.*

We have been favored with the following report of the first monthly exhibition of the Pennsylvania Horticultural Society, with a promise that the future ones shall be forwarded to us. We are happy in thus being able to lay before our readers, the proceedings of our horticultural neighbors of Philadelphia, at an early moment. The report is drawn up by Mr. Watson, the Secretary, with great care, and he details every article of importance. When the great Horticultural Society of the Valley of the Hudson is established, some notice of which will be found in the present number, we hope to be able to give the regular reports of the exhibitions of that Society also. In doing so, the progress of horticulture both in Philadelphia, New York, and Boston, will be kept constantly before our readers. We acknowledge our indebtedness both to Mr. Watson for the report, and to Messrs. Mackenzie & Buchanan, for their promptness in forwarding it.—*Ed.*

The monthly meeting of the Pennsylvania Horticultural Society was held on the evening of the 15th of May, the President in the chair. The Committee on Plants and Flowers awarded the premium to Robert Kilvington, gardener to Mr. Lloyd, for the six best auriculas exhibited at the Society's intermediate meeting of the 2d of May. There were two competitors.

The Committee on Vegetables awarded the premium to Mr. Chalmers, senior gardener to Mrs. Stot, Turner's Lane, for the three best bunches of asparagus; they also awarded him an honorary premium for some very superior sea kale; likewise an honorary premium to Henry Rasche, gardener to Mr. Borie, for some very fine beans, called early six weeks, exhibited at the Society's intermediate meeting of the 2d of May.

The Committee on Plants and Flowers awarded the premium this evening for the best display of plants in pots to Mr. Chalmers, senior gardener to Mrs. Stot, Turner's Lane, who exhibited *Cereus speciosus*, [*Epiphyllum speciosum*] *Ixora coccinea*, *Begonia insignis*, *B. parviflora*, *B. argyrostigma*, *Torenia scabra*, *Hoya carnosa*, *Verbena Tweediana*, *Ardisia crenulata*, *Petunia nyctaginiflora*, *Fuchsia gracilis*, *F. microphylla*, *F. tubiflora*, *Gloxinia rutila*, *Mimulus Wheelèrii*, *M. variegata*, *Calceolaria compressa*, *C. tricolor*, *C. sanguinea*, *Erica andromediflora*, *Schizanthus pinnatus*, *Senecio elegans alba*, *Swainsonia gallegafolia*, *Camellia myrtifolia*, *Cistus purpurea*, *Dianella cærulea*, *Valldota purpurea*, *Metrosideros lanceolata*; *Pelargonium Queen of Scots*, *ne plus ultra*, *De Vere*, capitatum; yellow noisette rose, monthly cabbage, and a fine double stock. He likewise exhibited vegetables, viz.

winter spinnage, spring ditto, two bunches of very superior blanched rhubarb, asparagus, sea kale, early potatoes, cauliflowers, onions, lettuce, and mushrooms.

The premium for the best tea China roses was awarded to Andrew Dryburgh, who exhibited *Rosa Amie Vibert*, yellow *Noisette*, *Thèa Madam Desprez*, yellow tea, blush tea, *R. Thèa Triumph de Luxembourg*, *R. Palavacina*, *R. Admiral de Perrie*, *R. Thèa Charles Desprez*, and *R. Faustine*. There being two competitors, he exhibited, besides, *Rosa Glorie de France*, *R. Glorie de Jardin*, *R. Bizarre de la China*, *R. Vaestana*, *R. Madam d'Arbley*, *R. La Bisché*, *R. Moss de Meaux*, *R. Louis Philippe*, *R. white Bath moss*, *R. white tea*, *R. scarlet tea*, *R. Isle de Bourbon*, *R. Maria Leonida*, *R. de la Fleche*, *d'Angers' Perpetual*, *Grand Perpetual*, *R. Josephine Antoinette*, *Gésnera bulbösa*, *Polygala speciösa*, *Euphörbia spléndens*, *Cèreus speciösa*, [*Epiphyllum speciösum*.] *C. Jenkensöni*, *Muráltia Heistéria*, *Swainsonia galeafölia*, and a fine green-edged auricula.

The premium for the best twenty-five tulips was awarded to Robert Buist, and for the best six to Alexander Parker. There were three competitors.

The premium for the best American seedling rose was awarded to McKenzie & Buchanan; a seedling from the sweet-scented tea, being in flower three months after the seed was sown.

The premium for the best bouquet was awarded to Robert Kilvington.

The Committee on Vegetables awarded the premium to Daniel Reilly, gardener to Pierce Butler, Esq., for the best forced cauliflowers, not less than three.

The premium for the best forced potatoes, not less than half a peck, was awarded to James M'Kee, gardener to Charles Chauncey, Esq.

The premium for the best blanched rhubarb, not less than two bunches, two pounds each, was awarded to Walter Wilson, Burlington, New Jersey.

The premium for the best lettuce grown in New Jersey, in the open ground, not less than eight heads, was awarded to James M'Kee, gardener to C. Chauncey, Esq.

The premium for the best display of vegetables that evening, was awarded to James M'Kee, who exhibited three different kinds of potatoes, lettuce, blanched rhubarb, cauliflowers, asparagus, &c. The Committee likewise make honorable mention of the vegetables exhibited by Mr. Chalmers, senior gardener, as being superior, especially the blanched rhubarb; also, to James Beadle, gardener, Turner's Lane, especially his leeks, being the best ever exhibited before the Society; likewise, Robert Meston, gardener to Mrs. Roland, for his fine display, especially the large quantity of very superior mushrooms.

Robert Buist exhibited *Rosa Thèa Marguarette*, *Thèa Hortensia*, yellow tea, pink tea, *Fúchia élegans*, *Tropæolum tricolor* var., *T. adúncum*, *Rhodochiton volúbile*, *Verbèna Tweedicàna*, *V. arraniàna*, *Lantàna fuscàta*, *Cèreus [Epiphyllum] spléndens*, *Gloxinia speciösa*, *G. cándida*, *Cytisus racemösa*, *Amaryllis Johnsonii*, *Ixia crocàta*, *Lechenaúlia formösa*, *Dillwynia floribúnda*, *Gnidia aúrea*, *Epidéndrum Parmentèrii*, *Oncidium flavéscens*, *Polygala cordàta*; and pelargoniums, viz. *Admiral Napier*, superbíssima, purpúrea cærulea, *Adelina*, Buist's *Fair Maria*, *Conqueror*, *Beauty of Philadelphia*, and purple *Perfection*, *Diomedé*, *diversum*, *Wheelerii*, *Queen of Scots*, *ne plus ultra*, *Lucifer*, *Celestia*, *americanum*, *tricolor*, *Man of Ross*, *Countess of Munster*, *Boll's General Washington*, and six auriculas. *Rosa Thèa lilacina*, *R. T. Madam Desprez*, *R. T. Triumph De Luxembourg*, *R. Bengal Triumphant*, yellow tea, *R. T. fragrautissima*,

R. T. mirabilis, *R. T. St. Claude*, *R. T. Jaune Panaché*, and yellow Noisette—these roses competed for the premium.

McKenzie & Buchanan exhibited *Amaryllis Johnsonii*, *Erythrina Crista-galli*, *Alstroemèria tricolor* and *pelegrina*, *Lechenaúltia formosa*, *Indigófera coccinea*, *Calceolària integrifolia*, *Tropæolum tricolor* var. *Verbena Tweediana*, *V. chamædrifolia*, *Dodecætheon integrifolia*, *Fúchsia microphylla*, *Mohérnia odorata*, *Lobèlia créuis*, *Ornithógalum níveum*, *Pelargónium Lord Deuman*, *Adelina*, *Hericartianum*, *diversum*, *Wheelèrii*, *Lucifer*, *Belvidere*, *Nimrod*, *Navarino*, *P. involucrätum superbum*, *P. Napoleon*, *P. Admiral Nelson*, *P. Admiral Napier*, &c. &c.

The meeting was one of the most interesting the Society has ever had, from the numerous well kept exotics exhibited, as well as the fine appearance of the vegetables, being superior to any thing of the kind ever shown before. The cauliflower and blanched rhubarb were very superior indeed, and does the greatest credit to our gardeners for their great zeal and perseverance in bringing the culinary vegetables to such perfection. The general appearance of the room attracted a great deal of attention, from the neat manner in which the plants and vegetables were arranged. Great merit is due to the gentlemen committee on the room, for the tasteful and appropriate arrangement they have made for the benefit of the numerous ladies and gentlemen that now attend the meetings.—*G. Watson*, Recording Secretary, Philadelphia, May 19, 1838.

ART. VII. Massachusetts Horticultural Society.

Saturday, May, 12th, 1838.—Exhibited. Fruit:—From John B. Barstow, Hanover, Plymouth Co., fine specimens of Seek-no-further apples. Vegetables:—From J. L. L. F. Warren, early white spine cucumbers.

Read.—A letter from John Prince, Esq., in regard to some new varieties of pears; (it will be found in another page.)

Presented.—The report of the committee on agriculture, on the memorial of Dr. Perrine, before Congress, by Mr. J. F. Callum, treasurer of the Columbian Horticultural Society, Washington.

Distributed.—Scions of several new kinds of pears.

Hon. Russell Freeman, of Sandwich, was admitted a corresponding member; and Joseph H. Gardener, Roxbury, and John Fenno, Chelsea, subscription members.

May, 19th.—Exhibited. Flowers: From Hovey & Co., beautiful specimens of upwards of twenty varieties of named hyacinths, of which the following kinds composed part:—

White: La Candeur (single,) Gloria florum suprema, Pyrene, La Gratieuse.

Blue: Lord Wellington, Habit Brilliant, Buonaparte, Jupiter, Grand Vedette, L'Emperor (single,) Comte de St. Priest.

Red and Rosy: La Ballaine (single,) L'Eclatante Parfait (single,) Comte de la Coste, Bouquet tendre, General de Tombé, Mars, (single.)

Yellow: La Heroine, Jaune Pyramide (single.)

May 26th.—Exhibited. From J. L. L. F. Warren, specimens of blanched rhubarb.

ART. VIII. Faneuil Hall Market.

	From		To			From		To	
	\$	cts.	\$	cts.		\$	cts.	\$	cts.
<i>Roots, Tubers, &c.</i>					<i>Squashes and Pumpkins.</i>				
Potatoes, new :					Squashes, per pound :				
Common, { per barrel, . . .	1	00	1	25	Lima,	4			
{ per bushel, . . .	40		50		West India,	2		3	
Chenangoes, { per barrel, . .	1	25	1	50	Winter crookneck,	5			
{ per bushel, . .	37½		50						
Eastports, { per barrel, . . .	2	00	2	50	<i>Pot and Sweet Herbs.</i>				
{ per bushel, . . .	1	00			Parsley, per half peck,	25		37½	
Nova Scotia, { per barrel, . .	1	50			Sage, per pound,	17		20	
{ per bushel, . .	50		75		Marjorum, per bunch,	6		12	
Turnips,					Savory, per bunch,	6		12	
Common, { per bushel,	50		75		Spearmint, per bunch,	6			
{ per peck,	17		20						
French, per bushel,	50		75		<i>Fruits.</i>				
Ruta Baga, per bushel,	50		75		Apples, dessert :				
Onions :					Common, { per barrel,	none.			
per bushel,	none.				{ per bushel,	—			
red, per bunch,	10				Russets, { per barrel,	2	50	3	00
white, per bunch,	—				{ per bushel,	1	50	2	00
new, per bunch,	6		8		Baldwins, { per barrel,	none.			
Beets, new, per bushel,	50		75		{ per bushel,	—			
Carrots, per bushel,	50		75		Pears :				
Parsnips, per bushel,	1	00			Baking, { per barrel,	none.			
Horseradish, per pound,	8		12		{ per bushel,	—			
Radishes, per bunch,	4		6		Watermelons, each,	—			
Shallots, per pound,	20				Cucumbers, each,	17		25	
Garlic, per pound,	12½				Pine-apples, each,	25		50	
					Grapes, per pound :				
<i>Cabbages, Salads, &c.</i>					Malaga,	none			
Cabbages, per dozen :					{ per bushel,	3	00	4	00
Savoys,	none.				Cranberries, { per peck,	1	00		
Drumheads,	—				Oranges, { common, per doz.	25		50	
Red Dutch,	—				{ Havana, per doz.	—		75	
Cauliflowers, each,	25		37½		Lemons, per dozen,	20		25	
Brocoli,	25		37½		Cocoanuts, each,	5		6	
Lettuce, per head,	3		6		Shaddocks, each,	25			
Spinach, per peck,	17				Walnuts, { per barrel,	5	00	6	00
Rhubarb, per lb.,	3		4		{ per bushel,	3	00		
Dandelions, per peck,	12½				Almonds, (sweet,) per pound,	12		14	
Turnip tops, per peck,	20		25		Filberts, per pound,	4			
Cabbage sprouts,	17				Castana,	4			
Asparagus, per bunch,	8		12½		English walnuts, per lb.	5½		6	

REMARKS.—A continuation of mild weather, accompanied with considerable rain, and without any frost, has contributed greatly towards forwarding vegetation. And though the latter part of April and beginning of this month betokened a late and very backward spring, and consequently an unpropitious season, the prospect is now that a more abundant crop of vegetables and fruits will be produced this year, than has been for some time. Fruit trees of all kinds, particularly the peach, have blossomed exceeding full, and the apple was never more profusely covered with flowers. The weather has been excellent for potatoes. Grass has set well, and we have no doubt an ample crop of hay will be reaped. Corn, though progressing slowly, looks well.

The stock of potatoes has become somewhat reduced, and there has

been but few brought in lately; prices are therefore well sustained; and in some instances a slight advance is obtained, though we have not altered our quotations. Unless there are more brought in soon, prices will continue to rise. Turnips are going out of market; some *Ruta Bagas* remain yet, but there are few others. Onions are quite scarce; none are to be had by the quantity, and but few of the last year's crop in bunches except the reds; new ones come to hand, large and fine. Radishes abundant and cheap. Cabbages of all kinds are gone. A few fine cauliflowers were brought in this week, which sold well. Some brocolis have come to hand in fine condition. Spinach, dandelions, and other kinds of greens plentiful and well grown. Lettuce has been received of handsome quality. Rhubarb has come to hand since our last, and in abundant quantities, and prices have fallen from seventeen cents to our present quotations. Asparagus has been tolerably plentiful, though not grown quite so prolific, as if the weather had been slightly warmer. No squashes in the market now, except the West India; owing to the lateness of the season and the limited demand, prices for these have sensibly declined.

Apples are about all gone, except russets, and of these, the supply is quite small: for those of fair quality, the quoted prices are obtained, which are a considerable advance upon our last. Pears are nearly or quite gone. Of watermelons there has been no late arrivals. Cucumbers have not been over abundant, and prices are well sustained. A few pine apples arrived a few days since, but they are now nearly all gone. No grapes to be found. Cranberries are very scarce, and prices have advanced to a high rate. Oranges and lemons abundant, and prices moderate. The stock of oranges is quite large.—*Yours, M. T. Boston, May 28th, 1838.*

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape vines in the green-house or grapery will need attention. Do not let the new wood get tangled up, or run together in confusion, but keep every shoot which it is intended to save, laid in at its full length, and at the distance of a foot or more from each other. Nip off some of the lowermost laterals, and cut away all superfluous shoots. Prepare to thin out the branches towards the latter part of the month. Give frequent syringings, and keep the vines clear from all insects. Vines in the open air will flower this month. Be careful to nip out all buds which will make wood, where it is not wanted, as it is better to do so than to use the knife at a later period. Cuttings in pots should now be shifted.

Peach trees in pots will need careful watering. Occasional supplies of liquid manure will be of much utility.

Raspberry plants should be staked, and the shoots tied up neatly, if not done before.

Strawberry beds, where it is very desirable to keep the fruit clean, should have a little clean straw, laid on the surface of the soil between the roots.

Fruit trees of all kinds should be frequently looked over, so as to see if insects of any kind are committing depredations upon them.

FLOWER DEPARTMENT.

Dahlias. We have before recommended the month of June, as the best period for setting out the plants. For a beautiful bloom there is no doubt of its being, in our opinion, the most favorable. Those who fear that a dahlia planted as late as the 25th of June will not bloom, are unacquainted with the plants. In our article upon the dahlia, (p. 126,) we have given some data by which the planter may be governed in setting out his roots. From the 10th to the 25th is sufficiently early. Young plants in pots should be turned out carefully into the soil, which should be well pulverized, and dug deep.

Annual flower seeds sown in pots in hot-beds should now be transplanted into the border. Many kinds may yet be sown, and they will flower well.

Gladioluses may yet be planted.

Chrysanthemums should be potted.

Hyacinths should be taken up the latter part of the month.

Ranunculuses in bloom should be watered, if the weather proves dry.

Tulips should be taken up the latter part of the month.

Geraniums may be propagated from cuttings this month. Head down the old plants.

Camellias and *ericas* should be placed out of doors in a sheltered situation, with a northerly aspect.

Verbenas, *petunias*, &c. in pots may now be safely turned into the borders.

Roses in pots will do well plunged in the border, or in clumps together.

Perennial flower seeds may be sown with success any time this month. Tie up and prune old plants of all irregular or unsightly shoots.

Chinese primrose seeds should be now sown to obtain good plants for next winter.

Trevirana coccinea: plants potted off into thumb pots in March, should now be shifted into the next size.

Carnations, in pots, should be top dressed with rich soil.

VEGETABLE DEPARTMENT.

Peas. Sow for a succession crop. The blue imperial or dwarf marrow are, both, fine kinds.

Cucumbers in frames should have good attention, and the vines properly trained.

Lettuce should be transplanted into rich soil to make large heads.

Celery plants raised in pots, and pricked out into beds, should be transplanted where they are to stand to make their growth. Let the situation be moist and the soil rich.

THE MAGAZINE
OF
HORTICULTURE.

JULY, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *The Picturesque in Floriculture.* By X.

To an observant admirer of nature, incidents, seemingly trivial to others, present to his eye objects of beauty or valuable hints for improvement. We were led to the above remarks by the casual discovery of a subject, imitatively introduced into floriculture, to give effect to the garden, or facilitate the cultivation of delicate plants. A pleasant ramble up a mountain ravine in the bed of a foaming and noisy brook, suggested many reflections, agreeable enough to our taste for the beauties of nature's peculiar economy, but detracting not a little from a favorite pursuit—the rearing of flowers. What florist could group with such exquisite loveliness and picturesque effect those scarlet columbines, and intermingle that spreading, snowy-flowered *Actæa*, or bend over the mirrored basin the cylindric racemes of wild cherry, or clothe with tinted variety the wet rocks with lighter and darker, and brown and purple mosses, or cause to sparkle with the beaded spray of the torrent such green and lobed *Marchántææ*, hiding themselves under the dripping rocks, and seeking in an always humid atmosphere a proper sustenance? Show us the arboriculturist who could hang in mid air, high above our heads, in the rifts and crevices of precipice, the dark juniper, the stiff cedar, the sylvan beech, the light green and needle-leaved pine, now suiting to the circumstances of the situation some crooked and gnarled stem and root, now inclining towards the horizon an entire trunk, and now shooting into upper air a feathery crest? Who would not envy us our skill, could we combine, by the aid of analytic process and nice manipulation, such varieties of soils observable in that narrow area, suited and

exactly adapted to its peculiar plant? What lover of ferns would not strive to imitate the method of growing such delicate maiden hair, such slender and flexile showy stemmed *Asplènum*, or its co-species, with purplish stripe and smaller leaflets, seen just at the bottom of that cleft, or the fragile and light *Nephrodium*, or the rooting-fronded walking fern, whose lanceolate leaf will measure the goodly length of twelve honest and lawful inches? Such *Chelone*, and *Lobelia*, *Eupatorium*, and a host of inhabitants of running streams or plashy water-courses! Such tufts of slender, nodding, cerulean tinted hare-bells, whose linear and lance-shaped foliage investing their flower-stems, sorely puzzles the young botanist in quest of the meaning of the epithet *round-leafed*, so cunningly has our little flower concealed from passing remark its tiny and almost orbicular, radical appendages! Verily, the efforts of the garden sink into almost insignificance, compared with the unrestrained, untutored luxuriance of nature! Our clumps of trees, by "fives and sevens," to denote by irregularity an approach to nature, are sorry imitations of yonder masses of rich forest growth. Produce by art such a family group as these thirteen straight and perfectly united lindens, so curiously though slightly radiating from a common centre, each a sister stem of nearly equal growth and years! Or show me, from your nursery bed, an azalea of such vivid rose, and with such innumerable flowers; or, by application of knife and ligature, by incision and distortion of branches, exhibit an equal and a rival to that crooked and fantastic broad-leaved laurel, whose foliage, amid sun and shower, winter and summer, is so glossy green, and whose periodical inflorescence is so magnificent! Or where the rhododendron of Nepaul, with its glorious varieties of hybrid parentage, so pre-eminent in stature, so rich in foliage, and so delicate in flower as yonder tall and ancient individual, whose summit and base exhibit its pyramidal heads of light rosy blossoms, the pride of the American northern swamps?

After passing objects of interest and beauty in our ramble just now mentioned, our attention was agreeably directed to a curious natural rock-work, for such we may call an irregular and large stone of ten or more feet high, covered with profuse vegetation. The corroding tooth of time and the presence of oxide of iron had decomposed portions, presenting several and singular shades and forms. Where there was an absence of soil, minute lichens and pretty mosses had taken possession. Such were the elegant *Bryum roseum*, and the more common *Anictangium*, *Parmelia tartarea* and *Endocarpon*(?) sp. Then of the more familiar plants was a succession of vernal and autumnal. We noticed the fimbriated *Mitella*, *Aquilegia canadensis*, *Arum triphyllum*, *Convallaria racemosa*; *Corydalis cucullata*, *Viola pubescens*; *Convallaria biflora*, *Aralia nudicaulis*, *Cerastium vul-*

gatum, *Thalictrum divicum*; a sparsely flowering grass; two or more species of *Solidago*; *Heliánthus* and *Harpályce*; *Amphicárpa*, several ferns, and a vigorous young ash, all comprised in so small a space, and each in fine condition! Such a rock-work, of such unique character, would grace any collection, and give a most charming effect to the parterre and border. A rude pile of stones of every mineral and geological character, and often of factitious origin, with shreds of pottens, or corols and shells of ocean birth, may be seen as specimens of a bad taste in our otherwise pretty gardens; while, should not an overgrowth of crowded pets prevent, every vile weed may be found in native luxuriance, taking quiet possession, to the injury of more valuable and tenderer plants. A stone covered with some moss is an object of importance in itself to merit care, and by some trifling pains many fine varieties might be rendered subservient to the beautifying and adorning of a proper and pleasing addition to the flower garden, the rock-work. We think that error is committed in giving too great depth of soil to such fabrics, and that a thinner and richer pabulum, spread with care on their surface and insinuated into their crevices, would suit the nature of such plants as thrive best under this treatment. This seems to be clearly denoted in the natural structure of precipice and beetling crag; and from what more correct sources could we derive instruction? The picturesque in gardening is not to be studied in books and treatises, but the rather to be sought in the guide and prototype of a native flora and its own peculiar habits. A gigantic growth and a precise configuration may be highly desirable in the production of floral art; but give us, we say, the luxuriance of nature and its own free unconstrained beauty, even should its flowers have a few petals the less, or their size be more diminutive.

X.

ART. II. *A Catalogue of Ericas (or heaths) in the collection of Mr. Towne, Snowhill Street, Boston.* Communicated by Mr. TOWNE.

AGREEABLE to promise I herewith hand you a list of such species and varieties of the *Erica*, as I suppose that I have in my small collection; with the remark, however, that the intolerable practice with venders of plants to multiply names, is of late so

common, that it is difficult for any one to know what he possesses. I have one variety which I have received under five, and another under no less than seven, different names; and many others have, after a careful nursing for three or four years, proved mere synonyms. These errors are truly vexatious, and calculated to do much injury to the cause of floriculture, as they operate greatly to the discouragement of those who wish, and would willingly go to any reasonable expense and trouble to possess, a fine collection of this lovely plant. The evil of multiplying names is not peculiar to this country, but is, I have reason to believe, practised in Europe to a sinful extent.

In this list I have omitted all which I know to be synonyms, and have noted those which have flowered with me, the names of which, I presume, are correct.

- | | |
|------------------------|-------------------------------------------------|
| <i>Erica</i> *arborea | <i>Erica</i> mammosa purpurea |
| — *arborea var. nov. | — *multiflora |
| — *herbacea | — margaritacea |
| — *australis | — Monsoniana |
| — †andromedæflora | — nigrita |
| — †ardens | — niarita [?] |
| — arbutiflora | — *purpurea |
| — abietina | — *pubescens minor |
| — Bonplandiana | — *pubescens major |
| — *baccans | — pinea |
| — Bowieana | — Plukenetii |
| — *canaliculata | — Plukenetia [probably syn.
with Plukenetii] |
| — *concinna | — *Persoluta |
| — conferta | — *Persoluta rubra |
| — *ciliaris | — ——— alba |
| — cruenta superba | — pulchella |
| — coccinea | — palucida |
| — coccinea grandiflora | — Parmenteriana |
| — *cinerea pallida | — †rubida |
| — *cinerea rubra | — reticulata |
| — *calluna | — rubens |
| — *caffra [?] | — *ramentacea |
| — †capitata | — Sebana rubra |
| — cóncolor | — †Sebana lutea |
| — cerinthoides | — Savileana major |
| — curviflora rubra | — spuria |
| — carniola [?] | — *tubiflora |
| — calycina | — tubulata |
| — exorticata | — Tétralix alba |
| — epistomia | — *Tétralix rubra |
| — †grandiflora | — urceolaris |
| — gílva | — †ventricosa |
| — *gracilis | — †ventricosa superba |
| — *hispidula | — ventricosa erecta |
| — ignescens | — vágans |
| — *imbricata | — vestita coccinea |
| — *longiflora | — vestita major |
| — *leucanthera | — versicolor |
| — *metulæflora | — *versicolor glutinosa |
| — *mediterranea | — viridiflora |
| — *mammosa pallida | — viscaria |
| — *mammosa rubra | |

With many other seedling varieties which have not flowered with me, and that I do not know the name of.

Those marked thus * have flowered in my collection.

Those marked thus † are now in flower.

Yours,

J. TOWNE.

Boston, June, 1838.

The above list of ericas in Mr. Towne's choice collection, will convey to all lovers of this elegant tribe of plants, some idea of the number of species and varieties already introduced into the country. It is but a few years since that there existed, in our collections, but a limited number of different kinds. Being one of the most difficult of all plants to introduce, from their inability to stand a long voyage, the accession of new ones has been very slow. And it has, we believe, been mostly by the means of seeds, that the greater number enumerated in Mr. Towne's collection have been procured. We know that several of them exist in our gardens only by this mode. With the increasing taste for this fine group, we shall look for a still greater addition to the number already cultivated, and we hope nurserymen, though heretofore unsuccessful, will not yet wholly give up their attempts to introduce plants, many of the most charming kinds of which rarely or never produce seeds in England.

Mr. Towne's collection was made, in the first instance, to ascertain, rather, whether the erica could not be grown without the great pains, which, it has been frequently stated, are absolutely necessary to be observed in the growth of the plants than with the idea of making a large collection. Having fully satisfied himself that they are as freely cultivated as many other green-house plants, he continued to increase the number of varieties and species, until the present number has been accumulated. That the erica can be successfully cultivated, there is no doubt, and that, too, with but little more than ordinary management, which care in the choice of the soil, and potting the plants, and a temperature not too warm during winter, are all that need be observed in the growth of the plants. Probably no cultivator in this country, either amateur or nurseryman, has enjoyed a greater degree of success in the growth of this tribe, than Mr. Towne. We have had occasion to make mention of the health and vigor of his plants several times, and it is unnecessary for us to repeat the same here. An uninterrupted series of flowers is now obtained throughout the whole year.

Were we to select but one group of plants for cultivation, we are inclined to believe that we should take the erica. Small in stature, beautiful in form, perpetually clothed with verdure and

with flowers of every shape and hue, we know not what other can afford the same attraction, at all and every season of the year. There is a delicacy in the blossoms of some of the species, to be found in but few plants; in others, the camellia itself will scarcely vie with the brilliancy of its tints. Every species is interesting, even the old mediterranea, one of the most common of all.

We have already given Mr. Russell's first paper on the cultivation of the *Ericææ*, and the others will soon follow. Mr. Towne's treatment corresponds very nearly to Mr. Russell's mode. His house is light and airy, being a span roof, and well adapted to their good preservation during the winter season. Indeed this is one important thing in the growth of heaths; the plants should stand near the glass, and the house should be so constructed as to admit of free ventilation, at all times. They require but very little heat, and it is better that the temperature should fall as low as 33° or 35° than to be kept up to 50° or 55° with fire heat, and the plants often standing near the flues. A cold and dry temperature will grow heaths in the greatest perfection.

As a guide to amateurs and others forming collections of heaths, we give the following list of kinds, which will flower in succession all the year. A plant or two of each in a collection, will afford blossoms every day in the year. They are arranged according to the period of their flowering:—

<i>Erica resinosa</i>	. . .	from Jan. to June
— <i>Persóluta</i>	. . .	Feb. to May
— <i>arborea</i>	. . .	Feb. to May
— <i>cóncolor</i>	. . .	Feb. to May
— <i>Bowieàna</i>	. . .	March to June
— <i>cáffra</i> (?)	. . .	March to June
— <i>pubescens</i>	. . .	March to Nov.
— <i>báccans</i>	. . .	April to June
— <i>tubiflora</i>	. . .	April to July
— <i>árdens</i>	. . .	April to June
— <i>grandiflora</i>	. . .	May to Sept.
— <i>cruénta</i>	. . .	May to Sept.
— <i>versicolor</i>	. . .	May to Nov.
— <i>ampullacea</i>	. . .	June to Aug.
— <i>ventricosa</i>	. . .	June to Sept.
— ——— <i>supérba</i>	. . .	June to Sept.
— <i>Savileàna</i>	. . .	July to Aug.
— <i>ramentacea</i>	. . .	July to Dec.
— <i>ciliàris</i>	. . .	July to Nov.
— <i>pínea</i>	. . .	Aug. to Dec.
— <i>cérnua</i>	. . .	Aug. to Dec.
— <i>cerinthoides</i>	. . .	Sept. to June

<i>Erica mammòsa</i>	. . .	Sept. to March
— <i>verticillàta</i>	. . .	Sept. to March
— <i>cólorans</i>	. . .	Oct. to June
— <i>concinna</i>	. . .	Oct. to Nov.
— <i>Monsoniàna</i>	. . .	Oct. to May.

We hope the cultivation of this fine tribe will rapidly increase, and that Mr. Towne's list of species and varieties, as showing what kinds are already known in our gardens, together with Mr. Russell's articles upon the treatment of the plants, will afford all the aid that is necessary to enable those who are unacquainted with heaths, to commence their cultivation.—*Ed.*

ART. III. *Experiments on the Vegetation of Rose Seeds.* By
R. BUIST, Florist, &c., Philadelphia.

SIR,—Some time last year I observed in your Magazine, a difference of opinion between two of your correspondents, in regard to the vegetating of rose seeds. I then determined on sowing some of the many varieties, and send you the result of my experiments.

No. 1. Seeds of *Ròsa índica odoràta*, or tea rose, were sown on the first of December, 1837, and vegetated in a temperature of between 58° and 65° Fahr., in from six weeks to three months, coming up occasionally during that period; the most of them have now bloomed, but not sufficiently strong to determine their character.

No. 2, of the same seed, and picked at the same time, was kept four weeks in sand, and sown on the ninth of January, 1838, and vegetated generally in seven weeks. The plants grew stronger and flowered better than No. 1, although treated in the same manner.

No. 3, seeds of the same, kept in sand till the first of February, and sown in pots and placed in dung or manure hot-bed, vegetated beautifully in six weeks, temperature from 65° to 75° Fahr., and are now promising, in growth, bloom and character, to surpass Nos. 1 and 2.

No. 4, seeds of Lamarque Noisette rose, collected from the plant in the open air in January, 1838, and sown along with those of No. 3, vegetated at the same time and have grown much stronger than any of the preceding, but only as yet three out of

four plants have bloomed, and strange as it may appear, (you know the parent to be a large white,) one of those which flowered is a deep rose color and perfectly double. It perhaps may be desirable to say that the soil used was sand, loam, and leaf mould, in equal proportions, and watered with pure river water.

Yours, very truly,

R. BUIST.

Philadelphia, June, 1838.

The above experiments, by so successful a practitioner as Mr. Buist, will at once set at rest all doubts respecting the time usually required to vegetate seeds of roses, of the Chinese varieties. We hope Mr. Boll, or other of our friends, will give us the results of experiments upon the vegetating of hardy rose seeds, which, Mr. Buist thinks, (see vol. III, p. 315,) require a much longer time to vegetate, than the Chinese varieties. The experiments now detailed confirm Mr. Boll's statement, (III, p. 216.) But Mr. Russell, who doubted the blooming of roses, at the early age of four months from the seed, intended his remarks to apply to hardy varieties.

The sport of the progeny of the Lamarque rose, noticed by Mr. Buist, is very remarkable. Such things are frequent in the dahlia, carnation, &c., but are probably rare in the rose. A description of the above named seedlings, would undoubtedly be acceptable to our readers, should they prove to be valuable kinds.—*Ed.*

ART. IV. *On the Cultivation of the Trevirana coccinea.*
By the EDITOR.

ONE of the prettiest plants of which our gardens or greenhouses can boast, in the fall of the year, is the *Trevirana coccinea*, or *Cyrilla pulchella* of *Herit.* It flowers from the month of August to October, and when well managed presents a gay and brilliant appearance, by the profusion of its scarlet corols, throughout that season of the year. It is an old plant in English collections, though it is not very generally disseminated in our gardens—certainly not half so widely as it should be—but we attribute this to be, as with many other fine things, from a want of a knowledge

both of the plant itself and of its mode of treatment. No collection should be without it, and in order that all may flower it easily, who once possess it, we have thought a few remarks upon its cultivation not inapplicable at this time.

The plant has small imbricated roots, partaking somewhat of the character of small bulbs; these are thrown up around the main stem of the plants, both at the time and after its period of flowering. After the plant has dropped its blossoms, and the leaves begin to assume a decaying tinge, these imbricated roots continue to enlarge, and, when they have acquired a little size, remain so during the dormant season, which is from December to March. During this period the plant should be kept from the frost, and without any water, in a dry situation; if in a green-house, on a dry shelf; or if in a cellar, where there is no dampness. Here they may remain till wanted.

Early in the month of March, the plants should be taken from the pots, and all the soil shaken from the roots; then select out the strongest of the imbricated roots, and put one of each in a thumb pot, in a compost composed of half loam, one fourth leaf mould, and one fourth heath soil, with a small portion of sand, or in something near these proportions. After the roots are potted, give them a light watering, and place the pots in a hot-bed, if one is at hand, or, if one is not convenient, a warm part of the green-house or the parlor. They will soon start to grow, though slowly at first; but by the first of May, they will have advanced sufficiently to be shifted into No. 1 pots, using the same soil as for the first potting; the middle of June, or thereabouts, again shift them into No. 2 pots, using the same compost as before. They will now grow more rapidly, and if placed in the green-house, in an airy situation, will soon fill the pots with roots. In want of a green-house, the plants may be placed in the open air, at this season, or if it is desired to grow them to greater perfection, a hot-bed in which the heat is partially exhausted will be an excellent situation.

By the middle of July, or from that period to the first of August, the plants should be shifted for the last time into their flowering pots. For this purpose No. 3 pots should be selected. Make use of the same soil as at first and all finished, until the plants have passed their bloom and begin to throw off their foliage. It is necessary to observe the following directions, in the potting, watering, and general management of the plants.

Potting.—The compost for the plants should be well mixed together, and well broken up, but not sifted. At the first potting of the roots allow a good quantity of potsherds for drainage; and at each succeeding shift of the plants, be careful to allow a good drainage. Press the soil down firm around the roots, each time of repotting.

Water.—When the plants are first potted they will require but a very small quantity of water, just enough to keep them in a vegetating state; to give an abundance as early in the season as March, would have a tendency to destroy the young roots. When the plants have made shoots an inch high or so, with five or six or more leaves, the quantity should be increased; but the best way to administer it at this period, is by means of the syringe. If standing in the hot-house, or hot-bed, let the plants be well syringed every day in fine weather; but if in the green-house or parlor, it may be well to be somewhat cautious, and not to apply too much until May or June. When the plants are in bloom, they delight in a good supply of this element at the roots. As the plants begin to drop their flowers, water should be gradually withheld, and, by the latter part of November, may be dispensed with altogether.

By observing these rules the plants will grow vigorously, and if the management has been judicious they will be about eighteen inches high when in bloom, well branched from the bottom, and covered with flowers from the surface of the pot to the tip of every branch. Tie the main stem of each plant to a neatly made stick, painted green.

When they have done blooming, set the pots in a dry place, underneath the stage, or in some other situation where they will receive the light, as before advised. Look at them occasionally during the winter, to see that they are in good order.

Trusting that these few remarks will call the attention of amateurs and others to this showy plant, and that we shall oftener see it in collections of plants, we submit them to our readers.

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s.

plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, Florist's Register, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 3vo. numbers, with a plate; 1s. each.

Floricultural Intelligence.—We stated, in our last number, that Mr. Lowell brought home with him, on his return from the West Indies, several kinds of cactuses. We have had the pleasure of seeing them since we gave that notice, and they all look in good condition, and will make strong plants. Among the number are opuntias, echinocactuses, &c. &c. Some are quite curious. Mr. Lowell has one which he procured under the name of *triangularis*, and which appears quite different from the species cultivated, by the same name, in the collections of this country. The furrows on the stem are scarcely perceptible in the plant in Mr. Lowell's possession. In addition to these, Mr. Lowell brought home seven species of palms, and several orchidaceous plants, including some *oncidiums*, &c. &c.; also a fine specimen of the *Musa rosacæa*, which has a most superb inflorescence. These, with several dozen pine-apple plants, and other things, are doing well, and, under the care of Mr. Lowell's gardener, will no doubt soon become strong and vigorous plants.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Malvæcæ.

A beautiful new seedling hibiscus is figured in the *Horticultural Journal* for May. The flower is of a pale pink, handsomely shaped, and measures upwards of five inches in diameter. No description is appended to the plate. It is stated to have been raised by Mr. Fuller. It will be a very good addition to collections.

Ternströmiæcæ.

CAMELLIA.

Some very fine new varieties have lately been produced in England, and exhibited at the meetings of the Royal Society and Central School of Horticulture and Agriculture. Three of them are stated to be of the most beautiful form, and very double. Only one of the kinds has been named, and this is called the *Rosa Victoria*; the color is a bright rose. One of the others is a dark-

red flower, and the third partakes of a character between the two first; being darker than *Ròsa Victòria*, and lighter than the other. All three are stated to be worthy a place in the most select collections; but it will be a long period before they can be produced at a reasonable rate.

C. japònica var. *Lawrenceiàna*, is the name of a very fine new variety which has flowered in the nursery of Messrs. Lowe & Co., Clapton. It is said to be beautiful.

The *Louis Philippe* and *Cardinal* camellias, both of which we noticed some time since, are offered for sale, one at three and the other at two guineas. *Louis Philippe* is said to possess the rare property of being fragrant, and is distinctly violet-scented. In this variety and *Parks's* striped, are laid the germs of what may, at some future time, be the means of producing new kinds which will possess odorous properties, as agreeable and as strong as the rose.

Mr. Allnutt and Messrs. Chandler each exhibited, at a late meeting of the London Horticultural Society, a seedling camellia.

Loasàcæ.

LOASA (meaning unknown)

lateritia *Hooker* Red Loasa. A green-house climber; with brick-red colored flowers; appearing nearly all the year; a native of South America; propagated by seeds or cuttings. *Bot. Reg.*, n. s. 22.

This is much the finest of all the loasas. The other species, as regards their beauty, are but little better than weeds, and they scarcely deserve a place in the garden, on account of the nettle-like hairs with which the plants are covered stinging the hands, if touched, so as to cause much pain. As respects this latter property, the present subject is equally objectionable. But the brilliancy of its large, pendulous, orange, or brick-red colored blossoms, and its fine climbing habit, combined, render it an attractive and altogether elegant object. The other species are dwarf, diffuse growing plants, and make no show whatever. The leaves are usually palmated, pinnatifid or three-lobed, on slender petioles, the flowers springing from the axils of each. It flowers nearly all the year, in the summer season in the open air, and under glass during the remainder of the year. The plants were originally raised at the Botanic Garden, Glasgow, from seeds transmitted by Mr. Tweedie, and obtained by him in Tucumana. Its easy mode of increase, both by seeds and cuttings, has already rendered it comparatively common. (*Bot. Reg.*, April.)

Fabàcæ or *Leguminòsæ*.

MUCUNA Adans. (the Brazilian name of one of the species, according to Maregraaf.) *puriens* D. C. West Indian Cow-itch Plant. A stove twiner; growing eight or ten feet high; with purple flowers; appearing in September. A native of the West Indies. Propagated by seeds. *Bot. Reg.*, n. s. 18.
Syn: *Dólíchos puriens* *Linn.* sp. pl. 1420.

This is the plant from which the stinging substance, the cow-

itch of the druggists, is probably obtained. It grows very common in many parts of the West Indies, in waste land, twining and fixing its low and rapid growing stems to fences or other objects. In its cultivated character it is a handsome plant; producing an abundance of long dense racemes of deep purple blossoms. The specimen from which the drawing was taken, was produced in the hot-house of Frederick Perkins, Esq., of Chopstead Place, in September, 1836. Its cultivation is quite simple, being easily raised from seeds.

The substance called cow-itch is the long, sharp, brittle hairs that clothe the pods, and some other parts of the plant. When applied to the skin, they produce a painful and intolerable itching. This property, however, is not owing to any substance deleterious in the plants themselves, but in their mechanical action, as they break and pierce the skin. Notwithstanding their offensive coating, the pods of some of the species are eaten like kidney beans, in India. With all this to detract from the plant, it is yet desirable for a collection, and we should be glad to see it flourishing in the gardens of this country. (*Bot. Reg.*, April.)

AOTUS

ericoides *Past.* Erica or heath-like Aotus. A green-house shrub; growing two feet high; with orange and yellow blossoms; appearing in May (?); cultivated by cuttings, in sand, in a slight heat. *Pax. Mag. Bot.*, Vol. VI, p. 51.

A pretty plant, which has been known in English collections for a long period, though now rarely seen, in even good collections. The plant has a heath-like habit, and, when in bloom, the slender branches are terminated with a cluster or an umbel, composed of from five to eight flowers. It is altogether a very interesting plant, and should be found in our gardens. Like too many of the beautiful old plants, it has been discarded to make room for those new and rare, though frequently less elegant or interesting. The plants are successfully cultivated, with but little other care than that which is bestowed upon green-house plants in general. The only exception is as respects the administering of water, and in giving a good drainage to the pots. Water should never be applied to the soil if it already has the least appearance of being sufficiently moist—nor should the plants be allowed to become so dry as to droop, for any length of time—either extreme will be fatal. In potting, a very large quantity of fine potsherds should be placed over the coarser ones at the bottom, to the height of nearly one third of the pot. Heath soil and sandy loam, with a small portion of fine sand, is a suitable compost. The plants are propagated by cuttings, in sand, with a slight bottom heat, and the seeds may frequently be procured, which vegetate in a short period. (*Pax. Mag. Bot.*, April.)

Tropæolæcæ.

TROPÆOLUM

tuberosum *Past.* Tuberos-rooted Tropæolum; a green-house half hardy plant; growing four or five feet high; with deep orange flowers; appearing in the autumn; a native of Texas;

introduced about 1834. Cultivated in common soil; increased by the division of the tubers and by cuttings. *Pax. Mag. Bot.*, Vol. V, p. 49.

Of the many elegant and interesting species of this genus, already known in England, "some of which, especially *T. tricolorum* have become such universal favorites, the one now for the first time figured, surpasses all others with which we are acquainted." It is a long time since it was introduced, but hitherto, from a want of a knowledge of its proper cultivation, it has only produced very weak and imperfect blossoms, possessing few attractions. It was supposed to be a green-house species, and treated accordingly, but all attempts to grow it successfully have proved unavailing. Aware of these facts, Messrs. Young, the enterprising nurserymen of Epsom, were induced to try the experiment of placing the plants in the open ground, and, having a good stock, they did so last year, in the following manner:—

"In the early part of the summer of 1837, Mr. Young, of Epsom, from a laudable desire of ascertaining the true habits and disposition of this plant, caused a number of plants of it to be placed out in a bed in the open ground; as soon as they began to grow, a few bushes were placed in the ground round each plant, and in the course of the summer they grew so vigorously and luxuriantly, as completely to cover the bushes which had been placed for their support, and each plant formed a dense mass of verdure, four feet high, and full six in diameter. This, compared with the weak and stunted manner in which they had grown while kept in pots, was considered perfectly astonishing; still not the slightest disposition to produce flowers was discovered. However, about the latter end of September, the flowers began to exhibit themselves from the axil of each leaf, and in the month of October, each plant was most profusely studded with its elegant blossoms. It is worthy of remark, that nature seems to have furnished this plant with long flower-stalks, for the purpose of displaying the flowers; for, although the plants might truly be said to be literally covered with blossoms, every flower protruded itself beyond the leaves and branches, and stood out boldly and advantageously to view; it is needless to add, that the effect produced was beautiful beyond description."

In the latter part of October, a slight frost was experienced, without doing any damage to the plants; but a severe one in November cut them off to the soil, at the time the plants had attained their highest state of flowering. After this the tubers were taken up, and preserved, through the winter, in a dormant state. If the plants had been put out earlier they would probably have attained perfection in flowering much sooner, and have been delightful all summer.

The plants are easily propagated by the tubers or cuttings, and will from this cause soon be found in every collection. The species was introduced by Mr. Drummond, from Texas, in 1834.

We have thus been copious in our extracts, as we believe there are now five or six species in the country, and ready for sale. All of the species are very interesting, and deserve a place in every good collection of plants. We hope the notice of this species will make the whole of them better known. The tubers are eatable, and, when boiled, surpass the potato in flavor, though they are rather watery. The drawing was made in August, 1837. (*Pax. Mag. Bot.*, April.)

Passifloràcæ.

PASSIFLORA

onychina Lindl. Lieut. Sullivan's Passion-flower. A stove climber; growing ten or fifteen feet high; with blue flowers; appearing in October and November: a native of Rio Janeiro; introduced in 1827; grows in a rich sandy loam; increased by cuttings. *Bot. Reg.* v. s. 21.

A new and extremely beautiful species, with tri-lobed foliage and small deep blue flowers. It is distinguished, principally, from the other species, by its long, round and slender branches, thin leaves and peculiar odor. It is however of luxuriant growth, and flowers in succession for a period of two months or more. The drawing was made from a specimen cut from a plant standing in the border of the stove, where it had been growing for twelve months without showing bloom. But in the following spring, the gardener pruned it severely, when it shot forth with redoubled vigor. The specimen was communicated by Miss Trail, of Bromley, Kent, last fall, but it was designated, in the miscellaneous notices of the *Botanical Register*, as a new species under the name above cited, Dr. Lindley supposing it then to have been introduced for the first time; upon looking over his papers, he found a description and a drawing of the same species, furnished Mr. W. B. Booth, under the name of *P. Sullivani*, some years ago. But the specific name of *onychina*, in allusion to the beautiful blue color of the flowers, having already been recorded, it was too late to remedy the error. The seeds were presented to Sir Charles Lemon, Bart., by Mr. Sullivan, who procured them from the Botanic Garden at Rio Janeiro, in 1827. The plant seems to delight in rambling about, and its shoots, in such a state, have been profusely covered with blossoms; while pruned and trained carefully, not a bud showed itself upon the branches. It grows well in sandy loam. (*Bot. Reg.*, April.)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Gesneràcæ.

GESNERA

rupéstris Paxl. Rock Gesnera. A stove plant; growing four inches high; with scarlet flowers; appearing in August; cultivated in rich soil; increased by cuttings. *Pax. Mag. Bot.* Vol. V, p. 53.

A very small but exceedingly brilliant species. Simple and neat in its habit, displaying its scarlet blossoms in great profusion, and remaining in perfection for a great length of time, it is thus

rendered a valuable plant; and the "striking contrast that is presented between its large and handsome foliage and its elegant blossoms, entitle it to more than ordinary attention and regard." This species differs from the others, in throwing up its flowers and foliage directly from the root: it therefore takes up but little room, and is a fine plant for a front stage of a stove, where it makes a conspicuous appearance.

Each flower is solitary, and produced on a peduncle about three or four inches long and slightly nodding. The corolla is campanulate or bell-shaped, and of a bright scarlet. So far as its management is understood, it prefers a rather rich soil, and requires to be kept in a humid part of the stove, where it should have good supplies of water during the summer season. It was introduced to England from the Berlin Botanic Garden, by Messrs. Rollison of Tooting, from whose collection the drawing was made. It seems a very desirable plant. (*Pax. Mag. Bot.*, April.)

Scrophulariàceæ.

ANTIRRHINUM

majus var. *caryophylloides*. Carnation-like Snap-dragon. A half hardy perennial(?); growing from one to two feet high; with striped flowers; appearing in August and September; cultivated in common soil; increased by cuttings and seeds. *Pax. Mag. Bot.*, Vol. V, p. 55.

A very beautiful variety of the common snap-dragon, so well known and generally cultivated. The shape of the flowers and habit of the plant are nearly the same, but in color the blossoms resemble the "choicest carnation," being very distinctly striped with deep red on a white ground. Occasionally some flowers open pure white, and others spotted with red, but generally they are true to their character, and are as finely marked as a carnation. The plant grows rather more bushy than its parent.

This variety is of simple growth, and may be planted out in the border, where it will display its flowers until very late in the autumn, requiring no other care than that ordinarily given to perennial plants. It is a most profuse bloomer, and by judicious management may be made to produce blossoms nearly the whole season. It is also a very fine plant for the green-house, and, we doubt not, for parlor cultivation. The following directions may serve as some guide to the treatment of the plants:—

"In the month of September cuttings should be put in, making use of light soil. After they have become rooted they should be potted off into the same soil, and removed to the green-house, or, in place of this, a frame or pit. Here they should remain, if in the former situation, until cool weather, and then be removed into a pot. Early in the spring they will require shifting into larger pots, and as soon as the weather is settled, they may be planted out into the open border, where they will soon grow up and flower vigorously and profusely. Cuttings may be put in at almost any time, and a succession of flowers obtained the whole

year. In pots in the green-house, this variety is stated to be extremely beautiful when in perfection. In the winter the plants should either be protected in a cold frame or green-house. Seeds should not be allowed to ripen unless the desire is to procure new varieties, as the plants are considerably weakened. If the flowers are taken off as soon as they begin to fade, an abundance of new ones will be produced. The origin of this fine variety is not stated. (*Pax. Mag. Bot.*, April.)

This handsome variety is already in our collections, and may be obtained at moderate expense.

Bignoniæcæ.

AMPHICOME (from *amphi* round, and *kome* hair; in allusion to the structure of the seeds.) *Royle arguta* *Royle*. Finely-cut Amphicome. A half hardy perennial; growing a foot high; with pale rose colored flowers; appearing from June to September; a native of the Himalaya mountains; cultivated in loamy soil; increased by seeds or cuttings. *Bot. Reg. n. s. 19.*
Syn. Incavillea arguta *Royle* *Illus.*

“Seeds of this rare and curious plant were given to the Horticultural Society by Professor Royle, marked as having been collected on the Himalaya mountains, at the elevation of from 6000 to 8000 feet. A single individual was raised, and produced its beautiful and graceful flowers in August, 1837.” It is a charming plant, of a slender delicate habit; with pinnated foliage, and terminal racemes of slightly drooping, pale rose, campanulate blossoms. The plant is half hardy, probably requiring the protection of the frame or green-house. It is impatient of wet during summer, and in winter it requires to be kept particularly dry. The soil which seems to suit it should be composed of loam, with a small portion of sandy peat. Cuttings may be put in any time during summer, and seeds may be planted in February. The second year they will bloom in June and continue in elegance until September, each flower remaining several days in perfection. We hope it will soon be introduced.

There is another species called the *A. emodi*, very much finer, with larger and more numerous flowers, more robust foliage, and of stronger and taller growth. It is not introduced into British collections. (*Bot. Reg.*, April.)

MONOCOTYLEDONOUS PLANTS.

Orchidæcæ.

STENIA (from *stenos*, narrow, in allusion to the form of the pollen-masses.) *Lindl. Jálida* *Lindl.* Pale Stenia. A stove epiphyte; growing six inches high; straw colored flowers; appearing in August; a native of Demerara. *Bot. Reg. n. s. 20.*

Of no great beauty compared with many of the beautiful plants of this tribe which we have noticed. The flowers are not large, of a pale yellow or straw color, and thrown out in a drooping position on very short peduncles. In general appearance it somewhat resembles *Maxillaria Rollissoni*. (*Bot. Reg.*, April.)

ART. V. Notes on Gardens and Nurseries.

Mr. Walker's Tulip Show.—June 6th. The second annual tulip show at Mr. Walker's garden, took place on the 29th of May, and was continued for upwards of ten days. The season has been remarkably fine, and the display was, we think, considerably finer than last season. Since that time, Mr Walker has added upwards of forty new named varieties to the collection, several of which are exceedingly beautiful flowers.

The arrangement of the bed is the same as last year; but a situation has been selected at the upper part of the garden. The addition of several rows for the new varieties, lengthened out the bed considerably, but not so as to interfere with the construction of the house. All the arrangements were effected in the same neat style which characterized the exhibition last season, and which we noticed in our last volume, (III, p. 261.)

Some of the most beautiful flowers that we noticed, were the following, which we have arranged in their respective classes:—

Bybloemens:—Ambassador d'Holland, rose Blanca, Madame Vestris, rose Domingo, Incomparable d'Holland, Bugby's Queen, rose Ephergerne, rose Triumph Royal, Louis XVI.

Bizarres:—Lord Denman, Earl St. Vincent, Cicero, Wildboar's Golden Fleece, Sir J. Moore, Sir Francis Burdett, Sir G. Duckett, Neal's Capt. Marryatt, Polyphemus.

Most of these are among the new ones added to the bed this season. It would be useless to particularize, in a bed so extensive and varied as Mr. Walker's, but among the Bizarres, Neal's Capt. Marryatt may be noticed, as one of the very finest. It was broke in New York, a short time since, and is valued by Mr. Walker at ten dollars. It is a light yellow ground, very beautifully lined, and feathered at the edge with dark red. It is a flower we should consider as equal to Polyphemus. Louis XVI flowered very well this season, but the situation does not seem to suit it altogether, and Mr. Walker thinks now he shall not place it in his large bed again. It does not appear to bear long shading so well as the stronger and less delicate varieties. The whole exhibition was one of great splendor. The weather was extremely favorable for a long continued bloom, though the flowers in opening were later than is usual by a week or two.

We have been gratified to learn that the exhibition was exceedingly well attended, and has nearly or quite equalled Mr. Walker's expectations, and that all who have paid Mr. Walker a visit, have not been disappointed. For ourselves, we concede to him the honor of being the first to encourage and diffuse a taste for the finer varieties of this gorgeous flower in the vicinity of Boston. We hope the display will be annually repeated, and that a

greater desire to cultivate the tulip may be the result of such an exhibition.

But the tulips have not been the only attraction of Mr. Walker's garden. Four of five large beds of beautiful seedling pansies contributed to interest and gratify the visitor. Among the many fine ones which Mr. Walker has raised, is a new white, very much better than the old kind, both in the habit of the plant, and color and shape of the flower. It will be a great addition to a collection where the object is the production of fine varieties.

Several of Mr. Walker's seedlings of last year were displaying as large and fine specimens of flowers as we have ever seen: Hecate, Queen Victoria, Miss Cushing, and Giant, were each very beautiful.

These few individual plants, together with the large beds just mentioned, were sufficient of themselves to attract hundreds of visitors. No such exhibition of this delicate and pretty flower was ever made in this country. Mr. Walker deserves great praise for his exertions in the cultivation of this flower. He has raised more fine named kinds than any person, and in cultivation undoubtedly stands unrivalled in this country. Cultivators who have paid but little attention to the pansy, would be astonished to see the immense number and variety of kinds; and we advise all who have hitherto been unwilling to admit this flower to possess charms sufficient to entitle it to the notice of the florist, to inspect Mr Walker's whole collection. We intend to procure of Mr Walker a catalogue of all the fine ones he has raised, with a short description of their colors, so that those who may desire plants can make a good selection.

Mr. Walker's herbaceous plants were many of them displaying their charms, and the whole garden was in excellent order.

G. C. Thorburn's, N. Y.—June 15th. Last season, when we visited Mr. Thorburn's establishment, he was then erecting a geranium house, the foundation of which had just been laid. Since that time it has been completed, and the house filled with a fine collection of geraniums, which have flowered beautifully the present season. The house is built with a span roof, and is quite low; a walk runs round the whole at the distance of about two feet from the wall, between which and the walk, is a wide shelf on which the plants stand. Between the two walks is a walled pit, without any stage, on which the plants are placed. It is well adapted for the growth of geraniums, and there has been, we believe, a most superb show; when we saw it, the greater part of the best varieties had been disposed of, and the remainder were past their prime. Some kinds, however, still showed a sufficient bloom to distinguish their excellence, and of these we took down some memorandums which we thought would be of interest, particularly to lovers of this much admired family. It will be re-

collected that though we saw these in flower, the specimens were by no means so good as they were a fortnight before. The following are the names:—

Agrippina, crimson scarlet, large and fine.

Belladonna, pale pink, with red spots, very pretty.

Cupid, fine white, with purple blotch.

Diomede, rose, pretty flower, and fine shaped truss.

Incarnatum superbum, pink, very large flower, fine truss, and a most superb variety.

Lord Hill, rose, large flower, and very beautiful.

Lovely Ann, pink, elegantly feathered with dark red; fine large flower.

Lautum, pale pink, a fine variety.

Pixy Queen, shaded rose, handsome truss, delicate and beautiful.

Polybianum, dark rose, fine large flower, and a splendid truss of blossoms.

Pulcherrimum, bright rose, good shape, and pretty flower.

Sancho Panza, dark rose, large flower, and very fine, large, compact truss.

Sir John Broughton, dark rose, large flower and elegant truss.

Speculum mundi, fine red ground, lined on both upper and lower petals, with dark purple, handsome truss, and very showy.

This is the 'Tam O'Shanter of some collections.

Gem, Hector, Brightoniensis, Charles X, and some others, are fine kinds, but the above embraces the most showy and beautiful of all we saw. The plants had been culled out to supply orders, and we could form no opinion of the degree of perfection to which Mr. Mackintosh grows his geraniums. The demand has been very good, and of some sorts only a single plant was left. The taste for geraniums around New York is very great, and those who are lovers of this flower, can have no reason for not being able to supply themselves, with such collections as Mr. Hogg's and Mr. Thorburn's at hand.

We found every thing removed from the green-houses, and set out or plunged in the border, and of course there was but little to notice. In the border in front of the houses, the ground is cut up into small beds of various shapes, and in them is planted a superb collection of Chinese and noisette roses, which were nearly out of flower, (at least ten days earlier than Boston and vicinity.) Two large clumps of *Verbena Tweediana* graced the border with its brilliant flowers. We also saw here the *V. incisa*, and, though a pretty addition to the garden, it is by no means so valuable a plant as the *Tweediana*.

The dahlia season was not yet over, and we found Mr. Macintosh just making preparation for planting out the roots. Mr. Thorburn's collection is one of the finest in the country, and a superb dis-

play of blooms will be made next fall. The demand for plants has been much greater than it was last season, and of some of the finer kinds it has been difficult to supply what was wanted.

Mr. T. Hogg's.—As usual we here found a fine display of geraniums, although the number was much smaller than at Mr. Thorburn's, from the very reduced state of the collection after the selling season. Mr. Hogg showed us some extremely beautiful seedlings, which he has not yet named, and some of which will rank among our best kinds. The specimens were not in a good state to give an accurate description of them, and unless we could do so, we prefer to say nothing about them until we have seen them again. That beautiful geranium, Dennis's Perfection, we never saw blooming in so fine a state. It is truly a superb variety, and will long continue to be one of the most admired of all that are now cultivated in our collections. Many of the same kinds in bloom we have already described as flowering at Mr. Thorburn's. We were glad to learn that the demand for geraniums is on the increase, and that Mr. Hogg's very extensive stock had been picked over, until scarcely enough was left for propagation.

The plants were mostly removed from the green-houses, with the exception of the camellias, of which Mr. Hogg has a good collection, and very well grown. *C. japonica* var. *Doncklaeri* flowered with Mr. Hogg last winter. We noticed some pots of seedling cactuses, which were just breaking the soil.

We have already noticed Mr. Hogg's new seedling verbenas. We did not see any very extra specimens, but sufficiently so to pronounce them fine kinds. *V. Drummóndi* was just coming up from seeds. Another variety, still different from the *V. Arraniàna*, so called, appears to promise better than the latter. The whole number now grown by Mr. Hogg is eight, viz:

<i>V. chamædrifolia</i>	|	<i>V. Aublètia</i>
— Tweedieàna	|	— sp. new scarlet,
— multifida	|	— sp. not named; of a deep
— Arraniàna	|	purplish tint, in habit
— Drummóndi	|	like <i>V. Tweedieàna</i> .

These, with the *V. incisa* in Mr. Thorburn's collection, make nine very desirable species, already in our gardens. All but the *V. incisa* we found growing here in one bed; but the plants had been turned out only a short time, and had but just begun to show a few clusters of flowers. They are all beautiful and valuable additions.

In the garden the herbaceous and other plants were looking well, and flowering abundantly. The roses were past their prime, and offered but few good specimens. But the display must have been truly elegant here, a few days previous. Mr. Hogg has quite a num-

ber of tree roses, though it is but a very small part of an extensive lot which he imported, and most of which he sold last season. We had no time to go over them and procure the names.

We also noticed a bed of petunias of different varieties, raised from seeds received from Mr. Tweedie; some of them were very large and brilliant. The Greville rose, which we noticed last season, was blooming in great beauty.

Broomley Vale, Mr. Lowell's, June 16th. This fine place, which we have not visited for some time, we found in its usually excellent condition. In the green-house, which was tolerably well filled with various plants, we noticed many very pretty things. Plants of *Calceolària integrifolia* were extremely showy. *Alstrœmèria Pelegrina* and *Flòs Martini*, both had thrown up strong stems, which were terminated with fine clusters of flowers. *Verbèna Tweedieana* and *Arraniàna* (both lately added) had just commenced flowering. Many other pretty things were blooming, but the most beautiful display was two pots of the *Cereus speciosissimus*, the largest and finest in the vicinity of Boston, one standing in the stove, but both together showing an innumerable quantity of buds and blossoms. On one small shoot, four fully expanded and large flowers were out last week. This species is undoubtedly one of the handsomest of all the cactus tribe, and as it is very easily grown, and well adapted for the parlor, we should be glad to see it oftener in bloom. *C. grandiflora*, two fine old plants of which, with upwards of a dozen buds each, will be nearly or quite in flower early in July, and present a splendid sight; probably two or three of the blossoms will open at the same time, and thus present a grand display. All these plants are in good soil, and on the surface of the pot Mr. Lowell has applied ground bones. With the exception of some of the new plants brought home by Mr. Lowell, there was little to notice in the stove. The old fig tree standing in the border had upon it a good crop of figs. It has borne four in one year. The fine coffee tree had been cut completely in, and had but just begun to throw out its new shoots.

The garden looks well. Here is one of the finest specimens of the buckthorn hedge we have ever seen; it has not been planted but five years, and is now one mass of thick, beautiful foliage, forming a dense mass, through which no animal would make an attempt to pass. Those who doubt the efficacy of the buckthorn in forming an impenetrable barrier against cattle, will, after seeing this, throw aside all such doubts. For ourselves we believe it to be perfectly secure. This strip of hedging to which we now allude, is that which encloses the kitchen garden from the rest of the grounds; it does so effectually, and in the regularity of its growth, and the deep green of its foliage, forms a pleasing object, where it is desirable to hide objectionable parts of the

garden from view. We were astonished when Mr. Lowell informed us that this hedge was planted in the *middle of June*, and with perfect success. The ground was well prepared, and the plants were taken up and immediately set out, without scarcely a delay in their growth of a day. The buckhorn is very tenacious of life, and from the great abundance of its fine fibrous roots, may be transplanted safely at almost any time in the spring from April to June. To those who are about planting hedges, we would recommend the buckthorn for all purposes.

Mr. Lowell has been trying an experiment, this season, of manuring the ground allotted to the growth of dahlias, with crushed or ground bones, fermented and mixed with other manure, and dug into the soil. The effect has been good to all appearance: the plants were at this time two feet high, and exhibited a thriftiness of growth and an exuberance of foliage quite different from dahlias under ordinary management. The great benefit arising from the use of ground bones to most crops has been fully tested in England, and is just about being appreciated here; and we have no doubt but the dahlia is a plant which will be greatly benefited by its use. We hope, at the close of the season, Mr. Lowell will do us the kindness to send us the results of his interesting experiments. We have spoken in another place, of the plants which Mr. Lowell brought home with him from the West Indies; among those, however, which we mentioned, we forgot to name several kinds of oranges and lemons, and the lime, of which he has several pretty plants, all doing very well. A considerable number of pine-apples, standing in a two light frame, looked very well. The bringing out of the various plants which we have enumerated, is another of the many beneficial services which Mr. Lowell has performed, and for which both the floriculturist and horticulturalist is deeply indebted to him. If other individuals who visit foreign countries, were to feel a tenth part of the interest which actuated Mr. Lowell, our gardens would soon contain many of the treasures which undoubtedly might be added, and for which, we have to look to England for a supply.

Seat of Col. Perkins, Brookline.—Since we were here, in the early part of the winter of 1836, the new house which we then noticed as about to be built has been completed and put into operation. It is one of the most complete structures of the kind we have ever seen. Every part is thoroughly built, and both the wood work and masonry have been put up in a strong and workmanlike manner. At some future time, if it answers the expectations for which it was erected, we shall endeavor to procure a drawing of it for our Magazine. We found grapes planted in the pit to be trained up to a trellis, and others growing in the space between the two walls, to run up the rafters, for successive crops. Those in the pits will be brought forward so

as to produce their fruit in March or April; and by introducing those into the house, from time to time, which are laid into the space between the two front walls, a succession of fruit will be obtained the whole year. On the back wall are shelves for pots of strawberry plants, of which Mr. Cowan informed us he had several hundred the past winter, and from which he had an abundance of fruit. In the pits were growing melon vines, which were producing an abundance of fine melons.

The crop of grapes and peaches in the graperies, green-house and peacheries, is immense, and we never saw the vines in better condition. None of the compartments were brought forward very early this year, and, consequently, no ripe fruit has yet been obtained. A few Frontignac grapes, in the green-house, were beginning to ripen off.

In the forcing ground the hot-beds and frames were filled with cucumbers, melons, &c., in all stages of growth, from the young plants to the mature vines. We had scarcely time, from our hasty call, to walk round the garden.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

Exhibitions of the Royal Society and Central School of Horticulture and Agriculture.—The sixth annual exhibition of this Society took place on Saturday, March 17th, at the Egyptian Hall, and presented an assemblage of horticultural productions hardly ever before equalled. Among the curiosities, were our old acquaintance the *Cycas revoluta*, which now shows its fruit very distinctly; a magnificent plant of *Banksia serrata*, fourteen feet high, in bloom; and a most gigantic specimen of *Acacia decurrens*, whose golden blossoms reached to the glass dome of the building, twenty-two (!) feet high. These three botanical curiosities remained the whole week in view. Camellias in abundance and variety; a very beautiful show of orchidaceous plants, collections of stove and green-house specimens, cucumbers, French beans, asparagus, monstrous cabbages, mushrooms, fruit, &c. &c. But the grand attractions were the baskets of flowers for Her Majesty.

The competitors for the gold medal, were Mr. Dunsford, gardener to Baron Dimisdale, Mr. Rogers of Battersea, Mr. Graves of Stratford, and Mr. Upright of Mordan. The gold medal was awarded to Mr. Dunsford, and silver medals to the others. A large silver medal was also awarded to Mrs. Marryatt, for a bouquet for the Queen, and it

was a very beautiful production, containing—though very small—more than forty varieties of flowers. The cut camellias for the Queen were very fine, comprising *C. j. Donkelaëri*, *Kew Blush*, *Cardinal*, *fimbriata*, *Chändleri*, *élegans*, *punctata*, *Colvillii*, *coronata*, *myrtifolia*, *Lady Hume's blush* and *Welbánkí*. Numerous prizes were awarded for camellias, green-house, hot-house, orchidaceous and other plants.

The seventh monthly meeting was held on Saturday, April 21, when another splendid display was made, and numerous prizes awarded.

Early Purple Guigne Cherry.—Grafts of this variety were distributed at the March meeting of the London Horticultural Society. This variety is figured in a late volume of the *Transactions* of the Society. It is stated to be "one of the very earliest of all known early cherries, coming into perfection as soon as the early May. It is of very good quality, and equal to the best known cherries, for all purposes." (*Hort. Jour.*)

We hope ere long to present our readers with an article on the cultivation of the cherry. It is a fruit not duly appreciated by our horticulturists, and but little effort is made to introduce into our gardens the best kinds. We shall then offer such observations as we hope will induce cultivators to give them more attention.—*Ed.*

Propagating trees by cuttings.—At a late meeting of the London Horticultural Society, a communication was read from Mr. Knight, the venerable president, upon the propagation of trees from cuttings in the summer. It was usually done with deciduous trees in the autumn, winter, or spring; whilst in the summer, when the cuttings were in foliage, they would rarely mature, and soon die. At this time two different operations were going on, the mature leaves absorbing carbon, and the young throwing it off; this was ascertained by the earlier laborers in pneumatic chemistry, who ascertained that in spring the germinating leaves vitiate the atmosphere. The experiments which he had performed with the elm, were with the slender shoots of the stem in July, reduced to one inch and put in pots, in [on] the flue of a hot-house, at a temperature of about 80°. Water was given, but so that the lower leaves were not wetted; and the experiment had also succeeded with the mulberry, and appeared suitable for almost every tree, with the exception of the fir. The cuttings presented a seedling-like appearance, the bud appearing like a plumule and the leaf as the cotyledon. He also considered that this plan would do for the camellia.—*Id.*

London Horticultural Society.—This society held one of its regular exhibitions on the 6th of March, when a variety of beautiful productions were exhibited. The following are some of the more interesting.

The most remarkable plants were the eparises, which, though once very difficult of cultivation, are now brought to high perfection. Of these, Mr. Pratt exhibited two specimens of *E'paris impréssa*, *E. púngens*, and *E. nivális*. From Mr. Chandler, a new variety, a seedling of *E. impréssa*, the color of which, some of the petals being of a bright pink, others paler, and some almost white, produced a very beautiful effect in flower. Mrs. Lawrence exhibited *E'paris campanulata* var. *rúbra* and *álba*; two specimens of *E. variábilis*, *nivális* and *impréssa*. From the garden of Lady Antrobus, were *E'paris púngens*, *E. púngens* var. *rôsea*, *impréssa* and *nivális*. [This must have been a most beautiful display of this most lovely plant.—*Ed.*]

Mr. Chandler exhibited a collection of camellias, of which were the following:—*Caméllia japónica* var. *Colvillii* [probably the *Colvillii* *rúbra* of some catalogues, *Ed.*] *pæoniiflora* *élegans*, *Colvillii* *striata*, *papa-veràcea*, *anemoneiflora* *álba*, *epsoménsis*, and that remarkable Chinese variety, *Donkelaëri*.

Many other fine plants were exhibited from amateurs, and from the

Society's garden. A premium was awarded to Mr. Chandler, for his seedling *epacris*.

March 20th.—This exhibition was not so interesting as the last, the only very showy display being that of Mrs Lawrence.

April 3d.—At this meeting the exhibition was very fine. Mr. Pratt, gardener to Wm. Harrison, Esq., exhibited a fine specimen of the *Acacia vestita*, in good bloom, the graceful plumes of yellow blossoms rendering it one of the most interesting of the species. There was also a hybrid rhododendron, with *Erica pellucida* and *ignéscens*.

Mr. Green, gardener to Sir Ed. Antrobus, exhibited a dish of Keen's seedling strawberries, and a brace of cucumbers. Mr. Smith of Norwich exhibited the following camellias:—*C. japonica* var. *Sweetii*, *corállina*, *Campbellia*, *Leana* *supérba*, and *Victoria antwerpiensis*; also a cut specimen of *Rhododéndron arbóreum*. Mrs. Marryatt exhibited some fine plants, among others the *Epimédium grandiflórum* from Japan, a hardy species in England. From the gardens were contributed a basket of camellias, including *C. japonica* var. *imbricatà*, *Colvillii*, and Press's Eclipse; also the *Loüsa lateritia*, [noticed in another page.]

April 17th.—At this meeting Mr. Flannagen, of Stove Hill, exhibited a brace of cucumbers grown in a three-light frame, and heated by dung; and Mr. Alnutt one of equal size, not grown by heated manure, but in a green-house [?] or pit, the plant suspended from the trellis of the ceiling.

Mrs. Lawrence exhibited an extensive collection, comprising several New Holland and Cape plants. One of the most interesting of the latter was a specimen of *Erica aristata* *májor*, with *E. transpárens*, *scabriúscula* and *carinatà*; also, among other plants, *Euphórbia Jacquinæ-flóra*, *Sinningia violácea* and *Caméllia japonica imbricatà*, *althææflóra* and *C. reticulata*. From the Society's garden, *Ribes sanguineum*, and a dark variety and *R. tenuiflórum*; also the following camellias, *C. reticulata*, and *C. japonica* var. *Colvillii*, *imbricatà*, and *fimbriatà*. Numerous other plants were also exhibited.

Mr. Brown of Slough exhibited a specimen of *Gésnera Pultenæa*, a very fine stove plant, easily raised from seeds. A prize was awarded for this.

The anniversary of the Society was to be held on the first of May.—(*Id.*)

Metropolitan Society of Florists and Amateurs exhibition of auriculas, took place in the rooms of the Royal Society on May 2d, when the following medals were to be awarded:—

Best green edged auricula:—First prize, £3; second, 30s; third, 15s; fourth, 10s.

Best grey edged:—First prize, £3; second, 30s; third, 15s; fourth, 10s.

Best white edge:—First prize, 30s; second, 15s; third, 10s.

Self:—First prize, 30s; second, 15s; third, 10s.

Collections:—First prize, £3; second, 30s; third, 15s; fourth, 10s.

A splendid display of this beautiful flower was probably made.—(*Id.*)

Hearts-ease or Pansies.—The Royal Society offered prizes at a late exhibition, for this beautiful flower, on condition that if a single flower in the whole collection had been pressed or artificially flattened, it should disqualify the collection for a prize, even if it was the best. The trickery of exhibitors has become so common, that gentlemen and amateurs stand no chance to compete with experienced growers, unless the flowers are entered under such a provision. It is folly to pretend by artificial means to press and flatten blooms, so as to give them the appearance of naturally growing so exactly, and we are glad to see reform begin so soon. All the art necessary is in the cultivation, and not in the dressing or the manufacture of the flower; and such practices should be checked as speedily as possible.—*Id.*

Self-regulating Ventilator, for horticultural buildings.—Messrs. Daft of Birmingham exhibited at a meeting of the Metropolitan Society of Florists and Amateurs, a very ingenious contrivance of a self-regulating ventilator, for horticultural buildings and other places, where an uniformity of temperature is required. The construction and principle of the model, is that of the simplest form of the merometer for indicating the degree of expansion of metals, and which, as is well known, can be extended to an extremely minute division. It consists merely of a cylindrical metallic bar, one end of which is connected with a double lever; the expansion of the metal, even in the most trifling degree, causes this to act upon a pin which raises a trap door. This arrangement is placed at the upper part of the building, and the bar may be agented to act at the impression of any required degree of heat: so that when the room has arrived at the desired maximum, the opening of the door will retain it at that temperature. The action of the model which was regulated, so that the door opened from the heat of the hand by merely placing it upon the cylindrical bar, gave much satisfaction; and the only practical difficulty attendant on its use, was considered to be in the probable derangement by oxidate air, or from the action of the atmosphere. It was remarked, that its introduction into the stove or hot-house must be very desirable, by keeping the place always at a required temperature, obviating the chance of any injury to plants, either from carelessness or accident on the part of the attendants, whilst its application to a variety of other purposes are singular and important. The Adelaide medal was unanimously awarded to Messrs. Daft, for their ingenious invention. (*Hort. Jour.*)

The Slimy Grub, Blennocarpa Seländria.—Having suffered extremely from this insect, I am induced to send you a receipt for composing a mixture, which I found effectual to destroy it, on upwards of two hundred trees under my care, which were more or less affected, some of the trees being literally covered with insects. Before giving the receipt, it may be useful to mention that I find a decoction of artichoke leaves, so useful for mixing with other ingredients, for the destruction of the insects, that I always keep some of it in readiness for that purpose.

The receipt is as follows:—To thirty gallons of water add a peck of quick-lime; after standing a few hours, pour it gently off, to prevent any of the sediment mixing with the liquid, (as that would give the trees an unsightly appearance;) add two pounds soap, one pound sulphur, (to be well mixed with the soap before dissolving it,) two gallons of the decoction of artichoke leaves, and one of tobacco liquor. After mixing the ingredients properly, apply it to the trees with Read's hydraulic syringe, or any other garden engine, in the proportion of one third of the mixture to two thirds pure water. The best time to apply it is from three to seven o'clock, P. M., after a fine dry day; or between five and eight o'clock A. M., no dew having fallen the previous evening.

From two to six washings will be found sufficient to clear the trees; and if the mixture be used on those not infected, it will be found a great means of preventing them from becoming so.

To make a decoction of artichoke leaves, I take one quarter of a hundred weight, (twenty-eight pounds,) of leaves, and boil them in twelve gallons of water for half an hour, then strain it off, let it stand till cold, and barrel it to be used as wanted. (*J. M. H. S. in Gard. Mag.*)

[We have not had the opportunity to ascertain the precise character of this insect, but presume it belongs to the same family as the slugs, which infest the cherry trees and rose bushes in our gardens. Would it not be well for cultivators and others, who are troubled with the slug,

to try the above method of destroying, those at least, which infest the rose bushes? In some places they are so numerous as to completely destroy every leaf. We shall be glad to learn the result of any experiments made with this composition, and we would recommend a thorough trial of it.—*Ed.*]

Ribes speciosum. This beautiful species, together with nearly all the others, suffered very much from the inclemency of the last winter. In many gardens the plants standing out were totally destroyed. Previously it had been considered as very hardy. The *R. sanguineum* appears to be the only one which stood uninjured. (*Hort. Jour.*)

ART. II. Domestic Notices.

Public Garden.—Since our last notice of the meeting of the subscribers to the public garden, another meeting has been held, at which, the committee chosen to solicit subscriptions reported progress. The amount subscribed was nearly twenty thousand dollars, and the corporation was immediately organized by the choice of officers, viz: five trustees to represent them until the first Monday in October next. Horace Gray, Samuel A. Elliot, Chas. P. Curtis, Geo. Darraeott, and J. E. Teschemacher, were chosen. The subscription papers are still open, and we hope there will yet be found a sufficient number of gentlemen interested enough in this excellent project, to come forward and fill up the sum wanted to commence the work in a proper manner. We presume operations will not be commenced until the ensuing fall. The idea suggested by one gentleman of running a plough through the soil, to mark out the outline of the walks, and then plant dahlias in the borders, which we thought, at the time, visionary, has been abandoned. It will require more labor and expense than many are aware of to put the grounds in a fit condition for planting.—*Ed.*

Kérria japonica, (*Córchorus japonica*) stood out the last winter without the least protection whatever, and not a single shoot was destroyed. It is now, (June 1st,) displaying its golden blossoms, which add greatly to the appearance of the border at this early season. It is the first time for several winters, that the shoots have not been killed to the ground. Its exemption from such injury is good evidence of the mildness of the weather, and the little destruction it has caused among plants generally considered only half hardy.—*Ed.*

Seedling Pinks.—Mr. E. S. Payne of Lowell has sent us two or three specimens of seedling pinks, one of which, called Payne's Beauty, appears to possess the properties of a fine flower. "Unfortunately," says Mr. Payne, in his letter to us, "my garden has been broken into, and my best pinks stolen, and I am under the necessity of sending you such as the thieves were pleased to leave." The specimen was, however, a very good one. We are glad to perceive that the cultivation of the pink has been taken up by Mr. Payne, and we hope he will, another year, send us some of his best varieties when in their best state. A taste for gardening is rapidly spreading in Lowell, and those of our friends there who are lovers of the pink, should call and see Mr. Payne's plants. The seeds, Mr. Payne states, were procured in England.—*Ed.*

ART. III. *Essex County Natural History Society.*

Floral Exhibitions.—*Salem, June 20th, 1838.* The Essex County Natural History Society, as is well known to many of our readers, has for a few years past been in the habit of connecting with its more precise and scientific pursuits, an occasional floricultural and horticultural exhibition, at those seasons when the beauties of the garden, the flower border, and the orchard, seem to invite a more particular attention to their respective merits. This institution, whose cabinets and scene of operation are in the neighboring city, has been unobtrusively and silently working its way, under various difficulties and embarrassments, and by the efforts of a few, deeply interested in the branches of science, has created or excited a taste for the studies of nature. To aid its cause, and to effect its aim, viz. the promotion of a stricter attention to the natural history of the country, it was thought advisable to go out of the usual routine of other and older institutions, and to gather here and there, amid the varieties of botany, a few gems of its sister science, horticulture. Occasional and periodical exhibitions of the varieties of the native flora of the vicinity, mingled with the choice and exquisite embellishments of the parterre, the green-house, and the little private flower border attached to individual dwellings, have elicited universal approbation, and called together the grave and gay, the sober and reflective, the beauty and fashion, the citizen, and the visitant stranger of the city. It has excited a laudable enterprise among amateur florists, and drawn out many a new admirer of nature and its works. Where, twenty years ago, in a place of great wealth and abundant means, one, or at the most, two green-houses, could be found, and the expansion of that queenly flower of night, the *Cereus grandiflorus*, could cause a sensation not forgotten at the present day, now may be seen structures of all sizes for the successful treatment of foreign species, the culture of the vine, and the other uses to which glazed roofs and anthracite flues and hot water pipes are severally applied. The fine prototype of the *Cactææ* above mentioned, now finds many a rival in superb plants of more dazzling and less evanescent charms, grown with a skill which can foretell the certainty of floral splendor and the result of proper cultivation. One would scarcely think of inspecting a thermometer in the ordinary vicissitudes of winter, when his eyes are now dazzled by countless geraniums and delicate roses, and ivory petalled camellias, and nodding cyclamens, in almost every window before which his accustomed walk leads him; while again he is agreeably surprised oftentimes at the approach of spring, ere he dreams of vernal breezes, when he perchance may catch a glimpse of golden narcissus and pure white snowdrops, peeping from the decayed foliage before many a private mansion. Persons of observation have frequently remarked the increasing taste which has spread among its citizens within a few years; a taste, who shall say otherwise than laudable and refined? To what extent this may be attributed to the formation and encouragement of the County Society, we do not feel prepared to say, because other and kindred causes have been coincident and effectual. Still, the very fact that each season evinces a new and laudable zeal in the general interest, (as the occasional reports of the society will show,) leads us to consider such efforts as promotive of good.

We have offered these remarks as an introduction to the annexed returns made to this Magazine, of the two first exhibitions of this kind, of the present year. The citizens of Salem desire no competition with others, in their floricultural pursuits; sufficient to them are the pure gratifications of floriculture. Should their gardens contain not so choice an

exhibition of particular flowers, e. g. the tulip and its varieties, we are fully sensible that it cannot be owing to any want of numbers, or excellence of sorts, or amount of expense, but to other, perhaps unavoidable circumstances, which rendered their culture or arrangement inferior.

We have thus casually alluded to the late (newspaper) competition and rivalry, between the tulip beds of two gentlemen well known as amateurs in fine flowers. Personally acquainted as we have the pleasure to be with both, we fear no offence in these remarks. To the urbanity and liberality of one, we feel indebted for many an introduction and acquaintance to and with choice and charming plants. With the private feelings of the other, nothing like rivalry could be sympathetic. We only trust and believe that good will always result from such competition, and by such personal efforts the cause of floriculture will be signally advanced.

Wednesday, June 20th.—The first exhibition of the season was held in the Halls of the Society, at 11, A. M. The following were some of the plants shown, and their contributors.

Bouquets of Martagon lilies, roses, *loniceras*, *tradesantias*, &c. &c., from Mrs. R. Brookhouse.

Bouquets of *Lysimachia*, *Digitalis*, *Lonicera*, lilies, &c., from Mrs. J. D. Treadwell.

Bouquets of Scotch and moss roses, phæasant-eyed pinks, *Potentilla formosa* and *Aristolochia Sipho*, from John C. Lee.

Pæonia Humei, roses, the moss, provins, *Raulandia* and double Scotch, *Phlox suaveolens*, &c. &c., from J. M. Ives. Roses; Burgundy, Scotch, damask and white, *Petunia nyctaginiflora*, *Geranium striatum*, *Antirrhinum majus*, and varieties, *Philadelphus coronaria*, *Delphinium elatum*, Martagon lilies, &c., from Wm. J. Richardson.

A basket of choice flowers beautifully arranged, among which were fine pelargoniums,—Mary Queen of Scots, Macranthon, Triumph, &c., (well grown,) seedling calceolarias, *Tropæolum atrosanguineum*, *Petunia phœnicia*, *Iris*, *Ranunculi*, &c., from W. W. Palfrey. A bouquet of several flowers, from George D. Phippen.

Several varieties of pelargoniums, (geraniums,) Martagon lilies of great beauty, *Delphinium ajacis*, fl. pl., *Calceolaria corymbosa* and *C.* var. Grand Sultan, *Cereus speciosissimus*, and *C.* var. new scarlet, *Pæonia Whitlèji*, *Humei*, fràgrans, *Reevèsi* and Richardson's albiflora, (*Reevèsi* we esteem one of the best new double varieties, of exquisite tints;) roses—Mary Stuart, Lee's crimson Perfection, Rivers's George IV, new beautiful provins, gloriøsa supërba, noire, Proserpine, Ventori's superb, Edenberger, delicatèsse, belle Aurore, delicieuse, Roxelane, pink Boursalt, Grand Pompadour, from F. Putnam.

The following fine herbaceous plants, viz: *Podalyria australis*, *Amsônia salicifolia*, *A. latifolia*, *viscaria* and *alba*, *Orobolus purpureus*, *O. niger*, *Phlox suaveolens* *Corydalis formosa*, *Dictamnus rubra* and *alba*, *Tormentilla réptans*, fl. pl., *Fumaria speciosa*, *Tradesantia virginica* var. *røsea*, *cærulea* and *alba*, *Spiræa filipëndula*, fl. pl., *Spiræa trifoliata*, *Delphinium sinense*, *Lupinus Marshallianus*, *Hesperis matronalis*, *alba*, fl. pl., *Dracocéphalum altaieense*, *Pæonia Whitlèji*, *Pòtsii*, *Reevèsi*. Pansies:—*Radiata*, *splendens*, Lord Byron, *floribunda*, Mrs. Spang, Yellow Jacket, Sir Walter Scott, Miss Lawrence, Monk's splendens and others. Roses:—*Bicolor*, Watt's Celestial, Cupid, La Beante, Eblouissant, belle Lilloise, beaute Ethereal, Talma nouveau, Pourpre le plus magnifique, Hollandoise, Duchess de Berri, Well's China cabbage, Adonis, Harris's Oniana, gloria mundi, from Jos. S. Cabot.

A few native plants were presented by E. S. L. Richardson, viz: *Kalmia angustifolia*, *Rubus odoratus*, *Thesium umbellatum*, *Potentilla argentea*, *Osmunda regalis*, *Sambucus canadensis*, *Arethusa ophioglos-*

soïdes, *Kérgia* virgínica, *Asclèpias* quadrifólia, (var.), *Achíllea* millefólia, *Lysimàchia* quadrifólia.

By Geo. D. Phippen; *Diervílla* canadénsis, *Convallària* bifólia, *Mitchélla* répens, with flowers of the present year, and fruit of last, and two very fine plants of *Sarracènia* purpúrea under cultivation in pots.

The regular annual meeting of the Society occurring this day, the choice of officers &c., the reports of the year, the progress of the collections &c., filled the hour appropriated to the purpose. At half past four the first lecture of a course on botany was delivered to a private class, by John Lewis Russell, at which were present many strangers and others who were casually introduced. This course was undertaken at the repeated request of a few friends, who were desirous of promoting among themselves a more accurate knowledge of the natural history of the vegetable kingdom. The lectures are to be eight in number, and delivered on two afternoons of each week, in the Society's Rooms.

June 27th.—In consequence of the approaching National Festival, when the season would be too advanced, and as the exhibition of last week was considered inadequate to the perfect and full show of roses, another floricultural display was held under the auspices of the Society this day. The pyramidal and elegant flower-stand (designed and built by a florist,) was laden with the exuberant productions of Flora's domains. We subjoin in detail, a catalogue of plants and contributors.

Bouquets of *Digitális* purpúrea and álba, *Antirrhinum* május, lilies and varieties, *Campánula* médium of great perfection, roses, among which was a semi-double variety, somewhat of the damask order, flowering on very short peduncles, supposed to be a seedling, from Mrs. Wm. Dean. Bouquets of *Lysimàchia* vulgáris, *Loníçera*, *Digitális* purpúrea and álba, several varieties of roses, *Campánula*, phloxes, sweet Williams, &c. &c., from Mrs. J. D. Treadwell. Similar collections of garden and border flowers in fine condition, from Mrs. R. Brookhouse.

A pretty arranged basket of many interesting native and garden flowers, among which we noticed the delicate *Gília* tricolor, and the curious *Clárkia* pulchélla, intermingled with roses, &c., from Miss E. Gardner. *Mesembryánthemum*, varieties of roses, *Calceolària* corymbósa, *Petúnia* phænicea, very fine clove pinks, and very good picotees, from Wm. F. Gardner. Moss and other roses, *Pæónia* Whitlèj, &c. &c., and the first dahlia of the season, a tolerable specimen of *Picta* formosíssima (?), from Chas. H. Dodge. *Clématis*, *tradescantia*, pinks, *gleditchias*, moss roses and other varieties, from John C. Lee.

Bouquet of garden flowers with the following native plants, viz: *Kálmia* latifólia (from Manchester,) and *K. angustifólia*, its pretty co-species, *Cucùbalas* Behew, *Arethúsa* ophioglossóides, *Cymbídium* pulchélla, *Lysimàchia* verticillàta, *Spiræa* álba, &c. &c., from E. S. L. Richardson. *Sambucus* laciniàta (a fine hardy shrub,) *Ròsa* micrántha and caroliniana (under cultivation,) the latter having almost obliterated its specific characters, purple *Noisette*, *Boursalt*, damask, single and double white, &c., *Amaryllis* Johnsóni, *Caprifólium* Frazèri, *sempervirens*, *Periclymenum*, *Philóx* *Listoniàna*, &c., from J. L. Russell.

Philóx maculàta, cárnea, suavèolens, *Ænothèra* Frazèri. *Delphínium* sinense, *Spiræa* filipéndula, fl. pl., *Campánula* persicéfólia fl. pl., do. álba fl. pl., *Lysimàchia* vulgáris, *Clématis* alpina, *integrifólia*, *Pentstèmon* digitális, *Dracocéphalum* Ruyschiànum, argunense, *Lythrum* salicària, *Astrántia* minor, *Gladiolus* communis, &c. *Pæonies*—Whitlèj, *Hùmeii*, *Reevèsii*. Pinks—Robertson's *Narcissa* (?), Paisley Reformer, Bow's *Claudius*, Wells's seedling, Davies's *Britannia*, Wooler's *George IV*, Smith's *Favorite*, Robertson's *Britannia*, Hunter's *Major Shaw*.

Roses—Ponsa parfait, Watt's Celestia, Roi de Prusse, Lee's Wellington, Brennusrick's rose, Fair Maid of Perth, Village maid, La belle Parisien, Snowball, L'Obscurité, Talma nouveau, Mobach, (a rival of the next,) Rivers's George IV, La beaute eblouissant, Leopoldine de Napoleon, pourpre le plus magnifique, Hollandoise, Attalaine du Bourbon, margined Hip, Mount Vesuvius, belle Liloise, Duc d'Angouleme, La Tourtuelle, Duchess de Berri, Waterloo real, Kuitessoff, delicatess, maiden's blush, Tuscany, bicolor, belle Aurore, ranunculus, Cupid; thirty-four varieties, from Jos. S. Cabot.

Fine specimens of calceolaria, pelargoniums, *Nèreum splendens*, *Cè-reus speciosissimus*, with the following roses, viz: moss, Rivers's George IV, Lee's crimson perpetual, rouge superbe, Gen. Kuitessoff, new provins, cabbage provins, Flora's riches, Edenberger, two colored mignonne, black Merice, Nigritienne, Welch provins, L'Obscurite, premier noble, Grand Pompadour, bicolor, belle Aurore, pourpre mammoth (?), gloria mundi, carmine, Brussels, black Mogul, L'Ombre superbe, mourning, negro panachè, Victoire, negro, Pluto, Marshal Blucher, Swisse, Empress of France, Imperial, Ventori's superb, gloria superba, European, maiden's blush, Asmodeus, Eriophylla, Singleton's hundred leafed, delicatess, Roxelane, petite hundred leaved; forty-two varieties, from Messrs. Putnam.

The following variety of roses from J. M. Ives, viz: Swiss, Proserpine niger, Tuscany, Roxlandia, Fanny Parrard, Vestre, Bishop's, moss provins, Nonpareil, Edenberger, white Ayrshire, fl. pl., garden velvet, Garnier's striped, double blush. From S. Driver, Jr., roses; moss, European maiden's blush, cabbage and royal cabbage, Bishop, border, Goliah, Lodovicus, Kuitessoff, sable, mottled, Tuscany, royal purple, King of reds, and a seedling.

A well grown cucumber from the garden of J. C. Lee was on the table, some cherries (unripe) of a good quality, from J. M. Ives, called by him, Manning's white Bigarrau, and a small cluster of ripened black Hamburg grapes, from the green-house of J. F. Allen. A full attendance of the citizens seemed to evince much interest in this second display, and many encomiums were passed on the collection of roses. A splendid day and all other circumstances uniting to render it agreeable and instructive.—X.

ART. IV. *Pennsylvania Horticultural Society.*

The monthly meeting of the Pennsylvania Horticultural Society was held on Tuesday the 19th of June, in the Hall under the Atheneum, the President in the chair.

The Committee on Vegetables awarded the premium of three dollars to Wm. Chalmers, senior gardener to Mrs Stot, Turner's Lane, for the best six heads of early cabbage, grown in the open ground, at the Society's intermediate meeting of the 30th May, no competition.

The Committee on Plants and Flowers awarded the premium for the best display of plants in pots that evening to Wm. Chalmers, senior gardener to Mrs. Stot, who exhibited *Crassula coccinea*, *Ixora coccinea*, *Gloxinia speciosa*, *G. candida*, *Ornithogalum niveum*, *Trachelium cærulea*, *Begonia insignis*, *Fuchsia globosa*, *Vinca rosea*, *V. alba*, pelar-

goniums of various sorts, *Ardisia crenulata*, *Myrtus pleniflora* (?), *Lychnis coronaria*, *Ajuga orientalis*, *Tabernaemontana coronaria*, carnations, *Lantana speciosa*, *Pleroma hetromalla*, and *Gnaphalium lucida*.

The premium for the best six pinks was awarded to Wm. Hobson, Kingsessing, no competition.

The premium for the best twelve varieties of garden roses was awarded to Robert Buist, who exhibited *Reine Caroline*, shell rose, *Fairy Parasole*, royal Portugal, Broomly rose, *Unique white*, *Queen of violets*, white moss, cabbage provins, *La Negress*, *Brown's superb*, no competition.

The premium for the best bouquet was awarded to Wm. Chalmers, senior gardener to Mrs. Stot, Turner's Lane, three competitors; likewise an honorary premium of two dollars to John Sherwood, Laurel Hill. Mr. S. exhibited a fine *Sedum*, name unknown.

The Committee on Vegetables awarded the following premiums, viz: for the best early lettuce, not less than eight heads, grown in Pennsylvania, to Robert Weston, gardener to Mrs. Roland. For the best early beets grown in Pennsylvania, not less than one dozen of roots, to James Beadle, gardener to Mr. Norris, Turner's Lane. For the best early beets grown in New Jersey, not less than one dozen of roots, to George Reid, gardener to Henry C. Carey, Burlington. For the best artichokes, not less than six in number, to Wm. Chalmers, senior gardener to Mrs. Stot, Turner's Lane. For the best early potatoes grown in Pennsylvania, in the open ground, not less than half a peck, to George Esher, Ridgeroad. And for the best bush beans grown in New Jersey, not less than half a peck, to Adam Rice, Burlington.

The Committee on Fruits awarded an honorary premium of three dollars to Wm. Chalmers, senior gardener to Mrs. Stot, Turner's Lane, for three quarts *Keen's seedling strawberry*; likewise an honorary premium of three dollars to J. Smith, gardener to Nicholas Biddle, Esq., for a very superior and uncommon fine display of grapes, of various kinds.

McKenzie & Buchanan exhibited *Gloxinia grandiflora*, *G. speciosa*, *G. candida*, *Fuchsia globosa major*, *Calceolaria integrifolia*, pelargoniums, *Lord Denman*, *Wheelèr's*, *Diomedè*, *Adelina*, *Hericartianum*, *purpurea carulea*, and *superbissima*; the above pelargoniums were cut flowers.

James Beadle, Turner's Lane, exhibited lettuce, early cabbage, red turnip, beets, asparagus, and cucumbers.

Wm. Chalmers exhibited early cabbage, artichokes, lettuce, red turnip, beets, tomatoes, and three quarts of *Keen's seedling strawberry*.

Thomas Allen, Burlington Co., New Jersey, exhibited some very fine seedling cranberries of last year's growth, in fine condition. [We should be glad to receive from Mr. Allen, some account of his mode of culture. *Ed.*]

John Smith, gardener to N. Biddle, Esq., exhibited the black *Hamburgh grape*, the white sweet water, and the black *Frontignac*, in a pot. Many of the bunches of the black *Hamburgh* weighed upwards of one pound and a half, the grapes uncommonly large, and altogether had a most enticing appearance.

R. Buist exhibited some very fine rhubarb.

It is a laudable ambition in our practical gardeners and amateurs to strive for the prizes at the monthly meetings, not for the pecuniary item that is awarded, but the honor in producing the best article in competition. The meeting, although not so interesting as the last, in the number of fine exotics, yet those exhibited were fine specimens, and in good order. The hardy garden roses of Mr. Buist were very fine, and many of them new to us; the flowers were large and well formed, notwith-

standing the great heat, and we may congratulate ourselves in an accession of some of the most superior roses in the country, and well worth the attention of every lover of that most exquisite of all flowers. The *Gloxinia grandiflora*, as the name implies, has a large pale blue flower, very showy, and a very free flowerer, and is a new plant to us. The fine appearance of Mr. Biddle's grapes, especially the black Hamburg, exceeded any thing of the kind we have ever seen, for the size of the grapes, as well as the bunches. They were merely a specimen of what his fine graperies can produce. It is certainly a great desideratum for the infirm in health and convalescent, to have in command at all times such delicate and sanative morceaus. The vegetables were good considering the backward spring. Mr. Chalmers's strawberries were uncommonly fine; after seeing them, we are surprised that the more common kinds should continue to be cultivated.—*G. Watson, Recording Secretary, Philadelphia, June 25th, 1838.*

ART. V. Retrospective Criticism.

Errata.—In our last, p. 205, in our remarks to the article of Mr. Vose's, for the "*L'Abbé Berlese*," which occurs once or twice, read the "*Abbé Berlese*," an error which escaped our notice in the hurry of getting to press.

Page 236, in the list of China roses for the prize, read "*Gloria de Jardin*," for "*yellow noisette*."

Camélia japónica var. Fløyii.—Mr. Editor: In your last Magazine of Horticulture, pages 203 to 206 inclusive, there is a notice of *Camélia japónica var. Fløyii*, by the Abbé Berlese, translated from the *Annales d'Horticulture* of Paris, by the Hon. E. Vose, President of the Massachusetts Horticultural Society.

I am much indebted to the Abbé Berlese, for the honorable notice he has taken of me, and also to the Hon. E. Vose, for placing the article before the public, in your Magazine.

In your remarks upon this article, which seem to have been sown rather "broad cast" and without much reflection, you observe "that you take an early opportunity of correcting one or two mistakes the Abbé Berlese has been led into," and that "you notice these errors, in order that before the next edition of his *Monographie* goes to press, he may make the necessary corrections."

As I had the honor of transmitting to the Abbé Berlese, a plant of the *Camélia japónica var. Fløyii*, together with the account of its origin and parentage, you will allow me to correct "one or two mistakes" that you have fallen into, or we shall soon have in this business, a "budget of blunders."

First—you observe, "It is to be regretted that Mr. Floy does not recollect the variety from which the seed was saved or with what kinds the flower was, if at all, impregnated." Were this the fact, it would be much to be regretted, for the genealogy of such a remarkable camellia as *Fløyii*, is not only matter of curiosity, but of great importance, to all those who are engaged in the hybridization of plants.

But on this point, I have never heard before that Mr. Floy had any doubt, and by recurrence to my file of horticultural correspondence of

1834, I find his letter, dated in December of the same year, in which is the following extract:

"My seedling camellias, Nos. 1, 5, 6, were raised from seed produced from warratah impregnated with the striped, sown in 1809, and what is very strange, No. 5, which is a very narrow leaf, with a very double ball like anemone flower, and No. 6, (*Flòyii*.) as you know, is a large leaf and flower, came out of the same pod. The leaf of No. 5 is nearly as much smaller, as No. 6 is larger, than common camellias."

You observe further, "that while on a visit to New York, in the spring of 1834, you gave me a condensed account of your tour through the gardens of that city, and, among other plants, are more particularly mentioned *Caméllia japónica* var. *Flòyii*," and that, "in consequence of our description of this camellia, Mr. Wilder, in the fall of the same year, purchased a fine plant of Mr. Floy, at the high price of fifty dollars."

I am in the habit of placing on record, or on file, most of my correspondence, consequently, I have before me your letter, bearing date February 7, 1834, containing an account of the fine plants you had seen about New York, and for which, and all favors I have received at your hands, you have my sincere thanks.

By your remarks, Mr. Editor, it would appear that I derived my first information of this camellia from your letter, and that in consequence of your description, I purchased it of Mr. Floy. The facts, however, are not *exactly* so—I purchased my plant of Mr. Floy in the month of September, A. D. 1833, *one year* anterior to the time you mention, and if my recollection serves me, I showed it to you when you first called at my place, for the purpose of obtaining a list of camellias that you intended to import, it being on the 6th day of December, 1833, and before you visited New York, or saw the original plant of *Caméllia japónica Flòyii*.

In the light of these facts, I think I may claim the honor (if honor there be,) of asserting, that in consequence of *my* "description" you purchased your plant of *Caméllia japónica Flòyii*.

The last error I notice is, that your plant "is now the largest plant in the country, excepting the original plant, Mr. Wilder having worked off several inarchings of his, and reduced its size."

In reply to this, I was about to say, that I would compare plants with you—but as your New York correspondent and yourself agree so harmoniously that "comparisons are odious," I will drop the figure, and only observe, that, until I have ocular demonstration, I am not willing to concede that such is the fact.

The introduction of *C. j. Flòyii* into Europe, I think must have been previous to the year 1836, but of this I have no proof; and although M. Vershaeffel of Gand, may have introduced it into his country, it is not probable that he received it so early as it went to England.

This camellia has sold at very high prices in Germany, under the name of Grand Frederick, and I am informed by M. Rison, of Frankfort, that he paid 1000 francs for it at the great Horticultural Exhibition at Ghent in 1836.

The *Caméllia japónica Flòyii* is in every respect a most remarkable production, and I agree with you that it is doubtful whether Mr. Floy will ever produce another equalling this.—*Yours, &c., M. P. Wilder, Hawthorn Grove, Dorchester, June 19, 1838.*

We are sorry that Mr. Wilder should take our remarks so much to heart—especially as regards the introduction of this variety into the vicinity of Boston. Without affording any information upon the real point at issue—the period of its first coming into bloom, and its introduction

into Europe—he has gone out of the way to discuss the question of its introduction into the vicinity of Boston, which seems to him of the most importance. We did not intend by our remarks to infer that the Abbé received his information respecting this camellia from Mr. Wilder, knowing that such an erroneous account would not have been furnished by him. If, however, as he says, he had the honor to transmit an account of its origin and parentage, how should the Abbé Berlese have passed over *such* authority, and have given an account altogether incorrect? We had only one view—that of correcting the gross errors as we found them.

Since our last we have had the pleasure of seeing Mr. Floy, and are thus enabled to give the entire history of the plant, which is as follows:—

It was raised from the seed as long since as 1809, (it seems as if Mr. Floy must be mistaken in this date, for according to Mr. Wilder's authority, (see vol. I, p. 15,) the warratah and double striped, from which it is said to have been produced, were not introduced into Europe till about or after that period.) but did not open a good flower until the spring of 1827 or 1828, when Mr. Floy had a drawing taken of it. Since that time its history is well known, from what we have already stated.

As regards its introduction to the vicinity of Boston, we may have been in error. We are not in the habit of making a memorandum of the month, or the week, or the day that we visit the various gardens about the city, and therefore must admit the truth of Mr. Wilder's statement. We recollect so far as to add that it was on the *eve* of December, 1833, we first visited his collection of plants; but our memory is for once so treacherous, as to forget whether we saw this variety then or not.

We did not claim the honor of introducing this camellia into the vicinity of Boston. But we did, and do now, claim the merit of being the first to make it known, through our Magazine. Like many other plants which get into the possession of amateurs at an early day, who are eager to possess what others do not, and keep the knowledge of such possession to themselves, it would have been less known but for the frequent notice of it in our pages.

The challenge thrown out by Mr. Wilder we have no desire to accept, but he may have "ocular demonstration" of the size of our plant at any time.

We believe that what we before stated was correct in every particular, excepting the time of Mr. Wilder first possessing this variety.—*Ed.*

ART. VI. Massachusetts Horticultural Society.

Saturday, June 9th, 1838.—Exhibited. Flowers: from Messrs. Winship, *Lonicera alba*, *Syringa persica*, *Spiræa trilobata*, *Clématis* sp., *Cytisus Laburnum*, *Azalea nudiflora*, and *pónica*, *Verónica gentianoides*, eight kinds of hardy *pæonies*, four of *iris*, four of *geraniums*, and specimens of Harrison's double yellow rose. Bouquets from S. Walker, containing a variety of fine flowers. From T. Lee, dahlias and specimens of annuals, native plants, roses, &c. From W. Kenrick, *Pæonia albiflora* var. *fràgrans*, *albicans plèno*, and *P. Grevillii*; also the tree *pæony*, *P. Moultan papaveracea* var. *Banksia*, *Wistària Consequana* from the open air, *Iris sibérica*, *florentina*, and *Sweèti*, scarlet hawthorn and laburnum.

Vegetables: From Messrs. Winship, fine specimens of rhubarb. From J. L. L. F. Warren, fine specimens of rhubarb, and the follow-

ing kinds of cucumbers; English white spine (?), short prickly, Sinot's smooth skin (?), and early frame.

June 16th.—Exhibited. Flowers: From S. R. Johnson, Charlestown, Chinese roses and pinks. From M. P. Wilder, several varieties of pæonies, roses, and double rockets. From Messrs. Winship, *Fris pseud-acoras*, *Lonicera* var. *Thalictrum álba*, and a variety of other herbaceous plants; also, roses, including a great variety of the Scotch, the purple Boursalt, florida, single yellow, &c. &c., and pinks.

From Hovey & Co., several fine bouquets. From Wm. Kenrick, bouquets. From S. Walker, bouquets. From W. E. Carter, several fine specimens of herbaceous plants.

Vegetables: Peas from Rufus Rowe, Dorchester.

June 23d.—Exhibited. Flowers: From T. Lee, *Kálmia latifolia*, *Magnòlia glauca*, *Orehis fimbriata*, *Lobèlia cardinalis*, *Clàrkia pulchèlla álba*, minuluses, roses, &c. &c. From E. Breed, a plant of *Cereus speciosissimus* with several flowers expanded. From Wm. Miller, fine seedling laced pinks, roses, pansies, &c. &c. From T. Magown, Jr., Esq., Medford, beautiful specimens of the *Magnòlia glauca*, *Kálmia latifolia*, and *Wistària frutescens*.

From S. R. Johnson, a collection of Chinese roses of various kinds, together with several hardy varieties. From S. Walker, bouquets of flowers, and fine specimens of laced pinks. (We intended to obtain the names of these.) Also, elegant pansies, ranunculuses, pæonies, roses, &c. &c. From S. Sweetser, Chinese and hardy roses, geraniums, pinks, *Verbena Tweediana*, &c. &c. From R. Howe, bouquets of roses, &c. From J. Hovey, Roxbury, bouquets of roses and other flowers. From Hovey & Co. several bouquets.

From M. P. Wilder, a large collection of roses, embracing a variety of kinds; among others we noticed Mobach, Ball de neige, white bouquet, Celestris, Noisette Bobelina, Gen. Lamarque and Thiers, Duchess of Parma, pourpre striata, hybrid de Bengal, atropurpurea Siro, &c. &c. and several kinds of moss roses. From A. Aspinwall, Esq., Brookline, a fine collection of roses, containing some choice and beautiful kinds, but the names of which we could not very well procure. The flowers were remarkably large and brilliant.

From W. E. Carter, bouquets of flowers. From Messrs. Winship, a very large bouquet, containing a great number of different kinds of flowers, and a cut bloom of *Echinocactus Eyrièzii*.

Fruits: From J. L. L. F. Warren, fine Methven scarlet strawberries. From Hovey & Co., a box of seedling strawberries, very large. From Mr. Vose, fine Keen's seedling. From R. Howe, Bath scarlet. From A. Mitchell, Esq., Nantucket, a ripe and handsome peach.

Vegetables: From S. Pond, specimens of rhubarb.

At this exhibition prizes were adjudged to the following contributors:

M. P. Wilder, the prize of five dollars, for the best display of roses; the prize of three dollars for the best twenty-four blooms of roses.

A. Aspinwall, the prize of two dollars for the best twelve blooms of roses.

S. R. Johnson, the prize of three dollars for the best twelve blooms of Chinese and other tender varieties of roses.

S. Walker, the prize of five dollars for the best display of pinks.

W. Miller the prize of three dollars for the best seedling pink.

The second prize for six blooms of pinks was not contended for.

The exhibition was very interesting, and attracted a crowd of visitors, so numerous that we were prevented from making our reports as complete as usual. The exhibitions are much more attended, and appear to attract more attention, than heretofore. We augur the best results from seeing such an interest manifested in the society's displays.

ART. VII. Faneuil Hall Market.

Roots, Tubers, &c.	From To		Squashes and Pumpkins.	From To	
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
Potatoes, new :			Squashes:		
Common, { per barrel,	1 00	—	Early Bush, per dozen,	37½	50
{ per bushel,	40	45	West India, per pound,	3	—
Chenangoes, { per barrel,	1 00	1 25	Winter crookneck,	—	—
{ per bushel,	37½	50	<i>Pot and Sweet Herbs.</i>		
Eastports, { per barrel,	2 09	2 50	Parsley, per half peck,	25	37½
{ per bushel,	1 00	—	Sage, per pound,	17	20
Turnips,			Marjorum, per bunch,	6	12
Common, { per bushel,	—	—	Savory, per bunch,	6	12
{ per peck,	—	—	Spearmint, per bunch,	6	—
new, per bunch,	8	10			
French, per bushel,	—	—	<i>Fruits.</i>		
Ruta Baga, per bushel,	—	—	Apples, dessert :		
Onions :			Russets, { per barrel,	2 50	3 00
per bushel,	—	—	{ per bushel,	1 50	2 00
new red, per bunch,	6	8	Strawberries, per box, (1 qt.)		
new white, per bunch,	4	6	Keen's seedling,	50	75
Beets, per bushel,	50	75	Methven,	50	75
new, per bunch,	6	8	Common,	37½	50
Carrots, per bushel,	50	75	Wood,	25	37½
new, per bunch,	6	—	Cherries, per quart,	17	20
Horseradish, per pound,	8	12	Gooseberries, (green,) per qt.	12½	17
Radishes, per bunch,	4	6	Currants, per quart,	8	—
Shallots, per pound,	20	—	Blueberries, per quart,	20	25
Garlic, per pound,	12½	—	Pine-apples, each,	12½	37½
<i>Cabbages, Salads, &c.</i>			Grapes, per lb. { Hot-house,	1 00	—
Cabbages, per dozen :			{ Malaga,	—	—
Early York,	50	75	Cucumbers:		
Early Dutch,	50	75	Forced, each,	12½	20
Cauliflowers, each,	25	37½	Common, per doz.	50	75
Broccoli,	25	37½	Cranberries, per peck,	1 00	—
Lettuce, per head,	3	4	Oranges, common, per doz.	37½	75
Beet tops, per peck,	12½	17	Lemons, per dozen,	20	25
Rhubarb, per lb.	3	4	Cocoanuts, each,	5	6
Turnip tops, per peck,	—	—	Shaddocks, each,	25	—
Cabbage sprouts,	—	—	Walnuts, { per barrel,	5 00	6 00
Asparagus, per bunch,	—	—	{ per bushel,	3 00	—
String beans, per peck,	50	—	Almonds, (sweet,) per pound,	12	14
Peas, per peck :			Filberts, per pound,	4	—
Common, early,	37½	50	Castana,	4	—
Marrowfat, or sugar,	37½	50	English walnuts, per lb.	5½	6

REMARKS. The memory of the oldest farmer "runneth not" back to the season, so propitious to the cultivator, so pregnant of every good fruit and vegetable, as the present. Bountiful and rich will be every harvest. After several seasons of scarcity, it is gratifying to anticipate an overstocked market, and a consequent fall of prices in many articles which have been too dear for only the more wealthy to purchase. A season of plenty will place them within the reach of all classes.

The whole of the month up to this date has been oppressively warm, though the earth has been well watered by refreshing showers, so that nothing has suffered in the least. Corn never looked better, potatoes promise a fine crop, and of fruits there seems to be no kinds, but what there will be a sufficiency; even the peach, which has been nearly root-

ed from our gardens on account of its unfruitfulness, is producing an abundant crop this season. Of the smaller fruits, such as raspberries, &c., there is a good crop.

Old potatoes have become a drug in the market. Some very small new ones have made their appearance, but too poor to be put into our quotations this month. The good prices which potatoes obtained in April, brought in a great quantity from the Eastward, and prices have fallen off considerably. New turnips are plentiful, and fine. New onions come to hand in considerable abundance, and of good quality; Several hundred bunches of reds, so called, came in this week from the Cape; they are said to be this year's growth, although they are perfectly dry and handsomely bunched. New beets and carrots now come in tolerably freely. Parsnips gone. New cabbages of very fine appearance have been received this week. Cauliflowers and brocolis the same as our last. Lettuce abundant and good, though from the excessive warm sun, it has run to seed rather quicker than usual. Rhubarb abundant. Dandelions &c. gone. Peas have been tolerably plentiful, but this week the supply has fallen off very considerably; in dry situations where they have been planted for early crops, the hot sun has almost dried up the vines; prices have in consequence been very variable. String beans are now coming in freely. Bush squashes have made their appearance this week, and a good supply is expected soon.

Fruit of all kinds obtainable at this season, tolerably abundant. A few russet apples yet remain. Watermelons scarce. Strawberries plentiful, and a good demand, which has tended to keep up prices; just at this date the supply is growing short, from the effect of the weather, which has ripened them all off at once. Cherries abundant, but poor. Currants, gooseberries, &c., plentiful. Pine apples very abundant; several arrivals this week have stocked the market. Some new forced grapes have come to hand, and command quotations. Cucumbers from the open ground begin to make their appearance; the weather has been excellent for the vines. Oranges very scarce and prices high. Lemons plentiful. Cranberries are only to be had by the peck or so, at our prices. Sales brisk, and the market generally, this month, has attained its wonted activity.—*Yours, M. T., June 28th, 1838.*

ART. VIII. *Obituary Notice.*

THOMAS ANDREW KNIGHT, Esq.—It is with regret that we announce the death of Mr. Knight, the late venerable president of the London Horticultural Society. We have scarcely time at this late hour to copy an obituary notice of his death from the London *Athenæum*, under the signature of J. L. (probably Dr. Lindley,) written with just and excellent feeling, but shall recur to it in our next. He died in London, at the house of Mrs. Walpole, one of his daughters, after a short illness, on the eleventh of May, in the eightieth year of his age. (*Gard. Mag.*)

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape vines will, in the green-house, &c., soon be swelling their fruit rapidly; thin out the branches if not done before, and give frequent syringings. Keep the shoots laid in at regular distances, and trim off all superfluous branches, laterals, &c. Cuttings in pots should be well watered. Vines in the open air will now have set their fruit. Tie up all the shoots which are required for another year, and prune off the rest.

Strawberry beds should be looked at. Cut off all the runners, unless some are wanted to make new beds, and these should be carefully pegged down to the soil. Hoe up all weeds and keep the bed in good order. The latter part of the month will be the season to prepare for new beds.

FLOWER DEPARTMENT.

Dahlias. The dahlias will probably have been all planted by this time. If not staked, it should be done now. Tie up the plants carefully, and give them water if the ground is dry.

Geraniums should now be propagated from cuttings.

Rose bushes should be budded this month.

Chrysanthemums potted in May, should now be topped, and shifted about the middle of the month.

Carnations should be layed this month.

Pinks should be propagated from pipings.

Perennial flower seeds may yet be sown.

Mignonette, for blooming in November, should be sown the latter part of this month.

Chinese primrose; continue to sow seeds, if plants are wanted.

Cactuses will do better to be removed into the open air.

Camellias may be inarched now, from the young wood just hardened.

Ericas should be repotted now as they are placed in the open air. Cuttings may yet be put in.

Pansies may be increased by pipings.

Verbenas in pots should now be shifted into the next size.

Green-house and stove plants, of most kinds, may yet be propagated with success.

VEGETABLE DEPARTMENT.

Celery plants should be transplanted into beds for earthing up.

Cucumbers may be sown for pickles.

Rhubarb; new beds may now be prepared to plant out in August.

Turnip seed should now be planted.

THE MAGAZINE
OF
HORTICULTURE.

AUGUST, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Additional Remarks on the Dahlia; the properties of flowers and the exhibition of blooms.* By the EDITOR.

WHEN we penned our former remarks upon the cultivation of the dahlia—which were extended to some length—we thought we had said nearly all that was necessary upon the subject. In so far as the mere growth of the plants is to be considered, we gave ample directions, and at this time shall say nothing on that point. But as the dahlia seems to be much more extensively grown this season than in any year heretofore, and as there appears among the largest growers some spirit of competition, and by gentlemen and amateurs generally a desire to know every thing in relation to this beautiful flower, we have ventured to throw out a few hints, confined mostly to the properties of flowers, some rules which should be observed in judging blooms, and the method of arranging them in stands for exhibition.

The dahlia has done more, in England, than all other plants together, towards the dissemination of a taste for gardening. Societies have in many instances been organized for the sole purpose of making dahlia exhibitions. These exhibitions have been so attractive, from the splendor of the numerous and beautiful varieties displayed, that they have created a desire, among all persons possessing a spot of soil, to cultivate the plants, and a spirit of emulation in exhibiting the most superb flowers. Eventually these societies have embraced other objects in their exhibitions, and the result has been the diffusion of a taste for floral productions of all kinds—a nicer appreciation of the beauties of the garden—a zeal to possess every thing rare—and attempts to excel in the production of superior specimens for exhibition.

The liberal award of prizes by these societies has produced most beneficial influences. Such will be—or, at least, so we hope—the result of similar exhibitions of the dahlia in this country. Every city in the Union should establish a horticultural society, and we doubt not that in many of the smaller towns, individuals who feel interested will combine and form themselves into associations for the purpose of encouraging the spread of a taste for floriculture, first beginning with the exhibition of the dahlia.

The dahlia has but just begun to be known and appreciated in the interior. In and around our principal cities they are extensively grown, and many of the most beautiful and rare varieties are found in our gardens, the same season that they are sold out for the first time in England. But the common and old sorts, which can be procured at reasonable rates, are yet only known in the country towns,—what is now called a first-rate show flower being rarely found beyond the precincts of the principal cities. The annual introduction, however, of all the new ones, will speedily drive from cultivation those of inferior beauty.

With such an interest excited for the dahlia, we have thought that some additional observations would not be inappropriate at this time. It is better that a good taste should be diffused at the outset, rather than a bad one, which will require much correction; and the only method of doing this is to make known what the real properties of a dahlia are, by what standard they are judged, that a mere *double* flower shall not be set up as a specimen of a fine bloom.

Our own ideas of perfection may vary from those of other growers; but as our views coincide with those of the best English cultivators, we will venture to advance them for the benefit of all who may feel desirous to profit by our remarks. We shall be as brief as possible, and shall in course notice the opinions and practices of the most celebrated English growers.

Those old dahlias, the Countess of Liverpool, the King of the Whites, Barrett's Susannah, Dennissii, &c. have long been cultivated in England, (and in this country,) the former at least for twelve or fifteen years, and yet finds a place in the most select catalogues. Thousands of seedlings, which have been raised since either of the above have been known, have had their day, and been thrown out as entirely worthless. These were considered the standard of beauty for a time, until the Springfield Rival made its appearance. This was the greatest advancement towards perfection that had yet been made; and even at this period, the best new seedlings out are described as Springfield Rival *form*. Of the immense number which has been produced since, few flowers hold a place in the catalogues. There are faults in this flower, as will be noticed, and, until the present season, there have been but slight improvements upon its character.

In giving the properties of a fine dahlia we shall first extract the following from Mantell's work, entitled *Floriculture*.

Criterion of a fine double Dahlia.—The flower should be erect, and stand completely above the foliage; for if the peduncle be short, so that the flower be hid among the leaves, it will not be displayed to advantage.

“Form, color, and size, are considered the essential properties of a fine dahlia.

“1. *Form.*—All good judges allow that perfection in form consists in the near approach to a hemisphere. The Springfield Rival may be given as an instance of the nearest approximation to a perfect flower: it is, however, too flat in the centre, and the outer petals are reflected. It is essential that the outline should form a true circle, and, consequently, the petals should be regularly disposed, rounded, smooth at the edges, or rose-leaved, and slightly concave, but not so much so as that the back of the petals should be seen in front. Those flowers whose petals are narrow-pointed, notched, or fringed, as well as those that are flat, or convex—however desirable for the flower-border—are objectionable as show-flowers; as are also those which, when fully blown, exhibit the eye or disk. In some dahlias the petals, near the centre, converge and conceal the disk, which, when the flowers are fully expanded, becomes exposed: these are, therefore, pronounced by florists imperfect flowers.

“2. *Color.*—As regards color, much depends upon taste; but *sels*, (i. e. flowers of one color,) of whatever color they may be, should be bright and distinct. In striped, spotted, tipped, or variegated varieties, the colors should be well defined, and every petal uniformly and distinctly marked. Those that are pounced, blotched, variously or irregularly marked, are inadmissible as show-flowers.

“3. *Size.*—When other properties are equal, size will determine the preference; but in judging of a good dahlia, form must have the pre-eminence, then color, and lastly, size; but in no instance should either form or color be sacrificed to size. The relative proportions of excellence in these criteria have thus been estimated: form three, color two, size one.”

Thus a dahlia, possessing the properties of form and color, would be judged superior to one having color and size, the relative proportions being as five to three. By this standard, the comparative merits of this class of show flowers have been estimated by the censors at the exhibitions of the Metropolitan Florists' Society.

If we were to judge all the flowers in cultivation by this rule, we should find that many which are now admired would be inadmissible as fine blooms. All the varieties with reflexed petals would be excluded, though they embrace some of our most es-

teemed kinds. If, however, in all other respects they are not wanting, viz. in roundness of form, fullness of petals, high centre, and brilliant color if selfs, or distinct if tipped flowers, they will not be objectionable. But if one of the same color could be produced with the concave petal, the convex one would be displaced. The latter are beautiful and not objectionable, because of the same colors we have none with concave petals and in other respects equally as fine.

If we notice the above properties of a fine dahlia, we shall see that *form* is the most essential, next *color*, and thirdly *size*. But the question is, what is perfection of *form*? Springfield Rival has been the standard. But it is imperfect; and let us see wherein. On this point we quote the observations of an English grower, whose ideas upon the subject correspond with ours.

“The only flower which is perfect on the outer edge, and thus forms a perfect circle, without notch, is the Springfield Rival; this fails on the side of the view, because the eye does not rise to the top, and the back petals reflect; the most beautiful bloom we have seen of it out of some hundreds being somewhat sunk in the centre.

“It is, however, a question if we ever get a flower perfect in all respects, for almost every grower says the Springfield Rival is the *best*. Our notions, then, of perfection, may be estimated thus: Would the Springfield Rival be handsomer, if the eye or crown rose up to a complete half circle, with all its present beauties? Secondly, Would it be better if, instead of the present reflection of petals on the under side, they were perfectly square and flat? If these points be conceded, our notions of perfection are established; for certainly, in the beauty and accuracy of these petals, no art could effect an improvement, nor could the compass of a mathematician improve the circular outline of the Springfield Rival, as you view it in front.”

These observations are very correct. All who have grown or seen the Springfield Rival in its best state have probably remarked its deficiency, viz. its hollow centre, otherwise so very perfect and beautiful: and while there have been others “well up in the centre,” as they are now described, in other properties they have come short, or at least have not excelled, until the present season, this old variety.

Perfection, therefore, in form, should be *half a globe*. But blooms, perfect in other respects, may be either more or less so, and still not be objectionable. Those, however, which are more than half a ball, would be the most perfect: for if they fall much short, they have altogether too flat an appearance. Criterion is an instance of a form less than half a globe, and Juliet, (Widnall’s,) one in which it is more; both flowers are well known, and will convey our ideas in judging upon this point.

In connection with form may be noticed the shape of the petal. To be perfect, they should be quite round, free from all notches, broad in proportion to their length, and not quilled or cupped so much as to show the back of the petals. A flower may be beautiful though the petals may be flat, cupped or reflexed; but those which are slightly cupped must be those which approach nearest to perfection. Those flowers with petals so concave as to appear quilled, though sometimes admitted, are highly objectionable, and in our opinion should be disqualified as *show* flowers, however so beautiful they may be as garden varieties. One of this class, (and by which we shall be better understood,) is Mackenzie's Contender, in other properties a pretty kind. Conqueror of Europe, Dodds's Mary, &c., are specimens of new varieties with good shaped petals.

We have, then, what we shall consider as perfection in form. Next comes *color*. Whatever the color of a bloom may be, if a self, (so called,) it should be clear, bright and fresh, without any spots or blemishes, or dusty appearance. If the colors are striped, edged or mottled, they should be bold, striking and distinct. Two thirds of the dahlias described as edged are nothing but dingy white flowers, with irregular blotches of color, extending, in some kinds, from the edge of the petals nearly to the centre; in others, stripes and tints of color are disposed over the surface of the petals, without any distinctness. Such should not be esteemed of any value. As specimens of the different classes of bicolored, we may note, of the kinds we have yet seen, the *Picta formosissima* as the best stripe—Widnall's Rainbow, (when good,) the best shaded—Levick's Incomparable, the best tipped—Mary Queen of Scots, (Dodds's,) the best tinted—and the King of dahlias the best edged, (though a poor flower in other respects.) It is difficult to say what is the best white; but of the kinds well known, *Exemplar* appears to combine the most good properties, though the white is not as pure as the old King of the whites.

Lastly comes size—a property which some individuals seem to look upon as more important than form or color—or both together. Large and small flowers are both objectionable. The former are generally flat and ill formed—the latter have a tameness which detracts altogether from their magnificence. A medium size is that which approaches the nearest to perfection. Size is however of little importance—but a flower, under, rather than above the medium, if good in other properties, is in our opinion preferable. Large flowers appear beautiful to those who only appreciate a dahlia from its quantity and not quality: there is a coarseness about the very best that we have ever seen, which would disqualify them as *show* flowers. *Negro Boy* and *Wilmot's* superb are two specimens, the latter of which is oc-

asionally very handsome. King Otho is also a large flower, inferior in the early part of the season, but beautiful late in the autumn, when the blooms are slightly above the medium size.

If all the kinds were to pass the ordeal of such restrictions, most of them would be found wanting. It is not expected that all will be perfect. But the standard should be set up, and by it all should be judged when offered for sale. We should then hear of less complaints of disappointed purchasers who have paid an enormous price for plants, which, though *novelties*, possess few of the beauties and perfections their fancy had conjured up. We trust we have said enough to convey our ideas of what we consider the properties of a first-rate dahlia.

There have as yet been in this country but a few exhibitions of dahlias for prizes. The Pennsylvania Horticultural Society, the past season, made such awards, as will be seen by a reference to our report of the annual exhibition last fall. The Massachusetts Horticultural Society, the present season, has, among other objects, offered some liberal prizes (p. 196,) for the dahlia, and probably there will be several exhibitors for the various classes. We shall be happy to see some competition among the many growers in the vicinity, as it will be the means of a more extended growth of the plants another season.

The method of exhibiting dahlias, or rather the style—*for there has been no method*—has been to display, without any particular reference to number, variety, freshness, form, color or size, a mass of blooms,—to arrange them in glasses, sometimes one in each, and sometimes two or more—one flower with a long stem, and another with a short one. *Number* has—we regret to say—often been taken as a warranty of the best and rarest collection, variety has been but little thought of, freshness of the blooms less attended to, and those particular properties of form, color and size almost wholly forgotten. Instead of exhibiting, as the most experienced English growers do, six, twelve, twenty-four, fifty, or a hundred faultless blooms, in stands by themselves, our cultivators have shown an indefinite number of all sorts, disposed so as to have the most effect, one flower of which collection, from either its overblown appearance, coarseness of petal, large disk, or eye, or irregular form, would have, in our opinion, condemned the whole. If number is to be the qualification for the prize, let it be known, and all who intend to exhibit will prepare themselves accordingly. Or if size is to be considered as a principal property, it should be so understood. But if exhibitions are instituted to show the perfection of the dahlia, then only perfect blooms should be admissible, and these should be estimated by their relative approach to properties which are considered as the standard.

Here we may be permitted to state our opinion as to the mode

of judging a stand of twelve blooms, supposing them hereafter to be exhibited by this mode. First, every stand, allowing a dozen to be brought forward, should be looked over, and each one containing a single imperfect bloom—such as showing an eye, bruised or mutilated petals, or other blemishes—should be set aside as totally disqualified for the prize. Second, those remaining should be examined carefully, and each flower judged by its real merit. Thirdly, the whole stand should be estimated by its tasteful arrangement, freshness of flowers, variety of color, brilliancy or delicacy of tints, equality of size, &c. All these properties should be kept in view: nothing, to us, is a blemish so fatal in a bloom as bruised or decayed petals. These rules have been the guide, in awarding prizes, of the Metropolitan Society of Florists, and have been the means of discarding from the exhibitions imperfect blooms of every description. Whatever method our cultivators may adopt, we hope it will be one which will disqualify bad blooms from competition. For our own part, we had rather see twelve perfect blooms, than a hundred perfect and imperfect ones together.

As a guide to the mode of exhibiting blooms in stands, which we wish to see adopted here, we extract from the *Horticultural Journal* the following plan, communicated by a “successful shower.” We have varied the varieties of flowers in one of the stands, as those enumerated have been superseded by finer ones, and some of them are out of cultivation entirely, by the best growers.

“Form is of the most importance. It is not enough that the flower should not show an eye or disk, but the centre of it should be high up, the petals regular, and the flower fresh and round. In looking, therefore, at your plant for a flower, choose rather a small bloom with all these properties, than a larger one with the slightest deficiency or irregularity.

“Contrast and variety of color is of the next consequence. In choosing your blooms, or rather your sorts, take care that there are two light, or bright, and two darker in each row: if practicable, let the two light and two darker be so different in color from each other that they will bear standing side by side, without appearing at all alike.

“In the back row place the two light ones at the corners, and the two darker ones in the centre; in the middle row place the dark ones outside, and the light ones in the centre; and in the front row place the two light ones at the corners, and the two darker in the centre. The stand then harmonizes; the four bright flowers at the four corners strike the eye, and the dark ones between the top and bottom rows outside and the light ones between the top and bottom rows inside, form so pleasing a con-

trast, that even worse flowers will beat, in appearance, their betters worse arranged.

“ Let the reader fancy the following flowers arranged for show, the blooms in the top row being all of a size and the largest; the second row rather smaller but all of a size; and the front row still less, but equally regular.

ROYAL LILAC. — Lilac.	LORD LIVERPOOL. — Purple.	DUKE OF BEDFORD. — Dark.	PRINCE OF ORANGE. — Orange.
COUNTESS OF LIVERPOOL. — Scarlet.	LADY GRENVILLE. — Bright rosy.	KING OF YELLOWS. — Yellow.	AUGUSTA. — Sha. crimson.
KING OF WHITES. — White.	SPRINGFIELD RIVAL. — Crimson.	WIDNALL'S PERFECTION. — Dark rosy.	PICTA FORMOSISSIMA. — Yellow and red.

“ They will imagine how much the flowers are assisted by the contrast of color, and how far superior that mode of arrangement is to any other; but as stripes begin to be fashionable and numerous, the following would be an equally effective stand, and there are flowers in the first which cannot be dispensed with.

MARCHIONESS OF TAVISTOCK.	JULIET.	WARMINSTER RIVAL.	YELLOW PERFECTION.
PURPLE PERFECTION.	LADY DARTMOUTH.	EXEMPLAR.	LILAC PERFECTION.
CONQUEROR OF EUROPE.	GLORY OF THE WEST.	SIR H. FLETCHER.	DODDS'S MARY.

“ In this arrangement the contrast is great, and the addition of two or three striped flowers gives novelty to the stand; but it should always be recollected that scarcity and novelty must not betray us into adoption of a worse formed flower, for nothing compensates for it; if either the dark or light flower, from a

scarcity of sorts, be too near of a color, the arrangement had better be altered so as to put them thus:—

LIGHT	DARK	LIGHT	DARK
DARK	LIGHT	DARK	LIGHT
LIGHT	DARK	LIGHT	DARK

“In this arrangement the contrast is quite as complete, but the uniformity is not, there being two light flowers at one end, and two dark at the other: however, they will look better this way than the other, if there is too much similarity in either the light or dark flower. The names suggested are not to guide the shower altogether, because there are fifty varieties equally as applicable as a majority of those mentioned, and some even better adapted than those set down: but if there be any bloom left on dahlia plants, when this appears, let the experiment be tried, and there will be no doubt about the matter; it will be a few minutes well spent, and prepare the party for next season. It is worthy of remark, that at Salt Hill there were but two stands arranged upon the plan now recommended, though more than fifty were shown.”

This is a simple arrangement, but beautiful and striking; and, we doubt not, would please much better than the promiscuous scattering of the flowers heretofore adopted. This system, let the stand be one of six, twelve, twenty-four or fifty blooms, will enable the gentleman or amateur to compete with the nurseryman; and the individual who grows fifty first-rate varieties will stand as good a chance of having the best stand, as the amateur or nurseryman who grows his three or four hundred plants. The absurd idea that too many have imbibed, that the largest number of blossoms is necessarily the best, without any examination of the individual blooms, we wish to see abandoned. It has originated with those who scarcely know what a good formed dahlia is, or, at least, the properties of a bloom; and who, to make up for such ignorance, at once judge by the quantity rather than the quality.

Such are the observations we have thrown together at this time, for those of our readers who feel interested in the subject to reflect upon. So far as we have made ourselves acquainted with the dahlia, they are our frank opinions, and we believe there are many cultivators who will agree with us. Should they differ from us, we shall be glad to receive their opinions and criticisms, that all may avail themselves of the information.

ART. II. *Remarks on the Cultivation of Ericas or Heaths, their propagation and general management.* By J. W. RUSSELL.

[Continued from p. 166.]

Treatment of the plants through the summer months, in the open air.—If I mistake not, the practice of taking the plants from the green-house to the open air, in the summer months, is allowed by all practical men to be highly conducive to their health and strength. The locality selected for them, and the mode of preparing the ground on which they are to be placed, is, or ought to be, the first consideration. Therefore it may not be out of place to state the aspect to which I should give the preference; a North-west aspect I should choose in this climate before any other; but if this was not easily to be obtained, one as near *North* as possible would be the next taken for this purpose.

After deciding upon the ground, the first necessary process is to cover the surface with coal ashes to the depth of four or six inches; then level the whole, and rake it over perfectly smooth, for the pots to stand on; this done, a quantity of pit or fresh water sand should be procured, to plunge the pots in. This may appear, to those persons who are not well acquainted with this family of plants, to be altogether superfluous, and of no kind of use whatsoever, to go to the trouble and expense of making such a preparation, when the plants can only remain there three or four months; nevertheless, it is my humble opinion, that whatever is worth doing at all, is worth well doing. The ashes will be the means of keeping the worms from the pots, and by plunging them in sand down to the rims, it will be a great saving of time that would necessarily have to be spent in watering. It would also undoubtedly save the lives of some of the most valuable kinds which are of a weak and slender *habit*, and, consequently, confined in small pots.*

If the pots are exposed in hot dry weather, they dry up very quick, but more particularly the small ones; and if even the small pots were regularly watered morning and evening, it would not be sufficient. The finely netted roots that are closely woven round the sides of the pots, soon perish if the earth is not kept regularly moist; in fact, moisture, (as well as drought,) has the

* These directions should be carefully attended to. Mr. Russell, in his practice, adopts nearly the same method as that so long and successfully tried by that experienced cultivator of heaths, Mr. McNab of Edinburgh, who published a treatise upon the management of heaths a few years since. More plants are lost by bad treatment in the summer than at all other times.—*Ed.*

same baneful effect, if given to excess. The intermediate path is the best, and must be strictly attended to, in order to be successful in the cultivation of heaths.

Repotting the plants.—Plants already rooted in pots may be successfully shifted at any time, from March till August; but perhaps the most convenient opportunity is when the plants are taken from the green-house to be placed in the open air, as just directed. Heaths may indeed, if they require it, be shifted at any season of the year with safety. But it is best to adopt some time when the whole of the plants may be done, in order to save labor, especially when the collection is large.

The same soil should be made use of as I have before mentioned for potting the cuttings into. The third or fourth time of shifting it may be less sandy than at first. An abundance of potsherds, broken tolerably fine, should be given for drainage, for on this depends, in a degree, the welfare of the plants. The hole at the bottom of the pots should be looked at when the plants are removed both from and to their winter habitation, in order to ascertain whether it remains open, so that the water may pass off freely.

Some *ericas* grow more freely and rapidly than others, and should have more frequent shiftings and plenty of pot room, if it is desirable to have good specimens. Some of this class are the following:—*E. conchiflora*, *concinna*, *verticillata*, *tubiflora*, *longiflora*, *mammosa*, *andromedæflora*, *arborea*, *cáfra*, (so called,) &c. &c. The soil for these and similar robust growing kinds should not be so light and open as for more slender and delicate species and varieties.

The after management of the plants during summer—the necessary precautions about administering water, &c.—have already been stated at length, and I now come to the

Winter treatment, and arrangement of the plants in the house.—I shall not suppose that there are at present, or will be for some time, collections sufficiently extensive to be kept in houses or heatheries built for the express purpose of the cultivation of heaths. The green-house will therefore undoubtedly be selected as the place to keep them through the winter season.

The best aspect for a green-house in this country, adapted to their growth, is a South-south-easterly one. In this situation they will be found to thrive best during the winter. In the spring, however, the sun's rays will be found too powerful for the health of the plants; an awning should therefore be procured, and the best article for this purpose is millinet, as it breaks the force of the rays, and yet admits sun enough to keep the plants in fine condition. The method of putting up such an awning is very simple. It should be fastened at the back of the house on light rollers, so as to be drawn down over the plants when the

sun's rays are likely to prove injurious, from their intensity. The awning may rest on two small bars of iron or wood, made fast to the rafters, and, when down, made tight at the bottom with a cord, to keep it from blowing about and breaking the tops of the plants.

The arrangement of the plants in the green-house is all a matter of taste; but there are some things which should not be overlooked. Always set the pots in the most airy and cool part of the house. Set the stronger growing kinds together; for if placed indiscriminately, the delicate sorts will be injured and crowded by the others; do not by any means place the plants too close together, but give them sufficient room: set the tallest at the back part of the stage and the smaller ones in front: if any of the plants require potting very much, let it be done. The front part of the green-house is the best situation, as they can then have all the benefit of the air admitted from the front lights.

During the early part of winter they should be very carefully looked after and watered: excess of moisture, or dryness, as I have before observed, is to be guarded against at all times. The pots should be kept as clean as possible through the season. Every plant of a straggling habit should be tied up to a stick, neatly made and painted green.

Finally, a person who has had some experience in the treatment of this genus, should have the whole charge of the collection, if it is large; for an inexperienced hand will not be careful enough in the watering of the plants, but will pour it into the pots indiscriminately; the result will be that those of a weak habit are irrecoverably lost, whilst the strong growing kinds are in a thriving state. By this I do not mean to infer that they may not be grown by any person tolerably well acquainted with plants; but that the watering should be performed at all times by the same hand, and the plants not allowed to be tended by various persons, as they often are in nurseries and other large collections.

Yours,

J. W. RUSSELL.

Mount Auburn, Cambridge, July, 1838.

It is quite unnecessary for us to say any thing in commendation of Mr. Russell's practice. He has had the management of a collection of plants, in which there were several heaths, in the vicinity of Boston, and the healthy and thriving state of these plants has been often witnessed by many of our readers. Those who follow his directions carefully cannot fail to be successful, so far as it is possible to be for individuals not already acquainted with the plants.—*Ed.*

ART. III. *Observations on three species of Lilium and a variety, with a comparison of two of the species.* By JOHN LEWIS RUSSELL, Prof. Bot. Mass. Hort. Soc. &c. &c.

Lilium, a genus of plants of great beauty, is the type of a small but interesting group or order, the *Liliaceæ*, remarkable for embracing individuals of humbler and of more commanding merits; from the pretty golden *Erythronium* to the towering and palm-like *Yucca*. Conspicuous in our meadows and sunny pastures at this season, especially in the month of July, are three species and one variety worthy the attention of the florist. Who has not noticed the elegant vermilion and claw-pointed perianth of the common red lily, scarcely elevated above the clustered fruit of the whortleberry and other kinds of *Vaccinium*, or blending, sometimes, its richness of contour with the fragrance of the sweet fern, (*Comptonia*.)? How many a child with juvenile superstition has avoided to gather it, in regard to its reputed effects of transferring its freckled surface to the shining and merry face of any little bold and daring collector. How many have admired its open, basket-like cup, produced by the narrowness of its unguis and the sudden dilatation of its lamina! Under cultivation, nor is its culture difficult, it produces one or more flowers as treated with a richer or more scanty soil.

Just peeping above the purple and green heads and panicles of grasses in yonder meadow, you will notice the pendant golden blossoms of the Canada lily. In a short ramble you may gather specimens with one, three, six, a dozen or more of these nodding and expanded bells, according as you find them uninfluenced by the effects of the periodical visit of the scythe and other unfortunate incidents. Occasionally, in some rich nook of an old wall, luxuriating on the accumulated treasures of decayed foliage, you may discover a more elevated plant, with dark-red flowers, which, are you, reader! a neophyte in botany, I advise you not to mistake, as has often been done by others, older, perchance, and wiser in such matters, for the third and most elegant indigenous species of which New England can boast. But should your taste for flowers ever have led you to their cultivation, be sure to carefully mark the spot, for the safe transplantation of this curious variety to your flower-border at some more advanced season of the year. The red variety of *Lilium canadense* has been often supposed identical with the third species, viz. *L. superbum*. Under cultivation for a series of years, the original and the variety becoming more beautiful in appearance and more commanding in aspect. Having in a very good condition of flower a few fine plants of the genuine species of *Lilium superbum*, grown from bulbs collected in Rhode Island, I have been led to observe

the characteristic distinctions between this and its co-species, *L. canadense*, which also is growing in my garden, close by.

Lilium canadense has passed its inflorescence before the first flower of *L. superbum* expanded; the difference of a fortnight in precocity in favor of the former. Leaves of *L. canadense* are in whorls of twelve, evidently and beautifully ciliated on the midrib and on each nerve. The base of each leaf is broader in *L. canadense*. The color of the foliage is of a lighter green. The flower is smaller, and the spots in the throat of the perianth confused and more numerous.

Lilium superbum has whorls of leaves in number from six to sixteen, as observable in younger or older plants. Sometimes, by the rapid elongation of its axis, these whorls assume a spiral form, one whorl meeting the next superior. No ciliation was observable on the nerves, as in *L. canadense*. The base of the leaves of *L. superbum* are strikingly narrow in comparison with *L. canadense*. The flowers of *L. superbum* are conspicuously large, of a fine orange-red on the laminae, and pale yellow on the fauces of the perianth, with distinct spots of black surrounded by an areola, when occurring on the orange color, each petal very much recurved and involute on its edge, stamens exerted, connectivum very delicate, stigma three-cleft, whorl of flowers irregular.

To the admirers of the *Liliaceæ*, this latter species must present many and attractive charms. Easy of culture, its exceeding beauty and grace recommend it a place in every flower-border. I never have had the good fortune to meet with it in its native habitat; but though thus rare in the eastern portion of the state, it is not uncommon elsewhere. It is to be wished that our floral friends engaged in the vending of plants might introduce it into culture, that, by offering for sale so choice a production of our native flora, it could be wider known and more highly appreciated. Several of our botanists seem inclined to reduce to one species the *L. canadense* and *L. superbum*; but from examination under culture, Linnæus seems to be correct in considering them distinct.

My plants of *L. superbum*, (and I suspect them by no means full grown,) are over six feet in height, with sixteen flowers on each whorl.

J. L. R.

We hope Mr. Russell's hint to our nurserymen and florists, to possess themselves of these beautiful species of *Lilium*, will not pass unheeded. We have often wondered that both the *L. superbum* and *canadense* were not oftener seen in our gardens. But it undoubtedly arises from the fact, that they are not "far-fetched and dear bought." If they were exotics, they would be seen in the flower border as frequently as the common and showy *L. tigrinum*.—*Ed.*

ART. IV. *On the Management of Oxalis Bowièi.*
By the EDITOR.

WE have several times been upon the point of giving an article upon the treatment of oxalises, with a short notice of all the species of any interest. But we have been unable, even to this time, to find an opportunity to do so in such a manner as we could wish. The treatment of some of the species has already been detailed by our correspondents, and Mr. Russell's excellent article (vol. II, p. 441,) has probably afforded much assistance to those who were wholly unacquainted with the plants; and we shall refer all who wish for information in regard to the other species than that which we shall now notice, the *O. Bowièi*, to that article, until we shall complete our own, unless some of our correspondents should anticipate us with a paper upon their cultivation.

All the species are beautiful little plants, and valuable from their abundant flowering, nearly the whole winter season. Some bloom as early as September, and from this period a succession of flowers may be kept up by the various species until May. The *O. Bowièi* is one of the autumn flowering species—though its bloom may be prolonged through the whole winter, as we shall hereafter notice—and is, in our opinion, by far the most showy and beautiful of the tribe.

It is a native of the Cape of Good Hope, where a majority of the numerous species have been found, and was introduced into England about the year 1823, and from thence into our gardens sometime in 1832 or 3, since which period we have cultivated it. The leaves are large and trifoliate; the flowers appear in threes or fives, on peduncles from six to ten inches long; each flower, in a well grown specimen, measuring nearly an inch in expansion, the whole umbel or cluster presenting a beautiful appearance. It is an abundant bloomer, and we have seen at least a dozen flower-stems arise from a pot not more than six or seven inches in diameter, having open at one time as many as fifty flowers. The season of its blooming is from September to December. The plants may be treated in the following manner:—

About the middle of August the bulbs, if standing in the old pots in which they flowered last season, should be taken out and the soil shaken entirely off. If they have been placed away in papers, they will be ready to pot at any time. Select out the large bulbs, such as have the appearance of being strong, from the small ones; these should be planted in pots by themselves, and the smaller ones also, as by setting them out promiscuously the pots are filled with roots, and the flowers more scattering and less abundant. The best compost which we have tried was

composed of about two thirds turfy loam and one third leaf mould, with a quantity of sand equal to about one third of the whole. If leaf soil is not at hand, make use of light sandy loam, with a small portion of decomposed manure of any kind, or heath soil. They will flourish in each, but the finest flowers are produced on those plants potted in the first named compost. We have generally made use of No. 4 pots, placing six or eight flowering bulbs in each, or from ten to twenty offsets, according to their size: eight is a sufficiency if the bulbs are large and strong. Place them about a quarter or half an inch below the surface of the soil, in a careful manner; and, after they are covered with the compost, finish with a light watering. Give a good drainage with broken potsherds; for although they delight in a good quantity of moisture when in full growth and in bloom, they do not like it in the earlier stages of their growth, and, in particular, around the bottom of the roots.

The plants may be placed in the open air until October, but if there is a green-house or frame near by, they would do better to be placed in one or the other. Give them plenty of light and air, and but slight quantities of water at first, until they show signs of considerable vigor; they may then be watered more freely. They will soon show buds; and, if the plants do well, will begin to bloom about the middle or latter part of September. If in the green-house, let them stand on the front shelves, or in some situation where they can get an abundance of air and light, or the flower-stems will be weak and the blooms faint. Here they may remain until their period of blooming is over, which is usually at the end of ten or twelve weeks: after that time the plants should receive less water, and it should be so gradually withheld that in the month of March it may be dispensed with altogether. The pots may then be removed under the stage, in the back shed, or to a shelf in a dry cellar until June, when they may be placed in a shady situation in the open air, turning the pots upon their sides, so that the bulbs shall not receive too much moisture from heavy rains. Here they may remain till the planting season again returns. The offsets should be managed in the same manner as the flowering roots, with the exception that they need not receive so airy a situation in the green-house unless there is plenty of room, as the plants alone will not be of much beauty without any flowers. Offsets will generally make good roots for another year, without any particular pains, otherwise than the use of a good compost.

The bulbs may be easily made to produce a succession of flowers, by delaying the planting of the roots. Last October we had plants in bloom, and there was scarcely a week, from that time until May, but what we had several pots of plants in

full flower. In our diary we find the following memorandums:—

- “September 20th. Potted bulbs of *Oxalis Bowiei*.
 October 6th. Potted more bulbs of *O. Bowiei*.
 November 4th. Potted more bulbs of *O. Bowiei*.
 December 25th. Potted last bulbs of *O. Bowiei*.”

The following are the periods of the blooming of the plants potted at the above dates:—

- “Oct. 22d. Bulbs of *O. Bowiei*, potted Sept. 20th, in flower.
 Nov. 5th. Bulbs of *O. Bowiei*, potted Oct. 5th, in bloom.
 Dec. 8th. Bulbs of *O. Bowiei*, potted Nov. 4, in flower.
 Feb. 4th. Bulbs of the last potting of *O. Bowiei* in bloom.
 (These continued so for several weeks.)”

The bulbs get somewhat weakened by their remaining out of the ground so long, but the plants, though not so vigorous as the early potted ones, nevertheless produce beautiful clusters of blossoms, which are doubly welcome at mid-winter, when our green-houses and parlors are so scantily supplied with flowers. We have no doubt but that the *Oxalis Bowiei* may be easily cultivated in parlors.

The remarks in relation to dispensing with the water as early as March, will only apply to those potted in September. But the same allowance in time should be made respecting withholding water from the plants as was observed in potting the bulbs; that is, those potted in October should have their usual supply till April, when the quantity should be decreased, those in November till May, &c. &c.

By this method of culture, the plants may be grown strong and vigorous, and a profuse display of blossoms may be obtained from autumn until spring. The bulbs may be procured at a reasonable price, and all who are lovers of the tribe should possess this species. Those who know *O. rosacæa*, an old but pretty inhabitant of our green-houses, can form some idea of the habit of the *Bowiei*, when to a more robust and deep green foliage is added a peduncle eight inches long, terminated with a cluster of from three to five flowers, each one larger, much better shaped, the petals less curled, and of a deeper and richer crimson than that species. It is a good companion to the *O. cœrnua* when planted late, so as to bloom with that species.

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, *Florist's Register*, and *Royal Ladies' Magazine*. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo. numbers, with a plate; 1s. each.

In the miscellaneous notices accompanying the *Botanical Register*, since the commencement of the new series, are short notices of various plants which have been introduced into English collections, or of which figures have appeared in other works. Such as are worthy of the distinction will be figured hereafter, while those of little interest will probably receive no further notice. As the information contained in some of these descriptions may prove interesting, and such notices anticipating somewhat the appearance of the most beautiful plants in the catalogues of the nurserymen for sale, we have thought that it would be a judicious method to enumerate them, adding an asterisk to each, that they may be known from those which are accompanied with a figure. They will be arranged under their respective orders.

A white bracted variety of *Poinsettia pulcherrima* has been figured in the *Botanist*. It was introduced from Mexico, together with the parent species, before the latter was introduced to our gardens. It must form a very pretty counterpart to the *P. pulcherrima*.

Diplacus puniceus, a very pretty species raised by Mr. Buist, from seeds brought from California by Mr. Nuttall, and among those which we noticed vol. III, p. 205, and sent by him to the London and Edinburgh nurserymen, is figured in the May number of the *Botanical Magazine*. It is a pretty plant, belonging

to Scrophulariæcæ: it has flowered in the choice collection of Mr. Towne the past spring. We shall notice it further hereafter.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculæcæ.

CLEMATIS

florida var. *bicolor* *Lindl.* We noticed this beautiful variety in our III, p. 413, under the name of *C. Sieboldi*, a name which was given to it in the gardens. Dr. Lindley states, however, that it is only a variety of the *florida*. For a particular notice of it we refer the reader to our last volume, p. 413.

It is stated that it grows freely in good loamy soil, flowers nearly all the summer, and may be increased by cuttings, though rather slowly. It is not likely to prove hardy in our climate, as the plants were killed down to the ground, the last winter, in English collections. (*Bot. Reg.*, May.)

Philadelphicæcæ.

PHILADELPHUS

**triflorus* *Wallich.* "A plant of this rare species, raised from seeds obtained from the Himalaya Mountains, by Dr. Royle, has lately flowered imperfectly in the garden of the Horticultural Society. It has the habit of *P. latus*, and is slightly but agreeably fragrant. It will prove quite hardy. (*Bot. Reg.*, May.)

Grossulæcæ.

RIBES

**Menzièsi* *Smith.* Another pretty species, raised from the seeds last received from the late Mr. Douglas. It is allied to the beautiful *speciosum*. The flowers are solitary, axillary, and nodding in the axils of the leaves. Dried specimens indicate a color nearly the same as the *speciosum*. The plants have not yet flowered, but will probably do so next year. (*Bot. Reg.*, May.)

Thymelæcæ.

PIMELEA

nivæa *R. Brown* Hoary Pimelea. A pretty green-house shrub; growing four feet high; with pink and white flowers; appearing in April; a native of Van Dieman's Land; introduced in 1831; grown in sandy peat and loam; increased by cuttings and seeds. *Bot. Reg.* n. s. 24.

Syn: *Pimelea nivæa* *Floral Cabinet* not *Labillardiere*.

A pretty green-house shrub, "with long slender side branches covered with its neat pink and white flowers, from the foot to the top of the plant." The lower leaves are opposite, ovate, acute, the intermediate ones oval obtuse, the upper ones alternate orbicular. The flowers appear in terminal clusters, as in the other species. It will be a very fine addition to our green-house plants, and especially to this genus, of which two species only are to be found in our more choice collections. It is treated like the other species, in the following manner:—

“ This species, like all the rest of the genus, succeeds very well on the front shelf of a green-house, if not too much crowded with other plants. The soil in which it grows best is a sandy peat, mixed with a little fresh sandy loam and decayed dung. It is easily propagated by cuttings at any season, particularly in spring or early in summer.

The young plants should be shifted frequently, and must have always plenty of pot room; otherwise they will become stunted and unhealthy. The finest specimens of pimeleas are generally seen in conservatories, where they are planted out in the border of the house; there they become bushy plants and bloom perfectly.” (*Bot. Reg.*, May.)

Both the *P. rosea*, *decussata* and this species are plants that we would recommend to the notice of every lover of green-house plants.

Fabacæ or Leguminosæ.

PULTENÆA

**obcordata*. A pretty species under this name, raised from Van Dieman’s Land seeds, lately flowered in the garden of Robert Mangles, Esq. “ It is a hardy green-house shrub, of the easiest cultivation.” (*Bot. Reg.*, May.)

ACACIA

**cultriformis* *A. Cunningham*. “ This species has flowered in the collection of Messrs. Rollissons, and proves a most charming conservatory plant, with quantities of clusters of yellow flowers, terminating branches covered with glaucous half rhomboidal leaves.” (*Bot. Reg.*, May.)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Astracææ.

ECHINACEA (A very objectionable name formed from the adjective *echinaceus*, bristly, in allusion to the sharp point of the scales of the receptacle, which bristle over the centre of the flower-buds of some species.) *Manch.*

Dicksoni Lindl. Mr. Dickson’s Echinacea. A frame perennial; growing about a foot high; with rose-colored flowers; appearing from August to September; a native of Mexico; cultivated in common garden soil; increased by seeds. *Bot. Reg.* n. s. 27.

“ A very showy perennial, growing about a foot high,” with rose-colored flowers, two and a half or three inches in expansion, having somewhat the appearance of a *rudbeckia*. It has dark spindle-shaped roots, which may be taken up after flowering in the autumn, and potted or placed in a box of dry sand or mould during winter, secured from frost and damp. It is of simple growth, as will be seen from the following remarks on its treatment:—“ The plant flowers from August to the end of September, in any good soil, particularly if a little peat and sand be added. Like many Mexican *Compositææ*, it flowers so late that it seldom ripens in the open border, but a few plants kept in the green-house will do so: it is only by seeds that the species can be increased with any certainty.”

“The seeds should be sown about the end of March, in a rich soil, on a nearly exhausted hot-bed, and treated like half hardy perennials; keeping them in pots the first season, as they will not flower before the second year. The seedlings must not be planted out in the open border before the middle of May.”

It will probably be speedily introduced by the seeds. (*Bot. Reg.*, May.)

Verbenàcæ.

This order is about to acquire considerable notoriety, from the many beautiful species and varieties of the genus, of which it is the type, that have been raised and still continue to be produced. No plant of the season has had a more ready sale, or been so universally admired as the *Verbena Tweedieana*, of which we have already said so much. Since our article was concluded we have flowered both of Mr. Hogg's new seedlings, and they are each beautiful plants, more particularly the new scarlet variety. We have not grown it sufficiently to ascertain its full character, but it can be classed as one of the handsomest of all that are known. The color is full as brilliant as the old *chamædrifolia*, and the umbel nearly as large and well formed as the *Tweedieana*. One excellent property is the long period to which its blossoms remain attached to the plant without fading: the *Tweedieana* fades much quicker than this. It is not very upright in its habit, though it has less of the trailing character than the *chamædrifolia*. It is about intermediate between the two.

Mr. Buist of Philadelphia has raised several new seedlings, among which is a white one, exceedingly elegant. The *V. incisa* and the old but pretty *V. erinoides* are supposed to be included. Mr. Brackenridge, Mr. Buist's foreman in the establishment, has promised us a description of all of them, and we shall therefore defer saying anything respecting them at this time.

We have raised a very handsome lilac one, from seeds from South America, quite distinct from anything which we have ever seen. The habit of the plant is erect and graceful, and in beauty will rank second to none of the purple ones but Mr. Hogg's *V. Arraniàna*, and in delicacy and clearness of color it surpasses the latter. We shall notice it again when it has flowered more freely, as at present it has opened but one cluster.

All the species now growing in the border are profusely laden with scarlet, crimson and purple flowers.

MONOCOTYLEDONOUS PLANTS.

Orchidàcæ.

CRYPTOCHILUS (The name refers to the “concealed lip or labellum.”)
sanguinea Wallich Blood-colored *Cryptochilus*. A stove epiphyte, growing six inches high; with scarlet flowers; appearing in June; a native of India. *Bot. Reg.*, n. s. 23.

“A very pretty species, with roundish pseudo-bulbs forming

tufts, and producing each a single broad coriaceous recurved leaf." The flowers are disposed in a terminal spike, and are of a brilliant scarlet. It is a native of rocks in the northern provinces of India. Dr. Wallich found it only once, and then in a single spot on stones on the summit of Chandagherry, a mountain in Nepal. It is cultivated like other epiphytes, and is a very splendid plant. (*Bot. Reg.*, May.)

EPIDENDRUM

ochraceum Lindl. Yellow-ochre-colored Epidendrum. A stove epiphyte; growing six inches high; with yellowish-orange flowers; appearing in August; a native of Mexico; introduced in 1836. *Bot. Reg.*, n. s. 26.

A pretty little plant, with slender racemes of ochre-colored flowers, small pseudo-bulbs and linear acute recurved leaves. It does best tied to the branches of an old apple or pear tree, somewhat shaded from the sun and covered with moss in a moist stove. It is an inhabitant of several parts of tropical America. (*Bot. Reg.*, May.)

**cucullatum* An epiphyte, with small white flowers; growing a foot high; a native of Para. *Bot. Reg. Mis. Not.* 47.

"One of the most unattractive of the genus," with small white flowers. (*Bot. Reg.*, May.)

**longicollis* An epiphyte; a native of Demarara.

"Allied to *E. nocturnum*, but much less handsome." The sepals and petals are pale yellow. (*Bot. Reg.*, May.)

**altissimum Bateman* *Bot. Reg. Mis.*, Not. 61.

A beautiful species, and so fragrant as to scent the air, in their native situations, "to an extraordinary and almost unreportable degree." (*Bot. Reg.*, May.)

CLEISTOSTOMA

**tridentata* An epiphyte; a native of New Holland. *Bot. Reg. Mis. Not.* 46.

"A small flowered epiphyte, of no beauty." Flowers of a dull, dirty, reddish white." (*Bot. Reg.*, May.)

PLEUROTHALLIS

**ophiocéphala Lindl.* An epiphyte; growing six inches high; a native of Mexico. *Bot. Reg. Mis. Not.* 48.

Of no beauty, "but remarkable for having one solitary flower protruding from the base of each leaf, and so similar to the head of a snake with the jaws open, that it is difficult at first sight to believe it really a flower that one looks upon. To add to the deception, the small labellum is shaped like a tongue, and moves up and down when you peep into the mouth of the flower." (*Bot. Reg.*, May.)

DENDROBIUM

**candidum Wall.* An epiphyte; growing a foot high; with white flowers; a native of India. *Bot. Reg. Mis. Not.* 54.

Flowers pure white, and "most exquisitely scented." (*Bot. Reg.*, May.)

VANILLA

**bicolor Schomburgk* An epiphyte; a native of Guayana. *Bot. Reg. Mis. Not.* 58.

"A deliciously fragrant climbing epiphyte," with flowers full

three inches long, and dull red sepals and petals, and a cream-colored lip. (*Bot. Reg.*, May.)

ONCIDIUM

**stramineum* *Bateman* A stove epiphyte; with straw-colored flowers; a native of Vera Cruz. *Bot. Reg. Mis. Not.* 63.

"A beautiful stove epiphyte, with pale straw-colored flowers about as large as those of *O. flexuosum*. (*Bot. Reg.*, May.)

Liliæceæ.

ORNITHOGALUM

montanum *Gussone* Mountain Ornithogalum. A green-house or frame bulb; growing about a foot high; with white flowers; appearing in April and May; a native of Sicily; cultivated in rich sandy loam; increased by offsets. *Bot. Reg. n. s.* 23.

A pretty species of the *Ornithogalum*, with spreading panicles of greenish-white flowers. It is a common plant in the mountainous pastures of Sicily, flowering in April and May. In England it is a hardy bulb, and may prove so in our gardens. It is easily increased by seeds or offsets. (*Bot. Reg.*, May.)

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Emasculation of the Vine, or a method to produce Grapes without pips.—Some of your readers will possibly feel startled at the above designation, and many will disapprove of a term used in surgery to an operation on the vine, at variance with received opinions on the physiology of plants. But, to your more ingenious readers, the experiment will offer a new source of amusement, and perhaps may lead to useful investigation. In Portugal and other places I frequently met with orange and lemon trees which produced fruit divested of pips. Upon inquiring for the cause, no one was able to enlighten me, further than that the effect was accidental. And I make no doubt that mere accident, (such as the perforation of the plant, when young, by a worm, or a blow from a spade or hoe, when first planted,) did produce the same effect on those trees which it would have produced upon the vine, if done purposely, and with a view to the same result.

For this ingenious operation on the vine I was indebted, some years ago, to a horticulturist of great eminence in Paris. It is as follows:—

When the sap is rising in March, make a deep incision in the heart of the bearing branch, from whence extract, with a grafting knife, about a quarter of an inch (1 centime, 5 lignes,) of the pith, (moelle,) close under the first bud (nœud,) at the stem, (souche.) The wound is then to be bound up with worsted, like a graft. This may be removed at the end of three weeks.

If the operation be performed with care, after some experience, the result will be the production of grapes without pips. (*Hort. Jour.*)

New method of applying Sulphur to plants, in a liquid form.—The

“flowers,” or the finely lœvigated stone brimstone, are with great difficulty mixed with water; and yet it is sometimes highly desirable to throw a shower of sulphurated water over the entire foliage of a vine or peach tree. This object can be readily effected by the aid of a little gum tragacanth, (gum dragon, as it is vulgarly called.) Half an ounce of the powdered gum, which can be procured very cheaply of any druggist, may perhaps suffice for two or three years. To a table spoonful or two of flowers of sulphur, in a wedgewood mortar, add three or four grains (or a quantity that would scarcely cover one half of a four-penny piece,) of the tragacanth; rub them together, dropping in a very little water: work these materials with the pestle till an even pasty mass be produced; then add water, to bring the sulphur to the consistency of cream; and in this state it will unite with any quantity of water; or, in other words, the particles of the sulphur will become diffused throughout the whole bulk, and can then be taken up by the syringe. The sulphur, it is true, will be deposited in time, but vegetation will bring it again to that state of diffusion in which the particles may be thrown on the plant; to which, also, they remain *fixed*, in situations wherein they may exert their utmost energy, whether that be a preventive or remedial. (*Id.*)

ART. II. Foreign Notices.

ENGLAND.

Value of Tulips.—A beautiful new bizarre tulip, called the Everard, has been lately figured in the *Horticultural Journal*. The whole stock, consisting of seven roots, has been purchased by Mr. Glenny for 140 guineas, (nearly \$700,) who proposes to divide the roots with any person wishing to possess it. The whole stock was purchased, as the individual who raised and broke it refused to sell a single hurb. It is stated as a singular fact that this variety was perfectly broken the first time the seedling bulb bloomed, and among seedlings, which, from the period of original growth, were kept separate. There is therefore not a breeder of it in the country. (*Gard. Gaz.*)

The white Carrot.—A new variety under this name is said to have been lately produced. In color it is something whiter than the parsnip; in flavor much more delicate than the orange carrot. Seeds have been advertised by the London seedsmen.—*Id.* [We hope this variety will be speedily introduced by our seedsmen.—*Ed.*]

London Horticultural Society.—The anniversary meeting of this Society was held on Tuesday, May 1st, 1838. Mr. Knight, the President, had arrived in town, but the state of his health prevented him from attending (see an obituary notice in another page,) the meeting.

The auditors of the treasurer's accounts made a report of the financial state of the Society, which gives a surplus over the expenditures of £1557, 15s. 2d. The receipts for exhibitions, &c. amounted to £5705, 3s. 2d.

The outstanding debt of the Society is now reduced to £12,898, 00s.

9*d.*, of which £10.350 is on bond: to meet this, there remains due to the Society on open account, (including the cash balance,) £6204, 16*s.* 10*d.*, besides the other assets of the Society, consisting of the house in Regent Street, with the furniture, the library, the garden, and various property therein, of which the auditors have not thought it necessary to call for any special estimates, as it must be sufficiently obvious that the intrinsic value of such assets, without reference to their use and necessity in forwarding the objects of the institution, very considerably exceeds the liabilities of the Society.

The following officers were chosen for the present year:—T. A. Knight, Esq., President; Thomas Edgar, Esq., Treasurer; and Geo. Bentham, Esq., Secretary. Sir Oswald Mosley, Bart., Sir Charles Lemon, Bart., and Henry Bevan, Esq., were also elected in the council, in the place of Sir Henry Willock, R. H. Solley and J. R. Gowan, Esqrs.—*Id.*

Autumn Grafting.—Some notice was made in Sept. 1837, of a mode of autumnal grafting, with a view to bring the theory to the test. Many trials have been made of the system, and, among others, that of two scions of the beurré d'Arenburg pear inserted in the rind of small quince stocks, not so large as a lead pencil of the ordinary size. One of them adapted itself well, and appeared to succeed; the stocks, however, perished during the rigor of the late winter: they had been transplanted the year before, and had little hold of the soil;—the experiment, therefore, was frustrated. A calabasse scion was, as stated, let into the stock of a dwarf standard pear, by mid-grafting, on the same day, August 17th. This tree had been removed in 1835, and therefore was not luxuriant, though young and healthy. The scion succeeded perfectly, and now has on it two as vigorous growing buds, an inch long, as any of those developed by the stock. This fact is interesting, and it may lead to the gain of time, if it do no more. The gentleman who recommended the practice mentions September as the season of autumnal grafting. It is highly probable that any month of the growing season, from February to October, may be favorable, if the condition of the scion and stock be suitable, the weather propitious, and the operation adroit.—*Id.* [We do not exactly understand what is meant by the calabasse method, as we did not see the notice alluded to. We think, however, that autumnal grafting will not do in our country, (especially performed late,) as our long and severe winters would undoubtedly destroy the shoots; but we should be glad to have the experiment tried.—*Ed.*]

Cultivation of the Tulip.—The taste for the growth of this gorgeous flower is on the increase. It is stated that the Duke of Devonshire is the first nobleman to patronize it, by possessing himself of a bed, and that it is probable he will not be content to remain second in quality to any one in England. (*Hort. Jour.*) [We should be happy to see the cultivation of the tulip taken up with more spirit by our amateurs and gentlemen interested in gardening. The more common, if not the more fanciful and costly varieties, should be found in every garden; and we shall endeavor to occasionally remind our friends of this fact, that they may have no complaint to make on their part. It is gratifying to know that there are already several fine collections about Boston and New York, and, another season, we trust we shall see an additional number.—*Ed.*]

New mode of cultivating Strawberries.—A paper was read before the London Horticultural Society, May 1st, 1838, on a new method of growing this delicious fruit. Many communications have been made on the subject. A great desideratum has been to keep the fruit clean, in order that it might be well flavored. The value of the fruit did not depend upon the size, as upon other qualities. The ordinary mode of

protection for this fruit harbored slugs, and, if the weather was wet, gave them a bad taste. If slates were placed round them they were kept clean, but the roots were rendered dry, and the same effect was produced by tiles and slates. The mode which the writer adopted was to set them in ridges about four feet six inches apart, and twenty-four inches apart, and from twelve to fifteen inches between the rows. Between and around these he placed pebbles, the convex surface of which allowed the rain to run between and penetrate to the roots, whilst at the same time it did not evaporate: the surface was kept clean, and there was no dust arising. The pebbles also became warm and reflected the heat of the sun, but they did not impede the growth of the runners. Some of Myatt's prospered well, as also Hautbois, although the stems are slender, and they generally fall to the ground, the pebbles being a support to them. (*Hort. Jour.*)

Phosphoric light emitted by Flowers.—In the garden of the Duke of Buckingham, at Stowe, on the evening of Friday, September 4th, 1835, during a storm of thunder and lightning, accompanied by heavy rain, the leaves of the flower called *Ænothëra macrocarpa*, a bed of which is in the garden, immediately opposite the windows of the manuscript library at Stowe, were observed to be brilliantly illuminated by phosphoric light. During the intervals of the flashes of lightning the night was exceedingly dark, and nothing else could be distinguished in the gloom, except the bright light upon the leaves of these flowers. The luminous appearance continued uninterruptedly for a considerable length of time; it did not appear to resemble any electric effect, and the opinion which seemed most probable was that the plant, like many known instances, has a power of absorbing light, and giving it out under peculiar circumstances. (*Mag. of Popular Science.*)

ART. III. Domestic Notices.

Caterpillars destructive to the Isabella grape.—A new foe seems introduced with the season, committing its ravages, among other subjects, on the fruit-stalks of the Isabella grape, where we have only noticed it, viz. a small white caterpillar, unknown to us in its insect form, which bites the peduncle half through, by which injury the entire branch falls. We hope some entomologist will give us the name of this little depredator.—*J. L. R., July, 1838.* [If our correspondent will send us one of these caterpillars, we will endeavor to procure some information respecting it.—*Ed.*]

Dr. Hosack's collection of Banksias.—We have understood that the rich collection of banksias, consisting of some very beautiful specimens, belonging to the late Dr. Hosack, has been purchased by Horace Gray, Esq., of Boston. They will be a treasure to any collection, and we are glad Mr. Gray, who has a fine large conservatory well adapted to their growth, has not let this opportunity pass of possessing himself of such valuable plants, which would otherwise, perhaps, have been scattered around in various gardens, and finally lost to the country. We shall endeavor to give some description of them at a future time.—*Ed.*

Use of Sea-weed for horticultural purposes.—We have been inform-

ed by a gentleman of New York that an amateur in gardening on Long Island late y tried the experiment of covering his beds of rhubarb with sea-weed, *fresh* from the sea, in order to preserve the moisture of the soil. He has found it to answer every purpose, and the rhubarb has grown with astonishing rapidity and vigor, while the plants in the neighboring gardens have been partially dried up during the prevalence of the late dry weather in that vicinity. It is not only excellent for this purpose, but it prevents all weeds from growing, and the salt with which it is naturally supposed to be saturated seems to increase rather than diminish the growth of the rhubarb. We hope the experiment will be tried by some of our friends in the vicinity of Boston, who will note the results and give us all the particulars. Perhaps it would be an excellent article to place around the roots of dahlias during the prevalence of dry weather.—*Id.*

Echinocactus Eyrièsi.—A plant of this charming species, in the collection of Mr. Leathe, Cambridgeport, is just now flowering, it being the second time it has produced blossoms the present season. In April it opened two or three flowers, and at the very moment we are writing this notice there are two fine large buds ready to expand. Its free blooming will render it extremely valuable, as many of the echinocactuses rarely display their blossoms.—*Id.*

Horticultural Society of Charleston, S. C.—The Horticultural Society of Charleston, S. C. has published the list of flowers, vegetables and fruits for which it proposes to offer premiums. A silver medal, or the same amount in money, is offered for the finest show of tulips, hyacinths, ranunculuses, pinks, &c. &c. Dahlias, roses, camellias, &c. are among the number of flowers. Of vegetables there are prizes for a variety of things, such as cauliflowers, rhubarb, celery, asparagus, and nearly all the more common vegetables. Strawberries, figs and papaw apples are among the number. This society is in a flourishing condition, from the efforts of some of its more active members, and we are glad to see such liberal premiums offered to induce growers to come forward and exhibit.—*Ed.*

Urèdo ròsæ seems very prevalent, this warm weather, on the calyx of *Ròsa álba*, both single and double, and attacks the upper portion with greater vigor than the under surface of the leaves, its usual field of operation. It is a pretty orange-colored fungus and parasite, of little injury, though rather disfiguring, to the plant.—*J. L. R., July, 1838.*

Training Isabella vines.—A correspondent of the *Cultivator* details the following mode of training the Isabella grape, (probably applicable to all American kinds.)

"I have had the Isabella grape in my garden since 1819; but the crop of fruit has not been good and full, oftener than once in three years. The failure has usually been caused by the *rotting* of the green fruit, about the time it attains its full size. Every means of preventing that I could find any where suggested has been fully tried, such as long and short pruning, and no pruning, thick and spare, upright and horizontal training; topping the fruit branches, thinning them out, plucking the leaves, &c., without any perceptible benefit.

"But having read or been informed, (I cannot say which,) that in the vineyards of Madeira the vines are trained on a horizontal arbor, about three feet high, in such a manner as completely to shade the whole ground, it occurred to me that it might be important, where the summer sun is very powerful, (as with us,) to shade the roots of the vines. To ascertain the effect of such a protection of the roots, in the fall of 1834 I pruned about twenty young vines, which had grown at random, so as to leave from five to eight branches, spreading all ways from the centre or root, like the spokes of a wheel, about four feet. These I tied up to stakes set in a circle around the vine, leaving the

branches from twelve to eighteen inches from the ground. The vines were left in this state to grow as they would, and by midsummer (1835,) they completely shaded the ground, for six or eight feet from the centre. *No fruit rotted on these vines.* The experiment was continued upon the same vines last season, and with *the same result.* During both seasons, the fruit on vines trained upon an upright trellis, (the roots of course exposed to the sun,) has been in a great measure *lost by rotting.*

“This experiment I should consider decisive but for one circumstance—the vines first mentioned were *young*, and the others *old*. Whether this has affected the result is yet to be determined.

“I ought perhaps to remark, (what I was not prepared to expect,) that the fruit ripened on the vines, shaded, as before described, a fortnight earlier than the others, and was in every respect better.

“*October 10th, 1837.*—The experience of another season gives the same result stated above, except that none of the grapes ripened, being destroyed by the frost October 4th—5th. To ascertain the effect of the vine’s *age* upon the fruit, I trained a vine upon a trellis, last spring, of the same age with those whose roots have been shaded, and the fruit upon it has been much mildewed and considerably rotted, while the fruit on the other vine has been bright and sound.”

Horticultural Society in Brooklyn, N. Y.—We are happy to learn from our friends in this city that it is the intention, among the amateurs and gentlemen interested in gardening, to get up a Horticultural Society. Now that the New York Horticultural Society is no longer making any exertions in the cause of gardening, it seems necessary that there should be one across the river. With such enterprising citizens as Messrs. Becar, Perry and others, we have no doubt but that their efforts will be crowned with success. We shall expect some of our friends will report to us the doings of the Society, the names of the officers, &c.—*Ed.*

Boccònia cordàta.—This is a very showy native perennial, growing about six feet high, with spreading panicles of singular looking flowers. The foliage resembles somewhat that of the *Sanguinària canadensis*, which belongs to the same order, *Papaveracæ*. It is a highly desirable hardy perennial plant.—*Ed.*

Catálpa syringefòlia.—A fine young tree of *Catálpa syringefòlia* was covered with flowers and rich foliage, this season, at the residence of D. Cummins, Esq., Salem, constituting a rare spectacle in these seasons of severe winter, through which few of our tender trees and shrubs can stand.—*X.*

Tropæolum tricolòrum, peregrinum, and several other species, have been and still are finely in flower in the collection of Mr. Buist, florist, Philadelphia, who has a fine stock of plants. We have heretofore noticed the elegance of all these species, and a fine opportunity now occurs to possess them.—*Ed.*

Tournefortia heliotropioides, a very pretty new plant, is offered for sale by Messrs. Mackenzie & Buchanan, florists, Philadelphia. It is somewhat similar to the well known and fragrant *Heliotropium*, and a very desirable plant.—*Id.*

Marchioness of Tavistock and Princess Victoria dahlias.—These two beautiful varieties, which were exhibited by Messrs. Hovey & Co. last season, and the merits of which, it will be recollected, were somewhat criticised in our Magazine, are likely to be shown in nearly all the stands the present season. This will seem, perhaps, singular, when the first was pronounced, by some growers, no better than the old *Beauty of Cambridge*. We shall probably notice both these kinds again, at a future time, and add something further in proof of the correctness of our remarks upon their properties.—*Id.*

Dahlias.—It is with much regret we learn that the dahlias, both in the vicinity of Boston and Philadelphia, are coming forward so slowly that it is somewhat doubtful if a larger part of the great number of plants which have been set out bloom at all, unless the fall should be extremely favorable and the frosts hold off longer than usual. Around Boston the plants are much infested with insects of various kinds, the most injurious of which appears to be the brown or turtle-backed fly. The red spider, thrips, &c. also attack them, but the fly seems to do the most injury. They puncture the stem from the root to the top of the plant, and it then assumes a hard knobby appearance; besides this, they perforate the tops of the young and tender shoots, which seems to poison the branch, as the centre shoot soon curls up, turns black, and directly after becomes hard, and the growth wholly stopped. We have observed them on the plants for several seasons, but not in numbers sufficiently abundant to do any injury. The present season, however, they appear to abound everywhere, and the tops of evening primroses, zinnias, China asters, marygolds, &c. have alike suffered from their ravages. As yet we have found no method to get rid of them otherwise than to pick them off by hand. But we hope some of our friends who are pestered with them will find out a way to destroy them more speedily. We have been promised a notice of this fly by that excellent entomologist, Dr. Harris. The extreme hot weather, together with the scarcity of rain, has affected their vigor very sensibly.

In Philadelphia the weather has been so dry and hot that the red spider has attacked the plants in great numbers. And up to this time, although many plants were set out early, not a good bloom has yet opened. We did not learn that the plants are troubled with the brown fly, but presume they are to a degree.

About New York the plants do not promise well, but appear to have suffered from drought, heat and insects.

Notwithstanding all these discouraging circumstances, we yet hope that the plants will be resuscitated: longer and cooler nights, with heavier dews, when the insects cannot work, are at hand, and they will probably regain somewhat, if not all, their usual vigor. A few copious showers, to saturate the soil, are also needed, to give the plants a sudden growth. Before our next we trust we may be enabled to give more gratifying information.—*Ed.*

The profession of the Agriculturist.—We have never met with anything more in unison with our own views upon what should constitute a real agriculturist, and the important station he holds in the community, than the following, extracted from the remarks of Dr. Graham before the health convention recently held in Boston. For the doctor's bran-bread theory we have not much respect; and this may be set down as one good thing among his many absurd notions which he has been so industrious in promulgating throughout the country. The remarks were appended to a resolution offered, "that a correct understanding of the science of physiology and of the laws of health would effectually promote the agricultural and horticultural interests of the community." We commend them to the perusal of every reader.

"The tilling of the ground is the most natural and the most noble, as well as the healthiest employment of man, and the greatest source of his subsistence and his comfort. Not only, according to sacred history, was the first of our race tillers of the dust of the earth, but every human being ever since, has been the offspring of the same mother earth: for we are all made of the same dust; all derive our material subsistence from the same bosom of nature. It is the dust of the earth, incorporated in the vegetable or the animal form, which constitutes our

nourishment, and is transmuted into our bodies, from the very commencement to the termination of our bodily existence. But both in its more primitive condition of inorganic matter, and in its various organic revolutions and changes in passing from the earth to the formation of our living bodies, the dust of which we are made is at every stage—in every form, continually subject to fixed constitutional laws, and hence there are fixed laws of relation between our living bodies and all the forms of matter by which we are sustained, and between these and the earth from which they spring, and of which they are composed. It is therefore an important truth, which human beings ought well to understand, that every thing which affects the quality of the soil and the character of its produce, has a most intimate relation, not only to our health of body, but to the general well being of man. Our wheat, our rye, our corn, our potatoes, and every other vegetable substance entering into the food of man, are rendered more or less healthful according as our agricultural and horticultural operations are more or less in conformity with the physiological laws of our nature.

“But interesting as this topic is, I must not on the present occasion extend my remarks. Yet I could wish that every tiller of the ground throughout the world were an enlightened—a thoroughly scientific physiologist. The importance of a liberal education in this class of men has been too greatly overlooked; and hitherto it seems generally to have been thought that the cultivation of the soil requires but a small stock of knowledge, and no scientific attainments; and hence, even in our own agricultural country, the vocation and standing of the farmer have been too commonly considered as less reputable than those of the merchant, the professional man, &c. This is wrong—it ought not so to be. The cultivators of the soil ought always to be regarded as the true nobility of the country, and they ought, therefore, to be among the most intelligent—the most liberally educated—the most extensively scientific members of society. Geology, mineralogy, chemistry, meteorology, botany, zoology, physiology, and other natural sciences, are of more immediate interest to the tillers of the ground than perhaps any other men; and when things are rightly understood and rightly ordered, such qualifications will be the ordinary attributes of our agriculturists, and the tilling of the ground will be regarded as it should be, the noblest and most honorable employment of man.” (*Newspaper.*)

ART. IV. *Pennsylvania Horticultural Society.*

The monthly meeting of the Pennsylvania Horticultural Society was held on Tuesday evening the 17th July, in the hall under the Athenæum, Mr. Keating in the chair.

The committee on plants and flowers awarded the premium for the ten best varieties of carnations to Messrs. Mackenzie & Buchanan, at the Society's intermediate meeting on the 4th inst., two competitors.

The premium for the best American seedling carnation was awarded to Messrs. Mackenzie & Buchanan, at the Society's intermediate meeting on the 4th inst., two competitors.

The committee on fruits and vegetables awarded the following premiums at the society's intermediate meeting on the 4th inst.:—For the best quart of white currants to William Chalmers, gardener to Mrs. Stot, Turner's Lane, no competition; for the best raspberries, not less than three quarts, to do., no competition; for the best bush beans grown in Pennsylvania, to do., three competitors; for the best two quarts of red currants to James Beadle, gardener to Wm. Norris, Turner's Lane, three competitors; for the best early cucumbers grown in New Jersey, not less than six in number, to Hugh Hatch, no competition. An honorary premium of two dollars was awarded to Wm. Chalmers for some fine mazagan beans; likewise one to James Beadle, gardener to Mr. Norris, for the royal gage cucumber, being very large. For the best early squashes grown in New Jersey, not less than six in number, to George Reid, gardener to Henry C. Carey, no competition.

The committee on plants and flowers this evening awarded the premium for the best display of plants in pots to Robert Kilvington, gardener to Wm. Loyd, who exhibited *Eucòma punctàta*, *Agapánthus umbellatus*, *Stapèlia grandiflora*, *Fúchsia grácilis*, *Ardisia solanácea*, *Maurándya Barclayàna* and *Calceolària integrifòlia*.

The premium for the best bouquet was awarded to Robert Kilvington, gardener to Wm. Loyd, two competitors; and also an honorary one of two dollars to Mr. Kilvington, for a fine bouquet of native flowers.

The committee on vegetables awarded the following premiums this evening:—For the best early corn grown in Pennsylvania, not less than two dozen ears, to James Beadle, gardener to Mr. Norris, Turner's Lane, two competitors; for the best early carrots grown in Pennsylvania, not less than two dozen, to James Beadle, no competition; for the best melangena (egg plant) grown in Pennsylvania, not less than three in number, to James Beadle, three competitors; for the best tomato (love apple) grown in Pennsylvania, not less than one dozen, to Charles Conover, gardener to Mr. Isaac Philips, three competitors; for the best gooseberries, not less than one quart, to Robert Weston, gardener to Mrs. Roland, no competition; for the best display of vegetables, to Wm. Chalmers, and an honorary one of two dollars for some very fine squashes.

Robert Buist exhibited *Crinum scàbrum*, and cut flowers of six verbenas, including *Verbèna pulchélla*, *Tweedieàna*, *Meléndres*, [chamædrifòlia,] *Arraniàna*, new white species, and the purple of the garden, with sixteen fine varieties of double Prussian stocks.

Wm. Chalmers exhibited different kinds of beets, tomatoes, squashes, black currants, egg plants and artichokes.

Peter Fleming, gardener to Mr. Hanson, exhibited some very superior squashes.

Robert Weston, gardener to Mrs. Roland, exhibited the following very superior varieties of gooseberries:—New Jam, Ironmonger, Neal's white rose, Inwood's incomparable, Crown bob, Miss Bold, red Warrington, green Gascoigne, yellow amber and red Porterfield.

Wm. Hobson, Kingsessing, exhibited early corn and tomatoes.

July, with its vertical sun, has burnt up all the flowers, and dispersed our fair friends in various quarters in search of the cool breeze, when their appearance is so essential to support us under such melting days; but who can blame them for leaving the dust and turmoil of the city, when health-invigorating scenes can be so easily attained everywhere on our romantic streams and mountains. However, we will hail them on their return with a cheerful welcome, at our next September exhibition, and show them some things almost as pretty as themselves.

From the report, it will be seen that the plants were few in number;

but the vegetables exhibited at the different meetings were of first-rate quality and appearance. The carnations were extremely good, considering the intense heat. The raspberries of Mr. Chalmers were very superior, and so were the currants of Mr. Beadle. Mr. Weston's gooseberries were the best we have seen in this latitude, were large and fine flavored, fully ripe, with little or no mildewing.—*G. Watson, Recording Secretary, Philadelphia, July 20, 1838.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, June 30th, 1838.—Exhibited. Flowers: A most superb collection of roses, including many rare and beautiful varieties, from A. Aspinwall, Brookline; among them were the following:—Princess Caroline, Moore of Virginia, Belle Catel, striped Unique, Gen. Thiers, Neuville du monde, belle Henriette, Duke de Choisel, Cordon blanc, &c. &c.; (we have never seen so fine a display of roses: the specimens were remarkably large and beautiful.) Roses from M. P. Wilder, including several mosses, and the following other kinds:—striped Unique, Garnet striped, York and Lancaster, Village maid, (all four variegated ones,) Lettuce leaved, Triumph de Laffay, &c. &c.; also, pinks and pansies. Roses, from S. R. Johnson, among which were several Chinese and beautiful Noisettes.

From Mr. Walker, Chinese larkspur, *Clématis erecta*, *Campánula persicæfolia*, white and blue, *Lythrum verticillata*, phloxes, pansies, roses, and laced pinks. A double oleander, *Verbena Tweediana*, roses, larkspurs, &c. &c., from S. Sweetser. Several kinds of passion flowers, honey-suckles, roses, &c. &c., contained in a very large bouquet, from Messrs. Winship. Bouquet of flowers, containing dahlias, *Agapanthus umbellatus*, roses, &c. &c. from Dr. J. C. Howard. Bouquets from Wm. Kenrick, John Hovey, S. Walker, and Hovey & Co. From Wm. Meller, fine seedling pinks.

Fruits: From Mr. Vose, fine specimens of Methven scarlet and Downton strawberries. Methven scarlet strawberries, from J. L. L. F. Warren, fine specimens of Hovey's seedling strawberries, from Hovey & Co. Cherries from H. Edwards, Boston.

July 7th.—Exhibited. Flowers: *Magnolia glauca*, *Rhododéndron catawbiense*, *Cymbidium pulchellum*, *Gaillardia bicolor*, roses, &c. &c. from T. Lee. Seedling geraniums, some of them very good, and roses, from M. P. Wilder. A good specimen of the Greville rose, and other flowers, from Wm. Meller. Chinese roses in variety, from S. R. Johnson. Bouquets, from Dr. J. C. Howard, containing several dahlias. Bouquets from J. Hovey, Wm. Kenrick, S. Walker and Hovey & Co. Mr. Kenrick, among his specimens, displayed the Ohio lily, a very elegant plant.

Fruits: Apricots, from M. P. Wilder. A basket of grapes, (Miller's Burgundy,) very beautiful, from Dr. J. C. Howard. Methven scarlet strawberries, from J. L. L. F. Warren.

Vegetables: Beets, from S. Sweetser. Lettuce, from J. Hill of Groton. Early six-weeks beans, from J. L. L. F. Warren.

July 14th.—Exhibited. Flowers: Bouquets, containing, among oth-

ers, *Cimicifuga fœtida*, *Gaillardia bicolor*, *Lythrum verticillatum*, *As-trantia major*, Chinese larkspur, coreopsis, roses, and fine laced pinks; also, a beautiful specimen of *Yucca filamentosa*, from the open air, and a variegated monkshood. Sweet peas, carnations, fine pinks and bouquets, from Wm. Meller. Cut specimens of *Combrètum purpureum*, *Gloxinia maculata*, and *Cereus speciosissimus* and *Jenkinsoni*, from M. P. Wilder. Bouquets from Dr. J. C. Howard and Hovey & Co. A fine large plant of the single pomegranate, (*Punica granatum*,) and bouquets, from J. Hovey. Roses, pinks, carnations and cut specimens of the double pomegranate, from S. R. Johnson. A large bouquet, from Messrs. Winship, containing a great variety of flowers, of which we noticed *Yucca gloriosa*, double blue-bells, *Hoya carnosa*, *Clématis florida*, carnations, &c. &c.

Fruits: Red and white currants and red and white raspberries, from J. L. L. F. Warren. Black Hamburg and Miller's Burgundy grapes, very fine, from Dr. J. C. Howard. Excellent specimens of Downer cherries, from S. Downer. Gooseberries from J. Hovey. Gooseberries from J. G. Thurston, Lancaster.

July 21st.—*Exhibited.* Flowers: Fine bouquets, composed of handsome specimens of herbaceous plants, roses, *Asclèpias tuberosa*, &c., and a fine specimen of *Yucca filamentosa*, from S. Walker. Cut flowers of a double white oleander and carnations, from T. Mason. Double flowered pomegranate, roses, fine specimens of hollyhocks and carnations, from S. R. Johnson. Bouquet of flowers and a variety of carnations, from Messrs. Winship. Bouquet of flowers, containing dahlias, &c. from Wm. E. Carter, of the Botanic Garden. Bouquets and fine carnations, from W. Meller. Bouquets from J. Hovey. Bouquets from Hovey & Co.

At this meeting the prizes for carnations were awarded. The competitors were Messrs. S. R. Johnson, W. Meller, Winship and Mason. Messrs. J. W. Russell, J. Breck and W. E. Carter were appointed a committee of examination, and they awarded the prizes as follows:—

To Messrs. Winship, Brighton, for the best display, a premium of five dollars.

To T. Mason, Charlestown, for the best six specimen blooms, a premium of three dollars.

To W. Meller, Roxbury, for the best seedling, a premium of three dollars.

Fruits: Apples of the crop of 1837, well preserved; also, large white and red Dutch currants, and red and white gooseberries, from J. D. W. Williams. Handsome specimens of black Hamburg, Miller's Burgundy, and Chasselas grapes, white and red Antwerp raspberries and Dutch currants, from Dr. J. C. Howard. Black Hamburg and white Chasselas grapes, from J. Tidd. White and red currants and gooseberries, from J. Hovey. Red and white Dutch currants, from A. D. Williams. Pears, (unknown kind,) from the green-house of E. Breed, Charlestown. Red seedling currants, very handsome, and the following gooseberries, viz. Hopling's globe, green Gascoigne, and Lancaster Lad, from S. Walker.

At this meeting, which was held by adjournment, some preparation was made for the coming annual meeting of the Society, which we shall notice in our next. Committees were chosen.

ART. VI. Faneuil Hall Market.

	From	To		From	To
<i>Roots, Tubers, &c.</i>	\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>	\$ cts.	\$ cts.
Potatoes, old :			Squashes:		
Common, { per barrel,	1 00	1 25	Early Bush, per dozen,	10	12½
{ per bushel,	50	—	Long Summer, per dozen,	12½	25
Chenangoes, per bushel,	75	—	Autumnal Marrow, pr pound	3	4
New, per bushel,	—	—	West India, per pound,	3	—
Common, { per barrel,	2 25	—			
{ per bushel,	1 00	—	<i>Fruits.</i>		
Turnips, new:			Apples, dessert, new :		
Common, { per bushel,	1 00	—	Common, { per barrel,	—	—
{ per peck,	31	—	{ per bushel,	1 00	1 50
{ per bunch,	6	—	Sweet apples, per bushel,	1 50	—
Onions, new:			Pears, per half peck:		
red, per bunch,	6	8	Juncating,	25	—
white, per bunch,	4	6	Sugar-top,	37½	50
Beets, new, per bunch:			Common,	25	37½
Long red,	4	6	Peaches, per dozen,	1 00	—
Turnip rooted,	4	6	Apricots, per box,	37½	50
Carrots, new, per bunch,	6	—	Cherries, per quart,	8	12½
Horseradish, per pound,	8	12	Gooseberries, (ripe) per quart,	20	25
Radishes, per bunch,	3	4	Currants, per quart:		
Shallots, per pound,	20	—	Red,	8	12
Garlic, per pound,	12	—	White,	8	12
<i>Cabbages, Salads, &c.</i>			Red, per bushel,	2 50	3 00
Cabbages, per dozen :			Blueberries, per quart,	8	10
Early York,	50	75	Whortleberries, per quart,	10	12
Early Dutch,	50	75	Blackberries, per quart,	12½	—
Savoy,	75	—	Mulberries, per quart,	—	—
Cauliflowers, each,	25	37½	Raspberries, per quart:		
Brocoli,	25	37½	Red Antwerp,	25	—
Lettuce, per head,	3	4	White do.,	25	—
Beans:			Franconia,	25	37½
String, per half peck:			Pine-apples, each,	12½	25
Marrow,	12½	—	Grapes, hot-house, per lb:		
Cranberry,	10	12½	Black Hamburg,	1 00	—
Shelled, per quart:			White sweet-water,	75	—
Common,	10	12½	Green grapes, per peck,	37½	—
Peas:			Watermelons,	20	37
Marrowfat, { pr bushel,	1 50	—	Cucumbers, per dozen,	4	6
{ or sugar, { pr peck,	37½	50	Tomatoes, per dozen,	25	—
Corn, per dozen:			Cranberries, per peck,	1 00	—
Common,	10	12½	Oranges, common, per doz.	37½	75
Sweet,	20	25	Lemons, per dozen,	20	25
Cucumbers for pick'g, pr hundred	12½	20	Cocoanuts, each,	5	6

REMARKS.—Another month has passed, and the season has so far advanced, that there is now a fine supply of nearly all the products of the garden. Our last report was congratulatory of the propitiousness of the season, with anticipations of a rich and plentiful harvest. At the moment we now write, the earth is suffering for want of rain—scarcely more than an inch having fallen since the latter part of June; but, with few exceptions, unless the drought should continue for a long time, we may again be thankful, that, by a kind providence, there is yet every hope of the husbandman's reaping richly for his labor.

The summer has probably been much the warmest for several years. Every crop has looked excellently till within a few days; but they now show some signs of suffering. Potatoes, in particular, in situations at all dry, have been the most affected. Corn looks well, and an immense quantity will probably be produced.

New potatoes have been brought in tolerably freely and of fair quality, though wanting in size. Early crops have been cut short, and the late ones will be, in the vicinity of Boston, unless there should be rain soon. Old potatoes have gone up, and now sell at quotations. Turnips plentiful but rather poorer than usual. Of onions there is a tolerable stock, and probably an abundance will be brought in. Beets and carrots abundant; the old crop is all gone. Radishes still come to hand. Of cabbages there would have been an immense stock but for the drought: they are now abundant, but the heads small. Cauliflowers and brocolis occasionally come to hand. Rhubarb is about done for the season. String beans of several kinds, and the common shelled, are now brought in. Peas have suffered more than any other crop from drought, and prices have been well sustained. Tomatoes raised in the vicinity are now tolerably plentiful. Corn is good, of either kind; it comes forward, however, so rapidly, that it soon gets to be past eating. Cucumbers for pickles cheap and unusually abundant. Of squashes there is a great supply of both summer kinds, and the autumnal marrow have already been received, of fair size and nearly fully ripened; they command good prices. Some West Indias yet remain on hand; the crop of winter squashes promises to be greater than for some years past.

The stock of fruit is large: apples are very plentiful for the season; the large sweets were received from New York. Pears were, there is no hesitation in saying, never brought into our market in such abundance: they are also of handsome appearance. Cherries are about done, with the exception of a few mazzards. Forced peaches have made their appearance, and apricots from the open air. Gooseberries and currants have been injured by the dry weather. Raspberries have been quite plentiful until within a day or two, when they have fallen off very suddenly. Blueberries and other kinds yet command good prices. The stock of pine-apples is getting small. Grapes are more abundant as the season advances. A fine lot of watermelons, from Virginia, arrived this week. Cranberries are not yet all gone. Of cucumbers immense quantities have been sold; there has not been such a season for this excellent vegetable for several years. Oranges and lemons remain the same. Sales brisk as could be expected.—*Yours, M. T., Boston, July 23d, 1838.*

ART. VII. Obituary Notice.

THOMAS ANDREW KNIGHT, Esq.—We had scarcely time or room in our last to notice the death of Mr. Knight at length. We now present our readers with the following obituary notice, copied from the *Gardener's Gazette*. Appended to it are all the papers which Mr. Knight has written on the subject of gardening.

The late Thomas Andrew Knight, Esq.—This estimable man, known for so many years as the President of the Horticultural Society of London, expired on Friday last, after a short illness, at the house of his daughter-in-law, in Upper Seymour Street, at the advanced age of seventy-nine. He arrived in London on the evening of the 30th of April, in a tolerable state of health, for the purpose of attending the anniversary meeting of the Horticultural Society, on the following day, on which occasion he has, with very few exceptions, presided, since his first becoming the president, in 1811; but the fatigues of the journey, combined with the debility consequent upon his advanced years, pre-

vented his attendance. It was generally remarked by those who had the opportunity of seeing him at the preceding anniversary, that that occasion would be his last; a prediction which has been too truly realized, for the society of which he was so long the distinguished head. In their president, the Horticultural Society has lost the principal if not the sole tie which attached them to the republic of science, and have probably met a loss they can never compensate. In the future ill-assorted mass which compose their transactions, the hand of the master will be no longer recognized; and death has struck a blow that will do more to annihilate the sophistry and imbecility of their management, than any other event that could possibly have happened.

Mr. Knight was born at Wormeley Grange, in Herefordshire, in 1759. His father, be it observed, was a man of much learning and acquirements. Having great power of mind, and living in an extremely quiet and sequestered spot, he was supposed, by his ignorant neighbors, in their language, "to know every thing." He died at an advanced age, when Mr. Knight was an infant; and, as an evidence of the respect his knowledge obtained him, whenever his son sought, in childhood, for information upon any unusual subject, he was told "that his father would have answered him, but that nobody else could." Being born in the midst of orchards, he observes, "I was early led to ask whence the varieties of fruit I saw, came, and how they were produced. I could obtain no satisfactory answer, and was thence led first to commence experiments, in which, through a long life of scarcely interrupted health, I have persevered, and probably shall persevere, as long as I have the power."

Mr. Johnson, the author of a work on English gardening, published in 1829, thus sums up the character of this individual:—"If the question were put to me, who is the most scientific horticulturist now living? who unites to a knowledge of the practices of gardening the most perfect knowledge of the sciences that assist it? which of living horticulturists has conferred the greatest benefits upon our art? I should quote Mr. Knight, in reply to them all. Whether we follow him in his researches as a physiologist, in his luminous observations and discoveries respecting the sap of plants; as a general cultivator in the numerous papers on every branch of horticulture in the transactions of the Society of which he is President, and especially in the raising of improved fruits and culinary esculents, we find in all, the most ample justification of our opinion, that he is the first horticulturist of our times. Nor is he eminent alone in the higher walks of horticulture; for, at Downton Hall, he demonstrates that he is capable of securing the correct performance of every detail of gardening."

Mr. Knight was one of the earliest promoters of the Horticultural Society, his name being inserted in the charter of incorporation first granted to that body. On the death of Lord Dartmouth, the first President, in 1811, he was elected to fill that office, which he held to the period of his decease. Until even the later period of his life, he was a constant, and almost the universal contributor to the transactions of the Society, where his death will prove a great chasm. Although distinguished particularly for his attention to fruits, he was well versed in every department of practical horticulture; and, if his researches in vegetable physiology have not tended much to the improvement of this art, they show proofs of enlarged thought. His fortune was not princely, but his gifts to the promotion of science were munificent, and his domains in Herefordshire displayed a very interesting development of the principles of modern horticulture.

Mr. Knight was the author of the following works, independent of his extensive contributions to the Transactions of the Royal and Horticultural Societies. The following is a list of the former:—

A treatise of the culture of the Apple and Pear, and on the manufacture of Cyder and Perry. London, 1767, 12mo.

Some doubts relative to the efficacy of Mr. Forsyth's plaister in renovating Trees. London, 1802, 4to.

Pomona Herefordiensis, or a descriptive account of the old Cyder and Perry Fruits of Herefordshire. London, 1809, 4to.

A letter on the origin of Blights, and on raising late crops of Peas; appended to Sir J. Banks's Essay on the Mildew. London, 1806, 8vo.

The principal part of his communications are, however, contained in the Transactions of the Horticultural Society. On March 14th, 1814, its gold medal was presented to him for his various and important communications to the Society, not only of papers printed in their Transactions, but of grafts and buds of his valuable new fruits. We give a list of his various communications to the Society, the first of which heads the first volume of the Transactions.

Introductory remarks relative to the objects which the Horticultural Society have in view. Read April 2, 1805.

Observations on the method of producing new and early fruits. Read Nov. 4, 1806.

On raising new and early varieties of the potato, (*Solanum tuberosum*.) Read Jan. 6, 1807.

On the advantages of grafting Walnut, Mulberry and Chesnut trees. Read Jan. 6, 1807.

On a new method of training Fruit Trees. Read April 5, 1808.

A description of a forcing-house for Grapes, with observations on the best method of constructing them for other fruits. Read May 9, 1808.

On the proper construction of hot-bed Frames. Read March 7, 1809.

On the management of the Onion. Read March 7, 1809.

An improved method of cultivating the Alpine Strawberry. Read April 4, 1809.

On some new varieties of the Peach. Read May 2, 1809.

A short account of a new apple, called the Downton Pippin. Read May 2, 1809.

On a mode of training Vines. Read Nov. 7, 1809.

On a new variety of Pear. Read Jan. 2, 1810.

On Potatoes. Read Feb. 6, 1810.

A new and expeditious mode of Budding. Read March 6, 1810.

On the best method of constructing a Peach-house. Read April 3, 1810.

On the cultivation of Horse-radish. Read June 5, 1810.

On the cultivation of the Potato in hot-beds. Nov. 6, 1810.

A concise view of the theory respecting vegetation, lately advanced in the Philosophical Transactions, illustrated in the culture of the Melon. Read Jan. 2, 1811.

A short account of some Apples and Pears, of which grafts were communicated to the members of the Horticultural Society. March 5, 1811.

A new method of Grafting. June 4, 1811.

On some early varieties of the Potato, and the best method of forcing them. Dec. 3, 1811.

On the advantages of employing vegetable Manure in a fresh state. Jan. 6, 1812.

On facilitating the emission of Roots from Layers. Feb. 4, 1812.

Some account of two new varieties of Grapes, each bearing branches of different colors. Feb. 4, 1812.

On the transplantation of Blossom Buds. March 3, 1812.

- On an early variety of Grape from Amiens. March 3, 1812.
- On the proper stock for the Moor Park Apricot. May 12, 1812.
- On inarching leafless branches of Fruit Trees. June 2, 1812.
- On the prevention of the disease called the Curl, in the potato. Feb. 2, 1813.
- On the culture of the Mulberry. Feb. 2, 1813.
- On the early puberty of the Peach tree. March 2, 1813.
- On the culture of the Pear tree. May 18, 1813.
- On the prevention of the Mildew in particular cases. May 4, 1813.
- On the culture of the Shallot, and some other bulbous rooted plants. December 6, 1813.
- On the propagation of the Mulberry tree, by cuttings. March 1, 1814.
- On the beneficial results of planting Potatoes which have grown late in the preceding year. April 5, 1814.
- On the application of Manure in a liquid form to plants in pots. May 17, 1814.
- On the ill effects of excessive heat in forcing-houses during the night. June 17, 1814.
- An account of two varieties of Cherry raised at Downton Castle. Nov. 1, 1814.
- An account of a new variety of the Peach. Jan. 3, 1815.
- On the want of permanence of character in varieties of Fruit when propagated by grafts and buds. April 4, 1815.
- On the mode of propagation of the *Lycoperdon cancellatum*, a species of Fungus which destroys the leaves and branches of the pear tree. Dec. 5, 1815.
- On the preservation of Fruits during winter and spring. Jan. 2, 1816.
- On the effects of different kinds of Stocks in grafting. Feb. 6, 1816.
- Some account of three new Cherries, the Elton, black Eagle and Waterloo. March 5, 1816.
- An account of three new Peaches. April 2, 1816.
- On the culture of the Peach and Apricot on Espalier Trees. April 2, 1816.
- On the ventilation of Forcing-houses. May 7, 1816.
- Upon the advantages of propagating from the roots of old ungrafted fruit trees. December 3, 1816.
- On the means of preserving Brocoli in winter. February 4, 1817.
- Observations on the Verdelho Grape. March 4, 1817.
- Upon the proper mode of training the Peach tree in cold and late situations. May 6, 1817.
- Observations on the proper management of Fruit trees which are intended to be forced very early in the ensuing season. June 3, 1817.
- An account of a Peach tree produced from the seed of the Almond tree, with some observations on the history of the Peach tree. October 7, 1817.
- On the best mode of pruning and training the Mulberry tree, when trained to a wall in a cold climate. January 6, 1818.
- Upon the variations of the Red Currant when propagated by seed. Feb. 3, 1818.
- Upon the propagation of varieties, of the Walnut tree by budding. April 7, 1818.
- On a method of forcing Rhubarb in pots. May 5, 1818.
- Upon the pruning and management of transplanted standard trees. June 2, 1818.
- Description and account of a new early black Cherry. August 4, 1818.

Description of a new seedling Plum.

Upon the variations of the scarlet Strawberry, when propagated by seeds. August 4, 1818.

Upon the preservation of Fruits from Wasps. Feb. 2, 1819.

On training the Fig tree. March 2, 1819.

On the superior healthiness of scions taken from the trunks of Apple trees, to those cut from the extremity of the branches.

Observations upon the most advantageous form of Garden Pots. May 4, 1819.

Upon the culture of the Guernsey Lily. Aug. 3, 1819.

Upon the effects of very high temperature upon some species of plants. Dec. 7, 1819.

Upon the means of giving strength to the stems of plants growing under glass. Jan. 18, 1820.

Upon the culture of the Pine-apple without bark or other hot-bed. March 7, 1820.

On the most economical method of employing Fuel in heating the flues of forcing-houses. May 2, 1820.

Physiological observations upon the effects of partial Decortication, or Ringing the Stems or branches of Fruit trees. June 6, 1820.

Upon the culture of the Fig tree in the stove. July 18, 1820.

On the cultivation of the Cockscomb. Dec. 19, 1820.

Observations on Hybrids. Feb. 6, 1821.

Directions for preserving buds of fruit trees in a vegetating state when sent to considerable distances. April 3, 1821.

Upon pruning and training the Plum tree. April 17, 1821.

Upon the management of Fruit trees in pots. May 8, 1821.

An account of an improved method of raising early Potatoes in the open ground. June 5, 1821.

On grafting the Vine. Sept. 18, 1821.

On the cultivation of the Pine-apple. Nov. 6, 1821.

Observations on the accidental intermixture of character in certain fruits. Jan. 16, 1820.

Notice of a new variety of *Ullmus suberosa*, and of a successful method of grafting slender scions of trees. March 19, 1822.

Upon the advantages and disadvantages of Curvilinear Iron Roofs to hot-houses. Oct. 1, 1822.

On a new and improved method of cultivating the Melon. Nov. 15, 1822.

Observations on the Flat Peach of China. Jan. 1827.

An account of the injurious influence of the Plum Stock upon the Moor Park Apricot. April, 1823.

An account of some Mule plants. May 6, 1823.

Account of an improved method of obtaining early crops of Peas, after severe winters. May 23, 1823.

Remarks on the supposed influence of the Pollen in cross breeding, upon the color of the seed-coats of Plants, and the qualities of their fruits. June 3, 1823.

Account of a new variety of Plum called the Downton Imperatrice. Dec. 2, 1823.

Observations on the effects of age upon the fruit trees of different kinds, with an account of some new Nectarines, March 2, 1824.

On the preservation of Strawberry plants for early forcing. March 16, 1824.

On the protection of the Blossoms of Wall-trees. June 15, 1824.

On the cultivation of Strawberries. Read Dec. 21, 1824.

Upon the beneficial effects of protecting the Stems of Fruit trees from frost in early spring. Read Feb. 1, 1825.

An account of a method of obtaining very early crops of the Grape and Fig. Read March 1, 1825.

On the cultivation of Strawberries. Read May 17, 1825.

On the cultivation of the *Amaryllis sarniensis*, or Guernsey Lily. Read December 20, 1825.

On the transplantation of Plants with spindle-shaped roots. Read Feb. 7, 1826. (*Gard. Gaz.*)

HORTICULTURAL MEMORANDA

FOR AUGUST.

FRUIT DEPARTMENT.

Grape vines will continue to need attention: syringe often if they do not yet show too much color, and give good airings. Tie up all shoulders, and be careful to cut away all useless and superfluous wood. Vines in the open air should not be allowed to run together, but should be kept pruned and nailed or tied up.

Strawberry beds may be made and planted this month. If the weather is dry defer it till early in September. Plants for forcing should be repotted.

Fruit trees should be budded this month.

Peach and other fruit trees, in pots, should be duly watered, and if the pots are plunged it will save labor.

FLOWER DEPARTMENT.

Geraniums should be headed down if it has not been done before this time. Propagate by cuttings.

Camellias should receive due attention, and be properly watered and syringed. Thin out the buds when too numerous. Inarching may be done this month.

Orange and lemon trees may now be budded.

Ericas may yet be propagated, and the old plants repotted.

Chrysanthemums should be repotted.

Carnations should be layed this month.

Mignonette should now be sown for winter blooming.

Roses should be budded this month.

Hydrangeas may be now propagated.

Oxalis Bowiei bulbs should be potted the latter part of this month.

Trevirana coccinea plants will need their final shifting.

Amaryllis belladonna may be potted for blooming soon.

Cactus cuttings may be now put in successfully.

Perennial plants, from seeds sown in June, should now be transplanted.

Verbenas: layers of all that are wanted for winter preservation should be taken off this month.

Primroses, from seeds, should now be potted off.

Dahlias will need considerable care. Give an abundance of water; keep the plants neatly and judiciously trimmed and tied up to the stakes. Mulching the roots will also be beneficial. If insects are troublesome destroy them by some mode. Look out for red spiders.

THE MAGAZINE

OF

HORTICULTURE.

SEPTEMBER, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Some account of the Miller Burgundy Grape.* By
Dr. J. C. HOWARD.

A FEW weeks since, some specimens of black Hamburgh, white Chasselas, and a grape, which I call Miller Burgundy, were sent by me to the weekly exhibition of the Horticultural Society. The name and character of the latter were doubted by cultivators as well as amateurs. Some writers on the culture of the vine, give this variety the name of Miller, from a person of that name in England, who first raised it from seed; but this is a great error; it derives its name from the French *Meunièr*, or Miller, the under side of the foliage being covered with a white down, resembling that which is upon the wing of the insect.

The grape is decidedly French in its origin, and was cultivated in France centuries before raised in England. It is one of the most prolific of the vinous tribe, and is, I believe, one of the grapes from which the finest Burgundy wine is made. It is thought by many to be a very hardy species, and to be of easy culture in the open air in this climate. Mr. William Prince, in his nomenclature of grapes, observes that it succeeds best in sandy and light soils, but will flourish in almost any open and dry situation; representing it as very hardy, easily cultivated, and ripening early in September. I very much doubt if it could be ripened in the open air, even in the most favorable position. Indeed, the time for growing the common sweet-water grape, or, in fact, any foreign grape, would seem to have passed by, with us so far north. The coldness of the nights and uncertainty of our climate prevent the perfection of the fruit, which requires an equal and warm temperature; hence the necessity of, at least, covering with glass.

My experience convinces me that the Miller Burgundy is not a hardy grape, as generally represented; for in my vinery it occupies a very favorable situation, being the second vine from the furnace; and even now, the 15th of August, there are yet unripe clusters on the vine. Fruit was gathered from black Hamburg vines beyond it, some time before the Burgundy was ripe; and forcing was commenced at an early period, which proves that it is not so easily grown as supposed.

It found its place in my vinery, by accident, supposing the vine to be black Hamburg; but so pleased am I with the character of the grape, that I would increase the cultivation of it. The improvement in the size and flavor of the grape, (which caused the doubt of the variety, which I before mentioned,) is to be attributed to the favorable situation in which it is placed, and the richness of the border, having the same care and treatment bestowed upon the other vines.

I think it a very safe and profuse bearer, and am satisfied that the Miller Burgundy would meet the hopes of the most zealous cultivator, with common care. It is very compact in its growth, and requires thinning freely to attain perfection, as do all foreign grapes.

Your obedient servant,

JOHN C. HOWARD.

Woodland, Brookline, August 15th, 1838.

ART. II. *On the Cultivation of Phlox Drummondii, Nicotiana longiflora, Petunias, and other Annuals.* By the EDITOR.

ANNUAL plants are among the most beautiful and interesting which enrich our flower-borders. Requiring generally but little care, and repaying, by the profusion of their blossoms, all the labor bestowed upon their growth, they have long been esteemed, and cultivated in every garden. How common is the marigold, the balsamine, the Marvel of Peru, and others of those old varieties, and yet how much they are valued: the greatest novice in gardening knows a balsamine and a marigold, for they are found in every village, decorating the cottage parterre, as well as the higher cultivated and more refined garden of the gentleman and amateur. They are always welcome, and remote will be the period that shall see these old friends driven from our gardens, no

matter how many novelties may be added to our already choice collections.

It may seem of trivial importance to devote much space to the notice of annual plants, having already made some observations upon the management of several of the most desirable and least known varieties, in our first volume. But, as many new plants have been introduced to our gardens since that time, we may be permitted to offer a few remarks upon the treatment of some of the choicer and less known varieties, that we may aid in their more general distribution and cultivation. Our Floricultural Notices record the introduction of nearly every plant into Britain; but many of those described as beautiful, and which seem worthy of possession, often prove to be mere weedy plants, with no attractions sufficient to claim a place in a garden where beauty, and not novelty, is desired. It cannot, therefore, but prove a source of interest to know what are valuable, and those cultivators who have grown any varieties sufficiently to deem them worth general dissemination, will undoubtedly confer a favor by recommending them for trial. Many kinds remain neglected for a long time, from the want of such information. The first plant we shall mention is the

Phlox Drummondii.—This is an annual species of the *Phlox*, a native of Texas, discovered there by Mr. Drummond, and introduced by him to England in the spring of 1835, where it flowered in the fall of the same year, in the garden of Dr. Neill, of Canonmills Cottage, Edinburgh, and was figured in the *Botanical Magazine*, t. 3441. It is noticed in our II., p. 62. It has also been figured in *Paxton's Magazine of Botany*, and again noticed by us, respecting titles of works, in our last volume, p. 301.

Seeds of this species were, we believe, first brought out from London, in the spring of 1836, by Mr. Wilson, of Albany, who raised plants from the same. From the nursery of Buel & Wilson it was disseminated among the New York and Philadelphia nurserymen. The first time we had the pleasure of seeing it in bloom was at the exhibitions of the Massachusetts Horticultural Society, last fall, when specimens were presented by Mr. Johnson, of Charlestown, which commanded universal admiration. Seeds have, we think, been received the past spring from several sources in London. So far as we have grown the plants, their treatment may be detailed as follows:—

The plants may be raised from seeds or from cuttings with facility; but, as the plants are very shy in ripening their seeds, cuttings seem to be a more ready and expeditious means of procuring young and thrifty plants. Seeds should be sown in a pot or pan, in a light sandy soil, in the month of April or May, and when the plants have three or four leaves, they may be potted off

singly into thumb-pots in the same soil, mixed with a very small portion of leaf mould. These should be shifted about once a month or so, until they are in number four or five pots, when they may stand in them to flower, or be removed to the border. The cuttings may be put in at almost any season, though May seems to be a preferable month; take them off from two to three inches long, and place them in sand under a bell-glass; and if early in the spring, the pots may be placed on a declining hot-bed; or they may be placed in a green-house or frame, if the latter is not too damp. If the cuttings show any signs of mildewing, which we have found they are apt to do, the best remedy is to dust them with a little sulphur, and allow the glasses to remain off an hour or so in the morning. When the cuttings are rooted, which will be in the course of a fortnight, or twenty days at the most, they may be potted off singly into the smallest pots, and treated in the same way of seedlings. We have attempted propagation by layers, but have not succeeded.

If it is desirable to grow the plants in pots, they should be regularly shifted as they fill the pots with roots, and the branches should be trained up to a neat stake: they will flower abundantly. When the plants are turned into the border, there is no particular care requisite, otherwise than to choose a good soil, which, if not so, should be prepared, and a proper situation, one not too moist or too dry, but midway between these two extremes. The soil which seems to suit them is a sandy loam, enriched with fully decomposed manure. Tie up the plants as they proceed in growth, or the lateral shoots will fall to the ground, and the beauty of the flowers soiled and marred by the rain and the dust.

The seeds do not ripen freely, and but very few can be saved with the greatest care; but as plants are raised from cuttings with such facility, this is of little consequence, otherwise than as a preventive to its quicker distribution.

There seems to be some care requisite to keep the plants through the winter, if, from circumstances, no seed is ripened. This may be either in a frame or green-house, or, in want of either, a parlor: but the situation should by no means be damp. A cultivator lost his whole stock, which was treated similarly to the carnations, an abundance of plants of which were in the same frame, and were kept well. Undoubtedly a green-house is the safest place. Too much moisture and a low temperature, at this dormant season, do not agree with the plants. Water should be administered with a careful hand.

There are several varieties of this phlox, which have been produced from seed in Britain. We have seen the following six enumerated:—*Venustum*, a most beautiful rose color, having a dark centre; *formosum*, lilac, red-eye, very large round flower; *pulchellum*, very dark velvet crimson, black centre, round flow-

er; bellissima, lilac, with very large crimson eye; speciosa, very dark scarlet crimson, rather star shaped, darker centre; carnascens, a light rosy pink. The parent species is of a bright rosy red, a small and delicate eye, and a flower about the size of the common *P. repens*. We believe Mr. Lee, of Brookline, has a seedling raised from a few seeds received from London the past spring, which is very dark and a beautiful variety. We hope that plants will be perpetuated by cuttings.

A bed, containing as many varieties as we have just enumerated, would be a most brilliant show, and no doubt a greater number might be raised by impregnation and a judicious intermixture of colors, after a few distinct ones have been produced accidentally. We esteem the parent species as one of the handsomest plants that has been added to our annuals for a long time, and worthy of universal cultivation, either in the green-house or the open border.

We would suggest the impregnation of this species with some of the most showy perennial species. Might not very charming varieties be thus produced? Might not their pyramidal or corymbose panicles be in part added to its already profuse though flat clusters? And might not a stronger and more robust habit, without the loss of its annual character, be acquired by such a process. We throw out these hints, with the hope that the experiment will be tried.

Nicotiana longiflora.—The present season we have flowered, for the first time, this very pretty and desirable species of *Nicotiana*. The seeds of this species, with a variety of other kinds, were presented to us by a friend, who received them from South America, we believe the vicinity of Buenos Ayres, where it is found growing abundantly. This species was first introduced into England in 1831, and was figured in *Sweet's British Flower Garden*, 2d series, t. 196.

In general appearance, the flower of this species somewhat resembles the *Petunia nictaginiflora*. The tube of the corolla is four or five inches long. The limb spreading, very deeply 5-lobed, and the flower, when in its full expansion, measuring from the tip of the lobes nearly two inches in diameter. They are of a clear, though not pure white; the under side of the corolla, together with the tube, is of a greenish tint, and the flower, after closing, changes to a dull purple.

The plants attain the height of three feet in good soil, with a main stem branching off close to the root into numerous erect laterals, each lateral again throwing out others, terminated with one of the tubular flowers. The blossoms do not open, like most of the plants of this family, until the afternoon, and fade and close again early in the morning. But they have a beautiful appearance at eve, and give out a perceptible, though very slight

odor. The plant produces from eight to ten large leaves at the base of the stem, laying close to the soil.

Crowded in among other plants in the flower-border, or allowed to be encroached upon by any plant standing near, much of the beauty of the plants is lost; but growing singly in open beds or in spare places in the border, where their erect stems and flowers can be viewed to advantage, they form imposing objects, and when a profusion of their white flowers are expanded, they are extremely showy and beautiful: the only objection to this species is, the rather uninteresting appearance the plants assume in the middle of the day, when the flowers are not open; but, if we recollect that it is at that time, especially in the hot months of July and August, in our climate, that the garden is least visited, and that both morning and evening are the periods when we desire most to see the flower-borders assume their fresh and lively aspect, this species will be but little the less valuable for its natural habit of unclosing its tender corols after the rays of a summer sun have given way to the freshness of the evening breeze.

The cultivation of the plants is simple. The seeds were sown in March in a pot, in the hot-house, and were up in the course of a few days. After they had made a few leaves, they were potted off singly into number one pots, in a light soil, composed of loam and leaf mould, with a small portion of sand. When the roots had filled the pots, the plants were shifted into the next size, (number two.) After standing in the stove until May, they were removed therefrom to the open air, and after a day or two of exposure in a partially shaded aspect, they were turned out of the pots into the border. The plants soon commenced growing, their leaves enlarging more and more, and laying flat upon the surface without showing any signs of a rising stem for some time. In the latter part of June the stem pushed up and grew rapidly, branching out profusely, and by the first of August the first flower opened; others appeared soon after, and the plant is now covered with an abundance every evening; and no doubt a succession will be thrown up until the appearance of frost. The soil is only that of the border, in a situation neither over moist or too dry, and where, during the dry season, it has not suffered for water.

Sweet's Flower Garden recommends that the seed should be sown in the fall, in order to bring the plants forward early. Perhaps the same system would do with us; at any rate we shall try it, and note the result; but we would recommend that the seed be sown in a hot-bed in February, or early in March, and after one or two pottings turned into the border, or other desirable place, as soon as the weather is sufficiently mild as not to endanger the

plants by frosts. We suspect it can only be increased with any success but by the seeds.

Calliopsis tinctora var. *atrosanguinea*, (Coreopsis of Nuttall.)

The parent of this variety, one of the most brilliant plants in the whole list of annuals, is too well known to need even a passing remark at this time. Ever since its introduction—and no plant ever spread over the country much sooner—it has been a universal favorite, and is found in almost every patch, in town or city, devoted to flowers. It has been well honored, and if it shall now have to give way to a younger aspirant, even one descended from itself, it may retire without complaint. The dark-colored variety we estimate as the most brilliant annual flower in our gardens. Its rich velvety petals, seeming, as it were, encircled with a ring of gold, glitter in the rays of a noon-day sun with all the brilliancy of gems. Its beauty cannot be over-rated. Some notice of it will be found in our II., p. 143.

It was first introduced into our gardens last year, but was found in only those collections, whose proprietors are ever eager to procure every thing new; and it may yet be considered as scarcely known. We have, in consequence, introduced it into our notices, at this time, in order that it may be known and grown wherever its parent has been an object of interest. Of its culture we need not speak; for the seeds only require to be sown in a good soil, and an abundance of plants will be the result.

We may, however, be allowed to caution the amateur, gardener, or nurseryman, who wishes, when once he possesses the true variety, to perpetuate it, to place it beyond the reach of all plants of the common kind, or, otherwise, the produce of the seeds will be nothing but a mass of those with which they abound in already. The best mode is to pull up all the plants of the yellow ones within, at least, ten yards of the dark ones.

In this family we would propose impregnation, and submit one or two more interrogatories to our amateurs. Could not the beauty of that handsome perennial species *C. lanceolata* be enhanced, by adding to its clear and deep yellow serrated petals a deep spot of velvety purple? And could not somewhat of the size of the *C. lanceolata* be added to that of the dark variety, to give it more boldness, and still preserve its annual habit? We wish to see such attempts made, for we are certain they would be attended with favorable results.

Petunias.—Another class we now name, which, though yet not extensively known, is by no means wanting in beauty or interest. In our first volume, (p. 254,) we have offered some brief remarks, on training both the *P. nyctaginiflora* and *phœnicia*, which, we trust, have not been without their use. We do not now intend to say much in regard to their growth, but rather

to notice some new varieties, and urge the importance of paying more attention to the raising of seedlings.

Mr. Hogg, of New York, has raised some of a very beautiful character from seeds which he received from Mr. Tweedie, now collector in South America. We saw several of them in flower last June, when we visited his nursery, but were struck, in particular, with the rich color and satiny appearance of the monstrous flowers of one variety, a plant of which we now possess in full bloom and vigor. Some of the flowers measure upwards of two inches in diameter, (*P. phœnicea* does not attain above half this size,) with a broad spreading limb. It is one of the best we have seen. The color is paler than the *P. phœnicea*, but not so much so as to have that washy look of most seedlings. It is neat in its habit, with small foliage and long slender peduncles, which hold out the flowers from the plant to plain view.

We have ourselves produced one or two seedlings of considerable beauty—one, in particular, quite distinct from any thing we have before seen. This variety was taken from a large bed of plants, sown in May, in the open ground. The size of the flowers is about the same as the *P. phœnicea*, but, in place of their being wholly self-colored, to use such a term for this tribe, they are narrowly edged with green, somewhat in the way of a green-edged auricula, though with not the same evenness of outline. The plant has, however, a very singular and distinct appearance, and deserves to be perpetuated and cultivated. If the flowers were as large as the variety we have just noticed, and the green edge perfectly even in its breadth, it would be surpassing in its elegance. It is a very singular sport, and, we doubt not, plants possessing this edged style of inflorescence may be produced from it of far superior beauty.

A blush or pink-flowered one was highly prized as a choice variety, in Philadelphia, last season, from whence plants have been sent to the vicinity of Boston. This variety breathes a delightful odor, much stronger than the old *P. nycetagineiflora*. The habit of the plant is rather stiff and woody, which detracts from its beauty. It is, however, worthy of cultivation.

We have seen another quite delicate variety, raised by an amateur in gardening. The flowers are of a very pale pink, almost white, and the inside of the tube or throat of a very dark shade, contrasting prettily with the pale surface of the corols. It is delicate in its mode of growth.

P. var. Blóckii, we have before noticed. It is a very ornamental variety, and a most profuse flowerer.

It may scarcely seem of importance enough to describe so particularly these varieties, as they will probably soon be displaced by others. For some time, at least, they will be considered as being desirable objects for cultivation, and in dis-

tant parts of the country, undoubtedly, they will but have begun to be known, when their cultivation may have been wholly given up, by nurserymen or amateurs in and around our principal cities, —so slow is the introduction of new things.

To raise new and superior varieties, large quantities of seeds should be sown every year, saved from the most choice varieties, with the assistance of impregnation. There would, then, be some certainty of new kinds. Chance, however, may discover to the zealous planter beautiful new sorts. *Phœnicia* and some of its varieties are shy seeders.

Petunias are admirable plants for the green-house or the parlor. Young and healthy seedlings, or plants raised from cuttings, now placed in pots, will get well established by winter. In February they will commence growing, and, if trained to neat trellises, there are but few plants which are more attractive. If well managed, they flower, with occasional trimming, the whole summer through.

Leptosiphon androsæceus and *densiflorus* are two very charming new annuals, which we have before noticed. In a proper soil, which appears to be a deep, fresh, moist loam, they grow into branchy and bushy plants, to the height of twelve or fifteen inches, with a great abundance of their lively and various-hued blossoms. In light, highly manured soil they amount to little or nothing. Like most of the Columbia river annuals, they seem to delight in a new and virgin soil, rather than one rich and prepared. There is a vast difference in growth in the plants upon these different situations. The former will be robust, vigorous, and exceedingly woody; the latter slender, with weak and diminished clusters of blossoms. Mr. Lee, of Brookline, has grown plants to a very great size. Seeds are produced rather sparingly, which will somewhat retard the progress of their general cultivation.

Nemóphila insignis, which we have previously noticed, is a beautiful plant for small beds. It does not thrive in a very dry situation; but in a good loamy soil it flourishes vigorously, and extends its lateral shoots to the distance of fifteen or eighteen inches. The plants should not by any means be crowded together, but should stand, at least, a foot apart: when allowed to run together and intermingle their branches in a thick bed, a great portion of the less vigorous shoots damp off and disfigure a whole patch. The seed should be planted early, to ensure a good growth.

There are several other plants, which we intend to offer a few remarks upon; but the great length to which the present article has been extended, prevents us from enumerating them at this time. Previous to another planting season we hope, however, to resume the subject.

ART. III. *Observations on the Cultivation of hardy varieties of Roses from seeds.* By L. BOLL, Florist, &c., New York.

IN a late number of your Magazine, I observe an article, (p. 241,) by Mr. Buist, of Philadelphia, on the germination of the seeds of roses, which corresponds very nearly with my own experience upon the same subject. In your brief remarks, appended to the article, you express a desire that some of your correspondents would give you a detailed method of the germination and vegetation of the more robust and hardy kinds, Mr. Buist's experiments having been confined altogether to China and other tender roses. I will therefore endeavor to offer, in a few words, my own method of cultivation and treatment, which I have followed with complete success for several years.

When the seeds are perfectly ripe in the fall of the year, I pick them from the plants and put them in a flower-pot, and set them away in a dark place, where they remain. The seeds are taken off in the hips, and it is very important that these should be put where they cannot dry up, and where they can be preserved in a humid state. I leave the hips in this state for ten or fifteen days, when I begin to open them and pick out the seeds ready for sowing, having first prepared my compost, which is generally composed of one third heath soil, one third fresh loam, and one third road sand, or scrapings of the highway.

I generally sow the seeds in boxes, which I prefer to pots for most all kinds of seeds. When they are all planted, I take some lime-dust and strew slightly over them. Afterwards I finish the operation, by covering the whole with a layer of the compost first mentioned, which I press down firmly, and give a gentle watering with a water-pot through a fine rose.

I then remove the boxes of seeds into a dark place in the green-house, (underneath the stage, or where they will get as little light as possible,) or into a pit. Each box I cover with a pane or piece of glass, according to the size of the boxes, to protect the seeds from the rats, which I find very troublesome. I leave the whole in this state until the month of February, when I again remove the boxes to a warm place in the green-house, on the stage, as near the glass as possible, where they will have plenty of light and air.

Seeds of hardy roses can be forced as well as the tender kinds, viz. the Chinese, and the tea or the noisette: but I would observe, that there is considerable risk of losing a great portion of the seedlings, from the excessive humidity of the atmosphere at this season, which causes the young seedlings to be attacked by what is termed the mildew, (*nieller.*) When this occurs, the

plants are separated very carefully before they have acquired a large size. Seeds may be also successfully sown in the open air; but I would observe that this method is scarcely ever employed, when the object is to procure strong plants, which will produce bloom the first year. All the seeds will not come up at the same time; and many of them often remain in the soil until the second year, before they vegetate.

It is probable that there are many persons, especially those who have not paid much observation to raising roses from seeds, who are not aware that the plants sport as much as any others, without excepting even the dahlia. I have often noticed, among my seedlings, plants with deep crimson or purple flowers, raised from seeds saved from a pure white rose. I think that the pimpinell class generally preserve their colors with more certainty than any other. I have also observed that the Isle de Bourbons sport less than either the Chinese, the tea, or the noisette varieties.

On this account I would recommend all amateurs of roses to sow as many seeds as possible of this superb and fragrant group. For all amateurs and connoisseurs of roses agree with me that this is, without contradiction, the finest and the most desirable of all for its delightful odor, its superb flowers, and its beautiful foliage, and for its hardiness in standing out in our most severe winters without injury.

The Isle de Bourbon roses hold, and will hold, a place above all other kinds. There are, at the present day, more than fifty varieties in the trade, all fine and beautiful. I have raised, the present year, two varieties from seeds planted the 28th of February, which flowered very well the 1st of June, and which were very fine. There is no reason why we should not produce a yellow Isle de Bourbon, for which I have labored long. I have not any doubt but that we shall produce, in a short time, as fine varieties in this country as in France. If our horticultural societies should encourage the taste for roses and the production of seedlings, it would be the means of adding many varieties to our collections.

I have thus noted down my method of cultivation of hardy roses from the seed. If my experience upon the subject has afforded any thing new, I shall feel amply repaid in communicating to you these few hints, for the information of all who feel an interest in gardening.

Yours, &c.

L. BOLL.

New York, August, 1838.

The above article, by Mr. Boll, who is, probably, one of the best cultivators of roses in the country, as all may witness who

have inspected his nursery, we trust will awaken the attention of amateurs and others to the interesting subject of raising new varieties of roses from seed. It has been generally believed, that two years were required for the seeds of roses to vegetate, and that two more were necessary to enable the plant to arrive at a flowering state; and such a prevalent opinion has prevented many amateurs and gardeners, who are not possessed with a good share of patience, from entering into the production of seedling roses. The facility of raising seedlings, as communicated by Mr. Boll, will account for the rapidity with which the French nurserymen raise new varieties, hundreds of which are added to the catalogues every year, although not half, or even quarter, of them are really fine and worth possessing. Indeed, few plants, unless we except annuals, can be brought into flower much sooner than roses.

Many of our amateur gentlemen in gardening have commenced the production of seedling camellias in good earnest, though requiring at least four, and, in a majority of cases, six or seven years' growth, before they are strong enough to produce a good specimen bloom. We hope the production of new varieties of roses will be commenced with the same zeal, and that we shall be no longer dependant on France for an annual supply of new varieties wherewith to decorate our gardens. Rose seeds may be procured in ten times the quantity, and with much greater facility than camellia seed, and a few boxes, which would take up but little room in any green-house, would hold hundreds of plants. A regular sowing every year would soon produce an abundance of plants, and undoubtedly, with proper care and attention in saving the seeds, many very fine and novel varieties. We repeat, that we hope the article of Mr. Boll will awaken a zeal among our amateurs and gardeners to produce seedling roses.—*Ed.*

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, Florist's Register, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice-Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo. numbers, with a plate; 1s. each.

Botanical Intelligence.—The first part of *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 Dr. Torrey and Asa Gray, has just been published. We have not yet had the pleasure of seeing a specimen of this work, but when we have examined it we shall notice it at length.

We have received from Dr. Torrey the prospectus, stating the plan and objects of this comprehensive work, which we give below. When it is understood that Mr. Nuttall will contribute the valuable information, which he acquired in his late visit to Columbia river, towards the completion of the work, and that both Dr. Torrey and Dr. Gray have been three years in collecting materials, in order to comprise every genus and species in its pages, there can be no doubt but that it will form the most valuable Flora yet published in this country:—

“This work will be published in three closely printed octavo volumes, of about five hundred and fifty pages each. As considerable time will necessarily be occupied in the publication of the work, it is concluded, for the greater convenience of botanists, to issue the volumes in separate parts, as soon as printed. The first volume, therefore, which will comprise the Exogenous Polypetalous plants, will appear in three parts, of one hundred and eighty-four pages each; of which the first part is just published. The second is now in press; and the third will follow as soon as is consistent with its faithful execution.

“The value of this Flora will be greatly enhanced by the extensive contributions of Mr. Nuttall; who has communicated, for publication in this work, his notes and descriptions of the plants collected in his recent journey to Oregon and California, by way of the southern ranges of the Rocky Mountains. Mr. Nuttall's collections are very interesting, and comprise a large number of new genera and species; a considerable portion of which were obtained in a region never before visited by botanists.

“The work may be ordered of the publishers, G. & C. Carvill & Co. New York; Carey & Hart, Philadelphia; and Little, Brown & Co., Boston: or subscribers may send their names directly to the authors. Price \$1.50 for each part of 184 pages, or \$4.50 per volume: payable on delivery.”

To increase as much as possible the value of the work, it is the intention of Dr. Gray to visit Europe the ensuing autumn or winter, and he will embrace the opportunity of examining herbariums, libraries and living plants.

Part II. will be issued during the present month, and the others will follow in succession as rapidly as circumstances will admit, without unnecessary haste. Botanists who possess any rare species of North American plants, particularly such as have not been described in any existing work, or any interesting information in relation to those already known, are invited to communicate them to the authors, for insertion in the forth-coming volumes of the *Flora*.

We trust that the friends of the science will come forward and sustain this arduous undertaking. The work is published at a low price, considering the expense always attendant upon the getting up of scientific works of the kind. Prospectuses may be found at the bookstores of the publishers. We have also one in our possession, to which we should be glad to receive the names of our friends as subscribers.

Dr. Gray has been appointed Professor of Botany in the new university of Michigan. An extensive botanic garden is to be connected with the institution. We hope it will be so in something more than the name. In the vicinity of Boston, attached to Harvard College, there is a garden under this name, which, for aught we have seen there, might as well be called any thing but a garden devoted to the study of botany. It would be highly creditable to this young state to be the first to set the example. With Dr. Gray at its head, there is no doubt of its success.

The Exploring Expedition set sail on Saturday, the 11th of August, from Hampton Roads. We have not learnt who has been appointed to fill the vacancy in the scientific corps, occasioned by the resignation of Dr. Gray, who remains behind. No other resignation has taken place since the corps were first appointed, that we are aware of.

Rafanesque's Botanical Works.—Professor Rafanesque has published several works on botany, the two last of which are the *Flora Telluriana*, or synoptical mantissa of two thousand new or corrected families, genera and species of plants, from all parts of the earth, the first work ever published in America upon the botany of both hemispheres; and the *New Flora and Botany of North America*, supplemental to all Floras, containing the genera and species omitted or mistaken by Pursh, Michaux, Torrey,

Hooker, Beck, Elliot, &c., [previous to the new *Flora* of Drs. Torrey and Gray, above noticed.] Three parts of the latter have been published, forming half a volume of three hundred pages, octavo. The first contains the introduction, geography, lexicon and monographs; the second, a historical sketch and neophyton of three hundred new or revived species of herbaceous plants, whereof eighty-six are monocotyledonous; the third, sylvan sketch and *Sylva* of two hundred and thirty-four new or corrected trees or shrubs. There are several complete monographs of the genera *Céltis*, *Mòrus*, *Spiræa*, *Hydránga*, *Hamamélis*, *Fágu*, *Forestièra*, *Ceanòthus*, and some new genera, *Nestròna*, *Cladástis*, *Nùdulis*, *Zanthyòsis*. Also, monographs of *Lèchea*, *Amphicárpa*, *Kùhnia*, *Peltándra*, *Eclípta*, *Crotalària*, *Capsélla*, *Baptísta*, *Gerárdia*, *Iris*, *Tradescántia*, &c. The parts are sold by the author at one dollar each, or one dollar for the six parts already published. Botanists are also accommodated with the work in exchange, or for specimens of rare plants. Subscriptions are also received for the parts which are to appear hereafter. (*Silliman's Journal.*)

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculàcææ.

Clématis flórida var. *bicolor* Lindl., noticed at p. 299, and in our III., p. 413, as *C. Siebòldi*, has lately flowered at Mr. Lowell's, who probably possesses the only plant of the variety in the country. We are informed that it is a beautiful plant, and fully equal to the description we gave of it, above referred to. Mr. Buist, of Philadelphia, we believe, imported it.

Loasàcææ.

Loàsà laterítia. At p. 252 we noticed this new plant, and commended it for its beauty. It is now figured in Paxton's *Magazine of Botany*, where a glowing description of it is given, with a highly colored figure appended thereto. Mr. Paxton remarks, "that a more interesting and valuable plant for ornamenting the trellises of the flower garden or green-house we have not had the pleasure of figuring for some time. We are accustomed to regard such plants as good and worthy of notice and cultivation, which are of elegant habits,—produce handsome and showy flowers,—are disposed to blow freely,—and exhibit their blossoms to advantage;—all these properties reside in the plant we are now noticing to no mean extent; and when we add, that it may be propagated with great facility, and cultivated with extreme ease, we should think that no other recommendation is necessary to bring it speedily into extensive notice, and obtain for it almost universal esteem."

We believe it is not yet in the country, unless Mr. Buist pos-

sesses it, of which we are not aware; but, as there is no doubt that it will be speedily introduced, we extract some hints in regard to its growth, that the treatment of the plants may be partially known:—

“It thrives well in the green-house or stove, where the plants can be trained to a circular or flat trellis; and if proper attention be paid to the time of sowing the seeds, it will produce its flowers in the autumnal months, and then will continue expanding till the commencement of the ensuing year.

“As soon as the flowering season terminates, the plant throws out new shoots from the axil of every leaf, and there can be no doubt, that, in a succeeding season, the display of flowers will be much greater: it will probably prove a biennial, or perhaps a perennial plant, in which latter case it would doubtless assume a shrubby habit, but we are not prepared to state which of them will be the case.

“Propagation may be carried on extensively, either by cuttings or seeds, the latter of which are produced in great abundance, ripen freely, and readily germinate. It delights in a rich loamy soil.”

The stinging property which we attributed to this species, in connection with the others, appears to be incorrect; as it is stated here that it possesses it but in a slight degree.

In some collections it is called *L. aurantiaca*, by which it is well known; but it now goes under the name first mentioned.

Loösa lateritia has gained a great number of prizes at the various exhibitions around London the present season. (*Pax. Mag. Bot.*, May.)

Proteàceæ.

TELOPEA

speciosissima The Warratah plant. A green-house plant; growing six or eight feet high; with red flowers; appearing in June and July; a native of New South Wales; cultivated in sandy loam, heath mould and white sand; increased by cuttings and layers. *Pax. Mag. of Bot.*, Vol. V., p. 73.

Syn: *Embóthrium speciosissimum.* *Bot. Mag.*, 1128.

This is the plant from which is derived the name warratah, as applied to the anemone-flowered camellia, and some other plants. It is an old inhabitant of English collections, though rarely seen in collections at the present time. This is mainly attributed to carelessness in its treatment and want of sufficient attention to its constitution and habits. Like all the proteas and plants from New South Wales and New Holland, it requires a peculiar mode of treatment to flower it well, which applies to but few other plants. Impatient of too much moisture or dryness, they immediately show signs of ill health when the first has been administered too freely, or when, by neglect, it has been withheld altogether for any length of time. Want of care in potting, and a poor drainage to the pot, are, also, two other causes which tend to the destruction of the plants.

To have the plants do well, be sure to allow a great quantity of potsherds to each pot,—select a proper soil,—place the plants in a very airy place in the green-house,—and water only at such times as the soil really needs it, and not indiscriminately or at regular periods, whether the plants need it or not. Equal parts of sandy loam and heath mould, with a good proportion of white sand and gritstone, well incorporated, are the chief points to be attended to in the selection of the compost. Water sparingly in the winter, and more liberally in the summer season.

The *Telœpea* may be described as a leafy shrub, growing six or more feet high, with obtuse unequally serrated leaves. The flowers are of a rich crimson, and produced in a terminal head, quite large, three or four inches in diameter, and five or six in height, resembling almost exactly the centre of the flower of the warratah camellia, but more than five times the size. They have a magnificent appearance, even at a great distance.

The same treatment suits all the banksias, and indeed most of the New Holland plants. Once properly grown and a judicious soil procured them, it is but little trouble in growing them to a great degree of success. We should be glad to see this noble plant in all our first-rate green-house collections, where it would not only be a rarity, but a plant of uncommon splendor. The easiest mode of propagation is by the suckers which spring from the roots, which should be laid down into small pots, where they will soon form roots. (*Pax. Mag. Bot.*, May.)

Portulacœa.

Portulacœa Gillièsii—a beautiful little plant, and yet but little known, is flowering finely under the management of Mr. Lee, at Brookline. A hot and dry situation seems necessary to bring out its full character. A plant was accidentally placed in a vase, which was removed to a sunny aspect. The plant soon began to make a vigorous growth, and within a week or two from twenty to thirty of its deep roseate flowers began to open at the same time, forming, and presenting, a brilliant appearance. We intend to notice this plant at length, some future time.

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Schropulariœa.

ANGELONIA

salicariifolia Lindl. Willow-leaved Angelonia. A green-house or stove evergreen perennial; growing from fifteen to thirty inches high; with purple flowers; appearing in August; a native of Caraccas; grown in sandy loam and peat mould; increased by cuttings. *Pax. Mag. Bot.*, Vol. V., p. 75.

This is another old green-house or stove plant, introduced twenty years since into Britain, “where,” says Mr. Paxton, “it is almost banished from our stoves, and is rarely seen or met with, except in the collections of such individuals who do not participate in the general mania for new plants, but value them

only as they are more or less intrinsically interesting, either in general appearance, or the individual or united beauty of their flowers."

The plant grows about two and a half feet high, with numerous branches, terminated with an abundance of flowers, which, from their clustered character, have the appearance of dense racemes. Leaves opposite sessile; stems four-cornered. Its native habitation is on dry rocks, many hundred feet above the level of the sea: the pots should therefore be well drained, and a few pieces of gritstone added to the compost. It should be set in an airy part of the green-house or stove, watered freely in the summer months, but should be kept perfectly dormant through the winter, and, consequently, water should only be given in such quantities as will keep it from drying up, until the season arrives for exciting it to make a new growth. Increased by cuttings in pure sand. (*Pax. Mag. Bot., May.*)

MONOCOTYLEDONOUS PLANTS.

Orchidaceæ.

* *Sarcochilus parviflorus*.—"A small-flowered epiphyte, from New Holland. It has no claim to beauty, but is interesting as a second species of the genus." The flowers are green, with a few spots of dull purple in the sepals. (*Bot. Reg., May.*)

* *Cirrhopetalum cæspitosum*. A little epiphyte in the collection of the Duke of Devonshire, and imported by him from the East Indies. It has small, pale, yellow ochre-colored flowers, but without any thing very striking about them. Flowers in April. (*Bot. Reg., May.*)

* *Octomeria gracilis* Loddiges *Ms.* A species, with inconspicuous flowers, like the *O. Bauèri*. Received by Messrs. Loddiges from Rio Janeiro. (*Bot. Reg., May.*)

* *Oncidium tetrapetalum* Lindl. A beautiful little species, the flowers being the smallest in the genus. "The labellum is a pure dead alabaster white, except at its base, where it is covered with yellow and brown tubercles. The sepals and petals are gaily barred and spotted with brown, while the column has two large pink-spotted spreading wings. Jacquin describes the species as having a flowering scape two feet high; that which appeared in the Horticultural Garden was scarcely more than six inches high, for the plant, though healthy, was weak and had suffered from its voyage." It was imported from Jamaica by John Henry Lance, Esq. (*Bot. Reg., May.*)

* *Cymbidium virescens*. This is a native of Japan, from whence it was brought to Europe by Dr. Van Siebold. It has greenish sepals and petals, about an inch and a half long, and a pale yellow lip slightly blotched with dull red. It may probably prove to be a green-house species. (*Bot. Reg., May.*)

* *Chenánthe Barkèri* Lindl. A singular plant, remarkable

for the obliquity of its flowers. "In the first place, the lateral sepals are lengthened into a bag, which hangs down over the ovary; the petals are stretched out at the base to adapt themselves to this; further, the labellum is connate with the column for nearly all its length, the latter being lengthened so as to fill up the bag of the sepals." The genus is nearly allied to *Noty'lia*, in natural affinity. Imported from Para by George Barker, Esq., in honor of whom it is named. (*Bot. Reg.*, May.)

* *Masdevallia infracta* Lindl. A curious plant, with "pale, whitish-yellow flowers, slightly tinged with pink and yellow cirrhi." It is an abundant flowerer. Its geographical distribution is quite extensive. M. Descourtilz found it in the cold wooded mountains which separate Canta Gallo from the province of Rio Janeiro. Sir. W. Hooker received it from the Oregon mountains; and Dr. Lindley has found it in a collection of dried plants collected near Rio Janeiro. Messrs. Loddiges imported it from Brazil, and it flowered in their collection last spring. (*Bot. Reg.*, May.)

ART. V. Notes on Gardens and Nurseries.

Woodland, Brookline, Dr. Howard.—*Aug. 21st.* Since the early part of the season of 1837 we have not visited this fine place. At that time we had no opportunity of seeing only the in-door improvements, as it was at mid-winter of that cold season; and we deferred, therefore, any remarks other than those we then submitted to our readers, until we could have the pleasure of looking leisurely through the grounds at a more convenient time.

The location of the grounds is very good. A great unevenness of surface, with portions of it finely wooded, and a fertile spot devoted to the garden, renders it an exceedingly picturesque and very desirable residence. Jamaica Pond, distant less than half a mile, is seen from the mansion, and the surrounding country, from the highest part of the grounds, is brought into the scene. Though less elevated than many other residences, the masses of wood and their disposition upon the uneven surface, form a rich view which seems to render it less dependant upon surrounding objects than is usual in such places. But our object now is to note down some of the improvements upon the grounds, rather than to describe its peculiar beauties. We need only remark,

that it is capable of being made one of the most beautiful residences in the neighborhood.

When we were here before, the green-house had just been erected, and the vines planted out in the border. Very few plants had been added to the collection of green-house plants, which now contains a good variety of roses, geraniums, cactuses, &c. &c. Mr. Irish still has the management of the place, and the plants, so far as their health and appearance could be judged at this season, gave evidence that he understands his business.

Passing first into the green-house, Dr. Howard pointed out to us the Miller Burgundy vine, some notice of which, its fruiting &c., will be found in a previous page. We were certainly astonished at its prolific character and general appearance, so altered from its aspect when growing in the open border. The vine was covered with numerous clusters well colored, to a jet black, although many had been cut from it. We tasted it, and found it highly vinous and sweet, and equal even to that old favorite the black Hamburg. Some cultivators having doubted the identity of this variety, Dr. Howard sent Mr. Lowell a few clusters for inspection. From the aspect of the grapes he could hardly believe them to be the Miller Burgundy, a grape he had been well acquainted with for twenty years; but upon tasting it the true flavor was perceptible, and he pronounced it a very superior grape. He had thrown it out of his collection some years since, never having tried it only in the open air, where its produce was not worth naming. As a forcing variety, however, he considers it, beyond doubt, very valuable. We should by no means recommend it, to the exclusion of the black Hamburg, but one or more vines should find a place in every forcing house. The black Hamburg and sweetwater were both exceedingly handsome, particularly the former, of which we saw some remarkably large clusters with enormous berries, which is attributable to severe thinning. Considering that the vines are only three years old, there is a great crop.

In the garden, which consists of about two acres, with a surrounding main walk, the borders looked very well, notwithstanding the dry weather. Some of the finest asters we have seen this season, we noticed here. The same insect which has ravaged the dahlias, has made sad havoc among the asters in many gardens, and the general bloom promises but poorly. The dahlias, which were here trained to the fence, mostly on the northern and western borders of the garden, have also done remarkably well for the season, and some very good blooms were open; numerous petunias, stocks, &c., in the border were making a fine display. Sanguinia roses, turned into the border in the spring, were now, and had been through all the summer, covered with flowers; this old variety is invaluable for this purpose.

The warm and dry summer, though unfavorable to some plants, has been highly conducive to the growth of vines of all kinds; and probably such crops of cucumbers, melons, squashes, &c., were never before seen in the country. Here we found some excellent melons, one in particular, called the Napoleon, which we think a richer variety than we ever tasted. It is a green-fleshed melon, very slightly netted, without ribs and of an oval form, weighing, when a fair specimen, we should judge, about three pounds. Mr. Irish received the seed from England two years since. Another variety we saw, the seeds of which were brought from Smyrna by the Rev. Mr. Pierpont, two or three years since. In the fall of 1836 it nearly perfected a fruit; last year none came to a full growth; but this season there is every hope of its maturing in perfection. It is nearly round in form, and quite smooth. It is also a very shy bearer. A long bed of the autumnal marrow squash was in great perfection; this variety is very generally grown this season. Two beds of salsify, a vegetable too little known, we noticed of fine size, and also four fine rows of Bailey's red and white giant celery, another vegetable just finding its way into cultivation. Salsify is rarely to be found in our market, and so little is it known, that there is scarcely any demand for it. The whole garden we found in good order.

We hope Dr. Howard will erect another house for plants, and devote the present one wholly to grapes. Possessing ample means, and with a taste to appreciate the beauties of a fine collection of green-house plants, we should like to see such a structure added to his garden. It would afford a great deal of pleasure; and his example would tend to induce others to erect similar houses. Such a beautiful residence should not be without a green-house well stocked with the choicest varieties of plants.

Charlestown Vineyard, Messrs. Mason.—We made a short call at this place in the early part of August. The garden is not in so good order as we have usually found it: this has, however, in a degree, been owing to the sickness of Mr. Mason, sen., who has been confined to his room all the early part of the season, and has just gained sufficient strength to enable him to walk about, and see to the work which is usually done. The Messrs. Mason have taken a piece of ground at East Boston, which they occupy as a vegetable garden, partly with a view of supplying the Maverick house with fresh vegetables and fruits. The constant attention of young Mr. Mason to this garden has not enabled him to give the time heretofore allowed to the vineyard, and under whose labors we always found it in fine condition.

The numerous houses here devoted to the cultivation of the grape, are producing a very excellent crop. In the longest one, which runs nearly the width of the garden, on the upper part of it, there is a very heavy crop, just beginning to color. Both

this house and all the others, except the old green-house, are merely cold-houses, so called, from the circumstance of their having no furnaces or flues for forcing. On the back wall some fine nectarines and Royal George peaches were just ripening. From some cause, unknown to Mr. Mason, the grapes in each of the ranges are not so forward as they were last year, notwithstanding the hot and dry summer. This, however, we infer, is to be attributed to the very cool and backward weather of the months of March and April, which kept back the vines from starting for some days; and the subsequent warm summer has not been sufficient to enable them to gain what they lost. It will be a loss of some amount to the Messrs. Mason, as grapes now find a ready sale, and produce considerably more than they will a month hence. The wood for another season has perfected itself already, and is vigorous and strong.

In the old green-house there is scarcely a cluster of grapes on the vines. This is mainly owing to the construction of the border and the planting of the vines. When they first came into bearing, and for a few successive seasons, a good crop was cut: but for the past two years it has been failing, till the vines have ceased to produce any fruit. When the house was first erected, a narrow border was made, about eight feet wide, very rich and well prepared. In this the vines were planted, and made beautiful wood. It was the intention to prepare the remainder of the border, which was to extend at least fifteen feet, in the same manner; but it was not done, and the border was filled up with fresh loam from the garden, without being enriched at all. The consequence of such neglect is, the total failure of the crop. The roots have struck down deep after nourishment, not finding it near the surface, until they have proceeded so far as to be entirely beyond the action of the air, (a great promoter of vegetation,) and the vines have ceased to flourish with their former vigor. Too much attention cannot be given to the proper preparation of the border in all cases. Mr. Mason intends now to take up the vines, trench, enrich and prepare the border, and plant out some young and healthy vines.

The green-house plants are standing about in various places, and the only thing we saw remarkable was an *Erica*, called *E. blánda*, in full bloom, and very pretty. The blossoms are tubular, about an inch long, of a pale rose, and clustered together in apparent whorls. It has somewhat the character of *E. cólorans*, but we think it different. The geraniums we found all potted, and doing well. Of *Azàlea índica*, *índica phœnicea*, and *ledifòlia*, there is a very fine stock.

The dahlias are suffering, as they are every where, from the long continued drought and the insects, and they do not promise an over-abundance of blossoms. Very few plants enrich the bor-

ders this year, from the circumstances which we just named. A little patch of *Verbena multífida*, which had spread its recumbent branches over a yard square, was very showy from the profusion of its neat, pale purple blossoms. It is the first time we have ever seen it in perfection.

The strawberries, the raspberries, and the fruit trees generally, have suffered much from the dry summer.

Mr. S. R. Johnson's garden.—Mr. Johnson is too well known among both horticulturists and florists, to need an introduction from us at this time. The great crops of plums which he has produced in his garden, for some years, have made his name familiar to the former; and the choice collection of green-house plants which he once possessed, and the neat mode in which they were cultivated, made him acquainted with the latter. We can recollect when we first visited Mr. Johnson's garden, at least ten years ago, since which time we have not had the pleasure of seeing it, when he cultivated the largest amateur collection of camellias that was known about Boston. A short time after this, we believe he sold out his green-house plants, and, being away from home a greater portion of the time, the collection has never been renewed. His garden contains, however, at this time, among other things, a choice collection of China and Noisette roses, and a fine variety of carnations.

The greatest treat we have enjoyed for some time, was the inspection of a Bolmar Washington plum tree in full bearing. This most superb variety has been hesitatingly planted by some cultivators, on account of its shy bearing; but a look at Mr. Johnson's tree would banish all such ideas forever. It is literally loaded with fruit, no less than seventeen or eighteen plums being clustered together on a terminal branch, not more than fifteen or eighteen inches in length, each plum larger than an egg. Mr. Johnson was unfortunately from home when we called, or we should have asked him the precise age of this tree; it is, however, upwards of twelve years old. The trees do not bear young, or at least they do not in the vicinity of Boston. But as soon as they acquire some size, they are undoubtedly, if this can be considered a fair specimen, the most abundant bearer in the whole catalogue of this delicious fruit. The white gage, standing close by, has produced above fifty dollars' worth of plums, for several successive seasons. The sweetwater grapes in the open air here, are ripening a heavy crop; and in the house formerly devoted to plants, the vines were loaded.

Our readers have probably noticed that Mr. Johnson gained the prize for the best China roses, at a late exhibition of the Massachusetts Horticultural Society. He has a fine collection, and well grown. We noticed only eight or ten dahlias in the garden. Mr. Johnson preserves every thing in the nicest order.

Mr. Sweetser's Garden, Cambridgeport.—There are but few gardens that offer a great display of flowers this dry season, and, consequently, we found this, as well as others we have visited, quite destitute. The dahlias suffer in common with those of all other gardens, and, from appearances, there will be a very sparing bloom. Some few flowers were open, among others Brown's Quilled perfection, a very pretty variety, though the specimen was not perfect. Mr. Sweetser has one of the most choice collections, and we yet hope that many of the plants will bloom in tolerable perfection, though it is too late to expect any thing like the profusion of flowers of last year, let them do ever so well. We found that pretty climber, *Lophospérmum scándens*, in bloom; we wonder it is not more extensively grown. Some bulbs of *Gladìolus natalénsis* had thrown up five spikes of flowers, nearly five feet high.

The camellias have budded well, and promise a fine bloom; and the extensive collection of cactuses, echinocactuses, &c., are in fine health, and many of the plants have made remarkable growths. Mr. Sweetser has promised us a list of all the species and varieties in his collection, which we shall endeavor to find room for in our next number. The garden is in better order than we have ever seen it.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Pubescence of the Plane tree.—Mr. Morren has made some curious remarks respecting the downy pubescence which coats the young leaves and branches of plane trees. This down is formed of delicate branched spiculæ, which, like the alimentary organs, composing the chidismus, and other parts of many plants, consists mainly of silica, and may, consequently, be likened to extremely minute glass needles. In the spring of the year, more especially, this down readily falls off, and, being wafted about by the air, is rendered noxious to gardeners who may chance to be engaged in their occupations in the neighborhood of these trees. Entering at the mouth and nostrils, these spiculæ insinuate themselves into the more delicate parts about the base of the respiratory organs, and produce considerable irritation and inflammation there. It seems advisable that these trees should never be planted in the neighborhood

of hospitals, or wherever invalids are in the habit of walking.—*Monthly Calendar.*

A permanent Tally for Plants.—The following tally is used in Melbury gardens, the seat of the Earl of Ilchester, in Dorsetshire. Plates are cut out of sheet lead, two and one-fourth inches long, and three and one-fourth inches broad; and on these the name is stamped, letter by letter, with steel types. The plate of lead is next soldered to one end of a piece of iron wire; after which the tally receives two other coats of dark lead-colored paint; and, lastly, a coat of white paint is put over the lettered side, taking care it does not get into the letters. Before the tally is inserted in the ground, the upper part of the shank is bent a little to one side, the better to show the name to an eye which is near it, and considerably above its level. The lead should be about one-tenth of an inch in thickness, and the iron wire not less than one-eighth of an inch in diameter. The plumber will furnish the lead, cut into plates of the proper size, and he will solder them on after they are stamped to the shanks. The shanks cut into the proper length, and also the steel stamp for stamping the letters, may be procured of the ironmonger, and the letters can be stamped on, and the whole tally painted by the gardener, during weather when he cannot work out of doors. To insure correct spelling, the person stamping the names should have a printed catalogue before him, [perhaps it would be safer to take Loudon's *Hortus Britannicus* for a guide.—*Ed.*] as the error of a single letter will render the whole of the labor bestowed on the plate quite useless. Tallies of this sort will last a life-time; when stuck in the ground they are just conspicuous enough to be read easily, and not so much so as to attract more attention than the plants against which they are placed; and, from the smallness of the shank, it is neither conspicuous to the eye nor injurious to the roots.—*James Eaton.* [We can confirm from experience all that is said in favor of stamped tallies, having had several hundred of them in use at Bayswater, for the last twelve years. Some, like Mr. Eaton's, with shanks, for plants in a free soil, and others, on strips of sheet lead four inches long, five-eighths of an inch broad at one end, and one-eighth of an inch broad at the other, for plants in pots. We have also used what may be called an invisible number for plants in the open air, which is a circular plate of lead, about the size of a waistcoat button, or larger if necessary, on which the number is stamped; and the plate or button is afterward soldered to the end of a piece of one-eighth inch iron wire, so as to resemble the head to a nail. Such a number, stuck in near the crown of an herbaceous plant, will be so concealed by its leaves, as not to be seen till it is sought for; and thus, while it affords the means of ascertaining with certainty the name of a plant when required, it does not intrude that name upon those who already know it, or care little about it. Before being stuck in the ground, the tally should receive two or three coats of lead-colored paint; or the head or leaden part may be painted with common paint, and the iron shank with anti-corrosive paint, or heated, and afterwards washed over with gas tar.—(*Cond. of Gard. Mag.*)

ART. II. *Foreign Notices.*

ENGLAND.

Forcing Roses.—The West London Gardener's Association for Mutual Instruction held a meeting Oct. 30th, 1837, before which an essay

was read by Mr. Judd, on the forcing of roses, from which we make the following extracts:

Mr. Judd divides them into two classes, China and noisette, and moss and Provins roses. China and noisette roses he cuts down at the end of September; shakes most of the soil from the root; re-pots them in fresh compost, consisting of equal proportions of peat earth, leaf mould and good loam, with a portion of sand and a little soot; and places them in a cold pit till the beginning of November, when he removes them to one having the command of fire heat; gives them a temperature of from 55° to 65°; waters in the afternoon; syringes after a sunny day, being careful not to allow the plant to be long damp, as it renders them liable to mildew. These will flower in the end of January; and, hardened off, will flower in the green-house till May. A second stock, put in in January, will flower from May to August; those put in in the green-house in January, cut down and re-potted in May, will flower in August; take the place of those put in the conservatory in May, which, now cut down, (October,) will be ready for forcing in November. Mr. Judd attaches great importance to watering and syringing in the afternoon; contending that doing it in the morning takes off that fine dew, so beneficial to the plant, which, no doubt, containing a portion of gaseous matter, becomes absorbed by the leaves when the sun shines upon them.

For forcing moss roses, Mr. Judd recommends two-years-old layers; and for Provins, good suckers or plants, taken up and potted in the month of September, into a compost, consisting of two-thirds good loam, and one-third rotten cow dung with a portion of sand and soot. He then places them, in October, in a frame or pit, with a sweet bottom heat of from 90° to 100°, and an atmospheric temperature of from 50° to 55°, increasing it gradually to 65°, and they will flower in January, when a second stock commenced with wild flowers in April. When they have done flowering, they must be hardened off before exposure; planted out, or well supplied with water in their pots, so as to have the buds well perfected; to effect which, the first stock should be pruned in August. He also recommends having moss and Provins roses established in pots, and laid down every season, applying the heat by dung linings. For the destruction of the aphid, he recommends tobacco smoke; for destroying grubs, pinching off by hand; and for eradicating mildew, sprinkling with flour of sulphur.

A discussion arose between the members upon this article, the substance of which is as follows:—

Mr. Fish considered that, by the method proposed, China roses might be kept flowering all the year. He agreed in the propriety of watering in the evening, but did not see the justice of the reasons assigned for it. The existence of moisture on the surface, and the drops hanging on the acuminate points of the leaves in the morning, were a sign of health, and an evidence that the plants required no syringing at any time; but he had seen no prejudicial effects from syringing at any time, provided the glass over the plants was good and free from spots. He did not think any evidence had been adduced to show that the moisture on the leaves, when not a secretion, consisted of a gaseous matter, except the constituents of water; or that the moisture was absorbed into the system by any agency of the sun-beams, and not rather evaporated in the atmosphere of the house. He mentioned that beautiful edgings to flower-borders might be made by China roses tied down to a low trellis. He agreed that, by the system of forcing roses at once, instead of having the plants previously prepared, roses would be got, but doubted much if with equal success; and that, as physiology had been introduced, he could not place the one system on an equality with the other, if he took the principles of that science for his guide.

Mr. Caie drew a distinction between China and noisette roses, show-

ing how the former ought to be pruned frequently, while the latter should be very little pruned; and mentioned how, by twisting the long shoots together, a continuous succession of flowers was obtained from the same shoot. He detailed a method of growing moss and Provins roses, by obtaining plants with good shoots, and laying these shoots round the sides of the pots when there was quite a mass produced of shoots and flowers. He approved of syringing in the afternoon; was confident that the leaves absorbed a great deal of moisture, which he considered necessary to the health and vitality of the plant.

Mr. Russell could not see how roses, taken up and forced at once, though sometimes successful, would always be as certain as those potted off for a twelve-month and properly managed; he wished to know whether the recommending such a system was the result of successful practice; and illustrated his remarks by making a comparison between the vegetable and animal world, and showing that, where two men had to run a long race, the one who had been best prepared by previous exercise, would be likely to secure the prize, and suffer least from the excessive exertion.

Mr. Stormont did not comprehend what sort of pits would do for the forcing of noisette roses, if they were never pruned. Mr. Adams showed that taking up roses, and forcing them immediately, was contrary to nature; that allowing the top temperature to rise before the roots were made, destroyed the success of the whole undertaking; that syringing might be done at any time, and was very beneficial to a sickly plant, even when the sun shone; and that he considered the moisture on the leaves to be chiefly evaporated, and not absorbed. Mr. Judd stated that the remarks he had made were the result of practice and observation combined.

Mr. Ayres showed that there was no analogy between the new system of forcing roses and the coiling of the vine, as the nature of the roots in the two cases was different; that the talk about the new system being troublesome was nonsense; that it had answered when the other system had failed; and that, in reality, little more was necessary than plunging them in the hot-bed, flowering them, planting them out into the border, pruning them and taking them up again, and potting when wanted.—*Gard. Mag.* [Our own ideas on Mr. Judd's essay are, that, so far as his practice applies to China and noisette roses, it is very good; but his mode of treating moss and Provins roses we do not believe will be so successful, as by spring plants well established in pots.—*Ed.*]

Pansies exhibited at Egyptian Hall, by Mr. Rogers, florist.—May 2, 1838. Enterprize, Masterpiece, Hecuba, Lord Glammias, Prospero, Nonpareil, Incomparable, Cicero, Royal Lilac, Beauty of Tottenham, Lady Blessington, Corinna, Desdemona superba, Inmutabilis, Donna Maria, High Admiral, Purpurea perfecta, Frogmore Beauty, Columbine, Nabob, Queen Victoria, Purpurea elegans, Achilles superb, Goliath, Queen of Scots, John Bull, Wild's Defiance, King's Alfred, Bacchus, Wallace, Shakspeare, Comus, Royal purple, Aurora, Minerva, Momus, Somnus, Cecilia, Samson, King, Josephus, Homer, Flora, (Rogers's) Hollis's Flora, Mountjoy's Flora, Cupid, Jim Crow (?) Battersea Beauty, Politor, Emma, Incomparable Vesta, Romeo, Lilac Perfection, Expression, Fair Rosamond, King of Oude, Pizarro, Paragon, Blucher, Apollo, Susannah, Prince Eugene, Crocea superba, Hounsley Hero, Rainbow, Pensillatum, Lady Peel, Duke of Marlborough, Duke of Northumberland, Richardson's Adelaide, Claude, Caravan, Gem, Emperor, Diomede, Brutus's Scots Helen, Countess of Bridgewater, Countess of Verulum, Cato, Andromache, Enchantress, Matchless, Pomona, Superba, Radical, Jack, Atropurpurea, Beauty of Esling, Cromwell, Chimpanzee, (?), Coronet, Horace, laxiflora, Nimrod, Beauty of Dalston, Paris, Theresa, Glaucus, Battersea, Hero, Dean superba. (*Gard. Mag.*)

Royal Society of Horticulture and Agriculture.—This flourishing Society lately held a grand exhibition and fete at Cremorne House, unequalled before for the quantity and quality of the plants, fruits and flowers displayed, in the United Kingdom. Since its establishment it has held nine monthly shows, and distributed nearly one thousand pounds in prizes. Professor Johnson has also given a course of lectures on agriculture and gardening, the admittance to which was open *free* to all practical gardeners. Notwithstanding the London Horticultural Society has endeavored to defeat its objects, and prevent its shows from being popular, by holding their exhibitions on the same days as those set by the Royal Society, they have been well sustained, and attended by very numerous assemblages of persons, including a great number of the nobility. The doings of the Horticultural Society in this instance will recoil upon itself, while the Royal Society will be benefitted by all such dishonorable and unwarranted opposition.

The fete was held for the benefit of the British Orphan Asylum. The pavilion erected for the plants was one hundred and thirty-three *yards* long, with a dome centre, and would accommodate six thousand persons in the event of wet weather. The beautiful mansion of Cremorne House was also thrown open, which would hold one thousand persons. In the afternoon a splendid balloon ascent took place from the grounds. The number of prizes awarded was as follows:—Three gold medals, valued at fifteen guineas each. Three gold medals, valued at ten guineas each. Twelve gold medals, valued at £7 17s. 6d. each; one of them was for twelve coxcombs, and one for twelve hydrangeas. Twenty-three silver medals, valued at two guineas each. Twenty silver medals, valued at one guinea each. And thirty other silver medals, valued at ten and twelve shillings each. Every exhibitor on this occasion, whether successful or not, received a proof impression of the coronation portrait of the Queen, which is published at two guineas. Every thing was prepared on the most liberal scale, and one of the greatest displays ever made, was the result. (*Hort. Jour.*)

London Horticultural Society.—A special meeting was held on June 19th, for the election of a President and member of the Council, in the place of the late T. A. Knight, Esq. The chairman, Mr. Dyer, opened the business of the meeting, by alluding to the rare combination of talent possessed by the late President. Notwithstanding their misfortune in losing one so eminent, they had not to look round for a successor in vain. He therefore proposed the Duke of Devonshire. Though not so prominent in literature as his eminent predecessor, he was greatly attached to the sciences connected with horticulture, and was one of the most liberal patrons of the arts. The meeting then voted a resolution, deploring the loss to the Society of the late President.

After the secretaries were appointed, the meeting proceeded to the election, and the Duke of Devonshire was chosen President. (*Hort. Jour.*)

Verbena Aranàna and V. chamaedrífòlia mājor were both exhibited at the above meeting. These are the two kinds we have noticed as raised by Mr. Hogg. It seems that Mr. Tweedie sent part of the seeds to London. That which Mr. Hogg calls the new scarlet, is the *chamaedrífòlia mājor*; it is just like the parent, except in the size of the clusters and the individual flowers, which are considerably larger.—*Ed.*

Prize Geraniums.—The Cambridge Floral Society held its Show of tulips and geraniums on Wednesday, June 30th, and numerous prizes were awarded. The following are the names of the geraniums which gained the prizes:—

Six Geraniums—first prize, Mr. Widnall's, viz. *Alicca, Amabile, Splendens, Perfection, Miller's Splendissima, Queen Bess, and Hector.* Second prize, Mr. Hudson, viz. *Marmion, Perfection, Duchess of Gloucester, Memnon, and Pulcherrima.*

The best Geranium.—Diomedé—Mr. Widnall.

Seedling Geraniums.—Hudson's Don Giovanni; second seedling, (not named) Mr. Widnall.

Best four Geraniums.—Mr. Widnall's prize, viz. Lucidum, Grand Sultan, Sir John Broughton, and Hector.

Best two Geraniums.—Mr. Widnall's prize, viz. Gem and Perfection.

Sir Abraham Hume's collection of Plants.—The whole of this extensive, rare and valuable collection of plants, embracing some remarkable specimens, was disposed of at auction the 22d of June last. The orange trees, camellias, &c. are probably the oldest in the kingdom. Nearly half a century has elapsed since the late Sir Abraham commenced making this collection. (*Hort. Jour.*)

Victoria Rhubarb.—Mr. Wyatt, of Deptford, exhibited, at a meeting of the Horticultural Society, June 5, a bundle of Victoria rhubarb, consisting of twelve stalks, which weighed forty-six pounds, each two feet eight inches long, and six inches in circumference. A Knightian medal was awarded for this. (*Id.*)

Annual Tulip Show at Hampton.—The following account of the anniversary meeting of all the principal tulip fanciers, with the remarks upon the properties of blooms, we think will be found interesting:—

This anniversary, which is a sort of a mustering day for the old and young tulip fanciers, was, in point of weather, the most unfavorable we have had some years, and yet there was a goodly meeting. The flowers were not of first-rate quality. The numerous blooms that have received injury from frost almost defied the cutting of a dozen in any thing like order for showing. The only stands produced for her Majesty the Dowager Queen's plate, were those of Mr. Holmes, Mr. Glenney, and Mr. Strong; and such was the scarcity of flowers, that one in the winning stand was only half bloomed. Even the great first condition, that the bottom of the flower shall be without a stain, was violated from necessity, as the grower doubtless did his best, though he could not exhibit what he had not got. Those who cut their flowers, calculating upon the absolute necessity of complying with one condition as a fixed principle, cut under a disadvantage, having to leave beautiful flowers, which had not come to perfection of color, behind them, and being restricted to those already blown out, and suffered accordingly. In the competition for the silver cups, nine blooms were exhibited by Messrs. Lawrence, Brown, Wilmer, Strong, and Lovegrove; and here Mr. Lawrence, for the third time, beat the field, but having received the first cup within the prescribed time, was restricted by the rules to a large silver medal on which the fact is engraved.

The anomaly of judging the two classes upon two distinct and different principles presented itself—the stained-bottomed flowers being at once thrown out among the stands of nine. The blemishes of tulips were divided by the Metropolitan Society into two classes; and these two classes were always understood by the Society to be the guide by which flowers were to be judged. The blemishes which have long since been determined to disqualify a flower altogether, are—

A stained bottom.

A split petal.

More or less than six petals.

A blighted petal.

The presence of a wrong number of each class of flowers in a stand, would disqualify the stand; all other blemishes, such as badly marked flowers, flushed flowers, flowers which quarter, &c. &c., tell against a stand, but only throw it lower down in the placing of the stands for prizes. These principles were abandoned in judging the flowers for the Queen's plate, but maintained in judging for the Society's cups. It

is essential that societies should publish the rules by which they intend flowers to be judged, and quite as essential that judges should follow their instructions. Societies should also, like the Metropolitan, class the blemishes; for the interest of the best growers in public exhibitions will assuredly cease, unless they can tell, when putting up their flowers, the properties most valued by the society, and the leading principles which are to govern the selection of the stands or flowers by the committee; and if the judges act contrary to this, they ought to be told of it. We are led to these remarks by the two opposite principles which governed the two sets of judges on Mouday, May 28, at Hampton: the one set, going *in direct opposition to the rules* published by the Metropolitan Society, and giving the prizes to a stand which such rules absolutely disqualified; the other being guided solely by the rules; the one set deceiving the exhibitors, the other placing every stand just where the exhibitors, who knew the rules, expected to find them.

Mr. Lawrence's bed of tulips is, upon the whole, not so fine as usual this year, but he has several magnificent new flowers. Messrs. Brown, of Slough, are as grand as ever, though they have lost, like their fellow cultivators, very many bulbs. Groom's, of Walworth, are better than he usually blooms them. Many private growers have suffered severely in the loss of splendid varieties, and almost all have to look out for sorts to make up. The Duke of Devonshire, who this year blooms his first bed, has already paid some visits; and must, before the season closes, if he desire to excel, visit Slough for a public bed of beauties, and look a little among the beds of private growers, all of whom, be it remembered, would be proud of a visit from his Grace, and be able to show some flowers which their competitors have not. His Grace is precisely the individual who, by example and precept, should foster a flower in which England now rivals Holland, and which only requires such a cultivator to render it the most popular, as well as the most grand, of our garden ornaments.

The following is the award of prizes:—

The Queen's Plate Class, twelve in a stand.

1. Mr. Holmes—Aglaiia, Fleur de Dame, Rosa Blanca, Selim, Brulante Eclatante, Desiderata, Holmes's King, Violet Rougeatre, Rubens, Shakspeare, Abercrombie, Strong's King.

2. Mr. Glenny—Rose Camuse, Catalani, Claudiana, Seedling, Holmes's King, Violet Quarto, Beufait, Cleopatra, Garrick, Strong's King, Abercrombie, Polyphemus.

3. Mr. Strong—La Tendrisse, Delia, Rainbow, Commander-in-Chief, Titian, Hero, Lord Holland, Princess Victoria, Duchess of Kent, Emperor of Austria, Unknown, Like Grand Turk.

For the Society's Cups, value 5l., 4l., 3l., 2l., and 1l. Nine in each stand.

1. Mr. Lawrence—Ponceau tres Blanc, Rose Astonishing, Bijou des Amateurs, David, Salvator Rosa, Monarch, Princess Sophia of Gloucester, Ariadne, Strong's King.

2. Mr. Brown—Lac, Wallace, Ponceau, Polyphemus, Rose Camuse Extra, Captain White, Ambassador, Solon, Salvator Rosa.

3. Mr. Wilmer—Dutch Ponceau, Bienfait, Milton, Camuse, Apollo, Transparent Noir, Triumph Royale, Carlo Dolce, Colossus.

4. Mr. Strong—Cerisse a Belleforme, Cerisse lelat, Hero, Duchess of Kent, Princess Victoria, Strong's King, Cicero, Surpasse Pompe.

5. Mr. Lovegrove—Triumph Royale, Perle Brilliante, Rose Quarto, Monarch, Holmes's King, New Seedling, Platoff, Aleon, Franciscus Primus. (*Gard. Gaz.*)

Stâtice arbôrea.—This very showy plant, which we noticed at p. 57, is advertised for sale by the London nurserymen at five guineas each. It is said to be a "splendid conservatory plant," and Messrs. Lucombe,

Pince & Co., of the Exeter Nursery, obtained the gold Banksian medal for a specimen exhibited at a late meeting of the London Horticultural Society.—*Ed.*

FRANCE.

Societe Royale d'horticulture de Paris.—The eighth exposition of this Society was holden in the Drangerie of the Tuilleries on the 28th May, and continued until the 2d of June. This noble building is well suited for an exhibition, being lofty and of considerable length and breadth, and sufficient light admitted by the spacious windows opening towards the Seine. The plants were placed upon stages extending the whole length of both sides of the room, and the walls were variously decorated with prints, drawings, paintings of flowers upon velvet, designs for gardens, and other objects connected with horticulture. In the middle of the room were small tables set apart for contributions from provincial societies, and seats for the company. The exhibition was well attended, and most of the fashionables of Paris graced it with their presence. It afforded delight to those who were not particular about the quality of the flowers, so long as they could behold a large collection, but the floricultural amateur, who expected to see fine specimens or new plants, was sorely disappointed; scarce any of either were to be seen. Orchidææ there were none worth seeing; but few rhododendrons, kalmias, ferns, amaryllis or roses. The Royal Gardens of Neuilly contributed a few good specimens, among which were *Arránca saccharifera*, *Arèca álba*, *Eugènia austrális*, *Araucária excélsa* and *inbriçàta*, and several varieties of *Fris germánica*. Messrs. Cels exhibited twenty varieties of *Cèreus*, and thirty-three varieties of *Echinocactus*, among which was a small plant of *E. scòpa*, very fine. Mr. Jamain had a good specimen of *Chamærops hùmilis*, and seventeen varieties of the orange. Mr. Bodin exhibited one hundred varieties of hardy azalia, but the effect was completely lost by the bad arrangement of the plants, besides which many of them were very badly grown. Mr. Loth had a good specimen of *Dracæna dràco*, and *Tropæolum tricolòrum*, as also a new variety of *Aquilègia*. Mr. Uterhart, a collection of *Calceolària*. Mr. Deville, a fine plant of *Melocactus minax*, which was upwards of twelve inches in diameter. Among the plants of Mr. Godefroy were *Crotalària élégans*, *Euónymus sinénsis elegantissimus fòlia argénteá*, and *fòlia àurea variegátus*, and *Lonicera fláva*. In the collection of légumes from Mr. Valmonio was *Chou Chenois Pétsaie*, and one hundred varieties of potatoes. Mr. Henry had plants of *Pavétta índica*, *Ixòra ròsea*, and *Lantàna speciòsa*. Messrs. Trepet et Leblanc had a collection of grain, consisting of ears of fifty-three varieties of wheat, two of rye, eleven of barley, and four of oats. Baron Rothschild sent some trees in fruit, cherries, plums, and currants; Lord Granville, the English ambassador, a collection of plants; Mr. Bachoux, a collection, including *Euphòrbia spléndens*, *Crèdri* and *canariénsis*, *Begònia argyrostígma* and *semperflorens*, *Plumbàgo ròsea*, and *Polypòdium àureum*. There were also some specimens of *Syrínga Josikæa* (which is hardly worth cultivating) geraniums, a variety of Pines in fruit, one collection of twelve petunias, a few ericas, and some small *Borònia serrulátus*, hearts-ease, &c. The fruit and vegetables, which were very fine, consisted of a few apples and pears, melons, strawberries, potatoes, and lettuce, but neither beans, peas, cucumbers, asparagus, or rhubarb. There were also other objects connected with horticulture, such as engines, spades, knives, pots and flower stages, zinc pans, artificial flowers, and some ingenious designs—portable baskets with fish and aviaries, surrounded with water and flowers.

The Society awards medals for such collections or objects as are considered deserving, but the plants were not marked for prizes, or the names of the successful competitors made known. (*Gard. Gaz.*)

Destruction of wood-lice and kermes in green-houses, by birds.—It has been long known that various birds continually wage war on insects. The sparrow race are the greatest destroyers of them, and many draw their names from the modes in which they pursue the insects which most contribute to their existence. Amongst these birds we find the tit-mouse, or tom-tit (*Parus lin.*) of which there are three kinds in the neighborhood of Paris. They may be seen at all times fluttering about in search of their prey. Two of these are too heavy to be admitted into a conservatory, but the third, the blue tit-mouse (*Parus ceruleus Eul.*) is small, and cannot do any damage to the plants. It is a pretty little bird, olive on the back, and yellowish on the breast, with the top of the head a clear blue. It is easily tamed, lives contentedly in a cage, and feeds on crushed hemp-seed, for its bill is not sufficiently strong to break the grains. Many persons complain of this bird surviving but a short time in the cage, but the death is occasioned in every instance by want of attention to bruising the food. When wood-lice or kermes are seen in a conservatory, all that is necessary is to shut it closely up, and let loose one or two of these little birds. In a few days not a single insect will be left. The birds, from time to time, enter their cage, and it can easily be contrived to shut them by means of a long string attached to the little door. It was by chance that this easy mode of keeping a conservatory free of insects was discovered by M. Poiteau, the French horticulturist. He has kindly communicated the fact to us, and assures us that two birds are quite sufficient for the largest establishment. (*Id.*)

ART. III. Domestic Notices.

Morus multicaulis.—This species of the mulberry, of which so much has been said, has stood out the last winter in Burlington, N. J., without any injury. Whole fields of it were not in the least damaged by the winter, which, though less severe than for several seasons previous, was by no means without a share of intense cold. This will be taken as a tolerable test of its hardiness, particularly in the middle states, especially upon light and dry soils and sheltered situations. In the vicinity of Burlington many thousands of trees are growing, and much attention is given to the subject of rearing trees and silk-worms. We are glad to see this interest taken; for, although the excitement which was created in the New England states has pretty generally ceased, and the planting of mulberry trees of all kinds, in a degree, given up, still we cannot but believe, that, whether the leaves upon which the worms are fed are the produce of the white, the Chinese, or any other of the various kinds of mulberry, which have been lately introduced, it will prove a profitable source of investment to every farmer, from Maine to Florida. Too great inducements were held out in the first instance, which had a very injurious effect upon the mind of the public, and has been the cause of the sudden check which has been experienced. If very much smaller estimates had been laid before our farmers, it would have been better; but, expecting to realize a fortune in a year or two, before a tree could scarcely have time to become rooted in the soil, and finding that their expectations were doomed to almost entire disappointment, the interest has subsided, and the planting and rearing of trees nearly given up. We trust, however, that our farmers will again feel the importance

of attending to the subject, and become convinced that, although small profits must be expected at first, eventually land planted with even the common white mulberry will produce an income, at the least, twice that arising from any other crop which could be produced on the same land.

We hope yet to see the Chinese mulberry acclimated to the New England states; but of this there is, we must say, some doubt. The Brussa mulberry, however, which is stated to be quite as valuable as the Chinese, and which is considerably hardier, may probably, by careful and proper culture, be brought to bear the inclemency of our most severe winters.

So far as the business has progressed in Burlington, sufficient profits have been realized to warrant the investment of considerable capital by the farmers of New Jersey and Pennsylvania.

The Messrs. Cheney, of Burlington, have commenced the publication of a work, entitled the *American Silk Grower*. It is to appear monthly, in octavo form, each number containing twenty-four pages, at one dollar per annum.—*Ed.*

Dr. Hossack's collection of Banksias.—We were in error in stating that the collection of banksias, belonging to the late Dr. Hossack, had been purchased by H. Gray, Esq., for his own collection. They were purchased, by him, for the public garden, which we have before mentioned, and will be removed there when the green-house is erected, if the subscribers proceed with the enterprise. In addition to the banksias, there are a great many other plants, numbering in all about seven hundred, including two very large camellias, one double white, and one double red. They are now in the garden attached to the Maverick House, East Boston, under the care of Mr. Senior.—*Id.*

ART. IV. *Horticultural Association of the Valley of the River Hudson.*

At p. 233 we noticed the circular of this association, signed by several of the most influential horticulturists, in the Valley of the Hudson, calling a meeting of all those gentlemen interested in gardening, for the purpose of forming themselves into a society for improving the condition, and promoting the cause, of horticulture.

The meeting was called at New York, where it assembled on the morning of the 30th of May, and formed itself into an association under the above title; a committee was appointed to prepare a constitution, prepare a list of officers, &c. The meeting was adjourned to the evening, when the constitution was read and unanimously adopted. The articles are similar to those of other horticultural societies; with the exception of the first and last, which we extract, the former as explaining the objects of the association, the latter the seasons of making its exhibitions:—

Art. I. This Association shall be styled the "Horticultural Association of the Valley of the Hudson," and shall be composed of active members residing in all the counties bordering upon the Hudson, including also Long and Staten Islands. Its objects shall be the promotion of Horticulture and the taste for rural improvements in general, by comparative exhibitions, at which medals and premiums shall be awarded, by procuring and disseminating choice fruits and plants; by experiments in culture throughout different sections of the territory embraced; by lec-

tures and essays on various subjects connected with the science and practice of Horticulture; and in such other methods as shall be deemed advantageous by the Association.

Art. XII. There shall be two meetings for the exhibition of horticultural products in every year, as follows: first, the *summer meeting*, for the smaller fruits and earlier flowers and vegetables, to be held in June, at Albany, Poughkeepsie, and Newburgh alternately; and, second, the *autumnal meeting*, for the larger variety of hardy fruits and late floral and vegetable productions, to be held in September or October, in the city of New York. There shall be an annual address delivered at the autumnal meeting; and lectures and essays, as herein provided, at the summer and other meetings.

The following is the list of officers:—

J. Buel, Albany, President. A. J. Downing, Newburgh, Corresponding Secretary. N. G. Carnes, New York, Recording Secretary. G. C. Thorburn, New York, Treasurer.

Vice-Presidents.—Philip S. Van Rensselaer, Albany County. Edward P. Livingston, Columbia Co. E. Holbrook, Dutchess Co. N. Becar, Kings Co. Alexander Walsh, Rensselaer Co. John Torrey, New York Co. C. Ludlow, Orange Co. R. Arden, Putnam Co. J. E. DeKay, Queen's Co. Eleazer Lord, Rockland Co. Samuel Young, (Col.) Saratoga Co. A. B. Hasbrouck, Ulster Co. James A. Hamilton, Winchester Co. William Emerson, Staten Island.

Executive Committee.—Poughkeepsie and Dutchess Co.:—Theodore Allen, J. R. Stuyvesant, J. W. Knevels. Newburgh and Orange Co.: Henry Robinson, J. F. Betts, C. Downing. Albany: J. M'Donald M'Intyre, William Thorburn, Jesse Buel. New York: John J. Palmer, James Pennell, (M. D.) J. A. Perry, James K. Hamilton, John Groshon, William R. Rushton.

The first meeting of the Association for Exhibition, &c., will be held in New York on the 27th of September. Gentlemen throughout the whole valley of the Hudson, are requested to bring flowers at the first exhibition, and such horticultural and agricultural products, as may serve to make up a comparative exhibition of the various fruits, flowers, and vegetables produced upon this diversified territory. The Association will award medals and other premiums, for all extra fine productions, new varieties of fruits of superior excellence, &c. &c. We are requested to state that gentlemen residing at a distance, are invited to send any remarkable specimens of fruits, or flowers, for exhibition.

We congratulate our friends in New York, upon the formation of this association, and are confident, from the standing and talent of the gentlemen interested in getting it up, that it will advance a taste for horticulture, in all its branches. We trust all will come forward at the first exhibition.—*Ed.*

ART. V. *Pennsylvania Horticultural Society.*

The monthly meeting of the Pennsylvania Horticultural Society was held on Tuesday evening, the 21st of August, in the Hall under the Atheneum. The President in the chair.

The Committee on Fruit and Vegetables awarded the premium for the best early peaches, not less than half a peck, to Hugh Hatch, Camden, N. J. (early York rareripe;) also, for the best early apples, not less than half a peck, to Mr. Hatch, (Bevan's favorite) at the Society's intermediate meeting of the 1st of August.

The premium for the best six roots Swiss Chard, was awarded to Wm. Chalmers, gardener to Mrs Stot, Turner's Lane, exhibited at the Society's intermediate meeting of the 1st of August: no competition for the above premiums.

The Committee on Vegetables awarded the premium this evening, for the best display of Vegetables, to Wm. Chalmers, gardener to Mrs. Stot, Turner's Lane.

The Committee on Fruit awarded the following premiums this evening, viz: For the best display of plums to James C. Laws, (Washington Bolmar;) four competitors. For the display of peaches, to Hugh Hatch, Camden, N. J., (early York rareripe;) three competitors. For the best cantelopes, to Mr. Cammac: three competitors. For the best display of grapes, to J. Smith, gardener to Nicholas Biddle, Esq.: three competitors. They also make mention of Alexander Parker, for his fine exhibition of plums; and of a cantelope, the Cephalona, said to keep four months after being cut from the vine, exhibited by Robert Brown Blockley.

The Committee on Plants and Flowers awarded the premium for the best bouquet, to Messrs. McKenzie & Buchanan: no competition.

Wm. Chalmers, gardener to Mrs. Stot, exhibited salsify, squashes of various kinds, tomatoes, egg plants, large corn, beets, cabbage, carrots, netted cantelopes, Royal George peaches, Spanish melons, white Syrian and white Muscat grapes, and some fruit of the *Passiflora edulis*.

James Beadle, gardener to Mr. Norris, Turner's Lane, exhibited squashes, tomatoes of various sorts, egg plants do., cucumbers, Lima beans, beets and sugar beet.

Mr. Cammac exhibited cantelopes, and three fine large lemons.

Daniel Reilly, gardener to Pierce Butler, Esq., exhibited cantelopes, plums, the golden drop, green gage, egg plum, and peaches.

Thomas Landreth exhibited the Bingham plum, and Hulings Reine Claude.

John B. Smith, Esq., Christian St., exhibited some fine seedling pears, [will our correspondent favor us with some notice of this fruit?—*Ed.*] and a large ripe fruit of the *Cárica Papaya*.

J. Smith, gardener to Nicholas Biddle, Esq., exhibited grapes, the black Hamburg, white Syrian, red Chasselas, and Chasselas Diel, &c.

Alexander Parker exhibited the following plums, viz: Imperial violet, magnum bonum, large Pruen, Bolmar's Washington, Vandyke's large egg, Parker's large natural, Stamper's large yellow, Queen mother, green gage, red do., blue do., mussle, French copper, Parker's fine cling, and other varieties, the Missouri plum, four varieties of apples, and a seedling, and five varieties of pears.

Mr. C. S. Longstreth exhibited some fine muscadine grapes, grown in the open air.

Mr. Ferrusher exhibited Huling's Reine Claude, being part of a branch from a tree bearing ten varieties.

The continuation of the extreme heat and drought has banished the flowers from our late meetings. but the fruits made ample amends in their fine appearance and delicious flavor. Mr. Cammac's and Mr. Reilly's cantelopes were very large and fine flavored, especially the former, as we can speak feelingly on the subject as they came under our particular notice and taste. We may say the same of the grapes; all were very superior, particularly those from the vineries of N. Biddle, Esq.: they were beyond all praise. Mr. Hatch's peaches looked very fine, and I suppose

tasted as good. The appearance of so many fine plums, gave general satisfaction. As an amateur, Mr. Laws has taken the lead these some years past, in plums and grapes. Mr. Chalmer's vegetables were first-rate, and so were Mr. Beadle's, which does these gentlemen the greatest credit, this year, especially for the many and excellent varieties of vegetables that have graced our meetings of late. One of the greatest rarities that was exhibited, was the ripe fruit of the *Cárica Papàya*, perhaps the first that ever was so matured out of the tropics before.

Mr. Smith has been very fortunate, I ought rather to say that by his superior skill, in raising and perfecting tropical plants of all kinds. The seed of the *Cárica* was sown in 1836, and the plants are large, and have been bearing three months past.—*G. Watson, Recording Secretary. Philadelphia, August 24th, 1838.*

ART. VI. *Massachusetts Horticultural Society.*

Saturday, July 21st, 1838. We noticed in our last the fruits and flowers, &c. exhibited at this meeting, and also mentioned that committees were chosen to make preparation for the coming anniversary, to be held on the 19th, 20th, and 21st of September. The general committee of arrangements is composed of the following members:—Samuel Walker, Isaac P. Davis, Thomas Lee, M. P. Wilder, E. Putnam, E. Weston, Jr., B. V. French, S. Downer, D. Haggerston, C. M. Hovey, W. McLennan, M. P. Sawyer, J. Breck, J. E. Teschemacher, C. Newhall, Wm. Kenrick, R. T. Paine, Henry Sheafe, S. R. Johnson, S. Sweetser, R. Manning, J. M. Ives, Dr. Howard, P. B. Hovey, Jr., E. M. Richards, J. A. Kenrick, W. E. Carter, J. L. L. F. Warren, W. H. Cowan, J. W. Russell, J. Winship, J. Tidd, and L. P. Grosvenor.

A special committee to decorate the hall, and take charge of all fruits and flowers, was also appointed, and the following members nominated by the President: S. Walker, M. P. Wilder, J. E. Teschemacher, W. Kenrick, E. M. Richards, S. R. Johnson, C. M. Hovey, D. Haggerston, W. H. Cowan, J. W. Russell, H. Sheafe, Mr. McLennan, and L. P. Grosvenor.

July 28th.—Exhibited. Flowers: From S. R. Johnson, several varieties of roses, including *Jaune Despréz*, *Lamarque*, &c.; also, carnations, pinks, and the double-flowered pomegranate. Carnations, honeysuckles, *Verbena Tweddieana*, *Lilium canadense*, and a variety of other flowers, from Messrs. Winship. Bouquets, from John Hovey, S. Walker, and Hovey & Co. A seedling white phlox, raised from the *pyramidalis*, from W. E. Carter; it is a much purer color than its parent; also, a bouquet of dahlias and other flowers.

Fruits: *Franconia* and white Antwerp raspberries, from Dr. J. C. Howard. Forced peaches, from M. P. Sawyer. Gooseberries, from J. T. Buckingham. Gooseberries, from Geo. Newhall, Dorchester. From W. Meller, gooseberries, and red and white currants. Gooseberries, from W. Kenrick. Currants, red and white, from A. D. Williams.

August 4th.—Exhibited. Flowers: From S. Walker, bouquets of

flowers, containing, among other fine things, a specimen of *Tigrídia conchiflora*. A large bouquet, from Messrs. Winship. Roses, fine hollyhocks, pinks and carnations, from S. R. Johnson. A finely arranged bouquet, from Dr. J. C. Howard, composed of superb asters, dahlias, &c. Bouquets, from Hovey & Co., J. Hovey, and Messrs. Winship.

Fruits: From Dr. Howard, black Hamburgh, sweetwater, and Miller Burgundy grapes. Early harvest, Curtis's striped, and Williams's favorite apples, from E. M. Richards. Apricots, from Mr. Wales, of Dorchester, and Mr. Rundle, of Boston. A branch of the *Shepárdia* or Buffalo berry, from Messrs. Winship.

August 11th.—Exhibited. Flowers: From S. Sweetser, *Amaryllis formosissima*, spotted balsams, *Lobèlia splendens*, altheas, *Verbèna Tweedieàna*, &c. &c. Two flowers of *Hibiscus fulgens*, from J. Donald, gardener to M. P. Wilder; these were very large and handsome. A species of *Acónitum* from Greece, and bouquets from S. Walker. A large beautiful bouquet, composed in part of asters, dahlias, *Gladiolus natalensis*, from Dr. J. C. Howard. Bouquets, from Messrs. Winship, and Hovey & Co.

Fruits: Figs, very large and fine, from J. F. Priest, Boston. Apricots, from Mr. Rundle. Early harvest apples, from J. Eustis, South Reading. Catalonia plums, from S. Pond. Green chisel pears, from S. Walker. Early harvest apples, from E. Vose.

August 18th.—Exhibited. Flowers: Dahlias, from Dr. Howard, viz: Queen Adelaide, Brown's Desdemona, Royal William, Beauty of Cambridge, Ophelia, and Cedo Nulli; also, a bouquet, containing a great assortment of flowers. Bouquets, from Messrs. Newhall, Hovey & Co., Winships, S. Walker, and J. Hovey. Spotted balsams, from S. Sweetser. Dahlias and bouquets, from W. Kenrick.

Fruits: From E. M. Richards, a fine variety of early apples, viz: early harvest, Williams's early, early Bow, early red Juneating, summer calville, sugar loaf, and spice apples. Shropshirevine, and Williams's favorite apples, from S. Downer; also Dearborn's seedling, Washington, and Queen Catherine pears, and Bingham, Royal de Tours, and damask plums. River apples, from James Munroe, Cambridge. Queen Catherine pears, from A. D. Weld, Roxbury. Apricot plums, blue, Mogul, and a large blue plum called Pond's seedling, from S. Pond. Fine specimens of the Miller Burgundy, white Chasselas and black Hamburgh grapes, from Dr. Howard.

Vegetables: Tomatoes, from S. Sweetser. Fine Lima beans, from A. Rogers, Waltham.

August 25th.—Exhibited. Flowers: From T. Lee, *Hibiscus Manihót*, and *palústris*, *Portulàca Gillièsii*, *Calandrínia discolor*, *Cleòme spinòsa*, *Gerárdia fláva* and *purpúrea*, *Saggittària saggittifòlia*, *Verbèna Tweedieàna*, roses, &c. Dahlias, from S. Walker, viz: Belladonna, rival yellow, (Jackson's,) and Duchess of Buccleugh; also several bouquets. Bouquets, from the Messrs. Winship. Dahlias, from Dr. Howard, viz: Countess of Liverpool, Ophelia, Beauty of Cambridge, Royal William, Prince Geo. of Cumberland, and a fine large bouquet. Bouquets, from John Hovey, and Messrs. Hovey & Co.

Fruits: From S. Downer, Washington, Julienne, and Frederick of Wurtemberg pears, and Williams's favorite apples. Bolmar's Washington, Bingham, Smith's Orleans, Duane's purple, green gage, Corse's nota bona, and a purple plum, from S. Pond; also, Williams's Bonchrèen, Julienne, Andrew's and Cushing pears. From S. R. Johnson, green gage, and remarkably fine specimens of Bolmar's Washington plums. Early Anne peaches, from T. Lee. Smith's Orleans plums, from C. H. Jones, Boston. White gage plums, and green chisel pears, from S. Walker. Black Hamburgh, and white Chasselas grapes, from Dr. Howard, and

the following melons:—Napoleon, netted cantelope, muskmelon, and the melon de poche de la reine, or Queen's pocket melon.

Vegetables: Tomatoes, from J. L. L. F. Warren.

ART. VII. Faneuil Hall Market.

Roots, Tubers, &c.		From	To	Squashes and Pumpkins.		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new :				Squashes :			
Common, { per barrel,	1 25	1 50		Autumnal Marrow, pr pound	2	—	
	50	60		West India, per pound,	2	—	
Chenangoes, { per barrel,	1 50	1 75		Winter crook-neck, per lb.	2	—	
	75	—		Canada, per lb.	2	—	
Sweet Potatoes, per peck,	75	—		Pumpkins, each.	12½	25	
Turnips, new :							
Common, { per bushel,	75	—		<i>Fruits.</i>			
	25	—		Apples, dessert, new :			
	6	—		Common, { per barrel,	2 00	—	
Onions, new :					75	1 00	
Red, per bunch,	4	6		Porter, { per barrel,	2 50	3 00	
White, { per bushel,	1 50	—			1 00	1 50	
	4	6		Sweet apples, per bushel,	1 50	—	
Beets, new :				Crab apples, per peck,	50	75	
Long red, { per bushel,	1 00	—		Pears :			
	4	6		St. Michaels, per dozen,	25	37½	
Turnip rooted, per bunch,	4	6		Bartlett, per dozen,	25	37½	
Carrots, new, per bunch,	6	—		Cushing, per dozen,	25	—	
Horseradish, per pound,	8	12		Julienne, per dozen,	25	—	
Radishes, per bunch,	—	—		Seckel, per half peck,	75	—	
Shallots, per pound,	20	—		Epargne, per half peck,	50	—	
Garlic, per pound,	12	—		Common, per half peck,	37½	—	
<i>Cabbages, Salads, &c.</i>				Plums, per quart :			
Cabbages, per dozen :				Green Gages,	25	37½	
Early York,	50	75		Washington,	50	—	
Savoy,	75	—		White Gage,	25	—	
Drumheads,	1 00	—		Orleans,	50	—	
Cauliflowers, each,	25	37½		Common,	17	20	
Brocoli,	25	37½		Damson,	12½	—	
Lettuce, per head,	3	4		Peaches, { per bushel,	4 00	5 00	
Beans :					37½	62	
String, per half peck :				Grapes, hot-house, per lb :			
Cranberry,	10	12½		Black Hamburg,	75	—	
Shelled, per quart :				White sweet-water,	56	62	
Common,	10	12½		Green grapes, per peck,	50	—	
Sieva,	20	25		Melons: each,			
Lima,	25	—		Watermelons,	12	25	
Corn, per dozen :				Pine-apple,	6	12	
Sweet,	10	12½		Green Citron,	6	12	
Cucumbers for pick'g, pr hund.	17	20		Common Musk,	12	25	
Peppers, per pound,	4	—		Whortleberries, per quart,	8	—	

REMARKS. Notwithstanding the apprehensions of many, that the crops would be very light on account of the long continued drought, we believe we can now say, with confidence, that a greater harvest has not been reaped for several years. It is true that the unprecedented fine weather of May and June, caused such rapid advancement of vegetation as to lead us to expect immense crops; undoubtedly larger than

have been or will be harvested in some localities, but, compared with last season, crops, of both the farmers and the market gardeners are, at least, three times as great. Since our last, there have been heavy and refreshing showers, which have invigorated every thing that was not beyond relief; and the turnip crop, which was not very promising, now looks well. Late potatoes are improving fast; and cabbages, cauliflowers, and other vegetables which have suffered, are making rapid progress. If the weather continues mild, with a moderate quantity of rain through September, all kinds of vegetables will have a sufficient season to mature.

Potatoes come in slowly, and not of the best quality: we have already stated that early crops were light; but it is not yet time to bring forward only those of the earlier planting. Sweet potatoes have come to hand the present week, and of fair quality, though smaller than usual. Turnips plenty, and better than at our last report. Onions begin to be received in larger quantities, and of good quality. Beets and carrots are tolerably abundant, and are brought forward by the bushel. No radishes in the market. Cabbages continue smaller than usual, though there is a decided improvement within the last week or two; some very fair drumheads have come to hand this week. Cauliflowers are scarce, from the excessive heat and drought. Beans are not abundant; sievas and Limas, but for the dry weather, would have been supplied in large quantities. Some green corn is yet received. Cucumbers for pickles, good. Peppers quite abundant. The market begins to fill up already with squashes of all sorts, shapes, and sizes, so sportive is that variety, the autumnal marrow. The crop is the largest which has been gathered for years.

Fruit of all sorts, abundant and tolerably good. Apples plentiful; Porter's have come to hand, but not quite as fair as usual. Pears continue to be received, as the season advances, in great quantities, and in numberless varieties; and it is gratifying to see such fine kinds take the place of the miserable ones, which have filled the market for several years; some St. Michaels from the garden of Mr. Hannas, in this city, were beautiful: not half the kinds that can be had are named in our quotations, for want of room; the dry weather has prevented their arriving to as large a size as last season; Bartlett's are quite inferior. Plums also in profusion; green gage, Washington, Orleans, Bingham, and yellow gage, &c., of very handsome size. Peaches have been mostly received from N. Y., but they begin to come in from the vicinity. Grapes are good and prices have fallen. Melons of remarkable size are now brought in from the neighborhood, and few or none have been received from New York lately; Green citron, Pine apple, &c., in quantities. Some whortleberries are yet to be had. Tomatoes abundant. New cranberries have just been received. Lemons very scarce, and prices have advanced. Oranges about the same.—*Yours, M. T., Boston, August 26th, 1838.*

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape vines, in the green-house or grapery, will now have mostly ripened their fruit; where they have done so, the shoots for next year's

produce should be pruned of the lower laterals, and kept tied up. Where the grapes have not wholly colored, give an abundance of air early in the morning, and close early at night.

Strawberry beds may be planted out any time before the 20th, with good success.

Currant and gooseberry bushes may also be transplanted the latter part of the month.

Fruit trees, particularly apples and pears, may be transplanted the latter part of the month, or later.

FLOWER DEPARTMENT.

Dahlias promise better since the rains of the last week; all useless shoots should be pruned away, and the rest tied up. Continue to water, especially over the tops, if the weather is dry. If there should be any danger of hard frost before October, hoe a little earth up over each root. Thin out the buds, and cut away all imperfect ones.

China, tea, and other tender roses, should now be repotted and pruned. Continue to bud where the sap runs freely.

Chinese primroses should be now repotted.

Geraniums may yet be propagated, if a sufficient stock is not secured.

Mignonette should be sown to flower in January.

Annuals sown last month should be potted off into small pots.

Verbenas of all kinds, intended for keeping over the winter, should be taken up and put in small pots, or plants may be layed off from the old roots.

Chrysanthemums should be well watered.

Pæonies may now be separated and transplanted with success.

Oxalis Bowiei, rosea, &c. may be planted in pots any time this month.

Cactus cuttings may be now put in.

Orange and Lemon trees should be repotted now, if needed.

Camellias should be well watered, and if any danger of frost is apprehended, they should be removed to the green-house.

Amaryllis, belladonna, and Guernsey lilies should now be repotted for blooming.

Pinks may be yet propagated by pipings.

Green-house and hot-house plants, of all kinds, should be repotted now if they need it, so as to get rooted before they are put in for the season. The houses should also be well cleaned and painted or white-washed, to destroy insects.

VEGETABLE DEPARTMENT.

Asparagus beds may be planted this month. See directions in the present volume.

Rhubarb roots may be also set out with safety.

Spinach and Lettuce for winter should be now sown.

Celery plants should be finally earthed up.

Cucumber seeds, to produce fruit at Christmas, should be now planted in a light hot-bed.

THE MAGAZINE
OF
HORTICULTURE.

OCTOBER, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *Some account of an Agave Americana, and a Catalogue of Plants in the Collection of J. W. Perry, Esq., Brooklyn, N. Y.* Communicated by Mr. J. W. PAULSEN, Gardener to Mr. Perry.

I HAVE under my management, here, a fine plant of the *Agave americana*, some account of which, I presume, will be interesting to your readers. The plant I procured of Mr. Cohen, an amateur gardener in Philadelphia, and, from its large size, I am in hopes that I shall be able to bloom it in the course of the next year, or, at least, the year after.

There are two reasons, I apprehend, why this plant has so rarely been in flower, in the northern parts of Europe or in America; first, that the plants are not kept in a growing state only part of the year, and are generally treated with the utmost neglect; and, secondly, that many gardeners, having an impression (it being a prevalent idea,) that the *Agave* blooms only once in the course of a hundred years, few exert themselves to encourage the plant to make a rapid growth, thinking that the period of its flowering is so far distant that they shall not have the pleasure of seeing it during their lifetime. Both causes have tended much to its not being oftener seen in collections.

The plant in this collection is about thirty years of age, but remarkably strong and healthy. I brought the plant from Philadelphia, on the 6th of June last, and immediately made preparations to plant it out in the open air. A circular bed was marked out, thirty-six feet in circumference; the centre of it was elevated three feet higher than the edge, down to which it gradually and evenly sloped. This was done to keep the bed dry in the

winter. The soil was a light rich mould, prepared with horse manure.

From the first of May to the last of September I intend to keep the plant in this bed wholly unprotected. But after the end of September I shall have a temporary moveable frame erected over it; the sides of the house or frame I shall have filled up with tan; and the inside will be heated by a small stove and pipe during all severe weather through the winter. The plant has grown very well since it was turned into the ground, and has, at this time, a fresh and vigorous appearance. The habit of the plant has entirely changed: the leaves are no longer pendant, as they are in general, but stand erect. It has made seven and a half new ones, as you will perceive from the following table.

June 22,	1 leaf	August 7,	1 leaf
July 14,	1 leaf	August 17,	1 leaf
July 18,	1 leaf	August 28,	1 leaf
July 28,	1 leaf		

Mr. Hogg is trying, at the same time, to bring into bloom a plant, of the *Agave americana*, belonging to Philip Spaulding, Esq., of New York. It is a very large and fine specimen, being about or upwards of ninety-eight years old, and is considered as on the eve of displaying its flowers. This plant Mr. Hogg has likewise planted out in the open ground, in a similar manner to that adopted by me, differing, however, in having a small house erected over it, both summer and winter, so as to force it more rapidly forward. [We saw this plant on our late visit to Mr. Hogg's.—*Ed.*]

In addition to this, I send you a list of several of our largest and best plants, which may prove interesting. I have not yet finished a complete catalogue of all the fine things in the collection, and probably many plants worth mentioning have been omitted. It is as follows:—

<i>Acacia dodonæifolia.</i>	<i>Amaryllis vitallina.</i>
— linearis.	<i>Agave americana</i> , three feet in diameter.
— decipiens.	<i>Alstrœmeria Ligtu.</i>
— longifolia.	<i>Alpinia nutans.</i>
— lophantha.	<i>Ardisia crenulata.</i>
— verticillata. All the acacias are very large spec- imens.	— solanacea.
<i>Amaryllis aulica.</i>	<i>Arœca montana.</i>
— crœcea.	<i>Astrapæa Wallichii.</i>
— equëstris.	<i>Banksia grandis.</i>
— Johnsonii.	— littoralis.
— <i>Belladonna.</i>	— latifolia, very large.
— vittata.	— serrata, very large.
	— repens.

- Banksia* collina.
Bauhinia tomentosa.
Bonapartea juncea.
Bombax *Cèiba*, very large.
Brunsvigia Josephina.
Camellia atrorubens; height eight feet; diameter five feet six inches.
Camellia variegata: height seven feet, two inches; diameter three feet, five inches.
Camellia fl. pleno alba: seven feet, three inches height; six feet diameter.
Crægus glaber.
Cheirostemon platanoïdes, rare.
Corypha umbraculifera.
Cycas revoluta.
Crescentia Cujute.
Coffea arabica.
 — orientalis.
Cypripedium venustum.
Carica *Papaya*, fruit-bearing.
Dracæna australis, very large.
 — ferruginea.
Erythrina laurifolia, very large.
Eugenia uniflora.
 — myrtifolia.
 — australis, very large.
Ficus elastica.
 — australis.
 — aloifolia.
 — bengalensis, splendid.
Hibiscus rosa sinensis, flora pleno rubra.
 — rosa sinensis, flora pleno variegata.
 — rosa sinensis, flora pleno lutea.
Hibiscus rosa sinensis, flora pleno rosea.
Hæmanthus coccineus.
Hækea suaveolens.
Justicia *Adhatoda*.
 — speciosa.
Jambosa australis.
Jatropha *Curcas*.
 — *Manihot*.
 — multifida.
Ixora coccinea.
Euphorbia Poinsettii.
 — punicea.
 — speciosa.
Kæmpferia rotunda.
Laurus cinnamomum.
 — *Camphora*, large.
 — cerasus.
 — persica, etc.
Latania borbónica, splendid.
Magnolia grandiflora, very large.
 — pumila.
 — fuscata, very large.
Mangifera indica, very large.
Mammèa americana.
Musa sapientum.
Poinsettia pulcherrima.
Phoenix dactylifera.
Pròtea argentea.
 — longifolia.
 — meliflora.
Rhipsalis salicornioides.
Pterospèrum auricifolium.
Rhododèndron catawbiense.
 — hybridum.
 — *Russellianum*.
Schòtia capensis.
Strelitzia reginae.
Swietenia *Mahagoni*.
Urèna speciosa, 16 feet high.
Zamia speciosa.

The *Magnolia grandiflora* I purchased for Mr. Perry at the sale of Dr. Hossack's collection. It is a splendid specimen. Immediately upon receiving it, I planted it out in the open

ground, and shall try, by erecting a slight frame of boards around it, together with the use of hay or straw, to protect it and keep it out through the winter without injury. The *Córypha umbra-caulifera* and *Latània borbónica* I selected from among the many plants, at the sale of Mr. Pratt's collection, in Philadelphia. They are two large and fine specimens of these beautiful palms, and a great ornament to the hot-house. The *Urèna speciòsa* made a splendid leaf the past summer; it was six and a half feet in length. *Cactus heptagónus*, presented to Mr. Perry by Mr. G. C. Thorburn, is a fine and superb plant, and measures twelve feet high. It is about forty years old, and has not yet bloomed. The *Cereus speciosissimus* is probably one of the finest in the country. I purchased it from Mr. A. Dryburgh, of Philadelphia. It is seven feet eight inches in height, and [all the shoots] about ten inches in diameter. [When we visited Mr. Dryburgh's establishment, in the spring of 1837, we noticed this plant in particular. See vol. III., p. 208.—*Ed.*] The collection of cactuses, cereuses, &c., here, is probably one of the best in the country; many of them are very large specimens. I have had *Crinum amábile* in bloom for the last month out of doors, and very beautiful. Mr. Perry is about erecting his new houses.

Yours,

J. W. PAULSEN.

Brooklyn, N. Y., August 30th, 1838.

We hope our correspondent, who has favored us with the above interesting paper, will continue to give us the particulars of the growth of the *Agave americana*; the exact number of leaves it makes; its mode of treatment, during the coming winter; and its future management until it blooms. Such a diary cannot but be of great value to those who may possess plants, as furnishing some guide to a successful mode of bringing them into bloom. We trust, therefore, that at the end of another season, or at an earlier period, Mr. Paulsen will communicate to us the weekly progress of the plant under his care. We are glad to learn that Mr. Perry is adding so many fine plants to his collection, as is announced in the above list, and that he is about building so extensively for the growth of plants and fruits. We hope at a future time, when our means will enable us, to procure a plan and general view of Mr. Perry's place and garden structures. We are confident that the neat and finished style in which they are built, would be a desirable pattern to gentlemen who are about entering into the culture of tender plants.—*Ed.*

ART. II. *On the most favorable situation for a Garden.* By
J. W. RUSSELL, Superintendent of Mount Auburn.

A GARDEN, if possible, should be on a gentle declivity towards the south, a little inclining to the east, to receive the morning sun. If it be situated in low ground, the wind will have the less effect upon it; but there it will be subject to early and late frosts, which will be found to be very prejudicial to the fruit, and other crops; and if situated on high ground, although it will, in a great measure, be free from early and late frosts, it will be exposed to the fury of the winds, to the great injury of the trees, by breaking their branches and blowing off the blossoms and fruits. A garden should be well sheltered from the north-west and east winds, in order to prevent the *blight* from affecting the trees.

If a garden be not naturally sheltered from the just mentioned obstacles, with gentle rising hills, which are the best shelter of any, plantations of forest trees made at proper distances, so as not to shade it, will be found the best substitute, at the same time there ought to be a free admittance for the sun and air. On that account, a locality surrounded by woods is a very improper one for a garden or orchard, as a foul stagnant air is unfavorable to vegetation; and it has also been observed, that blights are much more frequent in such situations than in those that are more open and exposed.

In the laying out of a new garden, another very essential point is, to make choice of a good soil. It should be from eighteen inches to two feet deep; but if deeper the better, of a mellow, pliable nature, and of a moderately dry quality; and if the ground should happen to have an uneven surface, I would by no means attempt to level it, for by that unevenness, and any little difference there may be in the quality, you will have a greater variety of soil adapted to different crops. The best soil for a garden is a rich mellow loam, and the worst, a stiff heavy clay; a light sand is also a very unfit soil for a garden. The cleaning of streets and ditches will be found very proper to mix with a strong soil, and if the ground should be cold, a large quantity of coal and wood ashes, sea sand, or rotten vegetables, should be laid upon it, in order to meliorate and loosen the soil, and render it easy to work; lime rubbish, or light sandy earth from fields and commons, will also be found of great service to stiff clayey ground. If the soil be light and warm, well decomposed cow's dung, or neat's dung, is the best dressing you can give it. If horse dung be ever used, it must be completely rotted and mixed with peat or bog soil, otherwise it will burn up the crop, if there should happen to be a spell of *dry, hot* weather.

With regard to the form of a garden, there are various opinions, and it sometimes depends on the situation; but where you are at perfect liberty, I would prefer an oblong or square. As to the size, it may be from one acre to six or eight, according to the demand for fruits and vegetables in the family.

It will be necessary, especially in exposed situations, to enclose the melon ground, with either a wall or paling, from six to eight feet high, in order to protect the frames early in the spring from cold piercing winds and frosty nights, &c. &c.

Whenever there is a quantity of manure laid together, it will be found to be of the utmost importance to have a large cistern made convenient to it, to receive the water that oozes from the dung. This moisture, which is the strength of the manure, may be used for watering grape-vine borders, cauliflowers, cabbage, &c., or any other kinds of plants and trees, that appear to be in need of a similar stimulus.

When a garden is planted and finished, it will be found very convenient to have a plan of it, with the name of each tree inserted in its proper place.

Finally,—a never-failing supply of water is an indispensably necessary appendage to a well kept garden. Therefore the obtaining of which ought to be the first consideration; for no garden can be called complete without an abundant supply of this element.

Yours,

J. W. RUSSELL.

Mount Auburn, Sept. 13th, 1838.

ART. III. *Catalogue of Plants which have flowered or fruited in the collection of J. W. Knevels, Esq., Newburgh, Orange Co., N. Y. Communicated by J. W. KNEVELS.*

IN our II., p. 96, an interesting account of Mr. Knevels's collection of plants is given by our correspondent, Mr. Downing, of Newburgh. Those of our readers who have read this, will be pleased to see a list of all the finer plants which are comprehended in this large collection; and as Mr. Knevels has forwarded us a list of the greater part of the rare and choice plants for publication, we are gratified in having this early opportunity of giving it an insertion in our Magazine.

It is quite unnecessary for us to state that Mr. Knevels's collection is one of the most extensive in the country, notwithstanding a portion of the plants, mostly duplicates, were disposed of last season at public sale. Among those now in his possession are some remarkably large and fine specimens. The camellias are numerous, and fine plants; and the tropical plants are extensive; the cactuses are also large and fine. But we need not particularize, as the article to which we have above referred, aside from the interesting remarks contained therein, upon the collections in general, enumerates a great many of the most showy and beautiful plants. Mr. Knevels's collection is, we believe, well known, as it formerly belonged to Mr. J. B. Smith, of Philadelphia, who was many years employed in gathering his plants together from almost every country where any thing new or uncommon was to be found; and his acquaintance with many of the French nurserymen enabled him to enrich his collection with all the most desirable plants, at a cheaper rate and at an earlier day than any other person. It is to this fact that we attribute his very complete collection of camellias, the whole of which, together with some fine seedlings, raised by Mr. Smith, were transferred to Mr. Knevels.

In the following list Mr. Knevels has omitted nearly all the species of a genus when they were very numerous, as in *Acacia*, *Amaryllis*, *Cactus*, *Camellia*, *Citrus*, *Fuchsia*, &c. &c. Some of the plants are very common; and, although Mr. Knevels has desired us to select only such as we think will be interesting to amateurs and gardeners, we prefer to give the whole catalogue as we have received it. It is arranged in alphabetical order.

Acacia armata, *Farnesiàna Julibrissin*, lanceolata, verticillata, odorata, scabata.

Achana Malvaviscus.

Agapanthus umbellata fl. cerulea, pale do., fl. alba, do. fol. var.

Albica altissima.

Aloe arborescens, variegata, lingua minor, retusa, pentagona, longifolia.

Alstromeria tricolor.

— acutifolia.

Amaryllis carnata, *Fothergillii*, *Johnsoni*, lateritia, longifolia, psittacina, pulverulenta, sarniensis, undulata, &c. &c. vendosa.

Anigozanthus rufra.

Arbutus Unedo.

Arctotis aspera.

Ardisia crenulata, elegans, paniculata, solanacea.

Arduina bispinosa.

Aristolochia sempervirens.

Asclepias arborea.

— curassavica.

Aster argophyllus.

Astrapæa Wallichii.

Aucuba japonica.

Azalea indica coccinea, *ledifolia*, *phœnicea*, *purpurea* pl. &c.

Azalea pontica.

— calendulea.

Begonia argyrostigma.

— discolor.

Bignonia capensis, *grandiflora*, *stans*, *æquinoctialis*.

Blètia hyacinthina.

Bulbine floribunda.

Burchella capensis.

Cereus flagelliformis, *grandiflorus*, *speciosissimus*, *triangularis*, *truncata*, *phyllanthus*, &c.

Calceolaria integrifolia.

— rugosa, &c.

Calla ethiopica.

Calothamnus quadrifolius.

Camellia, amongst others álba
lutescens, álba pl. álba simplici,
anemoneflóra, rùbra et álba,
atrorùbens, blánda, *Berlesiana*,
China Tales, crassifolia, ?
crassinervis? *Elphinstonia*, glòria
bélgica, *Halèsia*, incarnata,
insignis single, imbricata, imperialis,
nòva Calvérti, *Palmèrii*,
papaveracea, *Pæoniiflora*
rùbra, purpùrea, ròsea, álba,
pensillata, pulcherrima, punctata
plèno, rex Batàviæ, ròsa
sinénsis, rubricaúlis, spathulata,
speciosa simple, speciosa plèno,
variegata, rùbra pl., and simple,
venosa, *Woodsii*, exúnia,
seedling Aurelia, like punctata pl.,
Moyaméusing, astraflamente
(warratah,) No. 25, and *C. Kíssi*,
and *Sassánqua* ròsea.

Campánula pyramidalis.

Cánna flaccida.

— *indica.*

— *coccinea.*

Cassia, several species.

Céstrum lancifolium.

— *Pàrqui.*

Cérbera Thevetia.

Chirònia linoides.

Chrysócoma còma aurea.

Cinerària amelloides, aménta,
platanifolia, marítima.

Cistus vagenata.

— *salvifolius.*

Citrus Aurántium, var. *cruénta*,
var. pl. *variegata*, var. fl. pl.,
C. vulgaris, var. *myrtifolia*, *C.*
var. *d'otaite*, *C. nobilis* var.
minor, *C. hybridus*, *C. Médica*
var. *digitata*, *C. decumana*, *C.*
Limònum, *Limétta*, *hystrix*,
&c. &c.

Clématis crispa.

Cleòme grandiflora.

Clèthra arborea.

Cobæa scándens.

Coffæa arábica.

Corræa viridis.

Cotylèdon coccinea.

Crássula acutipétala.

— *coccinea.*

Cratægus glàbra.

Crinum amábile.

— *pendunculatum.*

Cycas revolùta.

Cyrilla pulchélla.

Datura arborea.

Dianélla cærùlea.

Diósma álba.

Dracæna férrea.

Echinocactus Eyrèsii.

Echevèria grandifolia.

Eránthemum pulchéllum.

Erica arborea.

— *purpùrea.*

— *vulgàris*, and some others.

Eriobótrya japónica.

Erinus alpinus.

Erythrìna Crìsta-galli.

Eucalyptus saligna.

Eùcomis punctata.

Eugènia Jámbos.

— *myrtifolia.*

Ficus austràlis, *bengalénsis*, *càrica*,
F. popùlnea, *F. vestita*, (?)
or *coriacea*.

Francoa sonchifolia.

Fúchsia globòsa, *gràcilis*, arbòrea,
monophylla, *macrostèmma*, &c.

Gazània pavònia.

— *rigens.*

Gladiolus cardinalis, *psittacìnus*,
natalénsis, *ròseus*.

Gesnèria rùtila.

Genìsta canariénsis.

Gloxìnia speciosa fl. álba.

— *cærùlea.*

Gnaphàlium glomeratum.

Gnìdia simplex.

Góodia latifolia.

Hæmáanthus coccineus.

Hellènia lúcida.

Hemimeris urticæfolia. [*Alon-
sòsa incisifolia*.]

Hibbértia volùbilis.

Hibiscus ròsa sinénsis, rùbra,
ròsea, lùtea, flàva, *variegata*.

Hoítza coccinea.

Hòya carnòsa.

Hypèricum monógynum.

Jasminum azóricum, *grácile*,
grandiflorum, *frùticans*, *trifoli-
atum*, *Mogul* or *Grand Duke*
of *Tuscany*, *ordoratíssimum*,
revolùtum, *Sámbac*, single
and double, *Wallichii*.

Játropha multifida.

Illicium floridànum.

— *parviflorum.*

Ipomæa sp.

Justicia Adhátoda, *coccinea*,
calytricha, *speciosa*, *quad-
rifida*.

Ixòra coccinea.

- Ixòra ròsea.*
Kennédya rubicúnda.
*Lantàna aculeàta, camàra, odo-
ràta, Sellòvii.*
Laúrus Càmphora.
— *nóbilis.*
Lechenaúltia formòsa.
Leptospèrmum baccàtum.
Ligústrum lùcidum.
Limònia trifoliàta.
Linum trígynum.
*Magnòlia anonæfòlia var. fus-
càta, grandiflòra, purpùrea*
var. Soulangeàna, M. pùmula.
Malpíghia angustifòlia.
— *glàbra.*
— *ùrens.*
Melaleuca hypericifòlia.
Meliánthus màjor.
*Mesembryánthemum acaule, do-
labrifòrme, barbàtum, &c.*
*Metrosidèros [Calistèmon] lan-
ceolàta, saligna, semperflò-
rens, pèndula.*
Moræa cærùlea.
Myrtus Citrifolius.
— *commúnis pl. fl., tomentò-
sus.*
Nandina domèstica.
Olea europæus.
— *fràgrans.*
Ornithògalum arábicum.
— *Squílea.*
Oxalis flabellifòrmis.
— *rubèlla.*
— *grandiflòra.*
— *ròsea, &c. &c.*
*Pæonia Moútan, Bânksia, ròsea,
papaveràcea, &c.*
Passiflòra edulis.
— *racemòsa.*
— *purpùrea.*
Phlònis Leonùrus.
— *fruticòsus.*
Phytolàcca arbòrea.
Pitcaírnia albiflòra.
Pòthos crassinèrvis.
Pittòsporium tobira.
— *undulàtum.*
— *chinèse.*
Plumbàgo álba.
— *ròsea.*
- Plumbàgo capènsis.*
Plunièria rùbra.
Poinséttia pulchèrrima.
Polygala myrtifòlia.
— *speciòsa.*
Pourrètia acránthos.
Psíidium pyrífòrum.
— *brasilièuse.*
Prímula Smíthii, mosebàtum.
Psoràlea pinnàta.
*Púnica granàtum, símplex, do.
fl. pl., do. fl. álba plèno, do.
nàna.*
Rhàpis flabellifòrmis, a palm.
Rhípsalis salicornioides.
Rhododéndron arbòreum.
— *Pónticum.*
— *hybridum.*
Rhododéndron azaloides.
— *ròseum.*
— *fl. álba.*
Ròchea falcàta.
Roèlla ciliàta.
— *ròsea.*
Ruèllia formòsa.
*Sálvia àurea, azùrea, coccí-
nea, splèndens, pulchèlla, in-
volucràta.*
Sansevièra cincta.
Scílla peruviana.
Seríssa fæ'tida.
Solándra grandiflòra.
*Sollya heterophylla (Billardiè-
ra.)*
Sparmànnia africàna.
Stachytárpheeta mutàbilis.
Stapèlia glàuca.
— *variegàta.*
Sterculia platanifòlia.
Streptocárpus Réxii.
Strelitzia reginæ.
Stylíidium adnàtum.
Strophánthus dichòtomus.
Tabernæmontàna coronàta.
Tillàndsia utricularia.
Thèa viridis et Bohèa.
Tradescántia díscolor.
Veltheímia viridifòlia.
Volkamèria japònica.
Zàmia hórrida.
Zephyránthes Atámasco.
— *carinàta, &c. &c.*

Newburgh, N. Y., Sept. 1838.

ART. IV. *Observations on the Lagerstræmia.* By K.

IN referring to Loudon's *Encyclopedia of Plants*, we find this plant designated as an inmate of the Bark stove, with the remark quoted from Sweet, *that this species, (i. e. L. regina,) is rather difficult to preserve through winter; it requires a good heat, and but little water in winter season.* *L. regina* is further described as "a very handsome shrub, the flowers in panicles a span long, *pale rose-colored* in the morning, growing *deeper* through the day, and becoming *purple* in the evening," while the other species, *indica*, is marked as having purple flowers.

We believe that a great many of these particulars are decidedly erroneous. In an extensive collection, which we have examined, we find two kinds of *lagerstræmias* differing so much in the foliage, as undoubtedly to constitute two species; of these, one bears *pink*, the other *purple* blossoms, without any variation of color, as above stated. In "*Herbier general de l'Amateur*," the *L. indica* is exhibited with *pink* panicles of blossoms, and we therefore consider the plants we have seen with purple flowers, as *L. regina*, particularly as the specific characters of the leaves of the former species agree with those attributed to it, in the above French work. At any rate, however, whether the two kinds we have seen are two distinct species, or only varieties, they are unquestionably most splendid objects, and second to no plants within our knowledge, as ornaments of the shrubbery or lawn, towards the close of summer. It must, therefore, be highly gratifying to all florists to know, that, so far from being *stove* plants, they may almost be ranked as *hardy!* We have seen a plant, which has stood through several of our late severe winters without protection, although, to be sure, severely damaged in its branches; probably a slight protection would be sufficient to preserve even the ends of the slender twigs, from which the flower-buds proceed, and which, if injured, prevent its blooming the ensuing season.

To make sure of its preservation, it should be treated as figs, pomegranates, and other half-hardy plants are often kept, by taking them up with the soil adhering to their roots, and putting them into winter quarters, under the stage of the green-house, or in a dry cellar, carefully preserving them from any damp, or other accumulated moisture.

One more criticism we must hazard respecting this plant: it is not, as Loudon imagines, the tree known at the south, as the *Pride of India*,* with which, he tells us, the streets of Savannah

* Vide *Encyclopedia of Gardening*, article *American Gardening*.

are ornamented. The *Melia Azedarach* is the one applied to this purpose, and which is there termed "the Pride of India."

In making these corrections, we are actuated by no invidious motive; on the contrary, we feel the utmost respect for this veteran horticulturist and spirited compiler, and are more inclined to marvel at the general accuracy which distinguish his voluminous publications, than to carp at an occasional mistake or inadvertence.

His name ought to be revered in America, not only as an author, but, from the spirit of independence and love of liberty, which emanates from his works, and the noble sympathy which he manifests on every occasion for the wants, the interests, and simple tastes of the poorer classes of his countrymen, a sentiment which must endear him to every true republican. His bust should be placed in the exhibition room of every horticultural association in the country.

K.

Newburgh, New York, Sept. 1838.

ART. V. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, Florist's Register, and Royal Ladies' Magazine. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice-Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo. numbers, with a plate; 1s. each.

Botanical Intelligence.—Dr. Gray, we have already stated, resigned his appointment to the scientific corps, attached to the exploring expedition. We have learnt since, that our correspondent, W. D. Brackenridge, of Philadelphia, was appointed assistant botanist, and left his situation with Mr. Buist. This appointment cannot fail to be of great benefit to the Floricultural community; as Mr. Brackenridge is well acquainted with an immense number of plants, and he will undoubtedly, should he procure seeds, select such only as are possessed of much beauty, rather than merely of botanical interest. Our readers may likewise, should he return in safety, have the pleasure of seeing an interesting account of his journey.

Drs. Torrey and Gray are busily engaged on their valuable *Flora*, the second part of which will be immediately published. We hope our botanical friends, and indeed all gentlemen and amateurs interested in gardening, will assist in the undertaking. Some considerable number of copies will have to be disposed of, to pay the expenses of publication; and unless sufficient encouragement should be afforded, we fear the work will not be completed. Let every individual send in his subscription at once.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculàcea.

DELPHINIUM

intermedium var. *palmatifidum*. *Lindl.* A hardy perennial; growing five or six feet high; with blue flowers; appearing in June and July; increased by division of the root; grown in common soil; a native of Siberia. *Bot. Reg.*, n. s. 38.
Syn: *D. palmatifidum* *D. C. Syst. reg.*

“A very beautiful bee larkspur, with a rich branched inflorescence, dark purple hairy stems, and rich blue flowers stained with lilac internally, . . . and is known by these characters, together with its lower petals being deeply divided into two narrow lobes, the ends of which are terminated by loose straggling hairs, while the disk is covered by a short tuft of short brown hairs.”

The peculiarities of the plant are not sufficient to distinguish it specifically from the *D. intermedium*; like that, however, it is a fine showy plant, deserving a place in every garden. Of the easiest growth. (*Bot. Reg.*, July.)

Berberidàcea.

EPIMEDIUM

violaceum *Part.* Violet-flowered Barren Wort. A green-house or frame perennial; growing a foot high; with purplish violet flowers; appearing in April and May; a native of Japan; increased by seeds and division of the root; grown in loamy soil. *Pax. Mag. Bot.*, Vol. V., p. 123.

A graceful plant, with slender stems and extremely delicate flowers. The epimediums are not very generally cultivated, but the genus is known by the common *E. alpinum*. The present subject, which is probably the handsomest, is a native of Japan, from whence it was brought to the continent by Dr. Von Siebold, and from thence imported into the English collections. It

has, so far, been treated as a green-house plant, though it may prove hardy in Britain, in the following manner:—

“It may be cultivated with the greatest ease, by being planted or potted in a loamy soil. If kept in a pot, it should be watered with great caution after the leaves have withered, till they [the plants] recommence growing, when it must have a more liberal supply.” Increased by seeds and division of the root. (*Pax. Mag. Bot.*, July.)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Ericaceæ.

ENKIA/NTHUS

reticulatus Pax. *Netted-leaved Enkiánthus.* A green-house shrub; growing six feet high; with pale pink or flesh-colored flowers; appearing in January and February; a native of China; increased by cuttings; grown in peat, loam, and sand. *Pax. Mag. Bot.*, Vol. V., p. 127.

One of the most exquisite green-house plants in cultivation. It is much like the *E. quinqueflorus* in its flowers; there being but a slight difference in the shape and color. It differs, however, very visibly in many material points; and perhaps in no particular is the difference more conspicuous, than in the size and shape of the leaves. Botanists have confounded the two species. The specimen from which the drawing was taken, flowered in the collection of Lucombe, Pince & Co., who received it from some source, (unknown,) as a variety of the original species. It is an old inhabitant of English gardens, though it is still uncommon in collections. It succeeds best when planted out in the border of a green-house or conservatory, in a compost of heath mould and loam, mixed with a due proportion of sand, and placed in an airy part of the house. It appears to be difficult of propagation, and hence its scarceness. We have noticed a fine plant of *E. quinqueflorus*, which has flowered several seasons in Col. Perkins's collection. We should like to see it in every green-house. (*Pax. Mag. Bot.*, July.)

Scrophulariæcæ.

NEMESIA Benth. (From *νεμεσις*, division, in allusion to the lobes of the upper lip of corolla.)

floribunda Lindl. *Many-flowered Nemesia.* An annual plant; growing a foot high; with pink and white blossoms; appearing from June to August; a native of Cape Town. Increased by seeds. *Bot. Reg.*, n. s. 39.

Syn. N. floribunda Lehmann. N. affinis Benth.

A little upright annual, with numerous flowers on slender terminal branches; leaves opposite and ovate. It may be compared in beauty to some of the antirrhinums, and more remarkable for its delicacy and gracefulness, than its brilliancy. Easily raised from seeds. (*Bot. Reg.*, July.)

Lamiæcæ, or Labiæcæ.

SALVIA

canescens Benth. *Hairy sage.* A hardy perennial plant; growing from one to two feet high; with deep purple flowers; appearing in July; a native of Caucasus; increased by division of the root and by seeds. *Bot. Reg.*, n. s. 36.

This is a showy species of *salvia*, and from its hardiness will

prove valuable, as we believe few or none of them, except the common, will live through our winters. The flowers are very handsomely displayed in terminal and lateral racemes, and have a showy aspect. It was raised from seeds, in the garden of the London Horticultural Society, received from Dr. Ledebour, of Dorpat. It inhabits rocks in that range of the Caucasus which runs into the Caspian Sea, and is consequently well adapted to rock-work. Seeds should be sown in May, and when of sufficient size potted off into small pots, and wintered in a frame, after which they may be planted in the border to flower, where they may remain. (*Bot. Reg.*, July.)

MONOCOTYLEDONOUS PLANTS.

Hæmodoracææ.

ANIGOZANTHOS

flavida Redout. Yellow-haired Anigozanthos. A green-house plant; growing two feet high; with green and red flowers; appearing in April and May; a native of New Holland; increased by young side shoots; grown in rich loam, sand and peat. *Bot. Reg.*, n. s. 37.

A singular species introduced to Britain long since, but rarely seen in collections. The flowers are tubular, green on the outside and red in, and in terminal racemes of five or six each, and from four to eight racemes on one stem. It is cultivated in the green-house, in a soil composed of rich loam, mixed with about one fourth of sand and peat, to which a small quantity of dung may be added. To grow it well, it needs plenty of pot room, and an airy part of the green-house, near the glass. When growing luxuriantly, it requires considerable water. (*Bot. Reg.*, July.)

A splendid variety, with scarlet and green flowers, has been raised by R. Mangles, Esq., from seeds, which will soon be figured. (*Bot. Reg.*, July.)

Iridacææ.

TRITONIA (from *Triton*, a vane, or weathercock, in allusion to the variability of the species of this genus as regards the direction of their anthers.) Ker.

fucata Lindl. Painted Tritonia. A green-house or frame bulb; growing about two feet high; with orange and yellow flowers; appearing in June; a native of the Cape of Good Hope; increased by offsets; growing in rich soil. *Bot. Reg.*, n. s. 35.

Communicated by the Hon. and Rev. Mr. Herbert, who received the bulbs from the Cape twenty-five years ago, but he never succeeded in flowering it until the summer of 1837. The bulbs have increased so rapidly, that hundreds of them were purposely dug up and destroyed. In the autumn of 1836 it occurred to Mr. Herbert to have dung laid upon the patches in the open ground, where the bulbs were growing, and the result was the production of a flower-stem in the following summer. From this fact he doubts not that manure is the requisite to make it flower freely.

The flowers are erect, ventricose, but slightly expanding at the summit, and of a deep orange color. It is a beautiful and desirable species. (*Bot. Reg.*, July.)

Orchidaceæ.

DENDROBIUM

densiflorum Pax. Dense-flowered Dendrobium. A stove epiphyte; growing a foot high; with deep yellow flowers; appearing in May; a native of Nepal; grown in heath soil. *Pax. Mag. Bot., Vol. V., p. 121.*

A splendid species, with dense racemes of deep yellow flowers. The drawing was taken from a specimen in flower, in the Duke of Devonshire's collection, which was imported, among others, by Mr. John Gibson, his Grace's collector. It is easily cultivated in heath soil, well drained, and the pot plunged in a gentle heat. (*Pax. Mag. Bot., July.*)

* *Dendrobium formosum Wall.* A noble plant, with large ivory white flowers, unrivalled for beauty, even in the rich Flora of India, which has flowered at the Duke of Devonshire's, at Chatsworth, into whose collection it was introduced by Mr. Gibson. "The flowers grow at the end of a leafy stem, and are between three or four inches in expansion, with every part of the purest and most transparent white, except one delicate, lozenge-shaped, buff-colored blotch, in the centre of the lip." (*Bot. Reg., Mis. Not. July.*)

PHAIUS

albus Lindl. white-flowered Phaius. A stove epiphyte; growing a foot high; with white flowers; appearing in May; a native of Nepal. *Pax. Mag. Bot., Vol. V., p. 125.*

"One of the most delicate, as well as the most lovely of orchidaceous plants, the flowers being large and pure white, pencilled in the most exquisite manner with purple on the lip; when in flower, it has a strikingly beautiful appearance, particularly as the flowers are produced at the extremities of the shoots when these are in full leaf." The habit of the plant is very remarkable; at one season it is in a leafless state; at another, in full growth; and in the third, beautifully in bloom. The flowers are large, and are produced in a pendant raceme, about six inches in length. This species was originally discovered by Dr. Wallich, in Nepal; but the plant, from which the drawing was made, was imported by the Duke of Devonshire, in 1837, through his collector, Mr. John Gibson, who found it growing upon trees in shady damp woods, on the Khowsea hills, at an elevation of from two to three thousand five hundred feet, where it blossoms during the rainy season in the greatest profusion. The genus is related to *Blétia*. (*Pax. Mag. Bot., July.*)

PHIALENOPSIS (from *φάλαινα* a moth, and *οψις* resemblance,) *Blume.*

amabilis Blume. The Indian Butterfly plant. A stove epiphyte; growing a foot high; with white flowers; appearing in May; a native of Manilla; grown in turf or moss. *Bot. Reg., n. s. 34.*

Another lovely species, the curious form of whose flowers, "the graceful way in which they hang down from below the leaves, their huge size, and the brilliant whiteness of their broad leathery petals," give it a most striking and uncommon appearance. It flowered for the first time in Europe, in the collection of Messrs. Rolison's, of Tooting, in May last. Dr. Blume first met with it on the

wooded coast of Nusa Kambangan; and Rumph met with it growing in abundance, on the trunks of trees, in Amboyna, covered with moss. It is rather difficult to increase; but it is easily grown in a hot, moist stove, where it should be fixed to pieces of wood along with a little turf or moss, and suspended from the roof; the wood should be covered with bark, in order that the roots may more easily attach themselves thereto. (*Bot. Reg.*, July.)

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

Mr. Lemist's, Roxbury.—*Sept. 4th, 1838.* After the long lapse of three years, we have again visited this fine garden. Since that period many and great improvements have been made, and the garden now contains one of the finest graperies that we have seen. The garden had suffered in common with all others, and but few flowers were to be seen.

The place is now under the management of Mr. Hutchinson, an industrious and attentive man, and the crops of fruit in the houses bear ample testimony to the excellence of his skill in forcing. We did not see Mr. Hutchinson on our visit, but we learnt this from Mr. Lemist himself, who is highly pleased with him. Mr. Willott had charge of the place when we were here last, but it is now upwards of a year since he left.

The crop of grapes in the graperies and the green-house is very large, and they were now ripening off with a good color, a thing too often considered of minor importance. The same house which we noticed in our I., p. 71, as being filled with lettuce for forcing, is now filled with grapes and plenty of excellent wood for next year's crop. This house is particularly well adapted for grapes, as it is low, with a fine border, and the vines have an abundance of fresh air. In the green-house we also found a very good crop, though many of them had been cut. In this house the fine large orange tree is full of its rich fruit. We also noticed some few ericas, &c., but generally every thing was cleared from the premises.

Passing from the green-house, we walked towards the upper part of the garden, where the new house stands. This is upwards of one hundred feet long, and sixteen or eighteen wide, of a proportionate height, and has a span roof in part, though the

back sashes do not extend only about half way. These afford a great quantity of light, which is much needed, particularly to the trees on the back wall. This house was put up in the place of another small one, two years ago last spring; the vines have but just come into bearing, and were showing large crops. The wood, however, is well grown. The border to this house was made in the most substantial manner; the proper soils and manures well applied; and the vines just begin to feel the effects of all this attention and care.

On the back wall vines are planted, which have already nearly reached the lower edge of the back sashes. There is also a trellis underneath the front part of the house, (between the front and back walk,) to which vines are trained; these, however, we think, will not add much to the value of the whole crop. Nearly all the vines in all three of the houses are the black Hamburgh, which is altogether the most profitable variety for the market. The vines in the large house were planted out under the care of Mr. Willott, and the work was thoroughly performed. This house was built in the most substantial manner, and we consider it one of the best in the vicinity for ripening a crop in perfection.

In the garden we noticed some patches of *Verbena Tweediana* and *multifida*; both together forming a pretty contrast with their crimson and pale purple blossoms. The present warm dry season has been such a one as the verbenas delight in, and they have never shown their beauty in greater perfection. The dahlias here have been almost a total failure, from the same causes which prevail elsewhere, viz., heat, drought and insects. We noticed some exceedingly fine double asters. Mr. Lemist has also a few very beautiful pansies. He pointed out to us a very elegant yellow one, which he procured from Mr. Buist, of Philadelphia; it is a fine one to raise good varieties from by impregnation with others. Rainbow, which is one of the very best varieties, we saw displaying some good sized blossoms; it is remarkable for throwing out such large flowers so late in the season. A great many pansies fall off in this respect, only a few of the first and earliest flowers being large, while those produced later are but little larger than the old garden variety.

Among the green-house plants, which stand in a circle on the grass lawn near the house, we observed some oleanders, ericas, cape jasmines, &c. in flower. The whole of the plants look well, and the camellias are budded very full.

Though so long since our visit here, we were highly pleased, at this time, with the various improvements, which appear more apparent than if we had seen them as they were progressing. Mr. Lemist's interest in the garden seems to increase with the spreading taste for horticulture, and we trust that such a well stored collection affords him much pleasure and gratification.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Use of Charcoal in the preservation of Plants.—One of the great inconveniences of low and moist grounds is, the difficulty they present in cultivating flower-roots of every description. These are generally destroyed by a kind of mouldiness which attaches itself to the shoots below, at different periods of their growth. It is easy to know when a plant has been thus attacked, for the stem assumes a dirty green color, approaching a yellow. The yellow soon supersedes the other, the leaves change, and sometimes fall off. The only means of preventing this evil, which most commonly attacks a number of plants at the same time, is to place a layer of powdered charcoal over the parts where the roots are to be planted. The best kind of charcoal for this purpose is, that which remains in dust after the large pieces have been taken away. When the earth has been prepared in the usual way for the reception of roots, about half an inch of the charcoal powder should be spread over the surface; the whole should then be lightly stirred together, in order that the charcoal should be incorporated with the earth. We have tried many experiments to prove the efficacy of this remedy, and in no instance has there been a failure. Thus, in a bed of roots fifteen feet long, by five wide, situated in a low moist soil, two-thirds were, a short time back, prepared in the way above stated, while the remainder was left undefended. The result was, that in the latter portion the roots were lost, whilst in the other we never had finer plants. The powder should be preserved dry, and, generally speaking, it may be used with advantage in the flower garden.

The Poor Man's or Cottager's Tree.—Such is the apricot; and so it has been justly designated by the few patriarchs of gardening who now survive. Alas! how are these worthies passing away!

The apricot originally belonged to the plum genus; it has of late years been removed from that family, and ranks as the head of the genus *Armeniaca*, a word derived from *Armenia*, the supposed native country of the tree. It was received in England from the Levant, so we are told, in 1548. The advocates of the *natural system* force this tree, with the apple, pear, plum, and many others, into their order *Rosæcæ*, from some fancied resemblance to the rose. There are natural affinities in abundance, doubtless, and we love to see them ably illustrated; but our heads ache at the multifarious anomalies which crowd upon and overwhelm the mind.

But, however, this rose of an apricot is the tree of trees to the poor man. Its habit is to bloom early, before the leaves expand; and therefore it is apt to lose its fruit when formally trained in a low horizontal direction; nevertheless, when it is favorably planted, as to soil and aspect, and can run up against a high and broad chimney, where the foliage can soon be early called into action in support of the young germs of fruit, those germs, while in the bud of the blossom, being, as well as the stamens, preserved by the slight yet genial heat of the brick-work, the multitude of fruit produced is frequently prodigious. The writer's next door neighbor has two trees; one faces the west, and is trained very upright against the house wall—it bears pretty well. The other is less, but faces the south, and has a kitchen chimney, as it is supposed. Last week the man gathered twice, sixteen dozens, and eighteen dozens—in all, thirty-four dozens, and sold them for tarts: numbers remain on. A tall tree (on a single main stem) in the west of England, which

required a thirty round ladder to reach its top, had one year above six hundred ripe and ripening apricots upon it, when the party inspected it. Such being the case, the cottager is called upon to cultivate this grateful tree, and to give it the best situation and greatest attention, that his means and time can afford.

One circumstance, an absolute fact, may gratify and surprise some readers. On the 27th of March, a tree that remained for the major part little advanced, had one branch, not only completely in leaf, (the foliage being of a bright verdure, and of full healthy vigor,) but covered with fruit, several of which appeared of the size of good nutmegs. The tree was planted to face the south-west, but it stands near the corner of the garden, where the wall takes a direction to the south by east. At the exact angle is the breast of a vinery chimney, and its aspect is nearly due south. Against this breast was trained the solitary branch alluded to; and the effects described evince the operation of a warm protective wall upon the buds, even at a time when the roots remain in the ground *exposed to frost*. (*Hort. Jour.*)

[These remarks, though intended for the latitude of England, will equally apply in this country. We know a gentleman who has an apricot tree in a small yard, nailed up (and carelessly too, without any system of training,) to a shed or barn facing the east, which has borne a considerable quantity of fruit for several years, notwithstanding our cold winters. And what may appear singular, the branches, which extended above the roof of the building, and fully exposed to the weather, bore as profusely as those nailed against the surface. If a good soil is selected, or, if poor, made good, (that is, light and deep,) there is no doubt but that apricots can be very easily produced. We should like to see more attention given to this fruit.—*Ed.*]

Superiority of the Pinus sylvestris.—Of the twenty-eight thousand acres which the forest of Fontainbleau contains, twenty-five thousand are now covered with pines of different ages, and a million of plants could be taken from them without being missed. It is in the ancient plantations, now become forest timber, that the superiority of the *Pinus sylvestris* appears over the maritime pine. This latter at first grows more quickly, but at present they are of the same height. The maritime pine sometimes appeared to me to have a larger trunk, but it scarcely gets higher, whilst the other pushes forward vigorously, and does not now appear to have arrived at more than half its elevation. It is always as straight as a taper, with a gray bark, but little indented. The maritime pine, on the contrary, is never perfectly straight, and its bark much thicker and rougher, is of a darker gray. Hence nothing is more easy than to distinguish the trunks of the two trees by the bare inspection of the bark.

Masts of Ships.—I said above, that M. Larminat began to graft, about ten years ago, the Laricio pine on the *Pinus sylvestris*. I must add here, that it was for the useful purpose of multiplying this precious tree for the benefit of the navy. His first attempts being crowned with full success, he has continued to execute a certain number of grafts every year. It is really a beautiful thing—a graft of the Laricio pine on the *Pinus sylvestris* of ten or twelve years old; they grow with wonderful vigor, and excel in length and bulk all the pines of the same age, which have not been grafted. The expectations of M. Larminat will not be disappointed, and one day the forest of Fontainbleau will furnish to the navy masts of immense size. There is so much analogy between these two species, that their graft never forms a swelling, when not interfered with. The point of union can only be known by the color and different roughness of their barks, which are clearly divided at the point of junction. There are now fifteen thousand of these grafts in the for-

est of Fontainebleau. I have only one more remark to make, and that is, that the Tshudy graft is executed here more simply than at first—it is no longer covered with paper to guard it from the sun and wind—it is simply tied with a flag, and a bit of grass, and it always succeeds perfectly. (*Hort. Jour.*)

ART. II. *Foreign Notices.*

ENGLAND.

Cremorne House Fete.—In our last we gave some account of the award of medals by the Royal Society and Central School of Agriculture and Horticulture. We now add the following remarks on the character of the exhibition:—

It is a long time since we remember to have witnessed (if it has ever been witnessed at all,) a more splendid assemblage of rank and fashion, than attended this unique fete; and the oldest horticulturist, as we are informed by every practical man we have consulted, never witnessed such a show of plants and flowers. The stages on which the flowers were placed, gave no less than twelve hundred feet of densely packed specimens, scarcely one of which was of ordinary growth. Nor was this all; there was an exhibition of fruit equal to any thing ever produced in this country; seventeen superb specimens of pines were exhibited growing on their plants, besides many beautifully grown pines cut, black currants, grapes, melons, cherries, strawberries, &c., in abundance; a vine in a pot, with numerous bunches of grapes, was also a pleasing and novel object. Two grand collections of Melo Cacti and Mammillaria, many of which were from the interior of Mexico, were considered superior to any thing in this country; one of these had a large, and the other a small, gold medal awarded, and richly did they deserve the distinction. There were no less than eleven large collections of stove and green-house plants exhibited in competition, and five of these by persons who would have exhibited at Chiswick, had not the Horticultural Society chosen the same day for their exhibition. The geraniums excelled every thing; no less than one hundred and forty feet of the stage was occupied with a double row of these splendid plants, which were exhibited in collections of thirty-six varieties; of heaths there were nearly three hundred, and better grown plants, or plants in more variety and beauty, were certainly never produced. In hydrangeas, there were many competitors; but those who know the growth of Mr. Mills, the gardener for Gainsbury Park, and Mr. Redding, of Wimbledon, will not be surprised that they stood first and second. Coxcombs were also in great splendor; and, considering the sameness usually manifested in this tribe, there was a variety not often met with; the collection, which obtained the gold medal, was a rich scarlet, very large and beautiful. Single specimen plants, comprising almost every thing that was new and rare, were abundant; and some specimens of orchideous, originally from Highclere, were such as every other collection in the country, not excepting even Loddiges', may be searched for in vain. As a fete unconnected with horticulture, there was much to commend. There were three military bands of first-rate quality, and the Blues, who took the centre, were never in better time for business; the only thing we complain of, on the part of the military, is the striking up "God save the Queen," while the Schwartzbach band were in the middle of a piece. It was uncourteous to strangers, and not much more flattering to the company. However, the latter were gratified with several extra-

ordinary performances on the machine trumpet, the cornet *à la piston*, and the potshorn, all of which instruments were played in a manner truly astonishing to the musical world, by members of the Schwartzenschach band, which performed till seven o'clock. Mrs. Graham's balloon, which a few ignorant people had been prognosticating would keep the fashionable world away, had precisely the contrary effect. There was a sight which the nobility could never witness before, unless they chose to encounter the ill-behavior of an indiscriminate mob, and to be witnessed with as much pleasure as if in their own garden. There was but one drawback. There were more than twelve hundred carriages to set down company, and the approach was difficult, and notwithstanding all the exertions of the police, there were some noble families who could not get up to the gates before the balloon was off; but, in fact, this very drawback was chiefly occasioned by the desire of many persons to be witnesses to the comparative merits of the show at Chiswick, and therefore the approach of empty carriages to take up according to orders, long before the full ones could set down their company, created confusion. The Horticultural Society, therefore, may take credit for having contributed its share of annoyance, though it seems to have been unable to divert a single plant worth looking at from the Royal Society's show. We are happy to add, that the British Orphan Asylum, whose children had a holiday on the occasion, and paraded the gardens for some time, looked remarkably healthy, and did credit to the society. The money, however, handed over to the society, clear of all expenses, was but 67*l.* 15*s.* We may therefore congratulate the people at Chiswick, on the result of their very *honorable* and *satisfactory* labors; for there is no doubt, but for the trick of appointing the Chiswick show on the same day, this sum would have been nearer three hundred than sixty. (*Hort. Jour.*)

FRANCE.

Destruction of Rose Trees during the last winter.—The destruction in this species of plant this year, has been dreadful. All the grafts from Bengal roses, as well as those of the Isle de Bourbon, show nothing but dead stems and branches. Yet we must declare it to be highly imprudent to consider such plants as absolutely dead and good for nothing. In order to be certain of the fact, it is necessary to wait for the departure of the first sap, which is more or less tardy in proportion to the degree in which the plants have suffered. In the spring of 1830, after the severe winter, we contented ourselves with cutting our Bengal grafts at their neck, and the greatest number blossomed, though only at the second sap, towards the end of July. These same Bengals resist perfectly intense cold, if precautions be used to heap the earth a couple of inches above their neck, as is done to preserve artichokes. This mode of covering is, in all cases, more preservative than either matting or leaves. The latter are subject to be disturbed, and lessened by the wind, and other accidental circumstances; whilst in spring, when they are removed, it is almost impossible to prevent some of them being scattered over the beds, which causes a loss of time in getting them picked up. Wherever this plan has been adopted this year, the loss has been comparatively trifling; but we regret to say, that the practice has not been generally tried. Stems frozen absolutely to the neck, and snapping at the touch on a level with the ground, must certainly be deeply struck; but even then it is not certain that they are altogether lost. In 1830, a great quantity of Bengal roses were seen in this state, yet they afterwards revived. The best plan is, to cut such plants at the neck, to dig about them carefully, and put down some manure. Those who do not like to wait,

but pluck up the plants at once, may often see, on examining narrowly, that at the neck, little white buds were making their appearance to repair the loss, which was supposed to be made. This remark can only apply to those plants which ought to bud in a fortnight or three weeks. Sometimes we have known two or three months to elapse before the fibres of the roots recover animation. If amateurs, however, do not desire to run any chance, they had better replace the plants they suspect, as otherwise they may lose the first blow. We may here remark, that the last year's experience, as well as that of 1829, proves that the English are quite right in their attachment to certain varieties, which resist cold so much better than others. We, on the contrary, seem indifferent in our choice. (*Hort. Jour.*)

French Horticulture.—The following notices we copy from translations in the *Horticultural Journal*, from M. Poiteau's account of an interesting excursion in the neighborhood of Fontainebleau. His principal object in making the tour was to visit M. Vilmorin's farm near Montargis, to examine his plantations of evergreens and American oaks. The property of M. Vilmorin consists of about twelve hundred acres, and is called Les Barres. It extends, without interruption, for something more than a league from east to west, and is cut in the centre by a small valley, which serves as the bed of a stream of some breadth, admirably fitted for breeding fish, and sufficient to turn any mills that might be erected on its banks. Curiously enough, the soil to the west of the little valley is silicious, whilst all the ground to the east is calcareous. The high road to Lyons passes close to the property, and the demesne is crossed in various directions with country roads, establishing an easy communication with the neighboring habitations. The whole estate is divided into four farms, of which two, containing about six hundred acres, are in the hands of M. Vilmorin himself, and on them he makes his experiments in planting.

The whole account is so interesting, that we make no apology for extracting the whole of this translation.

A gigantic Apple tree.—In examining the country, and from the appearance of the thickets scattered about here and there, I am inclined to think that, not many years ago, the whole district was covered with forests. One sort of tree is seen here more frequently than the others, and that is the sorb-apple, many of which appear hundreds of years old. One of these trees, in a hedge not far from M. Vilmorin's habitation, appeared to Bosc not less than from eight hundred to one thousand years of age. I am not aware on what calculations Bosc has formed his opinion; but I think that six hundred years must have been the extent of its existence. It is probably the oldest sorb-apple tree in France; its trunk, which is about four feet in diameter, is exceedingly short, being divided, at about six feet from the ground, into five enormous branches. The value of this tree cannot be well ascertained, but smaller ones, whose trunks were twelve or fifteen feet without branches, have been estimated at 100l. or 120l. The fruit of these trees is carefully gathered to make a sort of cider, considered in the country far superior to that made from common apples or pears. The wild pear tree, with small tart fruit, is common enough in this district; but a variety of it, called the "sage pear tree," probably because its leaves are white like the sage plant, is seen in as great quantities as in Burgundy; and makes delicious perry. It bears a load of fruit, and is well worth being introduced into other districts.

State of Agriculture.—At the aspect of these uncultivated plains, which are manifestly so ill-adapted for tillage, where a badly constructed plough just scratches the earth once every two or three years, it is natural to inquire, why trees are not planted along the roads, to break the tiresome monotony of barrenness? M. Vilmorin asked himself the

question on taking possession of his property; and since then he has been constantly engaged in efforts, both by his example and his advice, to induce the inhabitants to improve the appearance of the country. He had, at first, to combat both a system of blind routine and a host of deeply rooted prejudices.

It is almost incredible that, in the midst of France, within fifty miles of Paris, in the nineteenth century, he should have to fall in with farmers, who, with three or four hundred acres in their possession, should refuse to grow a single load of fodder, and should purchase all the hay necessary for the keep of their horses!—farmers who sowed their seed on fallows, still covered with thistles—who manured their wheat land at the rate of two or three little cart-loads an acre, or often put down no manure at all! Thanks to M. Vilmorin, his farmers are no longer in a state of such gross ignorance: but the thistles of his neighbours still introduce themselves, and defile his ground. Yet ten years have elapsed since he began his improvements.

Cedars of Lebanon.—To turn to the best advantage land which was manifestly unfit for either tillage or grass, M. Vilmorin planted seeds of various trees, in order to judge which would succeed best, and he has already experienced the most satisfactory results in his experiments of evergreens in a silicious soil. The sylvestre pine, and all its varieties, the maritime pine and the laricio, grow there with great luxuriance. The growth of this last named tree is a remarkable circumstance, and ought to be carefully noted. The *Pinus Stròbus* and the other American pines, are also there in great numbers. The cedar of Lebanon, the colossus of the vegetable kingdom, after a long and delicate infancy, has at last pushed forth most vigorously, and promises ages of prosperity. M. Vilmorin's estate will be, perhaps after some years, the only spot in the world where this tree will be found in any considerable numbers; for Mount Lebanon itself does not possess more than twenty, and few persons plant more than two or three in their pleasure-grounds.

Calcareous Earth and Pine Trees.—But if evergreens or resinous trees succeed perfectly well in poor silicious ground, the very opposite is the case in poor calcareous land. The attempts of M. Vilmorin on this point have hitherto been exceedingly discouraging. He does not, however, despair of seeing trees of this description at last succeed well enough in calcareous land, to make a fair return to the planter. He founds his hopes on the fact, that thousands of acres in Champagne, as chalky as his own, are covered with pines and evergreens, and promise at last, though at some distance of time, to recompense the farmer for his time and trouble. It is only fair to state, that M. Vilmorin has suffered dreadful losses in these experiments, in calcareous land, from the white worm. I may add, that my own experience leads me to believe, that calcareous ground is not fitted to the rapid growth of evergreen resinous trees. For fifty years I have been in the habit of seeing the mound in the Jardin des Plantes, at Paris, called *The Labyrinth*; and, during these fifty years, I can perceive little difference in the appearance of the evergreens planted on it; they are in the same state and nearly the same height. Now, if it be borne in mind that this mound was formed of the remains of old buildings, substances composed of carbonate and sulphate of lime, it will tend to prove that calcareous earths are not fit for evergreens; and that the resinous trees planted in Champagne must still be waited for many years until they arrive at a good growth.

American Oaks.—These trees have been included, to some extent, in the experiments of M. Vilmorin, and he can now declare that no species of this tree will succeed, even in a middling degree, in bad calca-

reous land ; whilst some exceed perfectly, and others tolerably, in poor silicious land. He has planted a great number in land of this description ; and there is every reason to believe that the results will be most gratifying, particularly as similar experiments, on a vast scale, made on a poor sandy soil in the Bois de Boulogne, near Paris, by M. Dandré, have been attended with unhopèd for success. It is probable that, if a few American oaks are seen in France, after so many attempts made to extend them during the last century, the reason will be found in the fact that they were planted in earth which was not suitable to them.

Poplars.—M. Vilmorin has made many experiments relative to this tree, and he finds that the plantations which he has made in silicious or sandy ground, succeed most satisfactorily for every description, whereas only few succeed well in a calcareous soil. Thus, the *Pópulus nívea*, FICH., of the same age, is a third or half stronger in a silicious ground than in a calcareous one. The poplar of Canada, *Pópulus canadénsis*, LIN., is in the same case ; whilst the Swiss poplar, *Pópulus virginiana*, LIN., grows well in calcareous land, and astonishingly well in certain parts of it. As to the *Pópulus nívea*, M. Vilmorin does not consider that, in size or height, it equals the white poplar of Holland, *Pópulus álba*, LIN. This latter species must always be preferred, when a larger trunk and good height are required, but the other is superior in the beauty of its foliage.

Elms.—The twisted elm has always been an object of solicitude to planters, from its being the only wood fit for making good stocks for carriage wheels. M. Vilmorin has received several packets of plants from various parts of France, and is inclined to believe that there are at least two distinct varieties. Although botanists regard this tree as a variety of the common elm, yet arborists are authorized to believe that it is a natural kind, since the seed of the common elm never produces it. However this question may be decided, the twisted elm grows perfectly well in the poor calcareous ground of Les Barres, and M. Vilmorin plants a great number every year. It grows there more rapidly than the common kind, and is a far handsomer tree ; the bark is quite smooth, of a deep green, and enables one to distinguish the variety at a glance. When about twelve or fifteen years old, it may be seen that, under the bark along the length of the trunk, there are formed lumps or elevations, which appear to be produced by the interlacing of the fibres, and from these arises that wonderful resistance which the wood opposes, when an attempt is made to split it. It is this quality which renders it so appropriate for the naves of wheels. There is nothing extraordinary in this tree succeeding so well in the calcareous lands of M. Vilmorin, for, of all trees, elms are those which grow best in that description of earth. Near Paris, at Bourg-la-Reine, there are some splendid elms along the road, and the roots of these are all fixed in a white calcareous bottom, nearly pure, covered with only a few inches of vegetable earth. Yet, although these trees are exceedingly beautiful, and have acquired a vast size from age, they would be still finer in an aluminous soil, and here is proof of the assertion: All the land of the plains, through which the road from Paris to Meaux passes, is of a calcareous nature, but of good quality. The elms which line the road appear exceedingly fine, as long as no others have been seen ; but when the traveller has passed Meaux, in taking the road to Ferté-Milon, he sees elms, no comparison more beautiful, and of a green far deeper. The reason is, that the earth is no longer calcareous ; it is aluminous, the soil of all others best suited to the tree. There is this difference between the beach and the elm, that, though they both grow so well in calcareous ground, yet the beech is fondest of moisture, and the elm of a calcareous soil exceedingly dry. Some years ago, the gov-

ernment, desiring to afford pleasure to the inhabitants of Paris, by replacing the dark and monotonous green of the elms on the Boulevards, by a variety of foliage, applied to the Society of Horticulture for a list of trees, either foreign or indigenous, which might be advantageously intermingled, so as to produce an agreeable effect to the eye. The Society hastened to fulfil the duty demanded of them, and remitted to the Minister of Public Works the names of certain trees, with varied foliage. I regard it as most fortunate, that the government changed their intention, and did not follow their first idea, for the soil of Paris has become so eminently calcareous, from the constant additions it has received from old buildings and repairs since it was first erected, that there is scarcely a tree which can grow there satisfactorily, excepting the elm; and if a variety had been then planted in place of the elms, nothing would now be seen but dead or dying trees.

Melons.—On quitting Les Barres, I repaired to Montargis, and, whilst waiting for the coach, which was to take me to Fontainebleau, I inquired if there was not some garden in the vicinity worth visiting. "None," I was told; so I went towards some gardens, situated in marshy grounds, at both sides of the road to Paris, in which I had perceived, when passing a few days before, a prodigious quantity of melons, of which I wished to learn the species and the cultivation. As I expected, these marsh-gardens were not so well cultivated as those of Paris; but I was not a little surprised to see, at this latitude, large squares completely covered with melons, either ripe or nearly so, the whole springing up in the open air, without dung, without a made bed, without glass, or any shelter whatever. These gardeners simply make a hole of some feet square, which they fill with manure and cover with earth. On this they sow their seed close to each other; they afterwards transplant them in fresh ground, like cabbages, in a square of the garden. They only cultivate one kind, because it is the only one, they told me, which can accommodate itself to such simple cultivation.* It is an oval melon, of middling size and netted. The day on which their melon harvest commences is about the 12th of September. The finest sell for about ten or twelve sous (fivepence or sixpence.) Although these marshes are inferior to those of Paris in point of cultivation, yet the gardeners of Montargis are exceedingly intelligent, industrious men. As their gardens produce much more vegetables than is required for the town, they send their wives eight or ten miles distance to sell the produce. In course of time they purchase land, and become small proprietors, and thus it is that the land round Montargis, formerly so barren, is now in such good cultivation.

Food for Cattle.—From Les Barres to Nemours, I saw the boys and the girls of the neighboring villages, perched up in the trees, pell-mell, which lined the road. These were elms, and the business of the young population above, was not only to gather the leaves, but to break down the young branches, in order to take them away as food for cows. Many trees had not a single leaf but at the extremity, where the hand could not reach. I was astonished at this license, and I spoke of it to an intelligent farmer whom I afterwards met, and he informed me that it was the custom of the country, and that the leaves and young branches were a great resource in feeding cattle. This explanation reminded me that I had seen, on several properties, elms cultivated with a bull-head, for the express purpose of enabling a servant to take off the leaves by means of a short ladder. In such cases I make no objection, for a proprietor can do what he pleases on his own property, but that the gov-

* A clever horticulturist has since told me, that the melon which succeeds best with a very simple cultivation, is the sugar melon, with white flesh, *sucrin à chair blanche*.

ernment should permit the custom of pulling off the leaves, and breaking the branches of public trees, and that no obstacle should be interposed to prevent such disfigurement, is what I cannot conceive.

Gardens of Fontainebleau.—For sixteen years I had not seen Fontainebleau. I found there old friends, who received me with the greatest kindness. I mention particularly M. Souchet, who replaced me in the care of the English garden* of the palace, when I was appointed to the Royal Nurseries of Versailles; and M. Brassin, entrusted with the care of the Park and the Royal Vinery, which furnishes the finest grapes that appear at Paris. It may easily be imagined how delighted I was to re-visit the English garden of the palace, which had passed into my hands, almost on leaving the hands of M. Hurtant, who had laid it down. With what interest I sought for those trees which I had planted myself sixteen or seventeen years before! As I expected, the general plan was preserved in the same form as when I left it; but the grace of infancy, the freshness of youth, had disappeared, to give place to a physiognomy more decided and more powerful. The huge squares of plantations, which, in my time, looked gay and light, had become vast forests, through which but little light could penetrate. The large pieces of grass had become narrowed by the branches of trees spreading out on all sides, and the whole look was different. How sixteen years increases the growth of a tree! How mistaken are they who give, as an excuse for not planting, that the enjoyment is too long to wait for! The enjoyment comes more quickly than they think. The land of Fontainebleau is exceedingly silicious, tolerable in some parts, and absolutely bad in others. It is now twenty-two years since the garden was laid down, and if all the wood which has been already taken was added to that now standing in it at present, the proceeds in money would certainly be greater than could, by any process of cultivation, be drawn from the same land in the same length of time.

Dahlias.—For a very long time M. Souchet has been celebrated for his beautiful dahlias. His collection certainly appeared to me a fine one; but, without meaning any offence to my good friend, I must declare that I have seen finer ones. Amongst many varieties of phlox, obtained from seed by this excellent horticulturist, I remarked one admirable for its large scarlet flowers. I was favored by M. Souchet with a plant, in order to multiply it, and distribute it amongst the nurserymen. A seedling of the *Salvia fulgens* also has furnished a variety with far larger flowers, and more brilliant than those of the original, and which will take its place in the trade.

Grapes.—M. Brassin has under his care two objects of a very different nature—the grand park in the style of Le Notre—and the Royal Vinery; I intend speaking of the latter object alone. This vinery, the origin of which is taken back as far as Francis the First's time, is, without dispute, the finest and largest in the world. It is a wall about a quarter of a league in length, running from east to west, about ten feet high for three-fourths of its length, and eighteen to twenty in the rest. It is covered on the south side with a kind of grape called *Chasselas*, the fruit of which acquires, at Fontainebleau and at Thomery, quality and beauty which do not distinguish it elsewhere. It is useless to say, that, since its origin, the wall has been many times repaired and rebuilt, and that the vine has been frequently replanted; but that which is little known, and little practised in any other place, except Fontainebleau and Thomery, is the clearing of the vine, or the replacing of the vines of

* The name generally given to the ornamental grounds and shrubberies of a gentleman's house in France.

which the grapes appear degenerated or inferior, by others whose fruit is of the finest quality. It is by this practice that the Royal Vinery preserves its superiority over all others in the kingdom. There exists, at present, but one plant of all those which M. Brassin found there seventeen years ago; and many of those which he has since planted, have been replaced by others considered of better quality. The present appearance of the Royal Vinery is really beautiful.

M. Brassin communicated to me the two following facts, which I think worth publishing for the sake of horticulture. He had always been in the habit of following the custom, adopted every where, of enriching the earth of his grapery with dung, and he at last is able to prove that this application impairs the quality of the grape. At present, he applies no more such manure; he gets together the cleansing of ditches, grass-turf, sweeping of roads, and filth, and mixes them well together. He suffers the mass, thus prepared, to ripen for two years, and makes use of it in place of dung. This confirms what has already been ascertained, and what the best authors have recommended; but the second communication is altogether novel, and I am going to arrive at it by a transition as natural as possible. When the maturity of the grapes is at hand, or when, in backward seasons, fears are entertained that the ripening will not be easy, it is usual for the greatest number of persons, even gardeners, to cut and pull off all the leaves which are before the fruit, in order, as they allege, that the sun may shine fully upon it, and ripen it speedily; and although experience proves, that the more the leaves are removed the less the fruit ripens, custom always causes the leaves to be taken off in abundance, at the expense of the quality of the grape, which then wastes away and gets wrinkled in place of becoming ripe. M. Brassin acts altogether differently with his. He knows that the leaves cannot be removed in a great number with impunity, from around the grapes, and he is therefore exceedingly cautious, and refrains from removing any of the leaves in front of the fruit. Those which he takes away are those behind, lying between the grapes and the wall, in order that the heat of the sun, being reflected by the wall, may strike the grapes from behind, and produce the effect desired. I have had experience of the efficacy of this proceeding; and I do not hesitate to recommend the practice of it, whilst I condemn the old custom of taking away the leaves in front. One ought to possess some notions of vegetable physiology, in order to take away leaves properly, otherwise the fruit is sure to suffer.

Orange-trees.—M. Faucheux, nurseryman at Fontainbleau, rears orange trees in great numbers. Of two grafts, or modification of grafts, which he uses for multiplying them rapidly, one appeared to me so excellent in its results, that I think it worthy of being made known. Get a young citron tree of one or two years' growth—it must be put in sap by the means generally practised, if it is not so already. When the buds begin to get along, the head of the plant is cut off above three or four of the best buds; a slit is then made with the grafting knife, between the stem and the second or third bud in descending, so that the bud and its leaf should terminate the lip. A branch of an orange tree is then taken, of a diameter a little less than the stock; it is sharpened with a sloping cut, and is then introduced into the stock in the usual manner, and tied on with a woollen string. The plant is then placed under a glass frame, as a graft *à la Pontoise*, and the same care is bestowed on it. When the union is certain, and the bud pushes forth, the stock is cut above the graft, and in a short time the marks of the wound disappear altogether. The superiority of the Faucheux graft over the Pontoise or English graft, is that it allows one to arrange the leaves and the

eyes of the stock above the fruit of the graft, which attracts the sap necessary for facilitating the union.*

Grafting of Pine-trees—In coming to Fontainebleau, I not only wanted to see my old friends and the gardens, but I was anxious to judge what progress had been made in the forest by the plantation of resinous evergreens, and to view the grafts, on a grand scale, of the laricio pine, executed on the *sylvestris* pinus, commenced by M. Larminat, the Conservator of the Forest, and continued by M. Bois-d'Hiver, his successor. It was in 1823 that M. Larminat conceived the happy idea of executing the grafting of the trees on a great scale, by means of the herbaceous graft, or 'Tshudy's', its inventor, or at least he who brought it into use, for this graft was already known in the sixteenth century, according to Francis of Neufchatel. The first sowing was a mixture of the *pinus sylvestris*, and the maritime pine on the rock of Avon, which is nearest the palace. When the success of this experiment had been tried, many others were made, sometimes separately, and at others mixed together. The sowing is generally made by scattering the seed, † though nurseries are also established from which they can plant out. Some American pines are seen there, but it is rather as an object of experiment, than for the sake of multiplying them. According to the plan now pursued, the poetic and romantic situations of the forest of Fontainebleau will disappear under the dark and enduring masses of verdure which are springing up in every direction. Its rocks, which contain in their interior such crystals as can scarcely be found in any other part of the world, will soon disappear under the layer of vegetable earth, constantly produced by the fall and decomposition of the leaves of the pine, which has already nearly concealed them by its dark and silent foliage. This is no hyperbolic picture. It is the simple, slow, gradual, but certain course of nature.

ART. III. Domestic Notices.

Effects of the late warm and dry weather.—The great dryness and heat of the last two months, have changed my garden to an Arabian desert. It lays very high, and is much exposed on all sides, to the heat and wind. The dahlias have suffered, notwithstanding the greatest care I could possibly give them, very much from insects and the heat. I have had no flowers yet, and despair of having a good show of blooms this season. The garden being nearly devoid of flowers, and the grass fruit entirely up, the appearance is melancholy to the greatest degree.—*Yours, J. W. Paulsen, Brooklyn, N. J., Sept. 1st, 1838.*

* This graft, acknowledged to be the best, the easiest, and the most certain, is known in some establishments under the name of the triangular graft. It is excellent for the camellia, rhododendron, clethra, and alasca.

† At first the ground was cleared and prepared before they planted the pines; this method cost one hundred and twenty-five francs (5*l.*) an acre, and about half was found to fail. Afterwards M. Larminat thought of a means of getting the seed sown for nothing in unencumbered places, and for a trifle in more difficult spots. The plan was this: the seed is flung on the heath, and the poor of Fontainebleau are then permitted to take away the heath, on condition that they tear it up by the roots.

Mr. Perry's new hot-house, and green-house.—I have, in another place, stated to you, that Mr. Perry was about erecting two new houses. Both will be eighty feet long; a hot-house forty feet long, and eighteen feet wide, at the back eighteen feet high, and nine feet high in front, and a green-house of the same dimensions. The building will consist of massive brick work. It will have half a span roof, and will contain about six thousand lights of glass. In front will be double glass windows, and no shutters. The houses will be on a level with the surface, [of the garden,] and underneath the green-house will be a deep cellar, forty-six feet long, for the furnaces, coals and a cistern. Each house will be heated by itself, by the furnaces opposite to each other, with hot water. In the hot-house will be a large tan [or bark] bed, for large and fruit-bearing plants, as the *Cárica Papàya*, *Mangífera índica*, *Crescéntia Cujute*, *Mammèa*, *Musa sapiéntum*, &c.—*Id.*

Lantàna Sélowii.—This beautiful plant, which we noticed in a late number, and copied some remarks respecting its treatment, is one of the prettiest things in the garden. In the early part of the summer we turned out into the border a small plant, which has now opened at least fifty of its elegant purple clusters of blooms: it has spread over the ground to the distance of two foot or more, and is always laden with flowers. Standing close by the side of *Verbèna chamædrifòlia*, it forms a pretty contrast, and sets off the brilliancy of that species. Exclusive of its value in the hot-house, it is a border plant of great beauty, and should be found in every garden.—*Ed.*

Cèus triangulàris.—A small plant of this magnificent species, in the collection of J. W. Boot, Esq., of Boston, lately produced a flower, which measured fourteen inches in length from the base of the tube, and seven inches in diameter between the tips of the petals. The flower remained expanded from sunset, at which time it opened, until about twelve o'clock in the morning of the next day. This species has never flowered but once or twice before in this country.—*Id.*

Mr. Hogg, nurseryman, of New York, sailed for London, in August. We understand it is his intention to bring out a great quantity of new and rare plants. We are glad to learn that he has visited London for this purpose. If some of our enterprising nurserymen and florists were to either go themselves, or send a competent person, every year, to select and bring out all the new plants, we believe it would be to them a source of great profit. There are many plants which cannot be brought out alive, unless under the care and attention of some experienced person during the voyage.—*Id.*

Early Quinces.—The first quinces in Faneuil Hall market, this season, were produced in the garden of Henry J. Finn, Esq., of Newport, R. I. These were picked as early as the 18th of September. Four trees yielded *seven* bushels. Mr. Finn devotes much time to his garden during the summer season, at which period only, he is enabled to be there, and raises an abundance of fine fruits, vegetables and flowers, with which the garden is well stocked, including among the latter, a fine collection of choice dahlias. Indeed, his residence is one of the prettiest in that ancient place.—*Id.*

Horticulture in Nantucket.—Perhaps few of our horticultural friends are aware of the progress of gardening in this "sea-girt" isle, a sandy waste, as it is often incorrectly termed. The following extract of a letter from a friend will show to what extent the culture of the grape has already arrived. "I started my grapes the last of February, and now have (July 20th) a very fine show of black Hamburgs; some of the bunches, I think, will weigh four pounds. I have also a house, rough built, in which is over seventy vines, of various kinds, mostly two years from the cuttings, over fifty of which are now bearing, and will

produce over five hundred clusters. On the back wall are peach trees, mostly in bearing: this house has no artificial heat."—*Yours, M., July 20, 1838.*

ART. IV. *Massachusetts Horticultural Society.*

Saturday, September 1st, 1838.—Exhibited. Flowers: From Hovey & Co., a fine specimen of Buist's, Mrs. Rushton, dahlia. From S. Walker, dahlias, viz: Jackson's Rival yellow, King of dahlias, Dennisii, Duchess of Buccleugh, Perfection, Lady Ann; also, *Tigridia conchiflora*, convolvuluses, &c., and bouquets. Large bouquets, including dahlias, from Dr. Howard. Bouquets from J. Hovey, Messrs. Winship, Hovey & Co., and Wm. E. Carter.

Fruits: White Chasselas, and black Hamburgh? grapes, from J. Tidd. Plums from S. Pond, viz: green gage, Washington, Corse's Field Marshall, Bingham, Smith's Orleans, and white gage. From S. Walker, white gage, and Bolmar's Washington plums. River apples and native pears, from J. Gardner, Dorchester. Julienne pears, (exceedingly large) from J. De Wolf, Brighton. Bolmar Washington, (superb) and white gage plums, from S. R. Johnson. From Dr. Howard, red bergamot, and Catherine pears, and Miller Burgundy, white Chasselas, and black Hamburgh grapes. Persian, Minorca, and cantaloupe melons, from the President of the Society; (these were very fine.) From J. Wiggin, Portsmouth, N. H., apples, the name unknown. Summer pippin apples, from J. B. Barstow, Hanover. Apples from Manchester, Virginia. From R. Manning, summer Franc Real, Dearborn's seedling, red Juneating, Hazel or Hessel pears; and nonsuch, (English,) white Astracan, and Putnam's Harvey apples; also, Dana, red Canada, and Byfield plums.

Vegetables: Tomatoes, from J. L. L. F. Warren. From Hon. J. Lowell, Cuba tomatoes, a new variety, and unknown here. With the specimens, Mr. Lowell communicated the following note:—

I send you the tomato of Cuba, which are much preferred by the Spaniards, to those we raise. Indeed, for a preserve for the dessert, they are much more beautiful. I was fearful they would not ripen in our climate; but I found they were eight days earlier than our own, raised near them in the open ground. They are abundant bearers.

Distributed—Cuba tomatoes, for seed, from the Hon. J. Lowell.

September 8th.—Exhibited. Flowers: From Dr. Howard, dahlias, viz: Cedo Nulli, Ophelia, Desdemona, Prince George of Cumberland, Dennisii, and Smith's purple; also a fine bouquet and asters. From S. Walker, dahlias, viz: Dennisii, Desdemona, Perfection, Rival Yellow, Cleopatra, and Calypso; also, asters, pansies, and fine bouquets. From Hovey & Co., dahlias, as follows:—Juliet, Middlesex Rival, Brown's Beauty, Conqueror of Europe, and Mrs. Rushton; also, bouquets. From M. P. Wilder, Fowler's Queen Victoria dahlia. Bouquets from T. Mason, Messrs. Winship, and W. Kenrick.

Fruit: From R. Manning, Passans de Portugal, Hooper's Bilboa, Chair à dame, Vallée Franche, Julienne, Summer rose (of Coxe,) and sweet pears (from France;) also, red and green sweet apples, and red apricot, and Huling's superb plums. Seedling plums from T. Mason;

these were small, but a tolerably good fruit. From William T. Eustis, Brighton, fine Grosse mignonne peaches. Ninety kinds of seedling peaches, taken from ninety different trees, from Otis Pettee, Newton. Specimens of the beurré d'amalis pear, from M. P. Wilder. Fine large rareripec peaches and French apples, from Mrs. T. Bigelow, Medford. From the President of the Society, Julienne, Dearborn's seedling, and Cushing pears. Pears unnamed, from S. Phipps, Roxbury. Prince's Harvest apples, from E. Sparhawk, Brighton. Peaches and black Hamburg grapes, from B. D. Whitney, Esq., Cambridge. From Dr. Howard, red Bergamot and red Catherine pears; also, black Hamburg, white Chasselas, and Miller Burgundy grapes. Hawthorndean apples, from S. Davis, Newton. Two large clusters of black Hamburg grapes, from O. Johnson, Lynn. Early sweet bow apples, from J. A. Kenrick. Black Hamburg grapes, from A. Mitchell, Nantucket. Early sweet bow apples, and Roi de Wurtemburgh, and old Catherine pears, from J. M. Ives, Salem. Black Hamburg and white Chasselas grapes, from J. Tidd. Native grapes, from Mr. Davis, Newton. From S. R. Johnson, white gage, green gage, and Bolmar Washington plums, (all fine.)

Sept. 15th.—Exhibited. Flowers: From S. Walker, dahlias, viz: Jackson's Rival Yellow, Urania, ? Glory, Desdemona, Lord Liverpool, Belladonna, King of dahlias, Calypso, Dennisii, Napoleon and Mrs. Broadwood; also, fine bouquets. From William E. Carter, the following dahlias:—Beauty of Camberwell, Duke of Bedford, Harding's Bride, Augusta, Dennis's Beauty, Calypso, Globe, Roke's dwarf scarlet, &c. From Dr. Howard, dahlias, viz: Desdemona, Lady Fordwich, picta formosissima, Dennisii, Augusta, Cedo Nulli, Ophelia, Beauty of Cambridge, alba purpurata, Royal William, and Prince George of Cumberland, &c.; also, large bouquets of dahlias, asters, &c. From S. Sweetser, Brown's Quilled Perfection, dahlia, and a bouquet. Large double sun-flower, from S. Phipps. Bouquets from T. Mason, Hovey & Co., Messrs. Winship, and J. Hovey.

Fruits: From Hon. J. Lowell, beurré Spence, beurré Crappaud and bergamotte Paysans pears, accompanied with a note, which will be found in another page. From S. Downer, Dix, Cushing, Urbaniste, and Roi de Wurtemburgh pears; also, Miller's Burgundy grapes, (open air cultivation,) and Porter apples. From the President of the Society, Duchess d'Angouleme and Julienne pears, and summer pearmain apples, and seedling peaches. Beauty of Brussels pears, from John Richardson. Andrews, Julienne, Fulton and beurré Diel pears, from S. Sweetser. Red rareripec and new Royal George peaches, from S. Phipps. Isabella, sweetwater, (open air,) and Miller Burgundy grapes, early violet nectarines, and Maiden's Blush apples, from Dr. Howard. Williams's Bon Chrétien pears, from Mrs. T. Bigelow. Bon Chrétien pears, from Dr. Harris. Spice sweeting apples, from J. De Wolf. American Nonpareil apples, (so called, but not true,) from J. Warren, Western. From T. Mason, Elruge, Bromfield, Brugnion nectarines. Williams's Bon Chrétien pears, from D. Parks. From S. Pond, white gage, Duane's purple, Smith's Orleans, and Corse's Field Marshal plums. Small plums, raised from seeds brought from beyond the Rocky Mountains, from Messrs. Winship. White sweetwater grapes, from Mrs. Sarah Jones.

The Ninth Annual Festival of the Society took place on Wednesday, Thursday and Friday, the 19th, 20th and 21st of September, at the Society's room. The arrangements were nearly the same as last season, and the whole was got up under the superintendence of the special committee of decoration, of which Mr. Walker was chairman, and which duty he performed with great credit to himself.

The plants which decorated the room were many of them the same which last year, and for several previous seasons, had graced the Society's annual exhibitions, and consisted of fine specimens of plants, some of which we shall more particularly mention in the course of our remarks. The flowers were very profuse, with the exception of the dahlias, in the blooming of which, the present season, there has been a complete failure throughout the country, so far as we have been able to learn, and not one tenth part of the number of blooms were displayed; indeed, we can scarcely say that from the number exhibited by any contributor, twenty first-rate blooms could have been selected. Notwithstanding the full display of flowers and pot plants, this falling off in the display of dahlias was quickly perceptible, even to those who were unacquainted with the flowers. In the fruit, however, all amends were made up. We never before feasted our eyes upon such a rich and numerous variety of fine kinds. The season has been dry, but that it has been bountiful no better evidence could have been adduced, than a view of the load under which the tables literally groaned. Pears in numberless varieties; peaches of blushing hue; grapes in profuse clusters; apples disputing in their delicacy, the bloom upon the maiden's cheek; plums in "golden drops," and melons diffusing their spicy odor,—all contributed to enhance the richness of the whole. Even the votaries of Ceres were more numerous than heretofore, in offering up at her shrine the productions of their summer's labor and care. One huge, though handsomely formed, squash there was, which might have almost literally been transformed into a coach, large enough for any fine lady, had there been a fairy near, with her magic wand, to have given the command. This improvement in the cultivation of vegetables, we are glad to perceive, and the display of such fine specimens cannot be otherwise than highly gratifying to all who feel interested in the production of superior varieties.

Considering the scarcity of flowers, particularly dahlias, the exhibition was very well got up, and went off even better than we ourselves had anticipated. The weather was fine until the afternoon of the third day, when there was a light rain, and the rooms were well attended both day and evening, with a select and fashionable company. One thing we much regretted; and this was, that no address was delivered before the Society, as customary. We had supposed that an orator had been selected, and felt much disappointment that such was not the case.

On Friday afternoon, the 21st, the committee of arrangements partook of a dinner at Concert Hall. The occasion was one of friendly greeting and cheerful intercourse. Much zeal was manifested, in the sentiments called forth, in the cause of horticulture and floriculture.

In reporting the great number of plants exhibited, we may omit some of the contributions: this we have endeavored to avoid; but from the crowded state of the rooms, when we had the chance of taking our notes, and from the arrangement of the plants, necessarily hiding many of the labels, it is possible that we may have missed some things deserving of notice. The more showy of the plants were the *Chamærops humilis*, and *Alpinia nutans*, of Mr. Cushing: the sago palm of Mr. Lemist: the *Agave americana* var. *variegata*, of Messrs. Winship: the acacias of Mr. Wilder, and particularly his magnificent *Stanhopea quadricornis*: the *Pandanus* of Mr. Lowell, and various specimens from the Botanic Garden. *Alpinia nutans*, had a beautiful raceme of flowers expanded; and we believe the plant has rarely flowered in this country. We commence with the plants and flowers.

Flowers: From the Hon. J. Lowell, *Pandanus spiralis*, *Eugenia australis*, *Asplenium* sp., *Begonia* sp., and several other plants. From T. Mason, *Erica blanda*?, *Acacia armata*, *Plumbago capensis*, *Rhododén-*

dron hybridum, fine stocks and bouquets of flowers; also, *Verbena Tweediana*, asters, marigolds, coxcombs, &c. From A. Bowditch, Boston, myrtle-leaved orange, fuchsias, *Allòysia citriodora*, orange trees, myrtles, &c. &c. From J. C. Gray, Esq., fine large coxcombs in pots. From J. Rundle, a large apple tree in a pot, with fruit. From J. P. Cushing, Esq., *Chamærops humilis*, *Jambòsa vulgaris*, *Erica persoluta*?, *Trevirana coccinea*, *Astrapæa Wallichii*, *Amaryllis Belladonna*, *Calathea zebrina*, *Alpinia nutans*, *Phœnix dactylifera*, and other plants; also, a fine cut specimen of *Crinum amabile*, which perfumed that part of the room where it was placed, with its odor. From Mr. Meller, orange trees, bouquets, asters, marigolds, pinks, phloxes, &c. &c. From J. Lemist, Esq., myrtle-leaved oranges, *Cycas revoluta*, *Plex Aquifolium*, *Høya carnosa*, *Erica colorans*, and many other plants. From J. Hovey, a yellow tea rose, *Passiflora racemosa cærulea*, and bouquets.

From M. P. Wilder, *Stanhøpea quadricornis* (with seven flowers,) *Erythrina Crista-galli*, *Amaryllis Belladonna*, *Ardisia colorata*, *Araucaria excelsa*, *Mannettia cordata*, variegated holly, fig tree, orange trees, and fine acacias of several kinds; also, a fine display of tender roses, *Verbena Tweediana*, asters and dahlias, viz: Suffolk Hero, Elphinstone's Diana and Zeno, Beauty of Bedford, Dennis's Duke of Bedford, Angelina, Clio, Quilled Perfection, Conqueror of Europe, Granta, &c. From Messrs. Winship, *Fuchsia gracilis*, *Psoralea aphylla*, *Agave americana* var. variegata, *Eugenia australis*, *Stevia serrata*, myrtle-leaved orange, stocks in pots, and bouquets. From O. Johnson, Lynn, dahlias, viz: Angelina, Rose d'Amour and Vicountess Beresford. From S. Sweetser, phloxes, balsams, roses, asters, and cut flowers of *Cereus Ackermanni*. Bouquets from Wm. Kenrick.

From the Botanic Garden, by Wm. E. Carter, *Aloe ensifolia*, *Strelitzia reginae*, *Laurus exaltata*, *Plex crassifolia*, *Acacia decipiens*, *Myrtus mucronata*, *Hakea* sp., *Banksia* sp., *Magnolia grandiflora*, *Laurus indica*, *Beaufortia decussata*, camellias of sorts, *Petunia* intermedia, and bouquets; also the following dahlias: Countess of Liverpool, Beauty of Camberwell, Duchess of Buccleugh, Glory, Belladonna, Granta, Lady Ann, Jackson's Rival Yellow, Lord Liverpool, &c. From J. Breck & Co., an assortment of zinnias, marigolds, verbenas, asters, petunias and other annuals, with flowers of *Tigridia pavonia*. From R. Ward, Roxbury, double and single pomegranate, and *Campánula pyramidalis alba*.

From T. Lee, *Portulaca Gilliesii*, *Chryseis crœcea*, *Verbena Tweediana*, *Cleome spinosa*, *Mimulus cardinalis*, *Gerardiu flava*, *Phlox Drummondii* var. dark, *Lantana Selowii*, *Lophospérinum scandens*, *Gilia tricolor*, and various kinds of roses and other flowers. From S. Walker, a fine collection of dahlias, viz: Ophelia, Duchess of Buccleugh, Urania, Granta, Napoleon, Belladonna, Jackson's Rival Yellow, Lady Ann, Mrs. Broadwood, Desdemona, Star, Countess of Liverpool, Widnall's Perfection, Dodd's Mary, Dennisii, Metropolitan Calypso, King of Dahlias, &c. &c.; also, fine bouquets, *Tigridia pavonia* and *conchiflora*, and other flowers.

From Hovey & Co., choice dahlias, viz: Buist's Mrs. Rushton, Widnall's Rienzi, *Sulphurea elegans*, Brown's Beauty, Liberty, Conqueror of Europe, Princess Victoria, Topaz, Glory, Lord Liverpool, Red Rover, Victory, Madonna, &c. &c.; also, a fine large bouquet, superb white asters, and a pot of *Oxalis Bowiei*. From Dr. Howard, a collection of dahlias, embracing, among others, Desdemona, Ophelia, Dennisii, Augusta, Royal William, Prince George of Cumberland, Cedo Nulli, *Picta formosissima*, Beauty of Salem, Granta, Countess of Liverpool, Smith's Purple, Beauty of Cambridge, Widnall's Juliet, Middlesex Rival, &c. &c.; also, two fine large bouquets, containing dahlias, asters, &c.

Fruits: From S. Downer, pears, apples, grapes and peaches, viz:—Heathcot, beurré d'Arenburg, Passe Colmar, Knight's seedling, Bezi Vaet, Dix, Iron, Forelle, Lewis, Cattillac, beurré Diel, Williams's Bon Chrétien, Roi de Wurtemberg, Moorfowl Egg, Andrews, Urbaniste and Wilkinson pears; Pie, Pumpkin sweeting, Siberian crab, Pomme d'Api, Pound, Wales, Seaver Sweet, Lyscom, Nonsuch, Gardener's Sweeting, Spice, Porter, and other apples; Catawba, Isabella, Miller Burgundy, white Chasselas and one other variety of grapes; rareripe peaches. From S. Sweetser, Fulton, Seckel, Julienne, Chelmsford, Andrews, and Williams's Bon Chrétien pears. From E. Bartlett, Dix, green Sylvanche, Williams's Bon Chrétien, Roi de Wurtemberg pears, and Ribstone pippin apples. From John Rayner, Boston, St. Michael, buerré Gris, and Brocas Bergamotte pears.

From E. Vose, fine specimens of pears, viz: Williams's Bon Chrétien, Passe Colmar, Mouille bouche, and Urbaniste; also, Geo. IV., and Grosse mignonne peaches; large red Sweeting and Hawthorndean apples. From S. Pond, beurré Diel, Cushing, Andrews, and Roi de Wurtemberg pears; blue Imperatrice, Duane's purple, white gage, and Corse's Field Marshal plums. From Joshua Gardener, Dorchester, Pomme d'Api, and Gravenstein apples and Cushing pears. From John Barnard, Dorchester, apples and pears. From R. Ward, Roxbury, Williams's Bon Chrétien and Bergamotte pears. From Charles Johnson, Weston, Hawthorndean apples, and Seckel pears.

From M. P. Wilder, handsome specimens of pears of the following kinds:—Easter beurré, Roi de Wurtemberg, Burgomeester, beurré d'Amalis, beurré Diel, beurré Von Marum, Alpha, beurré Thouin, Glout morceau, Fortuné, St. Michael Archangel, beurré d'Arenburg, Sage-ret, bergamotte de Paques [Syn. with Easter bergamotte,] Heathcot, belle de Bruxelles, Kenrick (of Van Mons,) Young's baking, Bleeker's meadow and one variety unnamed; also, Coe's golden drop plum. From Mrs. T. Bigelow, Medford, monstrous pippin and French apples; and fine peaches and three very large lemons. From P. P. Spaulding, Chelmsford, De Marseilles, De Monsieur le Cure and seedling apples. From George Browne, Beverly, Pomme d'api, (beautiful specimens,) sweet apples, and two unnamed kinds; also Seckel and other kinds of pears.

From E. M. Richards, Harvard pears, Yellow and Red Ingestre, Fall sops of Wine, and other kinds of apples, and two varieties of seedling peaches. From Wm. Oliver, Roi de Wurtemberg, Brocas Bergamotte, and St. Ghislain pears; also sweet-water grapes from open culture, (very fine) and President and petite Mignonne peaches. From John Lemist, black Hamburg grapes and Williams's Bon Chrétien pears. From D. Haggerston, gardener to J. P. Cushing, Esq., Cushing and Williams's Bon Chrétien pears, and fine black Hamburg, white Frontignac, Esperione, white Chasselas and other grapes. From Wm. Meller, black Hamburg and white sweet-water (open culture) grapes. From Jos. Balch, Williams's Bon Chrétien peaches; peaches and apples from an imported tree. From Jacob Deane, Mansfield, large early apples, pine-apple peaches, and seedling American grapes.

From Dr. J. C. Howard, black Hamburg, white Chasselas, and Miller Burgundy grapes; also, Golden beurré, Bergamotte (?) beurré rouge, St. Michaels, and Cambridge, (?) pears, and maiden's blush or Hawthorndean, and ruddy greening apples; Isabella grapes, large and handsome. From A. McLennan, gardener to Wm. Pratt, Esq., Andrews, and Williams's Bon Chrétien pears. From T. Mason, black Hamburg, white sweet-water, Lombardy, and purple Constantine grapes. From Thomas Banks, gardener to J. J. Low, Roxbury, beurré de Roi, St. Michael's, Andrews, and Burgomeester pears; and Dr. Hunt's Connecticut, red Calville and native apples. From J. Kenrick,

orange, quince, and pumpkin-sweet apples. From Dr. Z. B. Adams, Boston, St. Michael and Seckel pears.

From J. L. L. F. Warren, a large and showy basket of fruit, containing the following assortment:—Seckel pears, Baldwin, greening, Autumn superb, Porter, Lady, and Siberian crab apples; also, Royal George, New George IV., Melacaton, Royal Kensington, and Warren's favorite peaches; and damson plums, cantaloupe and green citron melons, and Chasselas, black Hamburg, purple Malaga, and Isabella grapes.

From J. Clapp, South Reading, Platt's bergamotte pears, and York russet, Siberian crab, Lady, and other apples; also, beautiful peaches, and grapes, and three very fine melons. From E. Holden, Dorchester, very beautiful Porter apples. From L. Baldwin, Newton, large red apples, very handsome. From Mr. Eames, Framingham, specimens of apples from Detroit, a large and fine fruit. From Mrs. Browne, clingstone peaches. From John Hovey, grapes from open culture. From A. D. Weld, West Roxbury, apples.

From S. & G. Hyde, Newton, Gravenstein, high-top sweeting, red Calville, Washington pearmain, Bun, Smith's gilliflower, Hubbardston nonsuch, pæony, Lyscom, winter sweeting, scalloped gilliflower, greening, July flower, Doctor sweeting, Pound, Vandevere Burlin, Cogswell, and Fall sops of wine apples; also, Tucker's Bon Chrétien, grand Sachem, Forelle and Urbaniste pears. From A. D. Williams, pears, viz: Epargne, summer thorn, and Williams's seedling, and Fall sops of wine, horn, and Porter apples; black Hamburg grapes, and seedling clingstone peaches. From George Newhall, Dorchester, Brocas bergamotte, Fulton, Roi de Wurtemberg, and Williams's Bon Chrétien pears; Porter and pearmain apples; yellow and red rareripe, Moore's rareripe, Jaques, golden purple clingstone, and seedling peaches. From James Eustis, South Reading, two varieties of peaches. From J. Warren, Weston, Warren's nonpareil apples. From Rufus Howe, Dorchester, Urbaniste pears. From Dr. J. Greene, Groton, Foundling apples.

From R. Manning upwards of *ninety* varieties of fine pears, the names of which are as follows: Doyenne blanc, beurré Comte de Fresnel, beurré gris, golden beurré of Bilboa, Brugmansbirne, Williams's Bon Chrétien, English autumnal bergamotte, Bezi Montigny, Sieule, Fondante de Brest, Duchess d'Angouleme, Rousset of Rheims, Easter beurré, Wilkinson, Camburnether, Cushing, Andrews, Green Catherine (of Coxe,) Jackman's meeting, Autumn superb, Belle Lucrative, Belle et Bonne, beurré Diel, Bishop's Thumb, Bleecker's meadow, Bon Chrétien Fondante, Spanish Bon Chrétien, Catillac, Cumberland, Doyenne Gris, Duchess D'Angouleme, Glout Morceau, green sugar, Hacon's Incomparable, Harvard, Henry Quartre, Jalouise, Johonnot, Lewis, Maria Louise, Messire Jean, Long green (of Coxe,) Long green of autumn, of new edition of Duhamel, Naumkeag, Newtown Virgaleau, winter orange, Passe Colmar, Pope's Quaker, Prince's St. Germain, Roussette Panache, winter royal, St. Ghislain, Stevens's Genesec, Styrian, Surpass St. Germain, Swan's egg of Coxe, Egg pear of Duhamel, Urbaniste, Washington, beurré Bollwiller, beurré Duval, Figue de Naples, Frederick of Prussia, Fulton, Garnstone, green pear of Yair, Josephine, Jamenette, Austrasia, Sabine of the French, Louise Bonne of Jersey, Roi de Wurtemberg, Present Royal of Naples, Reine des Poires, Surpass Virgoulouse, beurré Von Marum, Welber's yellow autumnal, Alpha, French autumn bergamotte, Bezi de Chaumontelle, Crassane, Knight's seedling, (of R. I.) Coffin's Virgoulouse, Petre, very superior, striped long green, Ronville, Cassolette, Summer thorn of Thoulouse; also the Camburnethan pippin, Crownshield sweet, new seedling fine, two sorts new seedling crabs, Rambour d'ete, Ortleypippin, Ribstone pippin, Fall Harvey, Swaar, yellow bellflower, blue Pearmain, Murphy new, fine, large, and Putnam's Harvey apples.

From J. M. Ives, Salem, Swaar, Pickman pippin, Rambo or Romanite, Wellington, Bullock's pippin, Red Doctor, Michael Henry pippin, and Mela Carla (not of the London Horticultural Society's *catalogue*,) apples; also the following pears; Capiaumont, (of Van Mons,) Roi de Wurtemberg, beurré Bosc, Andrews, striped St. Germain, Burgomeestre, (of Boston,) Cushing, Lewis, Williams's Bon Chrétien, Bleecker's meadow, Napoleon, Passe Colmar, Raymond.

From B. V. French, the following great variety of apples: Monstrous pippin, yellow bellflower, Ortley pippin, Mela Carla, Fameuse, Duke of Wellington, Hawthorndean, Fall Sopsavine, Garden royal, Devonshire Quarrendon, Porter, Dutch Codlin, Garden striped, Yellow Newton pippin, Sweet greening, nonsuch, sour sweet, black apple, Court-pendu Plat, Wells's pippin, Royal do., Scarlet nonpareil, English do., Danvers sweet, red Doctor, High-top sweeting, Æsopus Spitzemburg, Green's everlasting, Bun, Newark King, Snow, King of the Pippins, Fearn's pippin, Conway, Osgood, Ribstone pippin, Alexander, Vandavere, Jonathan, Surprise, Priesley, Moor's red winter, Cumberland spice, Pumpkin spice, Mela de Resomarino, French bellflower, Golden Reinnett, Reinet d'autumn, Templeton winter sweet, Russett, Long nonsuch, Old Pearmain, Side-hill, Lady finger, Greening, Lewis, French's sweet, Seaver sweet, York russet, Downton pippin, Pomme d'Api, Siberian crab, Murphy, Burraove, Virgenitt, Rock, Adam's sweeting, Red Calville; also, Red Queen Mother, and Coe's Golden Drop plums, and Cushing, Harvard, Long green, beurré Romain, Wilkinson, Old Winter, Roi de Wurtemberg, Williams's Bon Chrétien, Saint Lezain, Spanish Bon Chrétien, Tillington, and Bon Chrétien pears.

From John Arnold, Milton, two very large clusters of black Hamburg grapes, one weighing two and three fourths, the other three and three fourths pounds, also Muscat of Lunel. From E. Breed, Charlestown, Orange, Julienne, Seckel, Duchess d'Angouleme, and Williams's Bon Chrétien pears; also, Muscat Alexandria grapes, and green gage plums. From Dr. Joel Burnett, of Southboro', Burnett pears. From John Hill, of West Cambridge, lemon rareripe peaches.

Vegetables: The display of these was remarkably good. The variety of squashes was large, and the specimens excellent: one of the mammoth kind, exhibited by Capt. J. Lee, of West Cambridge, weighed one hundred and thirty pounds. A new variety of tomatoes from Cuba, by Mr. Lowell were curious, and some yellow fruited ones, a variety of the common kind, was very showy from their rich golden hue. Two seven years' pumpkins, the same which were exhibited last season, attracted attention; they were as sound as they were last September. This pumpkin, from its excellent keeping qualities, is likely to become a great favorite. A correspondent (Vol. III., p. 236) states that it is fully equal in quality for making pies to the Valparaiso squash. It is a great bearer. The following were contributed:—

From S. & G. Hyde, Newton, two very large water-melons, weighing about forty pounds to each. From J. M. Ives, Salem, true autumnal marrow squash, and a variety called the Palermo squash. From Mrs. A. Lawrence, an autumnal squash, raised in a tub. Hon. John Lowell, Cuba tomatoes. From J. Thompson, Jr., a cone squash. From E. Sparhawk, Brighton, a crookneck squash, weighing forty-four pounds. From J. Eustis, South Reading, a fine Valparaiso squash. From J. D. Greenwood, Brighton, squashes. From J. L. L. F. Warren, West India and common tomatoes, horticultural beans and seven years' pumpkin. From S. Poud, autumnal marrow squashes, and pine-apple potatoes. From Rufus Howe, Valparaiso squash.

From Capt. J. Lee, a mammoth squash. From S. Prescott, Roxbury,

three very fine winter crookneck squashes. From J. D. Williams, two superior drumhead cabbages. From J. Hovey, tomatoes. From J. L. Moffat, yellow tomatoes, very handsome. From J. Clapp, South Reading, crookneck squashes, netted, pine-apple, and water-melons. From S. Hyde, Jr., Newton, mangel wurtzel. From Mrs. Weld, Roxbury, pumpkins. From Perez Smith, Newton, a twin Canada squash.

Some fine melons were exhibited. From Mr. Wilder, a black rock. From Mr. Vose, two melons raised from seeds procured in Paris, said to be fine. From Dr. Howard, green Smyrna melons, the same we have previously noticed.

ART. V. *Retrospective Criticism.*

Errata.—In our last, p. 323, nineteen lines from the bottom, strike out “*respecting titles of works,*” a sentence inserted by mistake after our revision of the proof.

Dr. Hossack’s Collection of Banksias.—Mr. Editor, you will excuse me, if, to prevent a mistake, I inform you that, according to the notice of the last number of your Magazine, p. 306, (under the head of Domestic Notices,) Mr. Gray did not buy the rich and entire collection of the late Dr. Hossack’s banksias. Joseph W. Perry, Esq., of Brooklyn, purchased, according to the catalogue, as follows:—

No. 84, <i>Banksia littoralis.</i>	No. 89, <i>Banksia repens.</i>
“ 85, “ <i>grândis.</i>	“ 96, “ <i>latifolia.</i>
“ 188, “ <i>serrata.</i>	

There were left, therefore, only two Banksias, No. 187 and 246, viz: *B. spinulosa* and *ericeafolia*, which Mr. Gray could purchase.

The *B. latifolia* and *serrata* are two splendid and very large specimens; by far the finest which were among Dr. Hossack’s collection. I was myself present at the sale, and I bought for Mr. Perry to a very considerable amount, and the best plants to be found among the whole. I take the liberty to send you a list of some of our best plants, although I have not yet completed my catalogue. [This list will be found in a previous page.] *Yours, J. M. Paulsen, Gardener to J. W. Perry, Esq. Brooklyn, N. J., September 1st, 1838.*

We are glad to be corrected in any error, and Mr. Paulsen will receive our acknowledgments for the above. We were aware, some time since, that Mr. Perry purchased some of the Banksias in Dr. Hossack’s collection; but, as we supposed the collection contained some fifteen or twenty plants, we did not hesitate in saying, when writing the notice alluded to, that Mr. Gray was the purchaser of the larger part, though we have not yet seen the plants. Mr. Perry has been fortunate in possessing himself of the above specimens, and we hope, under the management of Mr. Paulsen, that he will be enabled to raise a number of young plants. The Banksias are scarcely known in the country, but a nobler tribe of green-house shrubs does not exist, and there is no reason why they should not be found in all choice collections. The commemorative name alone entitles them to extensive notice. The seven species, including those purchased by Mr. Gray, embrace the handsomest of the family. *D. longifolia* is particularly splendid.—*Ed.*

ART. VI. Faneuil Hall Market.

	From	To		From	To
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
<i>Roots, Tubers, &c.</i>			<i>Squashes and Pumpkins.</i>		
Potatoes:			Winter crook-neck, per lb.	1 00	1 50
Common, { per barrel, . . .	1 25	1 50	Canada, per lb.	2	—
{ per bushel, . . .	50	60	Pumpkins, each.	12½	25
Chenangoes, { per barrel, . .	1 50	1 75	<i>Fruits.</i>		
{ per bushel, . .	75	—	Apples, dessert, new :		
Sweet Potatoes, per peck, . . .	50	—	Common, { per barrel, . . .	1 25	1 75
Turnips:			{ per bushel, . . .	50	75
Common, { per bushel,	75	—	Porter, per barrel,	2 50	3 00
{ per peck,	25	—	Sweet apples, per barrel, . .	2 00	—
Onions:			Ribstone Pippins, per barrel,	2 00	—
Red, per bunch,	4	6	Greenings, per barrel,	1 25	1 75
Yellow, per bunch,	3	4	Russets, per barrel,	1 50	2 00
White, { per bushel,	1 50	—	Pears:		
{ per bunch,	4	6	St. Michaels, per dozen, . . .	25	37½
Beets:			Brocas Bergamot, per doz.	25	50
Long red, per bushel,	50	75	Urbaniste, per dozen,	25	37½
Carrots, per bushel,	50	75	Cushing, per dozen,	25	—
Parsnips, per bushel,	75	—	Seckel, per dozen,	25	50
Horseradish, per pound,	8	12	Capiaumont, per dozen, . . .	25	37½
Shallots, per pound,	20	—	Common, per half peck,	25	37½
Garlic, per pound,	12	—	Long Green, per half peck,	25	37½
<i>Cabbages, Salads, &c.</i>			Baking, per bushel,	1 50	—
Cabbages, per dozen :			Plums, per quart:		
Savoys,	50	75	Blue Imperatrice,	25	37½
Drumheads,	75	1 00	Peaches:		
Red Dutch,	75	1 00	Common, per bushel,	2 00	4 00
Cauliflowers, each,	12½	25	Superior, per dozen,	25	50
Brocoli, each,	10	15	Grapes, hot-house, per lb:		
Lettuce, per head,	6	8	Black Hamburg,	62	75
Beans:			White sweet-water,	25	—
Shelled, per quart:			Isabella,	12½	—
Common,	10	12½	Catawba,	12½	—
Sieva,	20	25	Melons: each,		
Corn, per dozen:			Watermelons,	12	25
Sweet,	12½	16	Pine-apple,	6	12
Cucumbers for pick'g, pr hund.	17	20	Green Citron,	6	12
Peppers, per pound,	4	—	Common Musk,	12	25
Tomatoes, per bushel,	1 00	1 50	Cranberries, per bushel,	1 25	1 50
<i>Squashes and Pumpkins.</i>			Quinces, per bushel,	2 50	3 00
Squashes:			Berberries, per bushel,	75	—
Autumnal Marrow, pr pound	1 00	1 50	Lemons, per dozen,	—	—
			Oranges per dozen,	—	—
			Chestnuts, per bushel, (new)	4 00	—

REMARKS.—After the dry summer, autumn has succeeded with an abundance of rain. The month has so far been mild, but a great quantity of rain has fallen, and the earth has been sufficiently moistened to afford nourishment to all crops not beyond the need of it. Cabbages have been greatly benefited, as have also turnips, and an abundant supply will be the result, where in August light crops only were anticipated. Potatoes were too far advanced to receive any great benefit from the rains. All garden productions have done well, and a frost, even at this early period, would do little damage other than the destruction of beans, peppers, &c.

Potatoes at the eastward are a heavy crop; the weather has there been cool, with the usual quantity of rain. They have already been received here in some quantities, but the scarcity in the Middle and Southern states has caused a brisk demand, and a great portion of the cargoes have been taken for re-shipment at high prices. This, together with the light stock in the vicinity, will keep prices up at their present rates for some time, and it is doubtful if they fall much through the season. Sweet are plentier and better. Onions have fallen a shade or two, and the prospect is of a greater reduction, as the stock is large and very good. Fine parsnips are now received.

Cabbages are good and plentiful; drumheads are filling up well, as are all the kinds. Cauliflowers are just now abundant, and brocolis are received of very large size. There are few beans to be found, except sievas, and these are very scarce. Celery comes to hand very good for the season. Tomatoes plentiful. Peppers have advanced since our last. Some sweet corn yet comes to hand. Squashes are abundant enough, and prices in consequence have fallen down to our quotations, at which the best can be purchased.

Apples are exceedingly plentiful, and withal quite handsome. Porters are mostly done, a few only remaining on hand. Greenings, russets, &c. are brought in now in considerable quantities; a good assortment of other kinds may be found, including some handsome Ribstone pippins. Pears continue about the same; some varieties are gone, but new ones have taken their place. Plums are done, with the exception of the Blue Imperatrice. Peaches, as the season advances, sustain their prices, and as the whole supply comes from this vicinity, it is rather limited; a few nice ones by the dozen, command our highest rates. Grapes plentier; sweet-water from the open ground have not been so abundant for several seasons; Isabellas and Catawbas are also very plentiful. Melons are poorer, and the demand is small. Of cranberries a good stock has been brought in, and the promise is a fine supply. Quinces are handsome this season, and there is an average crop. Lemons and oranges remain without much alteration. New chestnuts have come to hand; they are large and full, and no doubt there will be a greater quantity brought into market this year than for several previous ones. No new walnuts yet.—*Yours, M. T., Boston, Sept, 25th, 1838.*

HORTICULTURAL MEMORANDA

FOR OCTOBER.

FRUIT DEPARTMENT.

Grape Vines at this period will have so ripened their wood as to be ready for pruning away all useless and superfluous shoots, as well as all the laterals. Let the house be well aired early in the morning, in order to ripen the wood well. If the shoots are huddled together, separate them, now that the fruit is cut, and it can be done easily, and tie them at good distances from one another, so as to let the air circulate freely around them. If the crop is not yet cut, this can be deferred till next month. Vines in the open air should be partially pruned.

Strawberry beds planted in August will need hoeing and weeding, and upon the approach of frost a light protection.

Fruit trees of all kinds, particularly apples and pears, may be transplanted this month.

FLOWER DEPARTMENT.

Camellias should be removed to the house this month, as there will be danger of frost; the plants should be well cleaned before they are put in.

Chrysanthemums in pots should also be removed to some sheltered place, out of the danger of frost; for although the plants are perfectly hardy, the flowers are spoiled if once touched by a severe frost.

Gladioluses should be taken up the latter part of the month.

Amaryllises should also be taken up.

Tiger flowers should be removed from the ground before frost.

Carnations in pots should be placed in frames this month, but should be allowed all the air possible.

Paeonias may still be separated and replanted.

White lilies, and other kinds of lilies, may be set out this month.

Tulips, Hyacinths, &c.—The planting of these and other bulbs may be commenced the latter part of the month, if there is a great number to plant.

Oxalis Bowiei, cernua, rosea, &c., may still be repotted.

Sparaxis, ixias, and similar bulbs, may be potted this month.

Cactus cuttings may yet be put in.

Trevirana coccinea. The plants will soon have done blooming; when they have, set them away under the stage, where they will not be destroyed by too much moisture.

Stocks in pots should be removed to a frame.

Annuals for blooming early in the spring, may be sown this month.

Dahlias will need attention; if there is danger of severe frost, draw up a little earth over the crown of each root; and if the weather is likely to continue cold, take them up the first warm dry day, and place them away in the cellar or other safe place.

Mignonette in pots should be carefully watered.

Green-house plants of all kinds should now be got in; and those which need repotting, should be attended to.

VEGETABLE DEPARTMENT.

Asparagus beds, upon the approach of frost, should have a covering of coarse strawy manure or leaves. Beds planted this fall should be covered thicker than those already established.

Rhubarb roots, set out in August or September, should be lightly protected upon the approach of frost. Plants for forcing may be now planted in pots.

Celery plants should be yet earthed up.

Lettuces may be planted in frames for a spring supply.

Mushroom beds may now be spanned, and new beds prepared.

THE MAGAZINE
OF
HORTICULTURE.

NOVEMBER, 1838.

ORIGINAL COMMUNICATIONS.

ART. I. *A Catalogue of Cactuses, Opuntias, Cereuscs, Echinocactuses, &c., in the amateur collection of Mr. S. Sweetser, Cambridgeport; with some Observations on their cultivation.*
Communicated by Mr. SWEETSER.

THE Cactacæ are a tribe of plants which are not yet duly appreciated. Few, very few, of the numerous species have yet flowered in this country, and many of the best are only known to our amateurs and gardeners through European works on gardening, while there are probably numerous beautiful species in South America still undiscovered. Within a short time, however, many cultivators have added the more beautiful species to their collections, and the taste for the plants is constantly increasing. It is but a short period since the gorgeous *Cereus speciosissimus* first opened its magnificent blossoms in the vicinity of Boston; and the superb *grandiflorus*, though very generally found in collections, has flowered so rarely that it has not yet ceased to be an object of great interest when about to expand its splendid flowers. The old *Cactus speciosus*, now classed among the epiphyllums, is the most common and well known of all; easy of culture either in the green-house or parlor, it has found its way into the latter place, where its large, delicate, rosy flowers, profusely decking its uninteresting stems, have been the admiration of every lover of beautiful plants. *Cereus flagelliformis* and *Epiphyllum truncatum* are common, and tolerably well known; but, beyond these, few of the more elegant kinds are

found in only choicer collections in the green-houses and stoves of amateurs.

The uninteresting appearance of most of the species has induced many, who cultivate flowers, to imagine that the blossoms could not possibly be of sufficient splendor to entitle them to their notice and care; little suspecting that beneath such uncouth and grotesque forms lay concealed the rich and gorgeous coloring displayed in the *C. speciosissimus*—the light and mellow tints of the *C. grandiflorus*—the rosy hues of the *Epiphyllum speciosum*—the snowy corols of the *Echinocactus Eyriésii*—or even the monstrous though delicate blossoms of the *C. triangularis*, which has only flowered within two or three years in this country, and not until 1834 in England. The elegance of the blossoms of either of them need only to be once seen to ensure at least part of them, with many others nearly as fine, a place in every collection of plants, having any pretensions to beauty.

Within a short period English cultivators have attempted with this tribe, as they have with many others, the raising of new kinds by hybridization; and the same success has attended their efforts which has characterized their experiments with the geranium, the camellia, and other plants. Many of these hybrid productions are now to be found in the trade, and they have added much to the brilliancy of a collection. Some of the more splendid are *Epiphyllum Ackermánii* major, *Cereus Jenkinsóni*, numbers one, two and three, *C. Mallasóni*, *Smithii*, *Vandésii*, &c. &c. The first named, is a variety only excelled by the *C. speciosissimus*, between which and *E. speciosum*, it was produced; the different varieties of *Jenkinsóni*, though somewhat resembling each other, are, however, very beautiful plants and free flowerers. *Mallasóni*, and *Smithii* are said to be showy, though we have never seen them; *C. Vandésia* is similar to *Jenkinsóni*. Some of our nurserymen and amateurs have raised seedlings, by hybridization, which are said to be beautiful varieties. Mr. Feast, of Baltimore, has several in his catalogue of plants, for which he charges a high price, and from hence we infer that they are very elegant. Mr. Hogg, of New York, has also raised a few seedlings, which we believe are desirable kinds. Other cultivators have made attempts, but the plants have not yet attained a flowering size.

The operation of grafting performed upon the different robust growing species, has created more interest in the tribe, and added a new feature to their cultivation. That old and pretty species, *Epiphyllum truncatum*, has been grafted upon the *Peréskia*, the *Cereus triangularis*, *Opúntia brasiliénsis*. &c., and the success which has attended the experiments upon each, has been complete. We have heretofore noticed these practices, and they will be found recorded by a reference to our pages. We have seen

the *E. truncatum*, and it is a beautiful object when grafted; its naturally slender and pendant habit is unfavorable to a vigorous growth and showy display of blossoms; on a strong stock, it attains a large size, and when in bloom has an appearance altogether unique. The other weak growing kinds may be grafted in the same manner.

With these additional inducements to heighten the beauty of a collection, a taste for the plants is rapidly spreading, and, in a short time, we trust all the finer ones will be found enriching the parlor, and enhancing the beauty of the green-house, throughout the earlier months of the year. New varieties will be constantly increasing, which will make their cultivation still more interesting; and the facility with which seedlings may be raised, is an inducement to those who are fond of raising plants, to attempt the production of new kinds. Their cultivation is also simple. Requiring less attention than other plants, from their capability of withstanding drought, it is not necessary that they should be constantly looked after, as is always the case with most plants, to prevent their being destroyed for want of water. They may, indeed, be left the whole summer through, without the least care whatever, and without administering any water during that season. On this account they are excellent plants for amateurs, who are generally from home a portion of the time, and who have no gardener to attend to their plants. A longer or shorter absence will make no difference to the health of a collection of cactuses.

But we have already exceeded the limits, to which we intended to confine these few preparatory remarks, and we call the attention of our readers to the following list of species, which Mr. Sweetser has kindly permitted us to publish. He has been some time in getting up the collection, and has spared no pains to include every species which could be easily procured at home or abroad. Few of the plants are over four years old; but many of them have flowered the past summer very beautifully, and at the present time *Epiphyllum Ackermánii* and *truncatum* are coming into bloom. Some have made rapid growths, and are very large plants. The coming spring a fine bloom is anticipated, and several new sorts, it is hoped, will open their flowers.

With regard to the names there may be some inaccuracies, as the plants have been received from various sources, and often the same kinds under different names; and it is impossible to decide upon some of them with a certainty until they had flowered. Mr. Sweetser hopes, however, to correct all the errors as speedily as possible.

The larger part of the following are two or more years old; some have been lately added, and are yet small. But the majority are such as will probably flower under good management, in the course of the next year or the year after. Those species

of large size we have noticed in the catalogue, which is as follows:—

Cereus aurantiacus
 — *cæruleus*
 — *coccineus*
 — *costes minor*. This is a plant of fine size.
 — *cylindricus*
 — *chiloensis*
 — *Desvauxii*
 — *extensis*
 — *fimbriatus*
 — *flagelliformis*
 — *grandiflorus*. A large specimen.
 — *ignescens*
 — *Jenkinsonii*
 — ————— No. 1
 — ————— No. 2
 — *longiflorus*
 — *Mallasoni*
 — *macrantiæus*
 — *mâyfly*
 — *monstrous*
 — *Napoleonis*. A very rapid grower, with somewhat the habit of *C. triangularis*: large.
 — *peruvianus*. Four feet high, and large.
 — *Pitajaya*
 — *serpentinus*. About four feet high.
 — *speciosissimus*
 — *squamulosus*
 — *Smithii*
 — *triangularis*. A large plant, some feet high.
 — *Vandesiæ*. A species(?) similar to *Jenkinsonii*.
Epiphyllum Ackermánii
 — *alatum*
 — *crispatum*
 — *Hitcheni*. This is the splendidum of some cata-

logues, and is very similar to *Ackermánii*. The flowers are slightly larger in their expansion, and it is said to be a finer species.
 — *speciosum*
 — *truncatum*
Echinocactus crenatus
 — *Eyriésii*. A plant of good flowering size.
 — *múltiplex*
 — *Ottónis*. This will probably flower another year.
Opuntia braseliensis. Very large. Mr Sweetser intends to graft the *E. truncatum* and others on it.
 — *curassávica*. A fine large plant.
 — *cochinillífera*. This is the plant upon which the cochineal insect is produced. It is a rapid grower.
 — *frágilis*
 — *gláuca*
 — *micradàsia*
 — *ròsea*
 — *spinosíssima*. This is one of the most interesting of the opuntias, when not in bloom; the profuseness of its spines, and erectness of its habit, render it a fine plant at all times.
 — *vulgàris*
 — sp.
Mammillària discolor
 — *pusilla*
 — sp.
Pereskia aculeata
 — *grandiflora*
Rhípsalis salicornoides.

In the management of cactuses Mr. Sweetser has been very successful; and his collection is one which will not suffer in com-

parison with that of any nurseryman or amateur. All the stronger growing kinds have been exposed to the air all summer, and a few, like the *peruvianus*, *extensis*, &c., have been plunged in the border. The growth of the past summer has been remarkably strong.

The soil which Mr. Sweetser has found to suit the majority of the species, (for some are very partial to a peculiar kind) is composed of very old, decayed, hot-bed manure, which has laid until it has become completely reduced to a black earth. This forms his principal ingredient, and mixed with sand (and occasionally a coarse turfy loam,) in various proportions, it is applied to all the species. Some cuttings, of a year's planting, have made a growth of from twelve to eighteen inches in this compost. In drainage, Mr. Sweetser makes use of a good portion of potsherds, which is one great cause of the vigor of his plants.

Introducing these plants to the notice of our readers at this time, we hope, as they progress in size and arrive at a blooming state, to have the opportunity of describing the new species, as they come into flower, more particularly. Some will, undoubtedly, be only of ordinary character, and of no value, except in a complete collection formed for botanical purposes, while others will probably prove interesting and beautiful species.

Mr. Sweetser has been to much labor, and considerable expense, to get up his collection; but he will, we trust, be amply repaid for his time and attention, in the pleasure, which the successive blooming of the numerous species will afford him, as they expand their unknown flowers, and display their singular habits. To the spread of a taste for the cultivation of the plants, we have no doubt his collection will be greatly instrumental, as an inspection of the whole, when in a fine flowering state, will be a treat to the lovers of the tribe, not often obtained.

ART. II. *Observations on the Genus Hemerocallis, or Day Lily.* By PHALANTHUS.

RELATED not only in trivial name, but by other characters of a general structure, to the *Liliacæ*, or lily tribe, the *Hemerocallides* are rendered interesting and peculiar plants. For many years the tenants of the garden, certain species are as familiar objects as constant culture and a daring hardihood of constitution could make them. Species neglected and spurned, and cast

away to make room for more gaudy or newer favorites, have taken refuge in the neglected corner, or sprung up with the tenacity of vital action in the pasture grounds. Lingered in some unseemly tuft of torn foliage and tall flower-stem, before the door of the farm-house, one perchance may see the poor outcast, of tawny hue, (*H. fulva*) so seldom seen in better company. This individual species is said not to be unpalatable to cattle, and perhaps might supply on depauperated soils one form of food. In a section of country, rich in pasturage, where ordinary pains are taken, such resources may not be needed; yet the suggestion perhaps might elicit experiment. Its abundance of tuberous-shaped roots are easily divisible, and its propensity to spread to a mischievous degree in the flower-border is well known.

But, rejected as may be *Hemerocallis fulva*, who can pass without a tribute to beauty the elegant co-species in *H. flava*? An early visitant of summer, its golden blossoms, slightly bending around a graceful stalk, just rising from a delicate pale green foliage, renders it no mean subject of the florist's care. We have often admired its intrinsic loveliness when grouped amid other plants to form a bouquet, or to help fill a vase for the ornament of the centre-table. Perhaps a happy arrangement from feminine hands added not a little to the effect. For our own part, we always welcome it, whether in the flower-vase or amid the more costly and attractive liliaceous plants—the golden day lily of a boreal clime!

Next we have in interest the *Hemerocallis disticha*, or fan-leaved day lily of China, whose singularly flattened foliage, rising so regularly and straight from the crown of the root just below the soil, is not an unapt miniature of some infant palm. This species is, however, only met with in the collection of the curious, or in the garden of the botanist; because little known, and unattractive on account of its copper-colored flowers. The prevailing taste of the day is the rather for brilliancy of perianth and petal than for curiously formed foliage. We have ventured, however, to give it a passing remark, as the introduction to observations on a variety with double flowers, claiming kindred and near affinity with itself as the veritable original species. We now refer to *Hemerocallis disticha*, flore pleno, known to us for several years and under our cultivation, which for a series of seasons has produced three or more very tall, strong and bold stems, on which the double perianths have slowly expanded one by one for several weeks' duration.

The minute examination of full or double flowers, (as they are called, in the language of florists,) is of considerable interest, as developing the results of physiological structure in the presence, absence, abortion or abnormal variation of individual organs. Such an examination of a flower of the last named variety we

present to the curious inquirer. It will be observed that the type or original form is a perianth of six alternate sepals; and following the general rule in all liliaceous plants, the three inner, or as they appear to the eye, each alternate sepal, (colored leaf or petal,) will be smaller than the rest. Such was the case in the individual before us; but next, we notice that three of the six stamens are converted into perfect sepals, alternating with three perfect staminate organs; then, an imperfect stamen and two sepals; next, three imperfect sepals; next, three perfect stamens; next, five short stamens furnished with large arrow-shaped anthers; next, three very short filaments, with perfect and regular anthers; next, three attempts at the formation of the anthers; and lastly, in lieu of the pistil and its three important organs of stigma, filament and germ, nothing but the prolongation of the axis, with the ovary completely obliterated. Had this manifest struggle of nature occurred in a camellia or rose, it would have been complacently regarded as a very fair subject of experiment, and worthy of renewed effort to obliterate not only germen, but every rudiment which was not convertible into broad, flat or convex petals. Thus counter runs the simple and perfect style of nature's handiwork to the artificial criterion of floricultural art! All admiration be due, however, to the wonderful skill of the human mind, which can mould the forms of the living material world to its own ideas and suggestions! We love, indeed, the simple flower, as it springs from the seed long lodged in the ground, in native unadorned beauty, nor have we an obtuse perception of the merits of the florist's productions, be it the crimson daisy or the full snowy camellia, the pride of the green-house. We would unite in happy combination the taste of the florist and of the botanist, nor know we why they should be separated.

Two other species of the present genus are familiar to every flower grower—we mean *Hemerocallis japonica* and *H. cærulea*. The former, with its unique and elegant tubular corols, so white and so fragrant,—who has not appreciated its merits? We have often seen it cultivated with signal success as a pot plant, the occasional division of its roots and the renewal of soil being the only requisites to its management. An erroneous notion is somewhat prevalent that it is tender; while, on the contrary, its perfect hardihood in enduring, in the open border, the severest winters, commends it to universal culture. The other, *H. cærulea*, or blue day lily, has long been a favorite flower in the garden, and may be observed as an evident pet, equally in the more modern or antiquated. Mr. Salisbury has seen fit to separate it, in order to form the genus *Sausourea*, and we do not see why *H. japonica* should not share the same or similar honor.

ART. III. *On Forcing the common White Lily.*
By the EDITOR.

THIS common and beautiful lily of the garden, with its petals of the purest white, and breathing an odor almost as sweet and exquisite as the orange flower, may be as easily forced as the hyacinth or the tulip. Though we have rarely seen any attempts made to grow the white lily in the winter season, yet it can be done, and without any remarkable attention. So robust in its habit when standing in the open border, it has been supposed that it would be, like many other large and strong growing bulbs, difficult to bloom, on account of the cramped and confined state of the roots, necessarily suffering in a small pot. This, however, we have found to make no material difference; and generally the same pot which should be selected to bloom a hyacinth in the greatest perfection, is sufficiently large to flower the white lily in equal vigor. Pots which we have always designated in our articles as number 4's are those which we have generally made use of; but we presume, that what we term a hyacinth pot would be equally as well adapted to the lily, and the vigor of the plants greater.

Now is the time to plant the roots; but they should have been taken from the ground in due season, that is, by the middle of August, or, at the latest, before they begin to throw out their new roots for the coming season. If not taken up before this, the plants will be so injured by removal that they will not flower in any perfection, and, in general, unless remarkably strong, not at all. The plants should be removed in August, and laid away in a dry place till wanted.

The soil requisite for forcing the lily should be light and rich; good soil from the garden, mixed with a portion of leaf mould or very rotten manure, will suit them well. They should be planted in the pots just deep enough to have the earth cover the top of the bulbs. After this, set them away in a pit or frame, where they may remain until they are wanted to bloom, when they should be brought into the green-house and placed upon the stage where they will have plenty of air and light. It will be necessary, if the pots remain out, to cover them with straw, leaves or hay, to prevent the earth from freezing, or the roots cannot extend themselves; the pots would also be broken, and it would be impossible to bring the plants into the house at successive periods as it would be desirable to do.

When they begin to grow, allow them a good supply of water, and as they progress it should be more liberally administered,

giving an abundance when in flower. After the plants have bloomed, the pots may be removed from the house to a sheltered place, where they may remain till spring, when the bulbs should be turned out of the pots into the open border to recover their strength, as forcing reduces them so much that they do not flower again for two or more years. This, however, is not of any importance, as the roots are cheaply purchased, or a stock can be easily raised in the greatest abundance.

There are few plants which have a finer appearance in the green-house, than the white lily; its large snowy, symmetrical flowers, on a tall, erect and stately stem, diffusing their fragrance throughout the house, renders it an object of general admiration; add to this its easy management, and there are few bulbs which will afford more pleasure. We presume it may be managed with nearly equal success in a parlor, though we have never tried the experiment; but we should be glad to see the method put in practice. These few observations we hope will serve to induce the cultivation of the white lily for early blooming more general.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with 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 eight figures of Plants and Shrubs. In monthly numbers; 4s. colored, 3s. plain. Edited by John Lindley, Ph. D., F. R. S., L. S., and G. S. Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers; 3s. 6d. colored, 3s. plain. Edited by Sir W. J. Hooker, L.L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. In monthly numbers; 2s. 6d. each.

The Horticultural Journal, *Florist's Register*, and *Royal Ladies' Magazine*. Dedicated to the Queen, Patroness, the Rt. Hon. the Earl of Errol, President, and the Vice-Presidents of the Metropolitan Society of Florists and Amateurs. In monthly 8vo. numbers, with a plate; 1s. each.

Botanical and Floricultural Intelligence.—A *Monograph of the Genus Œnothera* is in preparation, with drawings, from the pencil of Mrs. Edward Roscoe, of Liverpool, and the descriptions by the Rev. William Hinks, F. L. S., of York. The work will appear in numbers, in 4to, each of eight plates, price 10s. 6d., and will extend from seven to ten numbers. Every facility will be afforded to this accomplished lady, especially by specimens from gardens, to make this work worthy of public patronage. The plates will be colored and executed in lithography by Mr. Gauci.—(*Annals of Natural History.*) A very interesting work might be made from this large and beautiful genus, some of the species of which are remarkably showy.

Mr. G. Gardner, botanical collector in Brazil, has sent home dried specimens of four hundred and ninety species of plants in a fine state of preservation, with the numbers and localities attached to them, and in some instances the names also. They were collected in the vicinity of Pernambuco, whose flora is particularly rich in Compositæ, Melastomæ, Myrtæ, Leguminosæ, &c. &c. We have extracted, in another page under our foreign notices, some account of Mr. Gardner's excursion, which will be found exceedingly interesting.

Mr. Hogg, nurseryman, of New York, whose visit to London we noticed in our last, has just returned, after an absence of three or four months, and has, we have understood, brought out with him many new and fine plants. We have no doubt he has secured one of the finest collections of geraniums, for the culture and sale of which, he has been so long celebrated. We hail the introduction of such collections of plants with great pleasure, and are glad to see such evidence of the spread of a floricultural taste throughout the country, manifesting itself as it does in the continual demand for the new and superior productions, of our own as well as of foreign growth. Our nurserymen and florists have only to keep their collections up by the addition of every thing new and rare; and the demand for the more choice species and varieties will be as extensive as they can easily supply.

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Onagræa.

**Fuchsia cylindræa* Lindl. "A pretty new species of fuchsia, raised from Mexican seeds, presented to the Horticultural Society, by George Barker, Esq., of Birmingham. It belongs to the same set as *F. microphylla* and *thymifolia*, and has cylindrical, deep scarlet flowers, about half an inch long, on very slender stalks, an inch and a half in length."—(*Bot. Reg.*, Mis. Not. July.)

Œnothera tetráptera, an annual species, with pure white flowers, nearly of the size of the common evening primrose, is a

beautiful plant for the border, remaining in bloom until the present time, notwithstanding there have been several hard frosts. It is not gross in its foliage, like the common evening primrose, but has long and slender recumbent branches, and attains, under good cultivation, the height of twelve or fifteen inches. To our taste, it is the neatest of all the annual kinds we have ever grown.

Fabàcæ or *Leguminòsæ*.

OXYLOBIUM

retusum *H. B.* *Retuse-leaved Oxylóbium.* A green-house plant: growing two feet high; with orange-colored flowers; appearing in April and May; grown in peat and loam; increased by cuttings. *Hort. Journal*, New Series, No. VII.

A beautiful species, with splendid capitata heads of orange-colored flowers. It is an old inhabitant of English collections; but, like many of the New Holland plants, has been neglected, and is found in but few collections. It is, however, a very showy and desirable plant. (*Hort. Jour.*, June.)

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Convolvulàcæ.

Batàtas bonariënsis *Lindl.* “A handsome twining convolvulaceous plant, with large purple flowers, imported from Buenos Ayres, by Messrs. Lowe & Co., of Clapton. It has handsome purple flowers, and appears as if intermediate between *Ipomæa Horsfállia* and *insignis*. It requires only the protection of the green-house.” This will probably be figured soon, as it must prove a very valuable plant from its hardiness; nearly all the *ipomæas* require the heat of the stove, particularly the *I. Horsfállia* and *insignis*, the former of which is a brilliant species, and the latter exceedingly showy. Being of a character between these two, it cannot be otherwise than a fine addition to the few green-house twiners. (*Bot. Reg.*, *Mis. Not.*, July.)

Verbenàcæ.

Verbèna Tweedieàna *supérba*.—Under this name we have lately noticed that a variety has been exhibited at the meetings of the London Horticultural Society. Through no other source have we heard of it; but as there seems, from this, to be two kinds of the *V. Tweedieàna* in cultivation, we have thought that some few observations upon the subject, in connection with a plant which we possess, would not be uninteresting to many of our readers.

There are two distinct kinds of verbenas which we have grown, and which are in some other collections, that we have received under the name of *V. Tweedieàna*. One, only, can be the true species; but as both were imported for it, it remains to be ascertained which is the correct one. *V. Tweedieàna* according to Paxton's *Magazine of Botany*, where it is figured (and noticed in our III., page 225) is described as having “rosy crimson

flowers;" the *V. Tweedieana* generally grown, the original plant of which, we believe, was imported by Mr. Buist, or at least received from him in the vicinity of Boston, is of a deep crimson scarlet, almost approaching to a fine scarlet, while the other is of a rich rosy crimson. We first saw the latter variety in the collection of Mr. Thorburn, of New York, a few days after it was brought out by his brother; this was in July, 1837. We then engaged a plant as soon as propagated, but never heard any thing more of it until last June, when we saw two large patches of it, which had been put out but a short period, in the open ground. We immediately saw that it was different from the one we had from Mr. Buist, and at this time secured a plant. It has bloomed all summer, and is quite different from the kind so universally grown in the color of the flowers, corresponding exactly with the one figured in Paxton's *Magazine*; in its habit and general character it almost precisely resembles the former.

Supposing Paxton's *Magazine*, (and we believe it has been figured in no other work, except the *Floricultural Cabinet*,) to have given a correct representation of the flower, the question arises,—is the one which is generally known as the *Tweedieana* in our gardens, true or not? And if not true, is not the other plant we have alluded to, the correct species; and is not the former that which is called *Tweedieana superba*? We are inclined to this opinion. We have stated the great difference in the color of the flowers of the two, one of which is the true *V. Tweedieana*; the other must be that called the *Tweedieana superba* of the English gardens, as it possesses the same characters, or it would otherwise be deemed a species. Both are worth preserving, and form a pretty contrast when growing near each other. For the present, we should be induced to designate them as *V. Tweedieana*, and *V. Tweedieana superba*, giving the latter name to the crimson scarlet one (of Mr. Buist) as the most brilliant and beautiful of the two. We shall refer to these plants again. Mr. Buist would confer a favor upon the friends of floriculture, to name the source from which he received his plants.

MONOCOTYLEDONOUS PLANTS.

Commelinaceæ.

* *Commelina orchidoïdes* Booth. A species "to be regarded more as a subject for the botanist than for those who are fond of showy flowers. To the latter it is valueless—but to the former it is not divested of interest." The flowers are numerous, bright blue, and open only one at a time. Roots of this species were received from Mexico in April last, in the collection of Sir C. Lemon, and they flowered in May. (*Bot. Reg. Mis. Not.*, July.)

Orchidaceæ.

* *Epidéndrum vesicátum* Lindl.—A curious Brazilian spe-

cies. The flowers are greenish white, and offer some analogy to *Physinga*. In habit it approaches *E. équitans*, but in the structure of the flowers it is widely different. Flowered in the collection of Messrs. Loddiges, and of no remarkable beauty. (*Bot. Reg.*, *Mis. Not.*, July.)

**Epidéndrum lívidum Lindl.* An obscure, unattractive species, with small, dingy purple flowers. Imported from Columbia by the Messrs. Loddiges. (*Bot. Reg.*, *Mis. Not.*, July.)

**Saccolábium germmátum Lindl.* A new species, the blossoms of which "are the smallest of the genus, not being larger than a grain of mustard seed; but the finest amethysts are not of a more brilliant purple, and the tips of the labellum and sepals are quite white. Brought from the Khoseea hills in India, by Mr. Gibson, the Duke of Devonshire's collector. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Saccolábium densiflórum Lindl.*—A handsome species, collected in Manilla by Mr. Canning. (*Bot. Reg.*, *Mis. Not.*, July.)

**Odontoglóssum cordátum Lindl.* A very handsome species, "having the sepals and petals richly blotched with brown, upon a yellowish-green ground, while the lip is white, with the crest at the base purplish, and the apex spotted and blotched with rich brown." Only a single small specimen has as yet flowered. Imported from Mexico by George Barker, Esq., of Birmingham. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Oncídium confragósum Lindl.* A fine species, with very delicate straw-colored flowers, faintly spotted with pale purple. It is very similar to *O. stranènum*. Imported from Mexico by George Barker, Esq. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Microstylis excavàto Lindl.*—"A green-flowered orchidaceous plant, resembling *M. ophioglosóides*, but with a corymbose inflorescence. Imported by Mr. Barker, from Mexico. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Dendròbium stupòsum Lindl.* An erect species, with the habit and general appearance of *D. cándidum*; the flowers are of the same white color, and but little smaller; the labellum, however, has a deep orange callus below its point, where it is thickly covered with a coarse tow-like hairiness. Imported from India, by Mr. Gibson, for the Duke of Devonshire. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Maxillària Boòthii Lindl.* A new species, with pale greenish-yellow sepals and petals, and one-flowered scapes about two inches high. The plant was collected in Guatemala, and added to the collection of Sir Charles Lemon, where it flowered this year. (*Bot. Reg.*, *Mis. Not.*, July.)

* *Bolbophyllum umbellatum* Lindl. Curious, with dull, dirty yellow flowers, spotted with brown. Flowered at Chatsworth, to whose collection it was introduced from the Botanic Garden, Calcutta. (*Bot. Reg.*, Mis. Not., July.)

* *Lúisia alpina* Lindl. A very distinct species, with corvaceous distichous leaves, and light-green sepals and petals; the lip strongly streaked with purple. Mr. Gibson found it on the Kho-seea hills, at an elevation of four thousand feet above the sea, where the snow frequently falls in the cold season. (*Bot. Reg.*, Mis. Not., July.)

* *Cáttleya supérba*, Schomburgk. A splendid species, remarkable for the beauty and fragrance of its flowers, which occurs on trees which skirt the banks of Curranarka, and other streams which fall into the Rapunny, a river of British Guiana. Found and described by Mr. Schomburgk. (*Annals of Natural History*, August.)

Liliacæ.

Ornithógalum geminiflorum, Herbert *Ms.* "A small white-flowered species, resembling *O. chloroleucum*, from which it differs in the flowers being in pairs, and opening one long before the other, instead of growing singly." It is a native of Lima, where it was dug up by mistake for *Pyrolion aureum*, and sent to the Hon. and Rev. W. Herbert. (*Bot. Reg.*, Mis. Not., July.)

A magnificent Bybloemen tulip, called Amato, is figured in the *Hort. Journal* for July. It was broke into color by Mr. Lawrence, of Hampton, in 1837, and from the figure we should judge to be one of the finest of the varieties lately broken. The flower is beautifully and finely feathered on a pure and clean ground; the form cupped and elegant. It will prove one of the best in cultivation.

ART. V. Notes on Gardens and Nurseries.

Messrs. Winship's Nursery, October 5th.—It is some time since we visited this nursery, and there have been many very great improvements effected in the arrangement and keeping of the grounds, within the two past years. We have never seen them in such complete order and cleanliness; and all this, too, Mr. Story observed to us, had been done with much less assistance than was former-

ly employed in the grounds. Three or four years ago, before the management of the nursery passed into the hands of Mr. Story, there was no system pursued in regard to the planting of the trees; some were in one place, and some in others, and the whole so much more confused than at the present period, that it was impossible to keep the grounds in any thing like the condition, in which they are now to be found. The evergreens and forest trees are now planted in appropriate places by themselves, and the herbaceous plants now line one side of the walk nearly round the whole of the main nursery ground, above half a mile in length. That part bordering on the rail-road has been beautified by the laying of a terrace, the construction of a handsome rustic seat, and the planting of evergreens, handsome shrubs, and herbaceous plants, in such order as to present an attractive appearance to the passer by, and an interesting scene to those who linger near the spot, while looking for the train of cars, which land and take passengers from the grounds.

At this late period of the season, after the dry and parching weather of summer had wasted the beauties of the border, and when the trees were changing their deep green of summer to the many-colored hues of autumn, we found less to note, interesting to the amateur or gardener, than we should, had our visit been made in the early part of the summer season. We have rarely known a year when the garden has been so continually barren of buds and blossoms.—Roses in the hot and sultry days of June and July, faded and fell ere they had scarcely opened their blossoms—the hundreds of fine perennial border plants have withheld the usual and constant display of flowers—annuals have withered under the scorching rays of the sun—and the dahlia, the king of autumn flowers, and the pride and glory of the garden, from August to November, has been so scanty in the display of blooms, that the garden has worn a barren aspect, unknown to us in any previous year, for a long period.

In the green-house we found the plants all secured from the effects of early frost; had we time and the disposition at this moment, we should write a homily upon the effects of procrastination, in the getting in of green-house and stove plants, which we should hope might awaken the attention of amateurs, and others, to the importance of the subject. Let us only say now, that is better to be too early than too late; many things receive a chill from the cold nights of October, even when there is no frost, which they do not recover from for a whole season. Crowding plants, too, all in together, when the frost suddenly overtakes the cultivator, is a bad plan, and attended with evil results. All such labor as washing the pots, cleaning the plants, &c. should be done out of the house, and when the plants

are put in, let them be arranged properly, as it can then be done without confusion.

We found several kinds of passion flowers here, the roots of which were planted in a small border under the front stage, and the shoots trained to the roof-sashes, viz: *P. alata*, *racemosa cærùlea*, *edulis*, *cærùlea*, and a species unknown: the latter was in flower, and was somewhat similar to the *racemosa cærùlea* in its habit. *P. edulis* was full of fruit, one of which we tasted, and we were much pleased with the flavor. The fruit is about the size of a plum, with a thick rind, and filled with seeds, each one imbedded in a sharp acid pulp. The fruit has a pretty appearance suspended from the plants. We observed but few things in bloom, of any beauty. Messrs. Winship's collection of cactuses has become considerably reduced, which we were glad to learn was from an increasing demand for the plants. *Echinocactus Eyrìesii* has flowered here at *three* different periods the past summer. The ericas are much reduced; we noticed but few specimens of any size. The whole, however, were in good order, and the plants vigorous.

In the nursery we saw some specimens of hedges which we should not pass over:—one of these specimens was the *Shephèrdia argéntia*—one the buckthorn, and one the three-thorned acacia. The *Shephèrdia* we think will make a good hedge; the foliage we do not admire, and it will not compare with the buckthorn: still the appearance of the plants in winter, covered with numerous clusters of eatable berries, will, in part, make up for its seeming dullness, and render it valued. Another year will decide how far the *Shephèrdia* is adapted to hedging. The acacia is too rapid a grower to ever make a suitable plant for hedges. The buckthorn appears to be the best, though the specimen here would not begin to compare with Mr. Lowell's. Every nurseryman should have a specimen hedge of such plants as he sells for that object, that purchasers may see how well adapted to the purpose each kind may be. The collection of ornamental forest trees and shrubs is excellent.

We were much pleased with our short visit, and it is a gratifying circumstance to see our nurserymen paying more regard to the arrangement and neatness of their grounds. There is no need that the nursery should be a place of utter confusion—a tree here, and a tree there, the soil thrown into numerous heaps where trees have been removed, and the dead stumps and branches of others still remaining. Order and neatness can be preserved with less expense, as has been fairly demonstrated, than confusion and slovenliness. Last year, with its concomitants of suspensions and stagnation of business, was an unfortunate one for the nurseryman, but we have been happy to learn that things have begun

to assume their usual train, and that the sales of the present year have been as good as could have been anticipated.

Mr. Cushing's, Watertown.—Oct. 5th. We made a hasty visit to this fine place, which is now in most excellent order, so far as the out-door department is concerned. The green-house plants were not yet all in, nor the stove inmates removed to their places for the season. The men were, however, washing and cleaning the plants, and in the course of a few days, (for Mr. Haggerston does not allow things to remain in this condition long,) the houses will appear arranged in their winter dress, more gay and brilliant than ever. Many of the ericas had already opened their flowers; among others, the splendid *E. cóncolor* which we noticed last spring, and the *E. glutinosa* with its glassy orange corols; others will be soon displaying their blossoms.

In the stoves the pines are showing a great abundance of fruit. Several fine black Jamaicas had nearly attained their size; some fine Javas were also swelling rapidly. They now present a fine appearance. *Musa sapiéntum*, the common banana, has flowered, and has now formed upon it a huge cluster of green fruit. This is probably the first time that it has fruited in the vicinity of Boston. A new species of passion flower, called *P. phœnicea*, had just opened its blossoms: Mr. Haggerston has been anxiously waiting to see what it would turn out to be; it proves, however, to be no handsomer than the *alata*, which it resembles, though it is a little larger flower. *P. Kermesina* has grown and flowered better the present fall than heretofore; and Mr. Haggerston thinks that when it is treated well it will increase in beauty: the colors are very brilliant. *Combrétum purpúreum* was, as we have ever found it, no matter at what season of the year we may have been here, in full bloom.

Returning from the stoves, we passed into the other end of the range to notice the grapery, the vines in which have been under a process of retardation, as mentioned by us in our remarks last spring after a visit here. We shall not enter into any particulars of the growth and maturation of the crop at this time, as Mr. Haggerston has kindly, at our request, kept a diary of the weekly progress of the vines, since they were taken from the ground, and will continue it until the crop is all gathered; and the subject we shall introduce to our readers, in an article at the commencement of the next volume. Mr. Haggerston confidently asserts that the crop will not ripen until such a late period that, allowing a reasonable time for the grapes to hang, after they have fully matured, the last will not be cut until the first of March, 1839. At that time the new crop in the stoves will be ripe; thus fruit may be cut from January to January again. The new wood is perfecting itself admirably.

The crop of grapes in the adjoining compartments has been very large and fine, and many of the best yet remained uncut. Some of the clusters of black *Hamburgh* were exceedingly large. The wood for the next crop is remarkably strong, and, as the vines have just attained a good fruiting age, the quantity will be immense.

The peach trees in the two houses, on the east and west walls of the garden, have made a most vigorous growth the past summer, and will probably produce a great crop next season. The trees are beautifully trained up to the trellises, one of which is an arched one over the front floor of the house, and the other on the back wall. The system adopted by Mr. Haggerston is that first made known and practised by Mr. Seymour, and considered, by those who have trained trees in his manner, to be the best ever yet discovered, both for the health and longevity of the trees, and for their constant and most productive bearing. There have been some objections raised to it, but we believe those who have pointed out what they have considered defects in the system have not suggested any other modes which would take the place of these they have denounced. We are very happy to see the system attempted by Mr. Haggerston, under whose good care it will be brought to its greatest perfection, and when an opportunity will be offered for all, who feel at all interested in the cultivation of the peach, to see how well it is adapted to bring out the productive qualities of this tree. We hope it will be in our power to offer, at a future time, some observations upon Mr. Seymour's system, accompanied with engravings, illustrating the trees in all their stages of growth.

We had intended to have had the leisure, at this visit, to have walked over the farming grounds, and noticed the improvements going on; we also wished to examine the fine breeds of stock, which Mr. Cushing has spared no expense to procure; but we found it impossible to do so now, and shall take another opportunity to renew our visit for this purpose. At this time various improvements were being made, new walls laid, out-buildings completing, and every thing being done to make the place, what it even now is—one of the most extensive in every department of farming and gardening in the country. We hope, at some future day, to have the permission of the liberal proprietor, to give a plan of the whole grounds, together with sections and elevations of the range of houses, accompanied with the details of construction.

REVIEWS.

ART. I. *On Improvement in Horticulture.* Read before the Horticultural Association of the Valley of the Hudson, by J. BUEL, on the 28th Sept. 1838.—Published at the request of the Association.

[THE following address, delivered by Judge Buel before the members of the Horticultural Association of the Valley of the Hudson, at their anniversary on the 28th of September last, has been kindly forwarded to us for publication. Not being a paper which would come directly under the head of original communications, we have thought fit to place it under the Reviews. We invite the attention of our readers to its perusal. It was prepared at a short notice, but it, nevertheless, contains much that is interesting to the horticulturist, and is an address of which any similar society might be proud. The inclement weather which prevailed during the three days of the exhibition, rendered the number of auditors who listened to Judge Buel much smaller than they would otherwise have been. Its publication, however, in our pages, will put it in the hands of all the principal horticulturists in the country. Our thanks are due to the Association, and to Judge Buel, for their politeness in forwarding us the address.—*Ed.*]

Recently notified that the gentleman selected to address you on this occasion, would fail in the performance of that duty, I have hastily prepared some remarks on the objects and promised utility of this association, which I beg leave to read.

Our first parent was placed in a garden, and commanded “to dress and to keep it;” thereby indicating, from the highest authority, that the garden is pre-eminently fitted for the performance of our highest duties, and the gratification of our purest pleasures. This construction of the Divine precept, is in accordance with the opinions of every enlightened age and nation. The garden has, by general consent, ever been considered a source of utility and of healthful employment—the best theatre for concentrating and displaying the beautiful and wonderful diversified varieties of foliage, flowers and fruits of the vegetable world—and a school for civilizing and socializing man, and of inspiring him with love to his Creator, and good will towards his fellow-man. Nor does the injunction seem to refer to the mere gratification of animal appetite;—for we read, that “out of the ground made the Lord God to grow every tree that is pleasant to the sight, and good for food.”

Gardening and horticulture are in a measure synonymous terms. Gardening is divided into branches. It "is practised for private use and enjoyment," says Loudon, "in cottage, villa and mansion gardens;—for public recreation, in umbrageous and verdant promenades, parks and other scenes, in and near large towns;—for public instruction, in botanic and experimental gardens;—and for the purposes of commerce, in market, orchard, seed, physic, florists, and nursery gardens." In all of these departments of horticulture, we have great room for improvement, and great need of it; in all of them it is the object of this association to promote improvement, and in all of them they will effect improvement, if their efforts are seconded, as I trust they will be, by the intelligence, the taste, and the public spirit of the opulent gentlemen of our valley. It is the object of the association to introduce into this—our Eden—"every tree that is pleasant to the sight, and good for food"—to introduce, and to disseminate widely, all that is useful and ornamental in garden culture—all the fruits, flowers and culinary vegetables, that are worthy of culture, whether of foreign or domestic origin, which our soil will grow, and our climate mature.

It is not enough that many of the choice productions of the garden should be found with a few of the opulent. Those that are excellent should be known and disseminated widely. We should do good to others, if we would know the pleasures that spring from a generous philanthropy. By bringing these productions together at our semi-annual exhibitions, showing and comparing them, we can determine their relative merits, their proper names and synonymes, (can publish the result of these comparisons, and recommend and disseminate those which possess the greatest intrinsic merit.) "All men will eat good fruit that can get it," says Sir William Temple; "so that the choice is only, whether one will eat good or ill;—and of all things produced in a garden, whether of salads or fruits, a poor man that has one of his own, will eat better than a rich man that has none." We seek to extend the luxury of good fruits to all, in order that the poor man who has a garden, may eat better fruit than the rich man who has none.

As I have remarked, gardening is co-existent with man. Its early history is too obscure to be traced. Suffice it to say, that in the best days of polished Rome, it was cultivated with taste and assiduity, and ranked with the fine arts; and that with these it sunk to obscurity in the downfall of that empire. All of the art that survived the shock of Vandalism in Europe, was preserved and cloistered with the monks during the dark ages. With learning it revived first in Italy and Holland; to which countries many exotics, and a taste for cultivating them, were introduced during the crusades. It was not until the reign of Henry VIII. in the

beginning of the sixteenth century, that gardening attracted much attention in England. Previous to this time, cabbages, and even pot-herbs, imported from Holland, constituted luxuries, found only on the tables of the opulent. During this reign, apricots, melons, herbs and esculent roots, were first introduced into the royal gardens. Among the new plants of that day is mentioned "the lilacke trees, which bear no fruite, but only a pleasant flower." Improvement in horticulture was greatly extended under Elizabeth and Charles the first. During the reign of the latter, the first work upon English gardening was published by Parkinson, under the title of "A garden of all sorts of pleasante floweres, with a kitchen garden, of all manner of herbs and roots, and an orchard of all sorts of fruit-bearing trees," which is yet quoted with high commendation.

About the middle of the seventeenth century, several valuable publications upon horticulture appeared in England and France; and in 1734 Phillip Miller published his celebrated *Gardners' Dictionary*, an original work of merit, which attracted general notice, and gave a new impulse to improvement. British and other foreign works upon gardening have been greatly multiplied; and improvement has kept pace with the increase of wealth and refinement, until horticulture has attained to a high state of perfection, as a science as well as an art, in most of the civilized countries of Europe. No gentleman of opulence or taste there, deems himself fitted to enjoy the comforts and luxuries of life, without his garden. Horticultural societies have been every where established,—princes have been competitors in them for honorary rewards; useful and ornamental plants have been sedulously collected from every quarter of the globe, and innumerable new varieties have been added to the catalogue by the skill and industry of man. Within a few years, the splendid *Encyclopedia of Gardening* has been added to our horticultural works by the indefatigable Loudon, professing to give all that is interesting in the history, and all that is useful in the science, or in the practice, of gardening. The society of London established a garden in 1818, and sent agents into every quarter of the world, to collect whatever could be found useful or ornamental. One of these agents, after traversing the United States and the Canadas, spent four years on the Pacific coast of our continent, exploring the coast from California to the mouth of the Columbia, and thence across the continent to the Hudson Bay Factories, in collecting rare plants and seeds. In a subsequent voyage to the western border of our continent, this indefatigable agent was destroyed by a wild bull, upon one of the Pacific Islands. Yet the name of Douglass will be perpetuated in the cognomen of several new plants which he first brought into notice. Some idea may be formed of the extent of this society's labors and usefulness from the facts, that in

its catalogue of 1830 are enumerated, as growing in its garden, three thousand four hundred varieties of hardy edible fruits, and fifty-eight varieties of nuts, exclusive of eighty-nine varieties of the fig, one hundred and eighty-two of the grape, fifty-six of the pine-apple, and one hundred thirty-one of the melon; nearly all of the four last named being cultivated in houses, with the aid of glass and artificial heat,—making an aggregate of about four thousand varieties of fruits, which administer to the sustenance of man, independent of ornamental plants, which exercise a benign influence upon his mental enjoyments. The fruits in this garden, have been classified, as it regards size and quality,—their form, color, use and time of maturity noted, and their catalogue thus affords a guide in the selection of fruits for the climate to which they may be transferred for cultivation.

X Enterprise in the acquisition of new fruits, and new plants, has not been confined to the London Horticultural Society. European governments, horticultural societies, opulent amateur florists, and professional nurserymen, have sent their agents into remote parts of the world;—and the towering mountains of Asia, the isles of the Eastern Archipelago, the burning sands of Africa, the inhospitable regions of Siberia, and the wilds of America, have been alike explored, for valuable and rare plants, to subserve our wants, and administer to our pleasures.

We are particularly indebted to the Flemings, for a great number of excellent new varieties of the pear. To the labors of Dr. Van Mons, of the University of Louvain, an amateur pomologist, we are indebted for about four hundred new and excellent varieties of this esteemed fruit, some of which are in eating through the circle of the year. The late Mr. Knight, till his death President of the London Horticultural Society, also produced many new and excellent varieties of fruit, by artificial fecundation.—Samples of several of the new fruits thus produced by Mr. Knight and Dr. Van Mons are now exhibited upon your table.

From the comparatively restricted means of a new country, gardening has with us been limited to the useful, seldom aspiring to taste and elegance. But even in the useful branch we have ample room for improvement. X We have no great central point for collecting and comparing the indigenous fruits of our country, and for disseminating the excellent through our land. Of the apple, plum and peach, it is believed we have as fine native varieties as are grown in the world, and yet they are but partially known and but partially enjoyed. Individual exertions are too limited and feeble to effect the desired object. It can only be done by the combined exertions of many, influenced by a common impulse, and directed to a common end. In this age, no great good can be effected in any branch of public improvement, without the concentrated exertions of associate bodies. The

garden culture of fruits and esculent vegetables has hardly yet commenced in many districts of our valley, while in other districts the culture is but imperfectly understood—the relative merits of different varieties are not appreciated, and their value, in promoting the health, economy and comforts of a family, unknown or disregarded. Few of the fine varieties of fruit, or of the other choice products of the garden, are seen in passing through our country. Yet twenty years has done much to improve our horticulture; and we have abundant reason to anticipate far greater improvements in the twenty years to come.

How few of our garden products, which are now considered, at least in imagination, indispensable to our wants, are the natural products of our country. Hardly one in twenty is indigenous in our soil. Our fathers have been collecting them, and we have been collecting them, through the lapse of centuries; and yet, how comparatively small is our stock, compared with what Providence has provided for the wants and comforts of man. We are strangers to many, very many, that grow naturally in our own country. And as to varieties, nature and art are every year multiplying them, under the same laws that multiply the breeds of our domestic animals, and that are diversifying the human countenance. Did our gardens contain only the plants that are indigenous to our country, the supply would indeed be scanty. But horticulture has laid almost every clime, and every country, under contribution, to administer to our wants, and to gratify our senses. Most of our grains, and a large portion of our fruits, and esculent roots, derive their origin from other countries. The greatest part of them came to us from Great Britain and Holland, which received them from Italy, Italy from Greece, and Greece from Asia. Rye and wheat are indigenous in Siberia and Little Tartary; rice is the natural product of Ethiopia; buckwheat, of Asia; kidney beans, of the East Indies, the beet and onion, of Spain and Portugal. Peas came from the south of Europe, artichokes from Brazil, peppers and cucumbers from India; the egg plant from Africa; the tomato from South America; the pumpkin from Astracan; the ruta-baga from Sweden; the cauliflower from Cyprus; and the asparagus from Asia. Our fruits originated in countries equally remote from each other. Without pretending to decide upon the disputed questions, whether all the cultivated apples originated from the wild crab, or whether any of our good varieties existed here when our shores were first visited by Europeans, I can say this much, that we have esteemed varieties of this fruit now under culture, which originated on the banks of the Po and of the Danube, of the Rhine and the Oder, of the Seine and the Thames, and on the shores of the Baltic and Caspian. The peach came from Persia, the plum from Syria; the cherry from Pontus; the quince from Austria; the almond from Barbary and

China, and the pear from Europe. Our pot-herbs and cultivated medicinal plants are also most of them exotics: parsley is from Sardinia, pursley from South America, nasturtium from Peru, thyme from Spain, sage from the south of Europe, savory from France, marjoram from Sicily, rhubarb from Asia, and balm from Switzerland. So also of our flowering shrubs and plants; the pink, the daffodil, and narcissus, are from Italy, the dahlia from Mexico, the ranunculus and anemone, from Capadocia; the hydrangea, balsam and camellia from China and Japan; the tulip and hyacinth from the Levant; the tuberose from Ceylon, and our finest pæonies from the "Celestial Empire." And of trees, we are indebted to the north of Asia for the ornamental horse-chestnut, and to the Indian islands for the towering ailanthus. These are but a small portion of the contributions which horticulture has gathered from foreign lands, for our convenience and pleasure; and every year adds to the list new genera, species and varieties. Providence seems to have apportioned its bounties among the different nations, as if to admonish them of their mutual dependence upon each other, and to excite in them a spirit of Christian philanthropy and benevolence.

Private gardens, of great extent and beauty, abound in most of the countries of Europe, and they are maintained at a princely expense. In these not only hardy fruits and vegetables are forced to early maturity, by artificial means, but most of the tropical fruits are brought to perfection, by the aid of hot-houses and walls. Strawberries, in this way, are produced for the table in April, melons in May, grapes and peaches in June, and pine-apples at almost every season. It is assumed, that in Britain a gentleman may derive from his garden, with the aid of glass and artificial heat, a more varied and richer dessert, throughout the year, than is to be met with on the most luxurious tables in any other country. And yet the summers of England are so cool, that the peach, grape, melon, &c. require the protection of a wall or glass, to bring them to maturity; and even our fine Spitzembergh apple does not ripen well there without a wall. Gardens of this description, though generally on a limited scale, may be found in the vicinage of our commercial towns, and will doubtless be multiplied as we advance in wealth and horticultural improvement. These cases of high improvement, or rather extravagant refinement, in horticulture, are not mentioned as models for general imitation. They indicate an expenditure which few here can prudently indulge in, if they would. Yet where there is the ability, and a disposition to extravagant expenditure, it may be indulged in, in horticulture, with advantage, rather than prejudice, to public morals and public usefulness. The examples to which we refer, furnish models of improvement, which we are at liberty to adopt on any scale that shall comport with our desires and our means.

Public nurseries, which belong to horticulture, are highly useful to all communities in which they are located. They serve to introduce and concentrate the vegetable productions of every country, which are likely to subserve our wants or administer to our rational gratification. The interchanges which take place between those of Europe and America, are now managed with such facility, that a new fruit, or a new flowering plant, which attracts notice, and acquires value, on one continent, in a year or two becomes common in the nurseries of the other. The numerous horticultural periodicals of the two continents, make us early acquainted with whatever is new or valuable in either, and a single season serves to propagate and to disseminate the desirable plant on both. In this way we have been enabled to obtain the fine new varieties of Flemish and French pears, in many instances before they had fruited in England. The dahlia, in its natural single flower, was first introduced into France in 1801, and subsequently into England. The skill of the horticulturist has since transformed it into a double flower, and imparted to it all the colors and tints which are gratifying to the human eye. This ornament of the garden, which is now found at all our nurseries, is termed, by common consent, "The King," as the rose has been called "The Queen of Flowers." And as regards fruits—I was instrumental in bringing into notice, seven or eight years ago, a fine new apple, the *Jonathan*, grafts of which I forwarded to Europe. Five years ago I noticed it in the catalogue of the London Horticultural Society, with the names of many other of our local fruits which I sent, and also in catalogues from the Island of Jersey, and from Hamburg. The Stroat apple which I sent at the same time had produced fruit in 1830, in the London Horticultural garden, and was classed, as it deserved to be, among the first quality of apples. The ailanthus was first brought to our country eight or ten years ago, by one of our consuls, from farther India, and it is now growing, I believe, in almost every state of the Union.

As having particular relation to those who depend upon market gardens for horticultural productions, for daily use, I take occasion to remark, that the quality of market garden productions depends materially on the judgment and liberality of the buyer. The object of the gardener is profit; and so long as the purchaser regards the price rather than the quality, he will continue to raise those varieties which give him the greatest product, which are generally those of inferior quality. The difference in the varieties of the same vegetable are manifestly great. This exists not only in their flavor, but in their nutritious and healthful properties; some varieties, particularly fruits, being absolutely prejudicial, while other varieties of the same species are highly conducive to health. In the potato, for instance, the difference in

nutritive matter amounts to nearly a half in different varieties. Some of the coarser kinds yield but fourteen and sixteen per cent. of nutritive matter; while some of the finer kinds have given twenty-eight per cent. And it is worth regarding, that good quality is almost inseparably connected with grateful flavor.

Horticulture, as an employment, is highly conducive to the healthful vigor of the body, and to an agreeable exercise of the mind. The labor it demands is neither severe in degree, nor monotonously tiresome in kind. It affords continued change and variety. The interesting objects of which it has cognizance,—as the germination of the seed, the development of the leaf, the growth of the stock and branches, the expansion of the flower, the swelling, maturing and gathering of the fruit, and the diversity in foliage, flowers and fruit, of the various vegetable families under its care, present to the mind, capable of appreciating and admiring the beauties of the vegetable kingdom, a succession of the most agreeable sensations.

As a recreation, horticulture offers all the pleasures I have enumerated, without the fatigues which accompany its manual operations. What more grateful, to the sedentary and the studious, or to him who is habitually involved in the mercenary cares of business, than the relaxation afforded by a well kept garden, which exhibits to the senses, the fragrance, the beauty, the order and harmony, which Providence has imparted to the vegetable kingdom? Here is nothing to awaken jealousy, to excite distrust, to beget envy—or to inflame any of the grosser passions; but every object is calculated to tranquillize the mind, to soften down the asperities of his nature, and to beget, towards his fellow-beings, feelings of kindness, philanthropy and love.

As a science, horticulture is rich in stores of intellectual wealth and usefulness. It embraces glossology, which teaches the names of parts of plants; phitography, or the nomenclature and description of plants; taxonomy, or their classification; vegetable organology, or the external structure of plants; vegetable anatomy, or their internal structure; vegetable chemistry, or primary principles of plants; vegetable pathology, or the diseases and casualties of vegetable life; vegetable geography and history, or the distribution of vegetables, relatively to earth and to man; and the origin of culture, derived from the study of vegetables.

It also embraces the study of the natural agents of vegetable growth and culture,—as earths, soils and manures; the agency of light, electricity, heat and water, in vegetable culture, and of the atmosphere in vegetable development.

Whether we regard horticulture as an art, or a science; whether we consider it as administering to our wants, convenience and pleasures, or as promotive of health and useful knowledge,—it has high claims to our notice and regard.

I present upon your table, for examination, gentlemen, more than one hundred named varieties of the apple and pear, collected from my grounds, which twenty years ago were a barren waste; and I might have added many others of doubtful or inferior character. Those presented have all been recommended as superior fruits, at the season of maturity, either for the dessert, the kitchen, for preserves, or for cider. They are the natural products of the northern and middle states, of Canada—and of Russia, Germany, France, the Netherlands, and Great Britain. They include, of course, only late autumn and winter varieties. Yet these fruits form but a small portion of the kinds which are to be found in our valley—much less in our country. Though we have a great many *good* kinds, there must be but comparative few that can be denominated *excellent*, or *best*. The only way to determine which are the best, is to bring the different varieties together, and to judge of them comparatively, at the season of their maturity. How desirable it is, that when starting in our pomological career—when selecting the fruits that are to administer to our enjoyment and our profit, through life, we be able to select the best kinds! But who is now a competent judge in these matters? What individual knows the comparative merits of half, or a quarter, of the fruits which abound in our land? Not one among us, I venture to say. How shall we then acquire the requisite knowledge? We have at present no competent guide to direct us in the selection. Individual effort is incompetent to the labor of classifying and describing all our best fruits. It can only be effected here, as it has been in England, by the joint efforts of an association—by bringing together the various kinds, testing their qualities, and establishing a standard of their relative merit, for the various uses for which they are adapted. This subject is so deeply connected with the comfort of all classes of our citizens—of the buyer as well as the cultivator of fruit—that I venture to recommend it to the early attention of the association.

The introduction of new and valuable varieties of fruits, seeds and ornamental plants, from different sections of our own country, as well as from the old world, should also engage our early attention. Many facilities present for effecting this. First, by a correspondence, and interchange of plants, seeds and fruits, with horticultural associations at home and abroad. Secondly, through the depot established at Washington, under the direction of an enthusiastic friend of rural improvement, H. L. Ellsworth, Esq., the commissioner of the Patent Office. Thirdly, through our naval, commercial and travelling citizens. Our corresponding secretary, who has tendered his resignation in consequence of being about to take up his residence for some years in France, has kindly tendered his services in this behalf—and his services there, in forwarding the objects of the association, may be rendered exten-

sively useful. After all, much, very much, will depend upon our individual exertions. If we show a spirit to go ahead, and to be useful to the community, assistance will be tendered from every quarter. But only those who *do* exert themselves, can or ought to expect assistance from others. We must put our own shoulders to the wheel, before we call upon Hercules. We *can* render this association pleasant and useful to ourselves, and highly beneficial to the public, if we but resolve to do so. But unless we set out, and persevere, in the resolution to do so, we had better suffer the association to die in embryo, and to forget that we had the ambition to be useful in promoting horticultural improvement, but lacked the resolution and the spirit to carry out our laudable design.

In conclusion—to the gentlemen who have interested themselves in getting up this exhibition, and particularly those of a sister state, whose contributions of superior fruits and flowers afford the strongest incentive to perseverance on our part, I feel myself authorized to tender the grateful acknowledgments of the association. A multiplicity of circumstances, and I may say of misapprehensions, combined with protracted bad weather, have tended very much to diminish the interest of our first exhibition; and yet I believe I may venture to say, that there has never, on any occasion, been collected in our state, a greater number of excellent varieties of fruit, or finer samples, than has been exhibited on this occasion; and although the season has been highly unpropitious to the floral department, yet the exhibition of fine dahlias, the favorite flower of the season, has been peculiarly brilliant. We have no reason to despond, but much to induce perseverance and renewed exertion. We have laid the foundation of improvement in that branch of industry which administers largely to the wants and elegancies of life. We can rear the superstructure. We can *deserve* success, though we cannot *command* it. And even the high satisfaction of doing this, is a consoling, if not satisfying reflection, to him who labors for the public good.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Mode of prolonging the Existence of aged Trees.—Experience has shown that the separation by an axe or by accident, of any large branch of a tree arrived at full growth, causes a wound, which it cannot cover with fresh bark if left to itself. The contact of the air, the rain, and

other atmospheric influences, the attacks of insects, and of birds, soon produce a complete disorganization of the place laid open by the wound. Little reservoirs of water soon are formed in the cut, and insects' nests are seen, which, sooner or later, occasion the decay of the tree to the very heart. Then growth ceases, the leaves become discolored, the fruit is thin and of bad quality, and at last the tree perishes.

A French agriculturist of some note, General Higonet, has lately made known his mode of proceeding in such cases. He says, "To obviate as much as possible the serious evils arising from fissures in old trees, I always adopt the following simple method, in my orchards at Veyrace, where I have trees remarkable for the quality of their fruits and the picturesque beauty of their branches. I regularly, every year, cover over with mortar the hollow of every aged or wounded tree. The wounded part is always filled with stones, and some of the trees are so old and wasted, that a whole bushel of stones has been used in a single instance. I have practised this plan for ten years, and the good effects of it have been perfectly astonishing. Every autumn I examine all the trees, and I make a mason fall to work where any services appear necessary. A single workman, with a boy to assist, is equal to the task of finishing off three hundred trees a day. Since I have taken this precaution, I have not lost a single tree, though many of mine are exceedingly old. They have received fresh vigor, and yield an abundance of fruit. This method also succeeds with oaks, ash, and other trees. I may remark, that the lime of the mortar stimulates so actively the parts of the tree which it touches, that I have seen large hollows, filled with masonry, completely closed by the tree growing over it in two or three years after having been built up." (*Hort. Jour.*)

ART. II. Foreign Notices.

ENGLAND.

Prize Dahlias.—We have not yet received our English floricultural journals, which give the results of the various exhibitions throughout the kingdom; but we have letters from various sources, which state that the display of flowers has been large and extensive. A Cambridge paper of a late date has been forwarded to us, containing an account of the great Birmingham Show, the names of the flowers, and the exhibitors; but it has not yet reached us, and is probably lost. Mr. Widnall, among our other correspondents, in a letter of a late date, informs us that he had exhibited at several of the principal shows, (open to all England,) and had received the following prizes:—

At the York Exhibition, August 30th, 1838,
 Best forty-eight blooms, £5.
 Best one, £1.
 Best one, (extra class,) £1.
 Seedling, 15s.

At the Cambridge exhibition, Sept. 6th,
 Best thirty-six blooms, £10.

At the Birmingham Grand Show, Sept. 12th,
 Best twenty-four blooms, silver cup, £20.
 Best twelve blooms, £5.
 Second seedling, £2.
 Fifth seedling, £1.

Mr. Widnall also states that he has not exhibited a stand this season,

without having in the *whole of his "seedlings of this year's sending out,"* besides having in some of his former year's raising. *Ne plus ultra* is in the prize pans at every exhibition in England; a pretty good test of its excellence. We hope, by our next, to be able to give the names of the winning flowers, at the various exhibitions. We have made such arrangements with our correspondents, as to be able to give all the information relative to new dahlias.—*Ed.*

Seedling Strawberries.—Mr. Myatt lately exhibited at the London Horticultural Society three varieties of new seedling strawberries. Mr. Myatt has already had the good luck to raise one fine seedling; this is his new pine, which, though scarcely known in this country, beyond the English catalogues and works on gardening, is said to be very superior. If the above sorts should prove to be valuable, as no doubt they will, we hope that plants will be introduced.—*Ed.*

FRANCE.

Elevation of the Ground in Pine Plantations.—It is now about nineteen years since I carefully examined the first stock of pines grown in the forest. The *pinus sylvestris* were then but twenty or twenty-five feet high, and the matter formed by their fallen leaves had already filled up the cavities of the ground, and had formed, in several level places, a bed of undecomposed leaves of about six or eight inches thick. The leaves of the pine tree take a long time to decompose, on account of the resinous matter which they contain; and I then foresaw that the depth of this new soil would increase rapidly.*

At present, these same pines have attained a height of from forty-five to sixty feet, and are generally thicker than a man's body. The soil produced by the fall of their leaves is so much elevated, that several rocks, which appeared two feet out of the ground, are no longer visible; and others, four or five feet high, are on the point of disappearing also under the fallen leaves. A moss, a sort of *hypnum*, has sprung up in several places on the leaves half decomposed, and contributes exceedingly to augment the thickness by its vigorous vegetation, and its prompt decomposition.

Resin.—In 1822, M. de Lauriston, one of the ministers, brought two men from La Teste, who were resin makers by occupation, to try if the pines of Fontainebleau would yield resin by tapping, as we see it produced in the Landes, † near Bordeaux. These two men submitted to the operation, in two years, about four thousand feet of maritime pines, and obtained from them nearly as much resin as in the Landes, that is about an average of two pounds each tree. The details of this operation were hitherto unknown in the neighborhood of Paris, and I think it may not be uninteresting to relate a few particulars. Two men are equal to the task of tapping eight thousand pines, which produce each year thirty-two thousand bushels of matter, at twelve or fifteen francs each. This is assuredly an excellent revenue, when it is considered that the pines which produce it grow in the sands, which refuse all sorts of cultivation, and many acres of which are sold for five or six francs. However, another calculation suggests itself—whether it would not be better to pre-

* I do not think that there is any tree which produces so much fresh soil by the fall and decomposition of its leaves, as the pine, particularly the maritime pine. I am not sure that this soil has yet been analyzed, or any experiments made to arrive at its properties when in cultivation. The vast quantity of resin which it contains ought to render it different from all other soils; and it would be interesting to ascertain if plants of all sorts accommodated themselves to it, or if only certain ones.

† Sandy grounds, generally quite waste.

serve the pines untouched, in order to obtain from them, by sawing, noble planks for general purposes. When operated on as related above, they are only fit for vine-props, though these are certainly of first-rate quality. Resin is produced from the maritime pine, but from the pine *sylvestris* nothing has been obtained, even when they were four feet in circumference: perhaps they were still too young. The most curious part of this matter is, that the Minister who commenced this experiment with so much eagerness, finished by paying no more attention to it, and by refusing M. Larminat the means of manipulating the raw produce which had been obtained. After many applications without an answer, M. Larminat received at last an order to forward all the resinous matter to the general gas depot at Paris; and six months after he had dispatched his last ton, he received another order enjoining him to take particular care of the resin, and to be sure and not allow the great heat (in 1825) to produce evaporation of the essential parts! We may conclude from this fact, and a hundred others, that when experiments are made, without having personal interest for a motive, they rarely succeed. (*Hort. Jour.*)

Culture of Pine-apples without Fire.—A treatise on this subject has lately been published by M. Guidon, giving an account of his mode of proceeding for some years past. His plan, he declares, is recommendable for its economy, as the chief expense is for a frame of wood, which any gardener can construct for himself. The first attempts of the author were directed towards rearing pine-apples in the open air. He does not detail the different experiments which he has tried; he merely declares that he has tried every possible method without, as we must presume, meeting with much success. It does not appear that he has made trial of the only method, the success of which was altogether satisfactory. It consists of a plank raised three or four feet above the ground, and on them a covering of good earth of about ten or twelve inches deep. In this are planted the ananas with the roots naked, or covered with a lump of earth. Below this platform good dung is placed and rammed close. This produces heat as from a hot-bed, and must be renewed, or stirred up, as often as it is found necessary to reanimate the heat. Last of all, care must be taken to keep up the heat at a temperature suitable to each season by means of flues and stoves, as is customary. This is the plan practised in the royal garden at Versailles, and enormous pine-apples are thus produced.

The frame which M. Guidon makes use of, is about five feet and a half wide, four feet and a half high behind, and four feet high in front. The planks forming the sides are pierced with four rows of holes, about a foot distant from each other. He fills the frame with a bed of new dung, without any mixture of leaves, covers this bed with about six inches of light composition of leaves, or light manure, and when the temperature of the bed is of a proper heat, he places his pine-apples in pots and plunges them into the frame. All around the frame, at about two feet distance, there is placed a wall somewhat lower; and this interval of two feet is filled with new dung, the same as that inside the frame, which in fact forms a sort of heated flue all round, and the heat of which, escaping by the holes mentioned above, spreads itself inside the frame, to the benefit of the plants. This interval is covered with a plank to prevent the evaporation of the heat, and it inclines outwardly to let off rain from the frame. M. Guidon speaks strongly against forcing pine-apples to fruit during winter. As he makes no use of fire, it is understood that he renews his beds, and his manure outside, oftener than is customary in establishments where a heating apparatus is used. The author remarks that the pine-apples are much finer from the moist heat of a bed and a quantity of manure outside, than from the dry warmth of a stove. He also declares that the moist and vaporous heat of the hot-bed destroys

insects and prevents their propagation; whereas the dry heat of a stove is favorable to them.

The plan of M. Guidon seems conducted with intelligence, and it does not appear that any horticulturist before him has succeeded in successfully cultivating pine-apples, without the aid of fire, within sixty miles of Paris. With respect to the economy of his plan, it is a different question. M. Guidon employs pure manure, in order to obtain a greater degree of heat than if he had mixed it with leaves. But the heat thus procured remains for a shorter period, and he is obliged to renew the bed and the manure outside more frequently. If M. Guidon has under his hand plenty of manure, and at an exceedingly low price, his method is undoubtedly cheap enough; but wherever manure is as dear as it is at Paris and its neighborhood, this method would become more expensive than that where recourse is had to the heat of a stove. (*Annales de la Société Royale d'Horticulture de Paris.*)

BRAZIL.

Mr. Gardner's Travels in Brazil.—Under our Botanical Intelligence we have made some mention of the dried specimens of plants sent home from Pernambuco, where Mr. Gardner has been travelling as a botanical collector. His narrative we have read with a great deal of pleasure, and presuming that many of our readers would be as delighted with it as ourselves, we have marked large extracts, for our pages. Not having room, we shall not give the whole at this time, but shall continue them in a future number. We commend it to the perusal of our readers. Mr Gardner reached Pernambuco, on the ninth of October, 1837, and from that date his letter commences.

“On nearing the coast it presented a very flat and barren appearance, forming a great and unpromising contrast to the magnificent entry to the Bay of Rio de Janeiro. The town being built nearly on a level with the sea, we could only obtain a view of that portion which immediately skirts the shore. No part of the coast, within many leagues of Pernambuco, rises to any height, except that whereon the old town, called Olinda, stands, and which is situated about three miles north of Recife, which is the name of the sea-port. The first thing which attracts the attention of a stranger when entering the harbor of Pernambuco is the nature of the harbor itself. It is quite a natural one, being formed by a coral reef which runs along the coast at a little distance from the shore, and is entered through a breach in the reef, on the south side of which a light-house and a small fort are built. However high may be the swell outside this reef, there is always calm water within, which at full tide is sufficiently deep to float the largest merchant vessels which visit the port.

“When I arrived, I found Dr. Loudon waiting, who kindly invited me to remain in his house during my stay in the place. Shortly afterwards, having delivered the letters of introduction which I brought from Mr. Hamilton, the English minister at Rio, to Mr. Watts the British consul, the latter obligingly offered to introduce me to the President of this province, Senhor Vicente Thomaz Pirez de Fiqueredo Comargo, as soon as it could be ascertained when it would be convenient for him to receive us. The permission to wait upon his excellency having been given a few days afterwards, Mr. Watts and myself proceeded to the palace, accompanied by Dr. Loudon, who is a personal friend of the President. He received us very kindly; and when Mr. Watts stated the object of my visit to the country, he promised to afford me all the assistance in his power, and desired me to call again the next day, when he would

give me a letter to Dr. Serpa, the Professor of Botany and Curator of the Botanic Garden at Olinda.

For the first few days my walks extended but little beyond the suburbs of the town. The country is quite flat, and the soil very sandy; and as the dry season had commenced, the herbaceous vegetation on the more exposed situations was beginning to suffer for want of rain. For many miles round the town of Pernambuco, the cocoanut and other large palms grow in the greatest profusion, mixed with fine trees of *Anacardium occidentale* (the Cashew,) then loaded with large yellow or reddish-colored fruits; with mangoes (*Mangifera indica*) which here attain a much larger size than at Rio, though still far from equalling those of Bahia; and the two species of bread fruit (*Artocarpus incisa*, and *A. integrifolia*,) the ends of the branches in the former, and the trunks and main boughs of the latter supporting their monstrous fruits. More attention seems to be paid here than at Rio, to the gardens which are attached to the houses near the town, many of them being adorned with beautiful flowering shrubs, chiefly of Indian origin. During my first walks I collected specimens of the following plants: *Turnera trioniflora*, which grows profusely in waste and cultivated spots, and by road sides, even decorating some of the less frequented streets with its large pale yellow flowers, which only expand during the early part of the day; and, in the same situations, a fine large blossomed species of *Richardsonia*, *Boerhaavia hirsuta*, and *Argemone mexicana*. In marshy places, which were beginning to be dried up, I found fine specimens of *Pontederia paniculata*, *Hydrolea spinosa*, and a small purple-flowered *Ammannia*. In spots which were either now under cultivation, or had once been so, grew *Elytraria tridentata*, a narrow-leaved *Stachylarpheta*, *Angelonia pubescens*, *Monnieria trifolia*, a small *Eriocaulon*, several small *Leguminosæ*, and *Conoclinium prasiifolium*, DC. Where the ground was dry, and among bushes, I observed *Hirtella racemosa*, in great plenty and full bloom, together with a small frutescent *Malpighiaceus* plant, and *Jatropha urens*, and *J. gossypifolia*, the latter sometimes attaining the stature of a tree, and being not unfrequently used for hedges. The *Mimosæ* and the fences, as about Rio, are festooned with *Malpighiæ*, *Bignoniæ*, *Ipomææ* and *Leguminosæ*, of which the cowitch plant (*Stizolobium urens*) was the most abundant, and, mingling in many places with a species of Dodder (*Cuscuta graveolens?* of Kunth,) which twines over the hedges with its long yellow cord-like branches, gives to the surrounding scenery a most singular appearance.

On the twenty-first of October I proceeded to visit Dr. Serpa and the Botanic Garden of Olinda, accompanied by a Mr. Nash, a young English gentleman, to whom I am indebted for many acts of kindness. There are three ways by which Olinda may be reached from Recife; one is along the sea-shore, but, from the loose sandy nature of the soil, and the complete exposure of the traveller to the sun, this course is seldom taken; another is to proceed in canoes up the river, by which the large freshwater lakes that are situated behind Olinda empty themselves into the sea. This stream runs almost parallel with the shore, from which it is separated by a high sand-bank. The third and last way was that which we pursued, namely, a road that keeps the inland side of the river, though at a considerable distance from it. This road is quite level, and at both ends are situated several fine country-houses, though much of it passes through waste and uncultivated land; and a considerable portion is bounded by the lake. Occasionally *Mimosa* hedges inclose it, where I observed a great profusion of a small white-flowered *Jasminum*, which at the early hour when we passed was perfuming the air with its delightful fragrance, and a species of *Securidaca*, that, in similar situations, displayed its large clusters of rich purple flowers.

The road-side was gay with the pale yellow blossoms of *Turnera trioniflora* and the delicate pink heads of the sensitive plant (*Mimosa pudica*.) Along its shore the lake was fringed with low shrubs, among which I observed *Anona pulustris*, *Avicennia tomentosa*, and *A. lucida*, *Laguncularia racemosa*, and a suparborescent kind of *Caladium*, while many parts of the water were yellow with the flowers of *Limnocharis Commersonii*, and of a large species of *Utricularia*. Towards Olinda I was delighted at finding the surface of the water covered with thousands of the splendid white blossoms and broad floating foliage of a water-lily (*Nymphaea ampla*, DC.)

Besides the letter that I carried to Dr. Serpa from the President, was another to Senhor da Cunha, Professor of the French and English languages at Olinda; and having called first on this gentleman, he expressed his regret that he could not accompany us to the garden, owing to his delicate state of health; his looks indeed testifying a tendency to consumption.

The Botanic Garden is situated in a hollow, rather behind the town of Olinda, and if it were all under cultivation would be of considerable size. The residence of the Professor stands nearly in the centre; it is a small building, of a single story. We found Dr. Serpa in his study, a rather large apartment, which he also uses for a lecture room; and were impressed by the intelligent and agreeable manners of the old gentleman, who is perhaps above sixty years of age; and, besides his other duties, has the principal medical practice in the town of Olinda. A few French works on botany and agriculture compose the chief part of his very limited library; among them I observed a complete set of the *Flora Fluminensis*, by Padre Vellozo. He showed me also three volumes of original drawings of indigenous and exotic plants, executed by his sons in illustration of the Linnæan system; many of them, however, were incorrectly named; *Cicca disticha*, for instance, being called *Ribes Grossularia*.

Dr. Serpa then accompanied us in a walk round the garden, which contained little worthy of notice; a few European plants, struggling for existence, and some large Indian trees being its chief productions; among the trees, however, were fine specimens of mango, tamarind, and cinnamon. We afterwards proceeded to see a little of the neighboring country, where I hoped to find something more interesting than within the precincts of the garden, and in this expectation I was not disappointed, having collected several species new to me, among them *Cuphæa flava*, which is common in dry situations in this province, and a curious *Eriocaulon*. After visiting some of the churches, and the ruins of an old convent, now inhabited by a hermit, we returned in a canoe to Receife.

About a fortnight after my arrival at Pernambuco, Dr. Loudon removed to his country-house, situated on the banks of the Rio Capibaribe, about four miles west from Receife. The country round, being chiefly uncultivated, afforded ample scope for my researches. In a low marshy spot near the house I found a good many *Cyperaceæ* and *Gramineæ*, and great plenty of the curious *Pangatium indicum* (Lamarck;) and in the same marsh, as well as along the banks of the river, are some large trees of *Avicennia nitida*, some of their stems measuring five feet in circumference, and rising unbranched to a height of more than twenty feet. Near the entrance of Dr. Loudon's house stands a large tree belonging to the natural order *Chrysobalanæ*, perhaps a species of *Moqueila* (No. 992 of this collection.) The stem is of considerable thickness, quite straight, and rises undivided to the height of upwards of thirty-five feet: below it is much ribbed, and at the summit is crowned by a top, not unlike that of an European beech; upon the whole it is one of the finest trees I have seen in this country, not certainly for size,

but for symmetry of form. It bears a yellow eatable drupe, about as big as a large yellow gooseberry. This fruit is called *Oyty*, and the tree itself *Oytycera*. Opposite the house, on the other side of the river, there extends a large tract of wooded country, consisting chiefly of small trees and shrubs, which have sprung up since the Virgin forests have been felled; it is called Mato de Torre. Between this wood and the river stretches a broad piece of open ground partly covered with short grass, and partly with low shrubs and herbaceous plants. The former consist of several species of *Solanum* and *Mimosa*, some *Myrtaceæ* and suffruticose *Vernoniæ*. Among the herbaceous plants I found beautiful specimens of the lovely *Angelonia salicariæfolia*, and a large white-flowered *Cleome*. *Jatropha urens* and *J. gossypifolia* are also common in this tract, in the middle of which are some small freshwater lakes that afforded me some good plants. To my great delight the first excursion to this spot was rewarded with that curious aquatic fern, named after Mr. Parker of Liverpool, *Parkeria pteridioides*. The lower parts of the fronds are much inflated, by which the whole plant, being rendered specifically lighter than the water, floats upon the surface of the shallows; its long fibrous roots only reaching the mud at the bottom. Along the borders of these lakes grow several large *Polygona*, one of them has stout spikes of greenish white flowers, and another considerably resembles our *P. amphibium*: there also abound *Pontederia paniculata*, *Hydrolea spinosa*, and a species of *Ammannia*. Several parts are covered with a floating turf, consisting principally of different *Cyperaceæ*; and where this does not exist, *Jussiaea natans* throws along the surface of the water its long floating branches, which are upborne by numerous small white cylindrical bladders attached to the lower side. The flowers are white, and about the size of those of *Ranunculus aquatilis*, to which, at a distance, it bears a considerable resemblance. Mingled with the *Jussiaea* are vast quantities of the curious *Azolla magellanica* and *Pistia Stratiotes*.

In the wood itself grow many species of *Myrtacæ*, a few *Melastomacææ*, and several fine trees of the Cashew; also a good many species of *Cocoloba*, and great abundance of *Vismia brasiliensis*, the latter often attaining the stature of a small tree, together with numerous *Byrsonima*. There are also several small trees of *Eschweilera parvifolia* (Martius,) which when covered, as was then the case, with its curious pale-yellow flowers, presented a beautiful object. Twining among these and other trees I observed fine plants of *Gomphia acuminata*, the large panicles of golden blossoms contrasting most agreeably with the shining dark-green foliage; likewise a species of *Trigonia*, and, particularly among the lesser trees by the bank of the river, a *Combretum*, with large clusters of small pale yellow and highly scented flowers.

On first entering this wood I was peculiarly struck by the difference of its general aspect from those of the same kind about Rio. Here every thing betokened a drier atmosphere and more arid soil. No ferns, *Begonia*, *Piperaceæ*, or orchideæous plants could be seen. On the stems and branches of the larger trees a few *Bromeliaceæ* and *Aroidææ* alone existed.

The Rev. Mr. Austin, the English clergyman here, having told me of a curious plant which grew in bushy places a few miles beyond his house, and kindly promised to accompany me thither, I started early with him one morning to procure some of it. On reaching the place where it grows, about ten miles west from Recife, I found it to be a noble *Epidendrum*, with stems more than six feet high, destitute of leaves at top, and bearing large corymbs of fine red flowers. It will probably prove to be *Epidendrum cinnabarinum* of Saltzman, first found by that botanist at Bahia. Whilst collecting specimens of a small leguminous

plant, growing near the *Epidendrum*, I observed on the ground, under the shade of some low shrubs, another orchideous plant in flower; a new species of *Monacanthus*, differing from the one on which the genus was founded (*M. virides*, Lindl.) in its three-lobed fringed labellum. The pseudo-bulbs are about six inches long, and its flowering stem rises to the height of about fifteen inches, bearing nine greenish-yellow flowers. Though I made a diligent search, I could find but one specimen. Near this place I collected *Stachytarpheta prismatica*, and a *Pteris* about the size of *P. aquilina*, which appears to be a troublesome weed in cultivated ground.

(To be continued.)

ART. III. Massachusetts Horticultural Society.

Saturday, Oct. 6, 1838.—Exhibited. Flowers: From S. R. Johnson, dahlias, viz: Rose d'Amour, Granta, Angelina, Emperor of Yellows, Viscountess Beresford, and other varieties, with several kinds of roses. From John Kenrick, dahlias, as follows: Dodd's Mary, King Otho, Rising Sun, Golden Sovereign, Mrs. Wilkinson, Venus, Metropolitan Calypso, Polyphemus, Beauty of Camberwell, Paragon, Duke of Bedford, sulphurea elegans, &c. &c. From T. Mason, dahlias, viz: Cedo Nulli, Rainbow, Zarah, Globe, Duchess of Buccleugh, Angelina, Conqueror of Europe, Village Maid, &c.

From S. Sweetser, dahlias, viz: Queen Elizabeth, Conductor, Countess of Liverpool, Queen of Trumps, Quilled Perfection, Conqueror of Sussex, &c.; also fine roses. From M. P. Wilder, dahlias, as follows:—Exemplar, Metropolitan Yellow, Juno, Diana, Fowler's Queen Victoria, Blandina, Lilac Perfection, Marchioness of Tavistock, King of Yellows, Countess of Mansfield, Angelina, Zarah, Maria Edgworth, Suffolk Hero, Rainbow, &c. &c. From S. Walker, dahlias, viz: Golden Sovereign, Urania, King of Dahlias, Napoleon, Duchess of Buccleugh, Metropolitan Calypso, Desdemona, Mrs. Broadwood, Dodd's Mary, Springfield Rival, &c. &c., and fine pansies and bouquets.

From Hovey & Co. dahlias, as follows: Liberty, Girling's Ruby, Mrs. Rushton, Lavinia, Lovely Anne, Wells's Champion, Blandina, Warminster Rival, Sir Henry Fletcher, Rienzi, &c. &c. From Dr. J. C. Howard, dahlias, viz: Desdemona, Cedo Nulli, Augusta, Lady Fordwich, Pieta formosissima, Prince George of Cumberland, Ophelia, Countess of Liverpool, Squibb's Yellow, Beauty of Cambridge, &c. and a large and fine bouquet. From J. Breck & Co., dahlias, embracing Exquisite, Desdemona, King of Yellows, &c. From J. L. L. F. Warren, marigolds.

Fruits: From the Hon. J. Lowell, Great Britain, Bezi Vaet, and Queen Caroline Pears; the latter is a fine new pear: with these specimens Mr. Lowell communicated the following letter:—

"I send specimens of Great Britain, Bezi Vaet, and Queen Caroline pears. The first and last I have translated from Grand Bretagne and Reine Caroline, because I think when foreign names *can* be rendered into English, retaining the sense, it is better. Thus, "Roi de Wirtemberg" will in a few years be corrupted into a barbarous, unpronounceable word of *no meaning*. "King of Wirtemberg" will be understood: Let me here remark, that there is no such name in *existence, lawfully known*, as Roi de Wirtemberg. The pear which some persons call by that name was raised by Van Mons, and called by him "Frederick of Wirtemberg," and is so printed in his catalogues. Some Belgian nur-

seryman, thinking that the high-sounding title of king would sell better, corrupted the name, and some prefer the corruption to the *true* name. The evil is, that we shall soon receive the *same* pear under *both* names."

From T. Lee, Isabella, Pond's Seedling (?) and Elsinburg grapes. From J. Heard, Marie Louise and Louis Bonne (of Jersey) pears. From Capt. J. Lee, West Cambridge, handsome specimens of Ribstone pippin apples. From J. M. Ives, Salem, a pear, the tree from which it was taken having been received from France for the buerré Bosc, and proves not to be true. From R. Manning, Buffum, beurré Bosc, beurré Diel, belle et bonne, Marie Louise, Pope's Quaker, Fulton, and Jalousie pears. From E. M. Richards, Capsheaf and Harrison's fall baking pears: also, Red Ingistre, Yellow Ingistre, and Fall Sops of Wine apples, with one kind unknown; Hill's Madeira peaches. From J. L. L. F. Warren, Isabella, Oval Malaga, and Sweetwater grapes. From Miss S. Seaver, Roxbury, Catawba grapes, (well ripened,) and a seedling from the Catawba.

Distributed: two plants of *Musa rosacæa*, and twenty bulbs of *Amaryllis equëstris* from the Hon. J. Lowell.

October 13th.—Exhibited. Fruits: From S. Downer, Gravenstein and Lyscom apples, and belle et bonne, Cumberland, and Bezi Vaet pears. From S. Pond, Isabella grapes, and beurré Diel and Burnet pears. From R. Manning, pound pears, and sweet russet and Murphy apples, the latter a large, fine looking and good flavored fruit. From J. L. L. F. Warren, black Hamburgh grapes, from the open air. From James Eustis, South Reading, a fine baking pear, name unknown: also, Ben apples, and a winter variety, name unknown. From B. Weld, Roxbury, Catawba grapes. From Luther Little, a red apple from a tree in Marshfield over two hundred years old, and said to be planted by Peregrine White, the first native white man of Massachusetts, and born on board the *Mayflower*. From T. Mason, black Hamburgh grapes.

October 20th.—Exhibited. Flowers: From Josiah Stickney, Boston, fine dahlias, viz: Dodd's Mary, Mary Queen of Scots, Augusta, and Widnall's Enchanter. From P. Barnes, Boston, Denissii, Star, and other dahlias. From S. Sweetser, Beauty of Lullingstone and Bride of Abydos dahlias. From M. P. Sawyer, a seedling dahlia.

From Hovey & Co. dahlias, viz: Marchioness of Tavistock, King of Beauties, and Girling's Ruby. From T. Mason, Desdemona, Conqueror of Europe, Queen Elizabeth, Cedo Nulli, and other dahlias.

Fruits: From E. Vose, a beautiful Duchess de Angouleme pear, weighing eighteen ounces, from a standard tree. From E. M. Richards, orange and pear-shaped quinces, and peaches from a tree imported from France, name unknown. From Judge Heard, beurré Diel, St. Michaels, and Forelle pears, the latter very handsome specimens. From S. Walker, Swan's Egg pear, (of Cox, No. 36.) From J. M. Ives, Salem, Capiaumont pears. From R. Manning, Figue of Naples, Fourcroy, (syn. with the Figue of Naples) and Minot pears; also, drap d'Or and seedling apples, the latter from a garden in South Salem, very handsome and good. From William Oliver, a green-fleshed melon, (probably syn. with the Malta,) cut from a vine in Grenada sixty-four days previous: the flavor was very fine, and, if the fruit would ripen in our climate, would be a valuable addition, from its long keeping.

At this meeting, the choice of officers for the ensuing year took place, and the following gentlemen were elected:—

E. Vose, *President*. E. Bartlett, M. P. Wilder, Jona. Winship, and John Prince, *Vice-Presidents*. Samuel Walker, *Treasurer*. R. T. Paine, *Corresponding Secretary*. E. Weston, Jr. *Recording Secretary*. Rev. T. L. Russell, A. M., *Professor of Botany and Vegetable Physi-*

ology. T. W. Harris, M. D., *Professor of Entomology.* J. W. Webster, *Professor of Horticultural Chemistry.*

Standing committees on fruits, flowers, vegetables, &c., were also chosen.

The Abbé Berlèse, of Paris, was proposed as an honorary member, and M. Rintz, Jr. of Frankfort on the Main, a corresponding member of this Society.

October 27th.—*Exhibited.* Vegetables: Bailey's red and white Giant celery, from Dr. J. C. Howard: both were remarkably fine and large.

ART. IV. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>		\$ cts.	\$ cts.
Potatoes:				Squashes:			
Common,	{ per barrel, . . .	1 25	1 50	Autumnal Marrow, per cwt.	1 00	1 50	
	{ per bushel, . . .	50	60	Winter crook-neck, pr cwt.	1 00	1 25	
Chenangoes,	{ per barrel, . .	1 50	1 75	Canada, per cwt.	2 00	—	
	{ per bushel, . .	75	—	Pumpkins, each.	12	25	
Nova Scotias,	{ per barrel, . .	1 50	1 75				
	{ per bushel, . .	75	—	<i>Fruits.</i>			
Eastports,	{ per barrel, . . .	2 50	—	Apples, dessert, new:			
	{ per bushel, . . .	1 00	—	Common,	{ per barrel, . . .	1 25	1 75
Sweet Potatoes, per bushel, . .		1 00	1 25		{ per bushel, . . .	50	75
Turnips:				Baldwins, per barrel,	1 75	2 00	
Common,	{ per bushel,	50	—	Sweet apples, per barrel, . . .	2 00	2 25	
	{ per peck,	25	—	Golden Pippins, per barrel, . .	3 00	4 00	
French, per bushel,		50	—	Greenings, per barrel,	1 50	2 00	
Ruta Baga, per bushel,		50	—	Russets, per barrel,	1 50	2 00	
Onions:				Blue Pearmains, per barrel, . .	2 00	2 50	
Red, per bunch,		4	6	Pears, per dozen:			
Yellow, per bunch,		3	4	Chaumontel,	20	25	
White,	{ per bushel,	50	—	Dix,	50	—	
	{ per bunch,	4	6	Beurre Diel,	25	50	
Beets, per bushel,		50	—	Lewis,	25	—	
Carrots, per bushel,		50	75	St. Michaels,	50	1 00	
Parsnips, per bushel,		75	—	St. Germain,	50	75	
Horse-radish, per pound,		8	12	Baking, per bushel,	1 50	2 00	
Radishes, per bunch,		8	12½	Grapes, hot-house, per lb:			
Shallots, per pound,		20	—	Black Hamburg,	50	—	
Garlic, per pound,		12	—	White sweet-water,	25	—	
				Isabella,	12½	—	
<i>Cabbages, Salads, &c.</i>				Catawba,	12½	—	
Cabbages, per dozen:				Malaga,	25	—	
Savoy,		50	75	Citron Melons for preserves, ea.	12½	—	
Drumheads,		75	1 00	Cranberries, per bushel,	1 50	1 75	
Red Dutch,		75	1 00	Quinces, per bushel,	2 50	3 00	
Cauliflowers, each,		12½	25	Berberries, per bushel,	1 00	1 25	
Brocoli, each,		10	15	Lemons, per dozen,	20	25	
Lettuce, per head,		6	8	Oranges per dozen,	—	—	
Celery, per root:				Pine-apples, each,	6	12½	
Giant red and white,		10	20	Chestnuts, per bushel, (new)	1 75	2 00	
Common,		6	10	Walnuts, per bushel,	2 00	—	
Spinach, per half peck,		12½	—	Cocoanuts, each,	5	6	
Tomatoes, per half peck,		25	—	Almonds, (sweet,) per pound, . .	12½	—	

REMARKS.—The continued and heavy rains during the month, together with the evenness of the temperature, scarcely falling below the

freezing point, have been of essential benefit to all kinds of late vegetables, particularly to cabbages, turnips, celery, &c. Last season the frosts in the early part of the month were so severe that many things were greatly injured, and the crops materially affected; potatoes were even frozen by the intense cold.

The potato crop at the eastward, as we stated in our last, is immense. There have been numerous arrivals of large cargoes at this port; to Philadelphia and Baltimore, a great quantity have also been shipped, which have commanded good prices from the scarcity at those places. The abundance of them in our market has affected sales which are now dull, at the usual prices at which they have been held, and a slight reduction is submitted to, by those who are desirous of a quick sale; sweet potatoes have been received in great quantities; since our last, upwards of six thousand bushels have arrived; sales are, notwithstanding, brisk at quotations. Turnips are large and excellent. Some radishes have come to hand this week.

Of cabbages, the crop has improved so rapidly, that it may safely be said to be larger and better than for several years previous; drumheads are immensely large, and all kinds have a solidity in their heads which they rarely attain. Celery is large and exceedingly beautiful. Some spinach has been received. A few tomatoes remain, though rather inferior. The great stock of squashes, and the greater demand for the autumnal marrow than the common crookneck, has caused a reduction in the price of the latter.

The stock of fruit is, with one or two exceptions, ample. Apples are handsome, and from the good supply, prices are moderate: a few fine golden pippins have been brought in, which command a high price; good sweet ones are rather scarce. Pears have fallen off considerably from the supply at this season of last year; this is to be attributed to the dry summer, which caused the young fruit to fall. Hot-house, and native grapes are most gone; but to take the place of these, there have been arrivals of great quantities of Malagas, which open in good order, and are sold at moderate rates. Berberries are scarce. Chestnuts were never more abundant; sales are, however brisk at quotations. Walnuts just begin to come in.—*Yours, M. T., October 26th, 1838.*

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape vines.—Continue the same care towards the vines as recommended the last month; if the leaves begin to fall, it will be a good method to get rid of them and thus prevent their continual dropping, especially when it is desirable to keep the floor or soil clean, to take a broom and brush off the leaves, doing this very gently, and drawing the broom from the roots towards the back of the house. This prevents any injury, which might otherwise occur, if they were brushed off violently the other way; continue this twice a week until they are all off. If the vines are not yet pruned of some of the superfluous wood, it may still be done. Vines in the open air may be pruned, and the tender kinds, if cold weather ensues, should be laid down at the close of this month.

Strawberry beds should be kept clean of weeds, if the weather continues favorable to their growth: on the approach of severe cold, throw a few leaves, or straw manure over the beds, just sufficient to cover them.

Fruit trees of all kinds, may be planted successfully this month.

Raspberry vines should be laid down towards the latter part of the month, if the weather is severe.

Scions for grafting in the spring may be cut this month, and laid away in the cellar in earth.

FLOWER DEPARTMENT.

Dahlia roots should be all taken up, if it has not been done; choose a dry warm day for this purpose, and remove them out of the way of frost.

Tulips, and all kinds of hardy bulbs, should be planted by the middle of the month, if possible.

Hyacinths should be planted as soon as possible. They may be put in pots and plunged in a frame.

Pæonies may yet be separated and transplanted with safety.

Gladioluses, and *tiger flowers* should be dug up, and secured from the frost.

Stocks in pots should be protected in a frame; if removed to the green-house or parlor, repot them.

Carnations, *auriculas* and various other plants, should be kept through the season in frames.

Cactuses, *cereuses*, &c. should be placed in a dry and warm situation in the green-house, and receive but little water.

Sparaxis, *ixias*, &c. should be repotted this month.

Verbenas should be protected in a frame, green-house, or parlor.

Roses for flowering the first of January should now be well pruned.

Azaleas should receive but little water at this season.

Camellias should receive a good supply of water, as their flower-buds swell.

Chrysanthemums should be removed to the green-house or parlor, out of the reach of frost. Water them liberally until they have done flowering.

Annual seeds of such sorts as dwarf larkspur, chryseis, &c. &c. may be now sown.

Perennial plants in the border should be slightly protected upon the approach of severe cold weather.

Oxalises may yet be potted.

Geraniums should be repotted, where the object is to have large plants.

Green-house plants should be attended to: top dress all that require it. Tie up those that need it, to neat green sticks, and pick off all decaying leaves. Keep the house cool and dry.

VEGETABLE DEPARTMENT.

Celery should be got in this month.

Lettuce may be now set out in frames for spring use.

Rhubarb and *asparagus beds* for early use, should receive a good covering of coarse manure.

Spinach should be protected.

Cucumbers planted in small beds last month, for obtaining a good crop at Christmas, should be now ridged out in hills in frames, where they are to remain.

THE MAGAZINE

OF

HORTICULTURE.

DECEMBER, 1838.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

BRAZIL.

[*Concluded from page 436.*]

Mr. Gardner's Travels in Brazil.—“About sixteen or eighteen miles west from Pernambuco there is a German colony. It was first settled about ten or twelve years since, at the breaking up of a German regiment, which had long been in the service of the Brazilian government here. The colonists gain their livelihood principally by making charcoal. It is called Catuca. Being desirous of spending a day or two at this place, I started early one morning in the beginning of November, accompanied by a young Englishman, with whom I had first made acquaintance in the Organ Mountains, and guided by two Germans who were returning thither from Pernambuco, whose horses carried our luggage. The route for about two hours lay through a flat country, principally planted with *Mandiocia*, though a great part was still uncleared; the larger trees only having been cut down, and some of these yet remaining and rising high above their fellows of the wood. After passing the cultivated ground, and ascending a slight eminence, we entered the virgin forest. Previously, the road had been of a sandy nature, but now we found it to consist of hard clay. Many of the trees were very lofty, though they do not commonly attain the stature of those in the Province of Rio. Among the shrubs that grow below them I observed a few *Melastomaceae*, *Myrtaceae*, and *Rubraceae*, also a beautiful scarlet-flowered acanthaceous climber. After riding for an hour through this wood, we reached the cleared valley, containing the cottages of the colonists, passing several before we reached the one at which we meant to remain. The buildings are generally small, but much superior in cleanliness and neatness of arrangement to those belonging to the same class of Brazilians. Having partaken of some supper, we slung our hammocks in a small apartment, and enjoyed sound sleep till morning.

“My friend, being desirous of having a day's hunting in the woods with one of the Germans, I determined to accompany them, in hopes of making some additions to my botanical stores. We set off early, entering the wood about a mile from the cottage. Here, as in similar situations near the town, I observed a great deficiency of herbaceous plants, and in a walk of about two hours only collected a few ferns. Passing

through this wood, we suddenly came upon another cleared valley containing the ruins of several cottages. This, we were told, had been the first site of the settlement; but as the Germans were forbidden to cut any more wood in this direction, they moved their quarters a few years ago to the place from which we started. Near these dismantled dwellings we found plenty of pine-apples, and refreshed ourselves with some which were ripe, sheltering ourselves from the sun under the shade of an out-house which had formerly served as a place for the manufacture of *Mandiocia*. Moist situations in this neighborhood afforded plenty of *Contouba spicata*, while in dry, sandy and bushy places were a few plants of a species of *Cyrtopodium* in flower. In the wood I observed a fine tree covered with long spikes of bright yellow flowers, of which, having procured specimens, I found it to be a species of *Vochysia*, with verticillate leaves. Near the same place were many trees, especially by a small stream, of *Moronobea coccinea*, loaded with their globular crimson blossoms; and, in returning, I collected a yellow-flowered *Palicourea*, called '*Matto rato*,' which is not, however, the same plant as is known at Rio de Janeiro by the name of '*Erva do Rato*.'

"Shortly after my return from Catnia, I spent a day at the country-house of James Stewart, Esq., a merchant of Pernambuco, to whom I had brought introductions from Rio. His residence is about a mile further than Dr. London's, and, being fond of horticulture, he possesses a good garden. During a walk which I took with him in the neighborhood, I collected more flowering specimens, and also ripe seeds of *Cochlospermum serratifolium*, with a species of *Echites* (?) twining on its branches, and bearing pink-colored and sweet-smelling blossoms. We also met with several small trees of a *Sapindus* in bloom; and in a low wood was *Acacia tortuosa*, a much branched shrub, about fifteen feet high. Near this place I was highly gratified by seeing for the first time the *Gustavia augusta* in flower, many of whose noble pink blossoms were expanded, and were as large as those of the white water-lily, while numbers were just ready to burst.

"Close to the coast, and about thirty miles north of Pernambuco, there is a small island called Itamana; which, on account of its peculiar flavor, and the abundance and superior quality of the fruit produced there, is designated as the garden of Pernambuco. Of course I was anxious to visit a place of which I heard so many praises, and for this purpose I started on the morning of the 13th of December, and considered myself peculiarly fortunate in having the company of Mr. Oliver Adamson, a young gentleman from Glasgow, who is in a merchant's office at Pernambuco. He is particularly fond of the study of nature, and collects plants for one of his relations. To make the voyage to Itamana, we hired a *jangada*, one of the raft boats which are so common in this part of the Brazilian coast. It consists of six pieces of a very light kind of wood, a species of *Apeiba*, each about twenty-five feet long and two feet in circumference, pinned and lashed together. The *jangada* commonly carries one large sail, and is manned by three men. The model of one which Dr. London gave you, when he last came home, will best convey an idea of this most insecure looking kind of boat; and had I not been repeatedly assured that, primitive as the construction appears, these vessels are perfectly safe, I should have felt some hesitation in embarking upon one of them. Having got our luggage, paper, &c. properly placed, so as to be out of the reach of the water which constantly washes over these rafts, we commenced our voyage. The wind almost always blows at this season from the north, so that it was right against us, obliging us to beat up so as to keep between the coral reef and the shore, the distance between which varies from a quarter of a mile to two miles, all the way from the town of Recife to the island of Itamana. At four

in the afternoon we found that the unfavorable wind had prevented our performing more than half the way, and we therefore determined to land at a small fishing village, called Pao Amarello, and there pass the night. It was with some difficulty that we obtained a shelter wherein we could sling our hammocks. After meeting with many refusals, the owner of a venda pointed us to an empty hut made of cocoa-nut leaves, and permitted us to take possession of it for the night. Hither, therefore, we moved our luggage, and after a supper of stewed fish and farinha slept soundly till day-break, soon after which we took a walk into the country. The soil is very sandy, and we found that all the herbaceous vegetation had been so dried as to be completely scorched up. One or two small shrubs were in flower, and in a moist shady place was a tall blue-blossomed *Herpestes* that was new to me. After breakfast we continued our voyage. At this place the reef was about a mile distant from the shore, and distinctly perceptible along its whole line, both at high and low water; the ebb tide leaving the rocks bare, and the white surf of the breakers marking its position even at the highest tide.

“The wind having now shifted somewhat to westward, we were enabled to proceed, and as we made much more rapid progress than the preceding day, we reached the island at noon, and landed on the south-east end, at a little village called Pelar. We carried two or three letters of introduction, and the first which we delivered obtained us quarters, where we remained during our stay. The name of our host was Senhor Alexandre Alcantara, the proprietor of a salt work, of which there are several on the island.

“Shortly after our arrival we took a walk into the country, in the direction of our landlord's salt-pits, and found its whole general appearance very different from the vicinity of Pernambuco. Instead of the almost uniformly level character of the latter, there is a gentle undulation of hill and dale. There is not much large timber, the wooded parts generally consisting of small trees and shrubs, which give to many parts of the island an aspect more like that of an English orchard than an uncultivated equatorial island. Some of the views that we obtained from the hills over which we passed, if not the grandest, were at least the most delightful that I had seen in Brazil. The trees we found to consist chiefly of gempapo (*genipa americana*), a beautiful large tree, with dark green foliage and pale yellow flowers; the cashew (*Anacardium occidentale*), of which the curious fruit was ripe, the juice of the large receptacle on which the nut is placed affording a most grateful beverage to the wearied traveller; also, a fruit tree, abundant both here and about Olinda, the *Manguaba* of the Brazils, which is of small growth, belonging to the natural order *APOCYNÆÆ*, and having much the general appearance of an ordinary apple tree, though its small leaves and drooping branches more resemble those of the weeping birch. It bears a yellow fruit, a little streaked with red on one side, about the size of an Orleans plum, and of delicious flavor, which is brought in great quantities to market. *Curatella americana* is also common, and we procured both flower and seed of it: the natives call it *Cashew brava* (wild cashew) from the similarity of its leaves to those of the *Anacardium*. We also saw some fine large trees of a species of *Juga* (?) with long bipinnate leaves, and the tips of their branches bearing many grand spikes of small yellow flowers. By felling one of the trees we obtained specimens of it. Another kind of *Juga*, with spikes of minute white blossoms, was also of frequent occurrence. Some of the shrubs that we met with here were particularly beautiful, especially a *Byrsonena*, about twelve feet high, of which the broad foliage was woolly, and the inflorescence spicate with bright yellow blossoms; and a *Gomphia*, of nearly the same size, bearing a profusion of equally golden flowers.

“During the afternoon we walked along the shore to the northward,

and picked up a few shells, among which were fine specimens of a species of *Lanthis* containing the animal. Many *Portuguese men-of-war*, as the *Physalis pelagia* is commonly called, had been lately thrown on shore. In a rocky place near the sea we found *Jacquinia armillaris*, and a little farther on, in flat sandy spots, *Sophora littoralis* in great abundance.

"Two days before quitting the island we walked nearly across it, and visited one out of the three sugar plantations which are on it. This excursion made considerable additions to our collections. On a dry hill, covered with low shrubs, we found great plenty of *Krameria ixina*, and a species of *Clusia*, with large white flowers, and attaining the stature of a small tree.

"The island is about three leagues in length, and half as much across, and is said to contain upwards of two thousand inhabitants, who derive their principal subsistence from fishing, and, though apparently very poor, showed us much hospitality. Though there are both a lawyer and a priest among them, they have no medical men; and as soon as it became known that I was such, I was consulted by great numbers. Two of my patients were in the last stage of consumption, but by far the greater proportion of cases were the results of intermittent fever, chiefly consisting of derangement in the digestive organs, especially the spleen and liver. As I would receive no fees, many were the presents which the grateful creatures made me, and I was loaded with fish, fowls and fruit.

"On my return to Pernambuco, I found that about fifty species of living plants, and upwards of seven hundred specimens had been the amount of my collections, during the four days we had passed on the island of Itamanca."

ENGLAND.

Prize Dahlias.—Immediately after our last number went to press, and but a very short time after we penned the paragraph relative to new dahlias, we received some of our London periodicals, in which we find the reports of several of the principal exhibitions. In addition to these, we have been kindly favored by Mr. Widnall with a Cambridge paper of a late date, containing an account of the Cambridge Florists' Society Exhibition, at which some of the best dahlia growers in England, who reside in the neighborhood, displayed many first-rate flowers.

After the past season, so prejudicial to the blooming of the dahlia, that scarcely any of the splendid new varieties introduced last spring have flowered sufficiently to form any true estimate of their properties and real excellence, we have thought that a detailed account of most of the more celebrated exhibitions would be highly acceptable to our readers, and assist them in selecting such as it may be supposed, from the numerous prizes which they have gained, are the most beautiful and desirable. To see a dahlia bloom is far better than reading reports, but yet we believe that, in four cases out of five, a very near estimate of the splendor of a bloom may be gleaned in this manner.

There has been no failure in the blooming of the dahlia throughout England, so far as we have heard: the exhibitions, according to the reports made, have been of the most magnificent description, and the number of blooms, as well as the number of competitors for prizes, has been far greater than in any previous year. Indeed, it may be said, that the cultivation of the dahlia, so far from being any where near its height, has hardly escaped from its infancy, and will not probably be at its zenith for some years. In many of the remote shires, those old flowers which *we*, in our eagerness for new kinds, have long since dis-

carded from our gardens, have the past season taken prizes; an indication that, in the interior towns of our own state, the dahlia, though not grown to any thing like the extent, is, nevertheless, as well appreciated as in the remoter parts of England.

As regards the production of new seedlings, the chances of procuring superior ones seem to lessen every year: so far as we have noticed, the number of seedling prizes awarded is not large; and we may, from thence, infer that there will not be a very great number of new ones offered the coming spring. Some dissatisfaction has been created by the naming and selling of many seedling flowers, at the high price of 10s. 6d. a plant, which have proved totally worthless, and amateurs and gentlemen who have been eager to possess them, and unable to do so without paying so exorbitantly, have now begun to be shy of seedlings, and buy with greater caution; choosing rather to grow more of the established kinds, than those whose beauty remains unknown, and which often cause sad disappointment to the unlucky purchaser.

The Royal Society and Central School of Horticulture and Agriculture, in order to prevent as much as possible the deception which has been too repeatedly practised, have established certain rules and regulations, by which the judges at all the exhibitions will be guided in making their awards of prizes. These appear to be drawn up with much care, and, if adhered to, cannot fail to have a very beneficial effect, and be the means of preventing any false estimate of a bloom to be given to the public. The decisions of the judges, who are always selected from the most eminent fanciers, will be looked upon as a sure test of the excellent properties and real value of seedling blooms. The following are the rules and regulations we allude to:—

DAHLIAS TO BE SHOWN IN THREE CLASSES.

Collections of 36 blooms for dealers.

Collections of 24 blooms for growers of more than 200.

Collections of 12 blooms for growers of less than 200.

Prizes will depend on the Judges, the first in each class being the gold medal, value £7 17s. 6d., or five guineas money or plate; the other prizes varying down to the silver medal, value £1 11s. 6d., or one guinea in plate or money.

Besides these prizes for stands and collections, the judges may select from the rejected stands any number of single blooms which are models of fine proportion and good growth, and award them prizes from 2s. 6d. to 10s. 6d. value; so that persons who may not be able to make up a first-rate stand, but yet possess a few very fine flowers, may look with confidence for the single bloom prizes, though rejected by the judges from the stand prizes.

No stand which contains a flower with *pointed petals*, or a *defective eye*, or with two *flowers too much alike*, or a bloom *decayed*, or *greatly damaged by vermin*, or a flower not regularly sold out, can be awarded a prize as a *stand*, though there be no other defect.

The object of adopting this plan is, that of teaching as well as encouraging inexperienced showers; it being presumed that, for the credit of the Society, those single flowers which possess good properties will *alone be selected* for single bloom prizes, and be marked accordingly; showing at once the description of flower to be cultivated and exhibited, and encouraging, by these prizes, the very smallest and most inexperienced growers to show a stand, even if they cannot avoid defects. It may thus occur, that stands which would be rejected instantly, on account of glaring faults in one half the flowers, may nevertheless contain two or three blooms deserving prizes.

The judges will, in a trifling degree, relax in the severity of their judgment on the stands of 12; and therefore it may happen that, in the

stands of 24 and 36, some blooms may be unnoticed, which, in the stands of 12, would have had a prize.

SEEDLINGS OF 1837, TO BE SHOWN IN TWO'S, THOSE OF 1833 IN SINGLE BLOOMS.

These must exhibit something *new in character or color*, or be *unexceptionable in form*, to obtain a prize; and a record of these prizes will be kept, with a true description of the flower. To facilitate this, the grower should be ready with a name or number.

The following is the second award of prizes made to the exhibitors on Saturday, Sept. 15th, 1838:—

STANDS OF THIRTY-SIX BLOOMS. GOLD MEDAL—VALUE £7 7s. 6d., OR FIVE GUINEAS IN MONEY OR PLATE.

Mr. Willmer, Sunbury—Widnall's Duke of Devonshire, Countess of Torrington, Fisherton Champion, Dodd's Mary, Oxford Rival, Nevill's Hope, Widnall's Conductor, Jeffery's Triumphant, Grant Thorburn, Widuall's Rienzi, Egyptian Prince, Pre-eminent, Dido, Glory of the West, Lord Ashley, Middlesex Rival, Seaman's Clara, Mount Pleasant Rival, Maher's Rosetta, Rival Sussex, Rosea Elegans, Suffolk Hero, Rival Granta, Beauty of Edinboro', Clark's Julia, Elphinston's Purple Perfection, Vanguard, Girling's Topaz, Holman's Lord Byron, Foster's Eva, Springfield Major, Bowman's Premier, Conqueror of Europe, Mountjoy's Ovid, Splendissima, Marquis of Lothian.

LARGE SILVER MEDAL, OR TWO GUINEAS IN MONEY OR PLATE.

Mr. Gaines, Battersea—Gaines' Queen Victoria, Gaines' Titus, Sir H. Fletcher, Suffolk Hero, Unicorn, Vivid Rosetta, Sir John Sebright, Springfield Rival, Topaz, Ruby, Kingscote Rival, Royal Standard, Ne Plus Ultra, Lord Byron, Duke of Wellington, Middlesex Rival, Ovid, Lady Flower, Springfield Major, Eva, Duke of Devonshire (Glenny's,) Ada Byron, Rival Sussex, Mrs. Bucknall, Purple Perfection (Squibb's,) Robert le Diable, Beauty (Brown's,) Ion, Rival Granta, Unique, Rosetta (Jeffery's,) Grant Thorburn, Duke of Devonshire (Widnall's,) Gloria, Knight's Victory.

Mr. Cormack, New-cross, Kent-road—Suffolk Hero, Springfield Rival, Ruby, Duchess of Sutherland, Rival Sussex, Knight's Victory, Rival Scarlet, Topaz, Dodd's Mary, Countess of Orkney, Louthianum, Royal Standard, Purple Perfection, Cheltenham Rival, Lord Byron, Alman's Rienzi, Lilac Perfection, Wells', Lady Kinnaird, Bontisholl, Blandina, Calliope, Captain Cook, Columbus, Cleopatra, Conqueror of Europe, Countess of Torrington, Glory of the West, Hero of Seven-oaks, Cormack's Vivid, Cormack's Robert le Diable, Cormack's Miranda, Cormack's Boadicea, Hope, Knockholt Rival, Sir Henry Fletcher, Unique.

SINGLE BLOOM PRIZES.

Mr. Gall, gardener to Rev. E. Colridge, For Nevil's Hope, 10s. 6d; Royal Standard, 5s; Purple Perfection, 5s; Duke of Wellington, 5s; Rosetta, 5s; Jeffery's Triumphant, 2s. 6d; Springfield Rival, 2s. 6d; Marquis of Lothian, 2s. 6d; Beauty of Berks, 2s. 6d; Knight's Victory, 2s. 6d; Conqueror of Europe, 2s. 6d; Suffolk Hero, 2s. 6d; Mary, 2s. 6d.

Mr. Mosely, gardener to J. Townsend, Esq., for Unique, 5s; Suffolk Hero, 2s. 6d; Marquis of Northampton, 2s. 6d.

Mr. Sheppard, Bedford, for Royal Standard, 5s; Hero of Wimbourne, 2s. 6d; Springfield Rival, 2s. 6d; Triumphant, 2s. 6d; Middlesex Rival, 2s. 6d.

Mr. Mayle, Bedford, for Springfield Rival, 7s. 6d; Topaz, 5s; Dodd's Mary, 2s. 6d; Eva, 2s. 6d; Sir H. Fletcher, 2s. 6d.

Mr. Henbrey, Croydon for Unique, 2s. 6d; Springfield Rival, 2s. 6d.

Mr. Jackson, Kingston, for Rival Sussex, 10s. 6d; Dodd's Wellington, 7s. 6d; Unique, 7s. 6d; Squibb's Purple Perfection, 7s. 6d; Levick's Triumphant, 5s.

Mr. Knight, Middlesex Rival, 5s; Rosea Elegans, 5s; Topaz, 5s; Squibb's Purple Perfection, 5s; Countess of Torrington, 5s; Tower of Sarum, 2s. 6d; Unique, 2s. 6d; Pre-eminent, 2s. 6d.

Mr. M'Cloud, for Unique, 7s. 6d; Rubens, 5s; Lady Dartmouth, 5s; Blandina, 2s. 6d; Hero of Seven-oaks, 2s. 6d; Suffolk Hero, 2s. 6d.

Mr. Parsons, for Unique, 7s. 6d; Brown's Beauty, 7s. 6d; Purple Perfection, 7s. 6d; Dray's Coriolanus, 2s. 6d.

Mr. Gurney, gardener to Capt. Lomax, for Springfield Major, 5s; Rival Sussex, 2s. 6d; Marquis of Lothian, 2s. 6d.

Mr. M'Culloch, gardener to James Drake, Esq., for Nevill's Hope, 5s; Purple Perfection, 5s; Suffolk Hero, 2s. 6d; Rosetta, 5s.

Mr. Mackintosh, gardener to the Hon. Mrs. Elphinstone, for Topaz, 7s. 6d; Rienzi, 2s. 6d; Mrs. Bucknell, 2s. 6d; Thompson's Rival, 2s. 6d.

Messrs. Catleugh and Son, Hans-place, for Knight's Victory, 5s; Joan of Arc, 5s; Springfield Rival, 2s. 6d; Metropolitan Yellow, 2s. 6d; Berkshire Champion, 5s; Hero of Seven-oaks, 2s. 6d.

Mr. Dover, Great Russell-street, for Topaz, 7s. 6d; Mary Queen of Scots, 7s. 6d; Knight's Victory, 7s. 6d; Unique, 5s.

The Cambridge Florists' Society, the Salisbury Plain Dahlia Exhibition, the York Floral and Horticultural Exhibition, the Oxford Dahlia Show, the Oswestry Floricultural Society, and the Cambridgeshire Horticultural Society, are those whose reports we now present to our readers, in addition to the above. The Birmingham Grand Show, probably the greatest in the kingdom, and the Metropolitan Society of Florists' Exhibition we have not had returns of, but we shall probably get them in season for our January number. We begin with the reports in the order they have just been named:—

Cambridge Florists' Society.—The Grand Dahlia Show of this Society took place at the large Assembly Room, at the Hoop Hotel, on Friday, the 21st instant. The decorations, which were under the superintendence of Mr. Catling, were such as fully to maintain the reputation attained by him in this department. As usual, the chief attraction to the real admirers of this beautiful flower was the display at each end of the room; one containing the prize flowers of the professional growers, and the opposite emulating and nearly equalling it, containing the prizes awarded to the amateurs. Indeed, we hardly knew which most merited our attention. Mr. Boning's flower, which obtained the premier prize, was greatly admired, as also was its rival on the professional stand. Between the prize flowers was placed a long range of elliptic stands, which were covered with a profusion of most splendid dahlia blooms, of every variety of color; most of them would, two or three years since, have been thought worthy of a place on the grand stand. Mr. Searle's stand of six various dahlias, which obtained the first prize, were of unusual excellence. Mr. Headly also exhibited four most perfect specimens. The China asters and French and African marigolds were not numerous; but those shown were of superior quality. The evening show was more fully attended than usual by our fair townswomen, promenading the room, evidently much gratified by the splendid scene, and after the ladies had retired, upwards of a hundred members and their friends spent the remainder of the evening with music and song, the Cambridge military band having kindly lent their assistance. The following is the award of the Judges on this occasion:—

AMATEUR CULTIVATORS.—DAHLIAS. MR. JOHN BONING, P. P., THE BEST DAHLIA OF ANY COLOR—THE SOCIETY'S PRIZE, AND 5s. ADDED BY MR. EKIN.

Crimson, Scarlet, or Red—Mr. Headly, Glory of the West; Mr. Searle, Calliope; Mr. Headly, Diadem of Flora; Mr. Hudson, Levick's

Triumphant; Mr. Paine, Glory of the West; Mr. J. Taylor, Countess of Morton.

White and Shaded White—Rev. Mr. Fitch, Seaman's Clara; Mr. Searle, Prima Donna; Mr. Headly, Bride of Abydos; Mr. Peck, Blandina; ditto, ditto; Rev. A. Fitch, Blandina.

Very Dark—Mr. Headly, Addison; ditto, ditto; Mr. J. Taylor, Metropolitan Perfection; ditto, Beauty of Lullingstone; ditto, ditto; Mr. Haylock, Metropolitan Perfection.

Orange and Buff—Mr. R. Boning, Brown's Sarah; Mr. Searle, ditto; Mr. Headly, ditto; Mr. J. Taylor, ditto; Mr. Searle, ditto; Mr. J. Taylor, ditto.

Purple and Shaded Purple—Mr. Searle, Ne Plus Ultra; Mr. R. Boning, ditto; Mr. J. Taylor, Addison; ditto, Duke of Bedford; Rev. A. Fitch, Conductor; Mr. Hudson, Squibb's Purple Perfection.

Striped and Colors—Rev. A. Fitch, Hon. Mrs. Harris; ditto, ditto; Mr. Paine, Sir Walter Scott; ditto, Hon. Mrs. Harris; Mr. Peck, ditto; Mr. Hudson, Sir Walter Scott.

Light Ground, Edged or Mottled—Mr. J. Taylor, Lady Dartmouth; Mr. R. Headly, ditto; ditto, Beauty of Kingscote; ditto, Hon. Mrs. Ashby; Rev. A. Fitch, Beauty of Kingscote; Mr. Searle, ditto.

Yellow and Sulphur—Mr. Searle, Topaz; Rev. A. Fitch, ditto; Mr. J. Taylor, ditto; Mr. Searle, ditto; ditto, ditto; Mr. R. Headly, ditto.

Rose and Rosy Crimson—Mr. John Boning, Warminster Rival; Mr. Hudson, ditto; Mr. J. Taylor, Sir Henry Fletcher; Mr. Searle, Ruby; Mr. R. Headly, Rienzi.

Lilac—Mr. Hudson, Madonna; Mr. J. Taylor, Brown's Beauty; Mr. Hudson, Lilac Perfection; Rev. A. Fitch, Sylvia; Mr. John Boning, Lilac Perfection; Rev. A. Fitch, ditto.

Claret and Puce—Mr. J. Boning, Suffolk Hero; Mr. Peck, ditto; Mr. J. Taylor, Knight's Victory; Mr. Searle, ditto; Mr. J. Taylor, Springfield Rival; Mr. R. Headly, ditto.

Seedlings—Mr. Searle, Mr. Hudson, Mr. Peck, Mr. Hudson.

Mr. Widnall's Prize to Amateurs—Six Dahlias, (various.)

First Six—15s. Mr. Searle, Dodd's Mary, Suffolk Hero, Brown's Sarah, Knight's Victory, Topaz, Conductor.

Second Six—10s. Mr. R. Headly, Suffolk Hero, Addison, Unique, Warminster Rival, Seedling, Springfield Rival.

Third Six—5s. Mr. J. Taylor, Rienzi, Dodd's Mary, Bontisholl, Ruby, Brown's Sarah, Springfield Rival.

Best one—Mr. Peck, Lady Dartmouth.

Mr. Brewer's Prize to Amateurs—Four Dahlias, (various.)

First Four—15s. Mr. R. Headly, Ovid, Countess of Torrington, Rienzi, Springfield Rival.

Second Four—10s. Mr. Searle, Countess of Torrington, Squibb's Purple Perfection, Brown's Sarah, Knight's Victory.

Third Four—5s. Rev. A. Fitch, Dodd's Mary, Addison, Springfield Rival, Suffolk Hero.

Best Seedling—2s. 6d. Mr. Headly.

PROFESSIONAL CULTIVATORS' DAHLIAS—MR. WIDNALL, P. P., THE BEST DAHLIA OF ANY COLOR, CONDUCTOR.

Crimson, Scarlet, or Red—Mr. Widnall, Glory of the West; Mr. Widnall, Brown's Ion, Mr. Headland, Glory of the West; Mr. Widnall, Lord Lyndhurst; Mr. Headland, Douglas's Glory; Mr. Headland, Glory of the West.

White and Shaded White—Mr. Headland, Lady of Oulton; Mr. Headland, ditto; Mr. Widnall, Forster's Eva; Mr. Stittle, Blandina; Mr. Headland, Lady of Oulton; Mr. Widnall, Blandina.

Very Dark—Mr. Green, Addison, Mr. Green, ditto; Mr. Hudson,

Metropolitan Perfection; Mr. Green, Addison; Mr. Stittle, Metropolitan Perfection; Mr. H. Scott, Addison.

Orange and Buff—Mr. Widnall, Brown's Sarah; ditto, Dodd's Duke of Wellington; Mr. Headland, Brown's Sarah; Mr. Widnall, ditto; Mr. Headland, ditto; ditto, ditto.

Purple and Shaded Purple—Mr. Widnall's Conductor; ditto, Conductor; ditto, Horatio; ditto, Ovid; Mr. Hudson, Purple Perfection; Mr. Widnall, ditto.

Striped, any Colors—Mr. Widnall, Sir Walter Scott; Mr. Stittle, Picta formosissima; Mr. Green, Sir Walter Scott; Mr. Green, ditto; Mr. Stittle, Picta formosissima; Mr. H. Scott, Hon. Mrs. Harris.

Light, Ground Edged or Mottled—Mr. Widnall, Dodd's Mary; Mr. Norman, ditto; Mr. Widnall, ditto; Mr. Headland, Lady Dartmouth; Mr. Widnall, Countess of Torrington; ditto, Hon. Mrs. Ashley.

Yellow and Sulphur—Mr. Widnall, Unique; ditto, ditto; ditto, ditto; ditto, Topaz; ditto, ditto; Mr. Headland, ditto.

Rose and Rosy Crimson—Mr. Widnall, Neville's Hope; Mr. Headland, ditto; Mr. Widnall, Warminster Rival; ditto, Girling's Ruby; Mr. Hudson, Warminster Rival; Mr. Stittle, ditto.

Lilac—Mr. Widnall, Lady Kinnaird; ditto, Rhoda; Mr. Green, Brown's Beauty; Mr. Widnall, Lady Kinnaird; ditto, Rhoda; ditto, Brown's Beauty.

Claret and Puce—Mr. Ready, Suffolk Hero; Mr. Widnall, Springfield Rival; ditto, ditto; ditto, Suffolk Hero; ditto, ditto; ditto, Cambridge Hero.

Seedlings—Mr. Widnall's letter T; ditto, 1 in 37; ditto, 5 in 37; ditto, P. 1; Mr. Ready; Mr. Ready.

The Salisbury Plain Dahlia Exhibition.—FIRST PRIZE, THIRTY-SIX BLOOMS. Mr. Squibb, Salisbury, for Sir Henry Fletcher, Lady Dartmouth, Suffolk Hero, Marquis of Lothian, Eva, Fisherton Champion, Middlesex Rival, Unique, Bowling Green Rival, Piltown Rival, Conqueror of Europe, Mill's Lilac Perfection, Sir R. Harland, Duchess of Kent (Mitchell's), Jeffrey's Triumphant, Lawson's Grand Purple, Stuart Wortley, Scale's Adonis, Robert Buist, Duke of Devonshire, Smith's Standard, Dodd's Mary, Victory, Bontisholl, Rival Sussex, Hope, Columbine (Salt's), Ne Plus Ultra, Oxford Rival, Rosetta, Ruby, Henrietta Temple, Pre-eminent. 2. Mr. Keynes, Salisbury, for Vanguard, Topaz, Watford Surprise, Hero of Seven-oaks, Independent Giraffe, Middlesex Rival, Dodd's Mary, Victory, Eva, Jeffrey's Triumphant, Conqueror of Europe, Suffolk Hero, Unique, Sir Henry Fletcher, Oxford Rival, Bontisholl, Glory of the West, Splendissima, Beauty of Berks, Lady Dartmouth, Ne Plus Ultra, Clio Perfecta, D. of Flora, Henrietta Temple, Robert Buist, Marquis of Lothian, Calliope, Pre-eminent, Berkshire Champion, Rival Sussex, Hope, Mrs. Broadwood, Ruby, Springfield Rival. 3. Mr. Bates, Oxford, for Dodd's Mary, Victory, Lavinia (Widnall's), Grant Thorburn, Dodd's Duke of Wellington, Suffolk Hero, Rival Sussex, Middlesex Rival, Mount Pleasant Rival, Day's Mary Ann, North Star, Countess of Torrington, Sir Henry Fletcher, D. of Flora, Lady Dartmouth, Springfield, Cecilia (Girling's), Mungo Park, Helena (Macket's), Southey's Glory of Cheshunt, Jeffrey's Brunette, Eva, Duke of Rutland, Young's Rosaline, May's Ne Plus Ultra, Lilac Perfection, Sir Walter Scott, Vicar of Wakefield, Glory of the West, Grand Falconer, Bowman's Pandora, Sontor Johnny, Theodore (Jeffrey's), Unique, Beauty of Bedford, Ruby.

TWENTY-FOUR BLOOMS. AMATEURS.

1. Mr. J. Keynes, Salisbury, for Hope, Victory, Rival Sussex, Oxford Rival, Bontisholl, Unique, Springfield Rival, Glory of the West,

Lady Mallet, Lady Dartmouth, Suffolk Hero, Royal Standard, Fisher-ton Champion, Sir Henry Fletcher, Henrietta Temple, Ne Plus Ultra, Vanguard, Rosetta, Thompson's Rival, Prima Donna, Ruby, Marquis of Lothian, Premier, Sylvia. 2. Mr. Dodds, Salisbury, for Hope, Lady Dartmouth, Suffolk Hero, Mrs. Glenny, Springfield Rival, Conqueror of Europe, Ruby, St. Leonard's Rival, Goldfinder, Victory, Rosetta, Lord Folkestone, Ansell's Unique, Marquis of Lothian, Maid of Judah, Rival Sussex, Lullingstone, Middlesex Rival, Bontisholl, Sir Henry Fletcher, Purple Perfection, Jeffrey's Triumphant, Robert Buist, Bowling-Green Rival. 3. Mr. Brown, Wilton House, for Lady Mallet, Rival Sussex, Mrs. Glenny, Ruby, Goldfinder, Countess of Sheffield, Victory, Conqueror of Europe, Middlesex Rival, Unique, Robert Le Diable, Hope, Beauty of Berks, Dodd's Mary, Lord Folkestone, Mount Pleasant Rival, Vanguard, Celestus, Coriolanus, Thomson's Rival, Etonia, Prima Donna, Suffolk Hero, Purple Perfection.

TWELVE BLOOMS.

1. Mr. Burn, Tottenham Park, for Ruby, Suffolk Hero, Vanguard, Mary, Purple Perfection, Topaz, Scarlet Perfection (John's), Beauty of Bedford, Countess of Torrington, Coriolanus, Lady Temple, Lady Dartmouth. 2. Mr. Drummond, St. Giles. 3. Mr. Kingston, Stockbridge.

SIX BLOOMS.

1. Mr. Kington, Corsham, for Lady Dartmouth, Eva, Piltdown Rival, Suffolk Hero, King's Victory, Duchess of Montrose. 2. Mr. Waters. 3. Mr. Wentworth.

Seedlings, 1837.—1. Mr. Squibb, Fire Ball; 2. ditto, Diamond; 3. Mr. Trollope.

Seedlings, 1838.—1. Mr. Squibb, (named Sir John Astley); 2. Mr. Wentworth; 3. Mr. Downing.

The York Floral and Horticultural Exhibition.—Class 1—For the best stand of forty-eight blooms of dahlias of different sorts, £5, to Mr. Samuel Widnall, of Grantchester, near Cambridge, for the following varieties:—Widnall's Ne Plus Ultra, Cambridge Hero, Conductor, Reliance, Rienzi, Duke of Devonshire, Lady Dartmouth, Marchioness of Tavistock, Perfection, Sir Walter Scott, Pizarro, Ansell's Unique, Foster's Eva, Lord Lyndhurst, Brown's Ashley, Springfield Rival, Marquis of Lothian, Suffolk Hero, Beauty of Kingscote, Queen's Superba, Knight's Victory, Hope, Dodd's Mary, Royal Standard, Variabilis, Prima Donna, Mount Pleasant Rival, Sarah, Countess of Torrington, Squibb's Purple Perfection, Topaz, Brown's Beauty, Grant Thorburn, E. Purple Perfection, Lady King, Diadem of Flora, Bontisholl, Ruby, Mrs. Broadwood, Duke of Wellington, Glory of the West, Berkshire Champion, Rhoda, Lady Kinnaird, Calliope, Warminster Rival, Exemplar, Zolermio.

Second best stand of 48 blooms of dahlias—£4 to Mr. James Edwards, of Layerthorpe, near York, for Duchess of Montrose, Girlina's Ruby, Zolermio, Miss Cooper, Countess of Radnor, Dr. Halley, Sir Henry Fletcher, Exquisite, Widnall's Reliance, Rienzi, Levick's Triumphant, Lord Derby, Warminster Rival, Jeffrey's Triumphant, Middlesex Rival, Widnall's Nimrod, Sir H. Fletcher, Sulphurea Perfecta, Suffolk Hero, Standford's Madonna, Miss Augusta Broadwood, Berkshire Champion, Sir Walter Scott, Mackett's Helena, Seedling of 1835, Hero of St. Giles, King Harold, Gem, Rector of Ackworth, La Carnation, Knight's Victory, York and Lancaster, Rival Sussex, Ansell's Unique, Etonia, Jones's Frances, Coriolanus, Lady Dartmouth, Widnall's Ne Plus Ultra, Beauty of Bedford, Hon. Mrs. Harris, Squibb's Purple Perfection, Lord Byron, Diadem of Flora, May's Ne Plus Ultra, and Willison's Purple Perfection.

Third best stand of 48 blooms of dahlias—£3 to Mr. George Braide.

Class 2—Best dahlia of any color—first prize, Mr. Samuel Widnall, £1; second, Mr. James Edwards, 10s; third, Mr. Cooper, 7s. 6d; fourth, Mr. Willison, of Whitby, 7s. 6d; fifth, Mr. Thomas Backhouse, 5s; sixth, Mr. Thomas Miller, 2s. 6d.

[The first and second classes were open to amateurs, nurserymen, and gentlemen's gardeners.]

Class 3—For the best stand of twenty-four blooms of dahlias—Mr. John Robinson, of Sheffield, 3£; second best, Mr. Coward, 2£; third best, James Richardson, Esq., 1£.

[The third and fourth classes were open to amateurs only.]

Class 4—Best dahlia of any color—first prize, Mr. Samuel Coward's Springfield Rival, 10s.

Class 5—[Open to gentlemen's gardeners.]—For the best stand of twenty-four blooms of dahlias—Rev. F. Best, £3; second best, Mr. George Braide, £2; third best, Mrs. Thompson, £1.

Class 6—[For gentlemen's gardeners.]—Best dahlia of any color—1. Mr. Braide's Sir Henry Fletcher, 10s.

Class 7—[Open for all.]—Best dahlia of any color—1. Mr. Widnall's Ne Plus Ultra, £1; 2. Mr. John Robinson's Girling's Suffolk Hero, 10s.

Class 8—Best unnamed seedling dahlia of 1837 and 1838—Mr. Joseph, Headly's Perfection (dark maroon,) £1; 2. Mr. Widnall's No. 2, 1837 (blush,) 10s; 3. Rev. C. Hall (primrose,) 7s. 6d; 4. Mr. John Evans (maroon,) 5s; 5. Mr. G. Braide (white ground tipped with lilac,) 2s. 6d.

The Oxford Dahlia Show.—FIRST CLASS FOR NURSERYMEN.—TWENTY-FOUR DISSIMILAR BLOOMS. 1. Mr. Willmer, of Sunbury, for Royal Standard, Suffolk Hero, Stone's Yellow Perfection, Mungo Park, Fisherton Champion, Dodd's Queen of Scots, Dodd's Mary, Lady Walpole, Maid of Judah, Rival Sussex, Metropolitan Yellow, Ansell's Unique, Egyptian Prince, Foster's Eva, Wheeler's Queen of Whites, Beauty of the Marsh, Mountjoy's Ovid, Granta Superb, Parsons's Burdett, Sir Henry Fletcher, Miss Scroop, Clara, Conqueror of Europe, Clio Perfecta. 2. Messrs. Catleugh and Son, of Chelsea, for Berkshire Champion, Beauty of Bedford, Bowling-Green Rival, Knight's Victory, Grand Duke of Sussex, Conqueror of Europe, Unique, Suffolk Hero, Middlesex Rival, Dodd's Duke of Wellington, Brown's Beauty, Royal Standard, Topaz, Springfield Rival, Lady Kinnaird, Sir Henry Fletcher, Dodd's Mary, Elphinstone's Glory, Blandina, Miss A. A. Broadwood, Rosa Superba, Marquis of Lothian, Metropolitan Yellow, Clio Perfecta. 2. Mr. Gregory, of Cirencester, for Jeffrey's Triumphant, Killner's Etonia, Forsyth's Analaby, Kingscote Hero, Squibb's Shakspeare, Brown's Beauty, Clio Perfecta, Mount Pleasant Rival, Topaz, Springfield Major, Mrs. Glenny, Marquis of Lothian, Sir Henry Fletcher, Springfield Rival, Mungo Park, Eva, Blandina, Purple Perfection, Lady Flower Lady Dartmouth, Ruby, Middlesex Rival, Brunette, Hope. 4. Mr. Brown, of Slough, for Marquis of Lothian, Topaz, Duke of Wellington, Conqueror of Europe, Jeffrey's Triumphant, Metropolitan Yellow, Rival Sussex, Maria Edgeworth, Rival Granta, Mary, Suffolk Hero, Beauty of Lullings-tone, Stone's Yellow Perfection, Sir Henry Fletcher, Corrinne, Ne Plus Ultra, Eva, Robert Buist, Stuart Wortley, Reliance, Unique, Springfield Rival, Ariadne, Oxford Rival.

The finest pan of flowers in this class was exhibited by Mr. Bates, of Oxford, but he was disqualified by having, in the opinion of the judges, two flowers alike in the same stand (Countess of Torrington.)

SECOND CLASS FOR NURSERYMEN.—EIGHTEEN DISSIMILAR BLOOMS.

1. Mr. Bates, of Oxford, for Suffolk Hero, Dodd's Mary, Victory,

Squibb's Purple Perfection, Foster's Eva, Allman's Lord Byron, Helena, Louthianum, Ruby, Glory of the West, Glory of Cheveley, Springfield Rival, Ansell's Unique, North Star, Pandora, Blandina, Beauty of Bedford, Conqueror of Europe. 2. Messrs. Catleugh and Son, of Chelsea, for Miss A. A. Broadwood, Springfield Rival, Ruby; Piltown Rival, Duke of Wellington, Maid of Judah, Conqueror of Europe, Beauty of Berkshire, Nulli Secundus, Middlesex Rival, Metropolitan Yellow, Rosa Superba, Foster's Eva, Beauty of Bedford, Dodd's Mary, Rival Sussex, Topaz, Suffolk Hero. 3. Mr. Willmer, of Sunbury, for Oxford Rival, Rosa Elegans, Robert Buist, Tower of Sarum, Clio Perfecta, Miss Scroop, Sir Henry Fletcher, Granta Superb, Grant Thorburn, Foster's Eva, Ansell's Unique, Countess of Torrington, Metropolitan Yellow, Dodd's Mary, Suffolk Hero, Hope, Fisherton Champion. 4. Mr. Brown, of Slough, for Marquis of Lothian, Oxford Rival, Suffolk Hero, Conqueror of Europe, Metropolitan Yellow, Maria, Duke of Devonshire, Eva, Stuart Wortley, Maria Edgeworth, Unique, Beauty of Lullingstone, Lady Kinnaird, Reliance, Springfield Rival, Corinne, Pre-eminent, and one not named.

THIRD CLASS FOR AMATEURS, ETC.—TWELVE DISSIMILAR BLOOMS.

1. Mr. King, of Hillingdon, for Lady Dartmouth, Suffolk Hero, Royal Standard, Topaz, Sussex Rival, Clio Perfecta, Springfield Rival, Unique, Marquis of Lothian, Ruby, Stuart Wortley, and one not named. 2. Mr. Hillier, of Oxford, for Grand Duke of Sussex, Oxford Rival, Suffolk Hero, Clio Perfecta, Bianca, Sir Henry Fletcher, Topaz, Middlesex Rival, Bontisholl, Dodd's Mary, Springfield Rival, Widnall's Perfection. 3. Mr. Bragg, of Windsor, for Conqueror of Europe, Beauty of Lullingstone, Foster's Eva, Jeffrey's Triumphant, Beauty of Berks, Dodd's Mary, Ruby, Prima Donna, Rival Sussex, Hope, Lady Dartmouth, Springfield Rival. 4. Mr. Cooper, of Bray, no names given.

FOURTH CLASS FOR AMATEURS, &C. NINE BLOOMS.

1. Mr. King, of Hillingdon, for Rival Sussex, Lady Dartmouth, Ruby, Clio Perfecta, Beauty of Lullingstone, Clark's Julia, Rosetta, Tower of Sarum, Springfield Rival. 2. Mr. Ford, of Pinkney's Green, no names given. 3. Mr. Hillier of Oxford, for Dodd's Mary, Suffolk Hero, Sir Henry Fletcher, Middlesex Rival, Topaz, Paris, Jeffrey's Triumphant, Bontisholl, Diadem of Flora. 4. Mr. Bragg, of Windsor, for Foster's Eva, Middlesex Rival, Brown's Sarah, Springfield Rival, Dodd's Mary, Suffolk Hero, Lady Dartmouth, Squibb's Purple Perfection, Stone's Yellow. 5. Mr. Cooper, of Bray, no names given. 6. Mr. Curll, of Tusmore, for Purple Perfection, Topaz, Horwood's Triumphant, Conqueror of Europe, Springfield Rival, Giraffe, Ruby, Horwood's Elizabeth, Holman's Scarlet Perfection.

FIFTH CLASS SWEEPSTAKES FOR NURSERYMEN, THIRTY-SIX BLOOMS.

FIVE ENTRIES.

Mr. Brown, of Slough, for Topaz, Marquis of Lothian, Maria Edgeworth, Royal Standard, Conqueror of Europe, Rival Scarlet, Metropolitan Yellow, Jeffrey's Triumphant, Brown's Beauty, Medora, Duke of Wellington, Suffolk Hero, Sir H. Davy, Duke of Devonshire, Sir H. Fletcher, Eva, Shakspeare, Stone's Yellow Perfection, Coriolanus, Reliance, Beauty of Lullingstone, Miss A. A. Broadwood, Dodd's Mary, Middlesex Rival, Oxford Rival, Stuart Wortley, Unique, Rival Scarlet, Maria, Corinne, Ne Plus Ultra, Springfield Rival, Duke of Devonshire, Robert Buist, Blandina, Purple Perfection.

SIXTH CLASS SWEEPSTAKES FOR AMATEURS, &C., TWELVE BLOOMS.

FIVE ENTRIES.

Mr. Bragg, of Windsor, for Lady Rednard, Suffolk Hero, Foster's Eva, Piltown Rival, Conqueror of Europe, Allman's Lord Byron, Bi-

nca, Springfield Rival, Dodd's Mary, Countess of Torrington, Ruby, Countess of Sheffield.

SEVENTH CLASS. SEEDLINGS.

Seedlings of 1837.—1. and 2. Mr. Willmer, of Sunbury; 3. Messrs. Catleugh and Son (Rose of Sharon); 4. Mr. Gregory, of Cirencester; 5. and 6. Mr. Hodges, of Cheltenham.

Seedlings of 1838.—1. Mr. Willmer, of Sunbury. The other blooms exhibited were not considered worthy of a prize.

Oswestry Floricultural Society.—The annual meeting of this Society, for the exhibition of dahlias, took place on Monday, the 17th instant. The collection of flowers, as compared to former years, was small, owing to great numbers having been destroyed by the severity of the late frosty nights; there were, however, many blooms perfect and unique in their kinds, and the nobility and gentry, who honored the Society with their presence, expressed themselves highly gratified by the exhibition. The prizes were awarded as follows:—

The premier prize, to Mr. T. S. Wood, of Oswestry, for the best pan of twelve dissimilar blooms, consisting of Mrs. Wilkinson, Warminster Rival, Marquis of Lothian, Holman's Scarlet Perfection, Middlesex Rival, Etonian, Suffolk Hero, Widnall's Perfection, Springfield Rival, Prima Donna, Lord Lyndhurst, Hon. Mrs. Harris.

Second best pan—Mr. Morgan, Oswestry, with Marquis of Lothian, Holman's Scarlet Perfection, Girling's Topaz, Warminster Rival, Dodd's Mary Queen of Scots, Hon. Mrs. Harris, Foster's Eva, Sir Henry Fletcher, Rival Sussex, Gem, Springfield Rival, Sir Walter Scott.

There were only two competitors for the third best pan, but owing to some errors in description, they were both declared disqualified.

Special prize for the best bloom, to Mr. Morgan, Marquis of Lothian.

Best seedling.—Richard Thomas, Aston.

The following were adjudged the best in their several classes:—

White—1. Rev. S. Donne, Bride of Abydos; 2. Mr. Jackson, King of the Whites; 3. Mr. G. D. Owen, Dray's Blandina.

Yellow—1. Mr. Gething, Topaz; 2. Mr. Gething, Ansell's Unique; Mr. Malpas, Sulphurea elegans.

Orange and Buff—1. Mr. Gething, Dodd's Duke of Wellington; 2. Mr. T. S. Wood, Sir Walter Scott; 3. Mr. Malpas, Brewer's Mulder.

Edged—1. Mr. Gething, Countess of Torrington; 2. Rev. S. Donne, Dodd's Mary; 3. Mr. G. D. Owen, Apothecaries' Lord Nelson.

Striped—1. Mr. T. S. Wood, Hon. Mrs. Harris; 2. Mr. Malpas, Barrett's Unique; 3. Mr. Jackson, Mary Anne.

Scarlet—1. Mr. Morgan, Holman's Scarlet Perfection; 2. Mr. G. D. Owen, Lord Lyndhurst; 3. Mr. Malpas, Cassina.

Lilac—1. Mr. Gething, Brown's Beauty; 2. Rev. S. Donne, Rose Incomparable; 3. Mr. Thomas, Lilac Perfection.

Rose—1. Mr. Gething, Marquis of Lothian; 2. Mr. T. S. Wood, Hope; 3. Mr. Gething, Girling's Ruby.

Crimson—1. Mr. Jackson, Granta; 2. Mr. Thomas, Lord Liverpool; 3. Mr. Malpas, Jones's John Bull.

Purple—1. Mr. T. S. Wood, Jeffrey's Triumphant; 2. Mr. T. S. Wood, Middlesex Rival; 3. Mr. Gething, Squibb's Purple Perfection.

Light Varieties—1. Mr. Morgan, Foster's Eva; 2. Mr. T. S. Wood, Mrs. Wilkinson; Mr. T. S. Wood, Conqueror of Europe.

Dark Varieties—1. Mr. T. S. Wood, Rival Sussex; 2. ditto, Suffolk Hero; 3. ditto, Robert le Diable.

The Cambridgeshire Horticultural Society.—Twelve best dahlias (various)—*Medal*—Ne Plus ultra, Lady Dartmouth, Conductor, Cam-

bridge Hero, Ruby, Dodd's Mary, Unique, Hope, Eva, Calliope, Meeket's Helen, Ovid—Mr. Widnall.

Second best ditto—Eva, Dodd's Mary, Clark's Julia, Topaz, Suffolk Hero, Cambridge Hero, Victory, Standard, Sir Henry Fletcher, Springfield Rival, Jeffrey's Triumphant, Squibb's Purple Perfection—Mr. Searle.

Third best ditto—Purple Perfection, Cambridge Hero, Suffolk Hero, Countess of Torrington, Rienzi, Topaz, Unique, Sylvia, Carmine Perfection, Ruby, Calliope, Springfield Rival—Mr. R. Headly.

Fourth best ditto—Squibb's Purple Perfection, Suffolk Hero, Quillend Perfection, Gold-finder, Westminster Rival, Addison, Lady Dartmouth, Maid of Tudor, Ruby, Levick's Triumphant, Dodd's Mary, Jeffrey's Triumphant.

Best seedling dahlia—Mr. Widnall; second best ditto, Mr. R. Headly; third best ditto, Mr. Ready.

After we have given the returns of all the large shows, we shall sum up those flowers which have been eminently successful, and add some further remarks upon the exhibitions.—*Ed.*

ART. II. *Horticultural Association of the Valley of the Hudson.*

This association was organized on the 30th of May last, by some of the most zealous amateurs and practised cultivators residing on the banks of the river Hudson, and the adjacent counties. The objects aimed at, are the improvement of the arts of culture generally; and the semi-annual exhibitions which are to take place at New York, and various places on the river, will, it is believed, be the means of increasing largely the taste for pomology, floriculture, and horticulture generally, throughout the entire state. The old Horticultural Society of New York having gradually dwindled away and become extinct, its place will, we hope, be taken, and its object more effectually promoted by the more active zeal, and broader interests and purposes of this new association. The territory directly within the scope of the association, is one of the most fertile and highly cultivated portions of the Middle States, and the exhibitions, when the society shall be fully in operation, will, we have no doubt, be fully equal to those of any similar society in the country.

The first exhibition, which was in fact the first meeting of the Association, took place on the 28th and 29th of September, in the large museum room of the Lyceum of Natural History, New York. Owing to the previous severe and protracted drought, and the imperfect notices of the exhibition, which had been given to the members on some parts of the river, the extent and variety of articles shown were not so large as may, hereafter, reasonably be anticipated. The splendor of the dahlias, however, considering the dry weather, was remarkable, and the fine collection shown by Mr. Thorburn, from his garden at Hallet's Cove, L. I., was particularly beautiful. Upwards of one hundred varieties of apples were on the tables, from the orchards of the President, Judge Bucl, of Albany, and the enormous size of some of the products on the vegetable list, afforded abundant proof of the richness and fertility of the soil in the neighborhood of the city.

J. A. Thompson, Catskill, presented the following fruits. *Apples*:—Irish peach apple, Paradise Sweeting, Beauty of Wiltz, Jersey sweet,

Fallowater, Jonathan or new Spitzenburg, Kerry pippin, Kentish fill-basket, Æsopus Spitzenburg, Michael Henry pippin, Pigeon rouge, Gloria mundi, Celine, new seedling. Several varieties of beautiful seedling *crabs*, one of which was sweet and good-flavored. *Pears*:—Napoleon, Virgalieu, Passe Colmar, Charles of Austria, Seckel, Brown beurré, Le Curé, Bezi Vaet, beurré Crapaud, beurré Diel, Bishop's Thumb, Bergamotte de la Pentacote, &c.

R. Arden, West Point, Pied Rouge, Golden Chasselas, and Chasselas of Fontainbleau grapes, from the open air. Very fine Seckel, and St. Michael pears; Holland and white magnum bonum plums.

J. Buel, Albany, about one hundred and twenty varieties of apples, among which were the following: Ortley, Pomme Gris, Downton pippin, Golden Harvey, winter Pearmain, Tewksbury winter blush, Jonathan, Roxbury russet, black Gilliflower, Short stem, Æsopus Spitzenburg, Fern's pippin, Baldwin, Spring russet, Grainwinkle, Golden Reinnette, Seek-no-further, American wine, Duchess of Oldenburgh, Buel's pippin, Ross Nonpareil, Winesap, Young's long-keeper, Pennock, Kirke's Lord Nelson, Carthouse, Bellige pippin, Foxley, red Pigeon, Guire, Newark pippin, Buckman's pearmain, Reinnette of Britain, &c. &c. Also, about twenty varieties of Flemish and other fine pears. [Mr. Downing, the secretary, has been requested, by the Society, to furnish a description of these, and we are gratified to have the pleasure of stating that the report of them will appear in an early number of our next volume.—*Ed.*]

C. & A. J. Downing, Botanic Garden and Nurseries, Newburgh.—*Pears*:—Bezi de la Motte, beurré Diel, beurré Bosc, beurré Rans, beurré Capiaumont, Brown beurré, Buffum, Napoleon, Virgalieu, Seckel, St. Germain, Wikinson, Duchess d'Angouleme, Rousselette de Rheims, &c. *Apples*:—Grand Sachem, scarlet Pearmain, Lucombe's seedling, English Golden pippin, Dutch Mignon, monstrous pippin, red Bellflower, yellow Bellflower, Zank, Roxbury russet, Pumpkin sweet, Faneuse. *Plums*:—La Royale, La Deliceuse, Milton Gage, red Gage, Frost Gage, Duane's purple, scarlet Gage, Coe's golden drop, and Coe's late red, the latter a very late and excellent variety. *Grapes*:—Catawba, Isabella, Bland's Virginia, Elsinburgh, Norton's seedling. *Filberts*:—Cosford, Frizzled, Northampton prolific, and red Kernel. Specimens of the Buffalo berry in fruit.

Miss Garretson, Rhinebeck, seedling peaches, Bergamotte pears, large pumpkin, weighing seventy-two pounds, apple squashes, fine tomato, mangold Wurtzel, and a variety of other vegetables.

Mrs. Edward P. Livingston, Clermont, a superb bouquet of dahlias. Capt. Henry Robinson, Newburgh, fine Virgalieu pears. John Ward, New York city, black Frontignac grapes. J. P. De Wint, Fishkill Landing, very large Gansels Bergamot pears, brown beurré pears, green Gage plums, York, claret, Isabella, and Catawba grapes, and some curious ears of Texian corn.

Miss Verplank, Fishkill Landing, extra fine clusters of black Hamburgh grapes, raised in the open air. These were uncommonly large and fine, equal to those grown under glass. Also, a beautiful bouquet of tuberoses, ears of rice corn.

William Roe, Newburgh, Siamese plums, (a very unique yellow seedling, the fruit almost constantly borne *in pairs* united,) four other varieties of seedling plums of excellent quality, yellow Chasselas, Muscadine, Flame Tokay, and Isabella grapes.

J. P. Cushing, Watertown, near Boston, large Trinidad pine-apple, Muscat of Lunel, black Hamburgh, white Chasselas and St. Peter's grapes. These grapes were uncommonly fine, the clusters of large size, and elicited much admiration. E. Vose, of Dorchester, near Boston, Duchess d'Angouleme pears, very fine. S. Sweetser, Cambridgeport, near Boston, fine Fulton pears.

Geo. C. Thorburn, New York, a superb collection of dahlias, among which were the following: Widnall's Ne plus Ultra, Mary Queen of Scots, Hero of Tippecanoe, Lovely Anne, King Otho, Queen Elizabeth, Cassalia, B. Beauty, Hadleigh Champion, Marquis of Northampton, Cedo Nulli, Marchioness of Tavistock, Salamander, Angelina, Rose Incomparable, Rienzi, Juliet, Princess Victoria, Unique, Rainbow, Lady Webster, Quilled Perfection, Paragon, Champion, Picta perfecta, Lady Ann, Rosa superba, Beauty of Dulwich, King of Dahlias, Pink Perfection, Dictator, Etonia, Calypso, Rising Sun, Conqueror of Europe, Sir Henry Fletcher, Sulphurea elegans, Colossus, Countess of Sheffield, Beauty of Camberwell, Dennissii, Countess of Liverpool, Healdy's Golden Sovereign, Yellow Perfection, St. Leonard's Rival, Grandis, Napoleon, Lavinia, Girling's Ruby, Scarlet Perfection, Madonna, Desdemona, King of Yellows (Elphinstone's,) Middlesex Rival, Warminster Rival, Hermione, Viscountess Beresford, Peerless White, Maria Edgeworth, Gem, Victory, Exemplar, Ada Byron, Lord Lyndhurst, &c. and two fine seedlings.

S. Walker, Roxbury, near Boston, the following dahlias: Lady Ann, Granta, Jackson, Rival Yellow, Calypso, King of dahlias, Earl Grey, Dennissii, Springfield Rival, Desdemona, Duchess of Buccleugh, Napoleon, Mrs. Broadwood, Countess of Sheffield, &c. &c. Messrs. Hovey of Boston, the following dahlias: Girling's Topaz, Buist's Mrs. Rush-ton, Juliet, Clara, Rienzi, Princess Victoria, Polyphemus, Ariadne, Duke of Bedford, Paragon, Glory, Lord Liverpool, &c. &c.

A. Arnold, New York, the following dahlias: Rainbow, American Stripe, Dodd's Mary, Criterion, Queen Elizabeth, Yemassee (Arnold's,) Clio, Star, Calypso, Surpasse Triumph Royal, Duke of Bedford, Golden Sovereign, Glory, Venosa, Cedo Nulli, Lady of the Lake, Conqueror of Europe, Man of Kent, Mrs. Wortley, Rosa superba.

Mr. Russell, Brooklyn, dahlias, as follows: Ne Plus Ultra, Levick's Incomparable, Hon. Mrs. Harris, Ruby, Reliance, Calypso, Jackson's Rival, Beauty of Camberwell, Primitive scarlet, Alpha, Duke of Sussex, Formosa, Queen of Portugal, Rival Queen, La Belle Ariel, Rienzi, Criterion, Josephine, Princess Victoria, and several beautiful seedlings, among which were American Beauty, Pink of Brooklyn, &c.

Mr. Hagg exhibited about one hundred blooms of dahlias, comprising many of the finest sorts, but the names not furnished.

William Kent, New York, dahlias, as follows: Reliance (Widnall's,) Angelina, Countess of Liverpool, Beauty of Dulwich, &c.

O. & S. Wales, Dorchester, near Boston, dahlias: Lady Fordwich, Earl Grey, Ophelia, Countess of Liverpool, Perfection.

J. A. Hamilton, Dobb's Ferry, fine marrow squashes, Bermuda beans and watermelons. J. Johnson, gardener to J. Foulke, Hurlgate, large Valparaiso squash, weight one hundred and three pounds, extra large tomatoes, blood beets, and a variety of other vegetables.

John B. Mantell, New York, specimens of the following superior mulberries, Rodolphi, Rose of Lombardy, and Moretti, of which the foliage was uncommonly large and handsome; also, large French pumpkins, seventy-two pounds.

J. Briell, Jersey city, fine seedling dahlias, Gaillardia picta, and some beautiful bouquets; also, very large heads of celery and other vegetables. William Armstrong, gardener to H. Delafield, Hurlgate, large Lima squash, weight one hundred and five pounds, and other vegetables of fine quality. Mr. Bunting, sugar beets, very fine. J. J. Astor, Patagonian gourds.

Theodore Allen, Hyde Park, Imperial watermelons, a delicious thin-skinned and prolific variety, bouquets of dahlias, double balsams, and other cut flowers.

An address was delivered by Judge Buel, the President of the Association, on the evening of the 28th, and a vote of thanks was passed to the gentlemen from Massachusetts, for their handsome contribution to the first exhibition. [Judge Buel's address has already appeared in our last number.—*Ed.*]

This exhibition being merely a preliminary one, got up without any previous preparation, affords no specimen of what may be expected when the Association shall be fully in operation.

The next semi-annual Show will take place in Albany, about the middle of June next.—*A. J. Downing, Corresponding Secretary.*

ART. III. Exhibitions of Horticultural Societies.

Again we present to our readers the reports of such Horticultural Exhibitions of the various societies throughout the country as we have been able to procure. But we regret much that they fall far short of what we were in hopes to have given. The monthly exhibitions of the Pennsylvania Horticultural Society have appeared regularly in our pages until within the two past months, when, from a change in one of the officers of the Society, we have not received any reports. We have however, by the kindness of Dr. Watson, been favored with the report of the meeting for October, and have been promised an abstract of that for November, by the Secretary, Mr. Burrows. This Society is in a more flourishing condition than any other in the country, and the interest which the members manifest at the meetings will result in the most beneficial effects. The report of the New Haven Horticultural Society, forwarded us by the kindness of B. Silliman, jr. Esq., is very complete, and shows that the inhabitants of that city are alive to the importance of such exhibitions. The report of the Association of the Valley of the Hudson appears in this number. It will be seen by the report that its prospects are fair and onward. The Essex County Natural History Society have held but two exhibitions, reports of which we presented to our readers some time since.

The reports of the Societies of Baltimore, Washington, and Charleston, we have had no accounts from. We trust our friends will not forget us, but will forward the reports of such exhibitions as may have taken place, in time for an early number of our next volume. It will be our endeavor, another year, to secure correspondents in each of the above cities, who will furnish us with the reports, so that we shall be enabled to give the whole at the conclusion of the volume.

We had in view some remarks upon the reports given below; but want of room prevents our enlarging upon them at this time. In our Retrospective Review of gardening, in the January number, we shall introduce some notes relative to the reports.

Horticultural Society of New Haven.—The annual fair of this Society was held at the State House, on Wednesday, the 27th of September last, and continued through the week, (until Saturday night.) The committee appointed to superintend the arrangements, submitted the following report:—

That the vegetables exhibited were remarkably fine, and far exceeded, both in quantity and quality, those of any former season. The fruit and flowers, although inferior to those of preceding years, were alto-

gether more excellent and abundant than could have been anticipated, considering the unfavorableness of the season for some weeks previous. The weather during most of the week was very unpropitious, yet the result of the exhibition and sales may be considered as highly encouraging, and should induce a more vigorous and energetic course of action on the part of the Society, that the skill and industry of the cultivator may receive the merited reward. The spirit of emulation which has been excited by the efforts of the Society, and which has before been principally confined to the city, has now become extended, and in active operation in the neighboring towns; and a rivalry which promises a mutual benefit both to the producer and the consumer, ought not to be permitted to languish for the want of a proper stimulant.

The funds of the Society, although upon the increase, are not yet sufficient to be distributed with that liberality which would be desirable, but it will be seen that a much larger sum has been appropriated this year, than at any former period, for premiums, amounting to nearly double the sum offered. The expediency of offering premiums on several of the best cultivated gardens, for the next season, has also been suggested, and is here mentioned for consideration merely.

Every thing presented, worthy of notice, is believed to be embraced in the proceedings of the committee as given below, which will certainly be pronounced sufficient in quantity; but if any thing has been inadvertently omitted, it may be a sufficient apology to state, that the intentions of the Society have, from the beginning, been somewhat paralyzed by a plentiful lacking of that individual and personal assistance which can never be obtained for hire. The recent accession of members to the Society will probably remedy the evil for the future.

To the ladies, whose very efficient and tasteful assistance was so successfully and untiringly manifested through the protracted term of the Fair, the Managers respectfully tender their thanks in behalf of the Society—and beg leave to add the hope, that with others whose generous contributions aided so materially in the decoration of the Hall, they will strengthen their hands and increase their numbers preparatory to the operations of another season. To any one who has reflected upon the subject, it must be apparent that the success of the Society has hitherto, and must, in a great degree, continue to depend upon the favor with which these fairs are received by the public; and the floral department opens a field peculiarly appropriate for the exertion of female taste and talent, and richly merits the attention of every cultivated mind as a source of rational enjoyment.

Flowers and fruits:—The contributions of flowers and fruits were as follows:—

A beautiful variety of green-house plants from Miss E. L. Gerry, and Mr. C. U. Shepherd.

The seedling pears which were presented by Gov. Edwards, are worthy of note; of these the Emily is one of the best pears we have met with, nearly equal to the Vergouleuse, but a much larger pear. The John is inferior to the Emily, although a good pear and fine flavor. The cantelope, another, is inferior to both these, but well worthy of cultivation. These pears, we think, are sufficient inducement to others to follow the example of Gov. Edwards, in raising new varieties from seeds. The Punderson pear, presented by Dr. Ives, a seedling from the Jonah pear, is worthy of cultivation, being much earlier and superior.

The quality of peaches grown in our vicinity is rather inferior. The finest exhibited, were from the garden of Prof. Shepherd. The epidemic disease, that has for years past destroyed the trees and discouraged the cultivators, we are inclined to think has, in a measure, passed by,

and were we to plant them in a good soil and cultivate the ground between them, we should again enjoy an abundance of this delicious fruit, independent of foreign markets.

There was not the usual quantity of fine apples exhibited, probably owing to drought, causing them to fall prematurely.

The display of grapes, for which the season has been very favorable, was superior to that of any former exhibition. The fine assortment of grapes, of thirteen kinds, sent by Mr. Lathrop, of Guilford, excelled all others. His Violet Frontignac is distinguished for a very fine flavor, as also another large white grape, name not known, probably a large variety of Chasselas.

Among his native grapes is one which he calls Alexander, purchased by that name, but appears to be the same that is called Bland in our vicinity, while the one which he calls Bland is like the Catawba in color, and somewhat in flavor; it is also called red Scuppernong.

A small grape, also sent by him, under the name of Chicken grape, was purchased for black Hamburg. This is like the Missouri grape of Mr. Hotchkiss, or Elsinburgh of Judge Darling, which the latter describes as a native of New Jersey. It is of the size of our smallest fox grape, but sweeter.

The Chasselas of Judge Darling, raised under glass, possessed a degree of sweetness superior to those raised in the open air. Experiments which have been made of this mode of cultivating in our climate, furnish evidence of its feasibility, and in most seasons its superiority to all others.

The thanks of the Society are due to numerous individuals for their liberal contributions of fruit and cut flowers, flowering plants and shrubs, which added greatly to the attraction of the exhibition and to the decoration of the hall.

Mrs. E. Whitney, fine carnations, geraniums, lemon trees, &c. Misses Gerry, a beautiful collection of flowering plants in pots for exhibition; several very beautiful presented to the Society; fine bunches dahlias, cut flowers, &c. Mrs. A. S. Monson, a very beautiful dish bouquet of *Rosa Smithi*, violets, &c. Mrs. Leffingwell, a large quantity of beautiful cut flowers. Mrs. Pritchard, bouquet and cut flowers. Miss E. Gilbert, a fine collection of green-house plants. Mrs. P. S. Galpin, a quantity of flowering plants, some of which were presented to the Society.

Mrs. S. J. Shipman, a choice collection of plants. Mrs. R. Hotchkiss, a choice collection of plants. Miss Staples, a beautiful double oleander. Miss P. Beach, a beautiful geranium, fine seedling dahlias, and other flowers presented. Miss E. Elliott, beautiful plants. Miss S. Thorn, two fine geraniums. Mrs. C. Denison, beautiful geraniums, &c. Mrs. E. Munson, a fine collection of plants and cut flowers. Mrs. N. R. Clarke, beautiful bouquet of wax flowers. Miss Eliza Law, splendid dahlias and wax flowers. Mrs. White, geraniums, &c.

From A. R. Street, Bon Chrétien and Bergamotte pears, very fine. Eli Ives, fine Punderson pears, Bland, black Hamburg and Missouri grapes, all of good quality. Wm. Mosely, Isabella grapes, very fine. H. W. Edwards, a beautiful sample of seedling pears, John, &c. Noyes Darling, beurré d'Arenburg pear, Napoleon pear, large ox pear-main and Bristol apples, Bland, Catawba, and Elsington grapes, Jackson eggs, cantelope pears. Mrs. Darling, six glasses delicious grape jelly, bottle of green currants, beautiful cut flowers. J. Lathrop, of Guilford, a bottle of fine wine made from the Isabella and Bland grape, several plates of delicious grapes, among which were black Hamburg, Tokay, Malmsey, Walton House grape, French chocolate grape, &c. in all thirteen kinds, of beautiful appearance and delicious flavor.

John Monegan, beautiful clusters Tokay grapes, Isabella grapes, splendid cut flowers, bouquets, &c. Edward Monegan, tuberose in flower, cut flowers. Elihu Ives, grapes and pine-apple melon, delicious. G. Totten, Jonah pears, very large and fair, Isabella grapes. Mr. Breed, of Norwich, a plate of very beautiful white grapes. Philos Blake, Catawba grapes. B. Hamblin, Isabella grapes and flowering plants. Atwater Treat, very fine Isabella grapes. E. Hotchkiss, of Westville, a very large orange pear. S. Dayton, fine pippins and Siberian crab apples, cut flowers, &c. J. M. Prescott, beautiful clusters of apples, geranium and sun flowers. F. Franklin, watermelon and Bland grapes, very large and fine. Jas. King, watermelon.

A. S. Monson, Isabella, Bland, and Catawba grapes, pippin and fall russet apples, a beautiful collection of plants in pots, cut flowers and dahlias. Wm. Mansfield, Jr. exhibited beautiful geraniums and other plants, bouquets, dahlias, &c. Mr. J. Maltby, a quantity of very fine damsons, for sale. R. Bradley, cotton plant, and a fine singing mocking bird. Mr. French, citron melons. Mr. Camp, a fine collection of flowering plants. L. Craney, two splendid bouquets of feather flowers. S. Rowland, two fine fig trees. A. Fisher, a large and choice collection of green-house plants. S. Dayton, spread eagle, curiously wrought with flowers of globe amaranthus, everlasting, and gold immortal. L. Dickerman, fig and orange trees. J. Nickolson, a dish of very large white and purple grapes.

R. Nott, fine peaches, and green ginger root. Wm. K. Townsend, E. Haven, very large fall pippins. S. W. Knevels, a fine oleander. R. Northrop, side-saddle plant. S. Merwin, one plant. J. Durrie, one plant. J. D. Smith, fine geraniums. Morris Tyler, very large geraniums. Elias Gilbert, fine plants and cut flowers. Charles Fagan, beautiful balsamines, mignonette, bouquets, &c. T. Hills, a large quantity of beautiful cut flowers. M. Cogan, very fine white and purple grapes.

The glass bee palace, a neat parlor ornament exhibited by Benedict Crofut, attracted much attention. India rubber table covers, life preservers, handkerchiefs, &c., beautifully manufactured by Mr. Goodyear, were exhibited by Ralph B. Steele. Specimens of sewing silk, from the manufactory of Messrs. Law & Co., of Hamden, were exhibited, equalling in fineness, gloss and strength, the best fabrics of Italy. Raw silk was exhibited by Charles Du Bouchet, together with a fan curiously wrought by the worms. The collection of beautiful and rare stuffed birds, loaned by Doct. Fontaine, were much admired. The premiums will be paid at the store of Dr. Peters in Chapel street. Those not called for in one month will be considered as relinquished for the benefit of the Society.

Vegetables.—The Society state that they are much indebted to the following individuals for their liberal contributions of vegetables, which greatly promoted the interest of this part of the exhibition. They are as follows:—

Butler Sackett—yellow pumpkins and squashes. C. K. Shipman—cabbages, beets, three cocoanut squashes, five pumpkins, and other vegetables. B. Hamblin—beans, peppers, &c. G. Totten—several squashes of excellent quality. Leverett Alling—five pumpkins, various kinds. Augustus Bagley—a large supply of vegetables, including carrots. Turnips of several kinds, peppers, cauliflowers, cabbages, and six different kinds of seed corn. S. D. Pardee—very fine turnip beets. Ammi Baldwin—ruta bagas of enormous size, beets, cabbages, &c. A. C. Babcock—a beautiful French pepper plant.

F. Franklin—a great variety of vegetables, beets, cabbages, turnips, tomatoes, celery, squashes, pumpkins, beans, potatoes, &c. Charles Fagan—white egg-plants, tomatoes, cocoanut, Valparaiso, and other

squashes, brocoli, carrots, parsnips, cabbages, Brussels sprouts, green corn, early blood beets, &c. John Harvey—white and purple egg-plants, very fine. A. Harrison—pumpkins and squashes, very large. Elibu Ives, (Five Mile Point)—California and cocoanut squashes, both very pure; Okra, Lima beans, English pumpkins, turnip beets, the best exhibited, but only three in number; bush beans, &c.

James King—turnips, beets, sweet corn, very superior, (marked for exhibition;) beets, and butter squashes, very fine. Timothy Baldwin—blood beets, turnip beets, white sugar beets, cabbages of several varieties, mercer and yam potatoes. Benajah Ives, of Cheshire—presented very large white flat turnips, sugar beets, and other vegetables. Andrew French—Lima beans, early corn, squashes, &c. J. M. Prescott—Cobbett corn, an excellent early variety, carrots, peppers, cabbages, beets, and pumpkins. Dr. A. S. Monson—sugar beets, and seven very fine cocoanut squashes.

Timothy Fowler—in addition to Mercer potatoes, turnips, seed corn, &c. exhibited two squashes grown on a vine four hundred sixty-seven feet long, which produced one hundred forty-two squashes over one foot in length, all from one seed. J. Maltby—presented squashes, peppers, &c. John Burgis—a large and varied show of excellent vegetables—squashes, pumpkins, beets, peppers of three kinds, cucumbers, tomatoes, &c. B. Silliman—egg-plants, tomatoes, onions, carrots, squashes, and beets, all of excellent quality.

John B. Davis, of Derby—a very fine acorn squash, California squashes, early corn, &c. Deering Dorinan—pumpkins, sweet corn, turnips, bush and pole beans, onions, cocoanut, California, crook-neck, Illinois, and butter squashes, all of superior quality. Capt. Beecher—very large turnip beets. Amaziah Hall—Mercer and seedling potatoes, and Dutton corn. Col. Punderson—turnips, very fine potatoes, corn, and cabbages.

Mr. Smith, of the Alms-house—butter, crookneck, California, cocoanut, and other squashes, long blood, turnip and sugar beets, egg-plants, Okra, ground nuts, pumpkins, &c. Prof. Shepherd—very fine sweet potatoes. Oliver B. Sherwood, of Derby—bell pumpkins, very large, acorn squashes, and other vegetables. Sydney Hull—kidney potatoes very fine, onions, four squashes, &c. Wooster Hotchkiss—three excellent squashes. Wm. Mansfield—a good assortment, including yellow, sugar, and turnip beets, very fine and excellent California and crook-neck squashes, squash and yellow sweet peppers, sweet corn, bush and pole beans, celery, white and red, &c. &c. Charles Roberts—three squashes.

A. Husson—turnip cabbage, a new and singular variety, curled endive very fine, French radishes, and drumhead cabbages of extra size. Capt. Goodrich—Rohan potatoes. E. S. Hotchkiss—very superior Dutton corn. Z. Richardson—a plate of very fine egg-plants. Charles Robinson—Rohan potatoes and yellow tomatoes, very rare. Wm. K. Townsend—mangel wurtzel of great size and vigorous growth. A. Terrel—a large pumpkin. E. C. Reed—Lima beans. F. Wohlrahe—very fine turnip beets.

The four Rohan potatoes presented by Mr. Alfred Harger, and remarkable for their size, were disposed of at the sale for \$1 each. Mr. Harger planted two tubers, weighing together thirteen ounces, which produced this season over one hundred sixty pounds. This potato is a new variety recently introduced, and promises to be an important acquisition to the farmer.

Mr Alexander Harrison exhibited some corn, planted July 1st, and ripened in sixty days. The seed was brought from the banks of the Nile by Lieut. Craney, of the U. S. Navy. Noyes Darling, Esq. pre-

sented a new variety of early corn, blended with the shrivelled corn, ripening two weeks earlier.

The following premiums were awarded for Fruits, Flowers and Vegetables :—

Fruits and Flowers:—*Pears*—Seckel, A. R. Street, J. Malthy. Eli Ives, M. D.; Emuly, (a seedling) H. W. Edwards; Bon Chrétien, Wm. Mosely; Bell, J. Malthy. *Peaches*—F. Franklin, first premium; Cling, R. Hall, of Wallingford, second premium. *Nectarines*—J. Monegan. *Apples*—Fall Pippins, Davidson, B. Ives, Cheshire. *Foreign Grapes*—White Golden Chasselas, Jedediah Lathrop, of Guilford, first premium; Purple Burgundy, Jedediah Lathrop, first premium; do. Violet Frontignac, Jedediah Lathrop; White Chasselas, G. Totten, Eli Ives; Frontignac, J. Monegan; White Chasselas, (raised under glass) Noyes Darling. *Native Grapes*—Isabella, Noyes Darling, first premium, Eli Ives, F. Franklin; Catawba, Eli Ives, John Monegan; Missouri, J. G. Hotchkiss. *Water-melon*—Deering Dorman, first premium; Apple Seeded, Elihu Ives, second premium. *Cantelope*—F. Franklin, Jas. King. *Bouquets*—Mrs. D. J. Whitney, first premium, Edward Monegan, Miss P. Beach, Miss Eliza A. Law.

Vegetables:—*Pumpkins*—Bell, two best to John Burgess, Guilford; two nearly equal, Frederick Franklin; two do. do. O. B. Sherwood, Derby; Yellow, two best, Leverett Alling; Mammoth, best, Frederick Franklin; do., second best, Mr. Smith, Alms-house; do. third best, Elihu Ives; very large and fine, best, John Burgess; French, best, C. K. Shipman. *Squashes*—Cocoanut, best, Frederick Franklin; Cocoanut, second best, Charles Fagan, garden of H. Whitney; do., third best, B. Silliman; California, best, C. U. Shepherd; do., second best, Mr. Smith, Alms-house; do., third best, Elihu Ives; Holland, best, Frederick Franklin; Winter, best, William Mansfield; Summer, very fine, Andrew French; do., nearly equal, John Burgess. *Beets*—Turnip, best, Frederick Franklin; Long Blood, best, B. Silliman; Sugar, best, Frederick Franklin. *Carrots*—Orange, best, Ammi Baldwin. *Corn*—Sweet, best, William Mansfield; Early White, best, J. B. Davis, Derby; Dutton, best, B. C. Eastman; Early Dented, best, Augustus Bagley; New variety, Noyes Darling; several different kinds, A. Bagley. *Pole Beans*—Lima, William Mansfield; White, Andrew French; Frost, William Mansfield; Bush, Deering Dorman, from Dr. Ives's farm. *Potatoes*—First Mercers, Amaziah Hall; Second Seedling, Amaziah Hall; Third Orange, B. C. Eastman; Fourth Yam, Timothy Baldwin; Rohan, four very fine, Alfred Harger. *Cabbages*—Dutch Drumhead, Timothy Baldwin; Red, for pickling, Ammi Baldwin; Sugar Loaf, Charles Fagan; Savoy, no competition, Ammi Baldwin. *Cauliflower*—Very fine, Timothy Baldwin. *Brocoli*—Purple Cape, Minor Bradley. *Onions*—Yellow, best, Samuel Merwin; White, Deering Dorman. *Peppers*—Squash, best, William Mansfield; Ox Hearts, very large, John Burgess; do., Avery C. Babcock. *Turnips*—White, James King; Yellow Aberdeen, Charles Fagan. *Celery*—White solid, Frederick Franklin; Red Solid, Frederick Franklin. *Egg Plants*—Purple, J. Harvey, garden of J. A. Hillhouse. *Okra*—Purple, Mr. Smith, Alms-house. *Tomatoes*—best, John Burgess. *Sweet Potatoes*—from seed raised by J. M. Prescott the year before, J. M. Prescott. For the largest and best contribution of vegetables, the premium of \$5 was awarded to E. Franklin.

Pennsylvania Horticultural Society.—On visiting the stated meeting of the Pennsylvania Horticultural Society, on the 19th Sept. and subsequent ones, I was much gratified at the fine display of plants, dahlias, fruits, vegetables, &c. I noticed some fine plants from Mr. Buist's garden, of the *Manétia cordifolia*, *Witsénia corymbosa*, and several *Hæmánthus coccineus*, &c.

The premium was awarded to Nicholas Biddle, Esq., for the best grapes produced under glass: the plants were in the best possible condition, full of fruit and quite ripe, and being interspersed up and down the room, had a fine effect. The best grapes, produced in the open air, were exhibited by James Laws, Northern Liberties; they were the Hanstoretto, the black Hamburgh, the Royal Chasselas, Elsinburgh, &c.; the bunches were large, and the fruit fully ripe, and of the best flavor. On visiting Mr. Laws's grapery, I was much surprised to see so much done in so small a space; the vines were healthy, and in fine bearing, being full of the finest grapes I have ever seen, having no conception that there were so many fine grapes produced, comparatively, in the heart of our city; there were many of the finest varieties, besides those I have enumerated, but recently planted. I tasted a glass of wine made from the Isabella grape three years ago, and a finer flavored wine I would not wish to drink. Mr. L. deserves the greatest praise for his assiduity in bringing to perfection so many fine grapes; and is a strong inducement to every amateur to cultivate the vine. From his gentlemanly conduct, and urbanity of manner, I am certain he would freely impart any knowledge in its cultivation. His residence is in North Seventh street, above Callowhill.

The premium watermelons of Mr. Hatch, Camden, N. J., were very superior and very large. So were those of Mr. Wilson, Burlington, N. J. Mr. Cammack's cantelopes were uncommonly large, and fine flavored. Mr. Pepper's grapes and butter pears were very fine; so were the plums of Thomas Fisher, and the peaches of Joseph Price were large and of the finest flavor.

I noticed some plants of cotton that were raised by Thomas G. Percival, Esq., in his garden, in flowers and in pod. Some of the cotton was tolerably matured, and others had ripened. The dahlias exhibited by Mr. Buist, Mackenzie & Buchanan, Mr. Parker, Mr. Hancock, Mr. Landreth, and Mrs. Hibbert, were uncommonly fine, considering the season. No premium was awarded for the dahlias that evening, part having it for that night two weeks, when there appeared many competitors, and the flowers were very fine. The first prize was awarded to George C. Thorburn, New York, who exhibited Middlesex Rival, Kingscote Rival, Exemplar, Smith's Napoleon, Girling's Topaz, Warminster Rival, Widnall's Rienzi, Widnall's Reliance, Zitella, Wells's Letitia, Springfield Major, and Conqueror of Europe.

The above new ones are a great acquisition to the amateur, as they are of the very best kinds, the finest forms and colors. The second prize was given to Thomas Heiskell, Bristol. We noticed some very superior ones from the garden of Thomas Hancock, Burlington, N. J. He had a flower of Smith's Napoleon, which exceeded any thing we have ever seen.—*Yours, G. Watson, Philadelphia, Nov. 21, 1838.*

Monthly meeting, Nov. 20th—The report of this meeting we were, in part, promised by Mr. Burrows, the secretary, but it has not yet reached us. We were in the city and present at this meeting, but did not take any notes, having had the promise above named. We will state, however, that the meeting was well attended, and the exhibition very good. The flowers were mostly chrysanthemums; besides these, there was not much of note, except some splendid plants of *Epiphyllum truncatum*, grafted on the *Cereus triangularis*. The largest of them belonged to Mr. Pepper, and is probably one of the most magnificent objects ever seen. A correspondent of ours has noticed this plant, at p. 28. The graft is inserted in a stem about five feet high, and the plant forms a head five or six feet in circumference, with from two hundred to three hundred flowers fully expanded. The graft is only three years from the insertion. About seventy plants of seedling chrysanthemums were shown

by Mr. Kilvington, gardener to Wm. Lloyd, Esq., some of which were superb. We shall notice them hereafter. The vegetables comprised Brussels sprouts, celery, cardoons, &c., all of which were fine. Premiums were declared.—*Ed.*

ART. IV. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	¢ cts.	<i>Squashes and Pumpkins.</i>		\$ cts.	¢ cts.
Potatoes:				Squashes:			
Common, {	per barrel, . . .	1 25	1 50	Autumnal Marrow, per cwt.	1 00	1 50	
	per bushel, . . .	50	60	Winter crook-neck, pr cwt.	1 00	1 25	
Chenangoes, {	per barrel, . .	1 50	1 75	Canada, per cwt.	2 00	—	
	per bushel, . .	75	—	Pumpkins, each	12	25	
Nova Scotias, {	per barrel, . .	1 50	1 75				
	per bushel, . .	75	—				
Eastports, {	per barrel, . . .	2 50	—				
	per bushel, . . .	1 00	—				
Sweet Potatoes, per bushel, . .		1 50	—				
Turnips:				<i>Fruits.</i>			
Common, {	per bushel,	25	—	Apples, dessert, new :			
	per peck,	12½	—	Common, {	per barrel,	50	2 00
French, per bushel,		37½	50		per bushel,	50	75
Ruta Baga, per bushel,		37½	50	Baldwins, per barrel,	2 00	2 50	
Onions:				Sweet apples, per barrel, . . .	2 00	2 50	
Red, per bunch,		4	6	Golden Pippins, per barrel, . .	3 00	4 00	
Yellow, per bunch,		3	4	Greenings, per barrel,	2 00	2 50	
White, {	per bushel,	1 25	1 50	Russets, per barrel,	2 00	2 25	
	per bunch,	4	6	Blue Pearmain, per barrel, . . .	2 00	2 50	
Beets, per bushel,		50	75	Pears, per dozen:			
Carrots, per bushel,		50	75	Chaumont,	20	25	
Parsnips, per bushel,		75	—	Green Sylvanche,	25	37½	
Horseradish, per pound,		8	12	Beurre Diel,	25	50	
Radishes, per bunch,		8	12½	Winter St. Michaels,	50	—	
Shallots, per pound,		20	—	St. Germain,	50	75	
Garlic, per pound,		12	—	Baking, per bushel,	1 50	2 00	
				Grapes, per lb:			
<i>Cabbages, Salads, &c.</i>				Malaga,	25	—	
Cabbages, per dozen :				White sweet-water,	—	—	
Savoys,		50	75	Citron Melons for preserves, ea.	12½	—	
Drumheads,		75	1 00	Cranberries, per bushel,	1 25	1 75	
Red Dutch,		75	1 00	Quinces, per bushel,	3 00	—	
Cauliflowers, each,		12½	25	Berberries, per bushel,	1 00	1 25	
Brocoli, each,		10	15	Lemons, per dozen,	20	25	
Lettuce, per head,		6	8	Oranges, per dozen,	—	—	
Celery, per root:				Pine-apples, each,	12½	25	
Giant red and white,		10	20	Chestnuts, per bushel,	1 75	2 00	
Common,		6	10	Walnuts, per bushel,	2 00	2 50	
Spinach, per half peck,		17	25	Cocoanuts, each,	5	6	
Tomatoes, per half peck,		—	—	Almonds, (sweet,) per pound, . .	12½	—	
				Shaddocks, each,	25	—	
				Filberts, per pound,	4	—	
				Castana,	4	—	
				English walnuts, per lb.	5½	6	

REMARKS.—There is but a slight alteration in prices since our last. The stock of nearly every thing is ample and the demand steady. The celery and spinach crop has been somewhat injured by the early setting in of cold weather, and probably a gradual rise in prices may be anticipated.—*Yours, M. T., Boston, Nov. 25th, 1838.*

LIST OF PLANTS.

<i>Acacia</i> , 6 sp.	362	<i>Anætochilus setæceus</i>	182	<i>Azalea phœnicea</i>	107. 141. 143
7 sp.	367	<i>Anémia californica</i>	211		144. 342. 367
armata	392	<i>Andróméda</i>	54	<i>punicea</i> , probably	
conspicua	114	<i>Angelonia pubescens</i>	433	synonymous with	
cultriformis	300	<i>salicariæfólia</i>	337. 435	<i>phœnicea</i>	114
decipiens	393	<i>Anictangium</i>	242	<i>Smithii coccinea</i>	114
decurrens	264	<i>Anigozánthos flórida</i>	374	<i>Yoangi</i>	136
Houstonei	20	<i>Manglési</i> var. <i>angusti-</i>		<i>tedifolia</i>	141
lanccoláta	114	<i>fólia</i>	181	<i>nudiflora</i>	135. 342. 367
longifolia	56. 65. 66	<i>rufa</i>	367	<i>póntica</i>	276. 367
	103. 111. 139. 142	<i>Anóna palústris</i>	434	<i>Azólla magellanica</i>	435
pubescens	114	<i>Antirrhinum május</i>	370	<i>Babiána</i> sp.	139
pulchélla	56	<i>május</i> var. <i>caryophyl-</i>		<i>Banksia</i>	393
spectabile	114	<i>loides</i>	256	6 sp.	362
tortuosa	450	<i>Aótus ericoides</i>	253	5 sp.	397
verticilláta	107	<i>Apeiba</i>	450	<i>ericæfólia</i>	397
vestita	266	<i>Aquilégia canadensis</i>	242	<i>longifolia</i>	397
virgáta	20	<i>Arália nudicaulis</i>	242	<i>serrata</i>	204
<i>Achánia malvaviscus</i>	367	<i>Araucária excélsa</i>	251. 323	<i>spinulosa</i>	397
<i>Achilléa Millefólium</i>	271	<i>imbricata</i>	351	<i>Baptisia</i>	335
<i>Aconitum</i>	357	<i>Arbutus</i> , 4 sp.	20	<i>Batátas bonariensis</i>	411
<i>chinense</i>	211	<i>U'nedo</i>	367	<i>Bauhínia tomentosa</i>	363
<i>Acroptera Loddigésii</i>	17	<i>Arctótis áspera</i>	367	<i>Beaufortia decussata</i>	393
<i>Actæa</i>	241	<i>Ardisia</i>	367	<i>Begónia</i> , sp.	272
<i>Agapánthus</i> , 4 var.	367	<i>colorata</i>	393	6 sp.	19
<i>umbellatus</i>	311. 312	<i>crenulata</i>	235. 293. 362	<i>argyrostigma</i>	235. 351. 367
<i>Agave americana</i> , 361. 362. 392	392	<i>solanacea</i>	33. 311. 362	<i>discolor</i>	367
var. <i>variegata</i>	393	<i>umbellata</i>	20	<i>in-ignis</i>	93. 235. 272
<i>Ajuga orientalis</i>	273	<i>Arduina bispinosa</i>	367	<i>parviflora</i>	235
<i>Albúca altissima</i>	367	<i>Arca</i> álba	351	<i>semperflorens</i>	351
<i>Allamánda cathártica</i>	137	<i>montana</i>	362	<i>Benthámia fragifera</i>	20
<i>Alœe</i> , 6 sp.	367	<i>Arethusa orphioglossoides</i>	270	<i>Berberis Aquifólium</i>	27
<i>ensifolia</i>	393	<i>Argemone mexicána</i>	433	<i>Besleria serrulata</i>	179
<i>Alonsóa</i>	394	<i>Aristolochia brasiliensis</i>	19	<i>Bignónia</i>	179
<i>Alóysia citriodóra</i>	169. 393	<i>sempervirens</i>	367	4 sp.	367
<i>Alpinia nutans</i>	362. 392. 393	<i>sipho</i>	270	<i>jasmínoides</i> , a syn. of	
<i>nutans variegata</i>	20	<i>Aristotelia Macqui</i> fol. var.	19	<i>Tecomá jasmínoides</i>	19. 60. 114
<i>Alstónia macrophylla</i>	153	<i>Arranga saccharifera</i>	351	<i>Biétia hyacinthina</i>	397
<i>Alstroméria acutifolia</i>	367	<i>Artocarpus incisa</i>	433	<i>Tankerville</i>	115. 137
<i>Flós Martini</i>	262	<i>integrifolia</i>	433	<i>Bocconia cordata</i>	308
<i>Ligtu</i>	362	<i>Arum tryphyllum</i>	242	<i>Boerhaavia hirsuta</i>	433
<i>Pelegrina</i>	237. 262	<i>Asclépias arborea</i>	367	<i>Bolbophyllum umbellatum</i>	414
<i>tricolor</i>	237. 367	<i>curassavica</i>	367	<i>Bombax Cieba</i>	363
<i>Althæa</i>	357	<i>quadrifolia</i>	271	<i>Bonapartea juncea</i>	363
<i>Alyssum saxatile</i>	197	<i>tuberosa</i>	313	<i>Borónia crenulata</i>	19
<i>Amaryllis</i> , 7 sp.	362	<i>Aspáragus officinalis</i>	91	<i>serulata</i>	351
10 sp.	367	<i>Asplenium</i>	242	<i>Brachy-ema latifolia</i>	19
3 sp.	20	<i>Aster argophyllus</i>	367	<i>Brassavola cucullata</i>	18
<i>Belladonna</i>	393	<i>Astrántia májor</i>	313	<i>tuberculatum</i>	18. 20
<i>brasiliensis</i>	64	<i>minor</i>	271	<i>Brugmánsia sanguinea</i>	20. 115
<i>equestris</i>	436	<i>Astrapæa Wallichii</i>	33. 362		142. 153. 181
<i>formosissima</i>	64. 357		367. 393	<i>Waymániu</i>	180
<i>Johnsóni</i>	142. 236. 237. 271	<i>Aucuba japónica</i>	357	<i>Whymánü</i> , a syn. of	
<i>psittacina</i>	142. 144	<i>Avicennia lucida</i>	434	<i>Waymánü</i>	73
<i>sarniënsis</i>	320	<i>nitida</i>	434	<i>Brunia nodiflora</i>	33
<i>Ammánia</i>	433. 435	<i>tomentosa</i>	434	<i>Brunsvigia Josephinæ</i>	363
<i>Amphicarpa</i>	243. 335	<i>Azalea calendulacea</i>	367	<i>Brysoncóna</i>	451
<i>Amphicoma arguta</i>	257	<i>indica</i>	342. 367	<i>Bryum roseum</i>	242
<i>emodi</i>	257	<i>elegans</i>	141	<i>Bulbine floribunda</i>	367
<i>Amsónia álba</i>	270	<i>Gillinghámi</i>	141	<i>speciosa</i>	143
<i>latifolia</i>	270	<i>hybrida</i>	107. 114. 135	<i>Burchélla capensis</i>	142
<i>salicifolia</i>	270		136. 141	<i>elegans</i>	367
<i>viscaria</i>	270	<i>ignescens</i>	114. 136		
<i>Anacardium occidentale</i>	451				

Cactus, 5 sp.	20	Camellia j. imbricata	55. 64	Celtis	365
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