

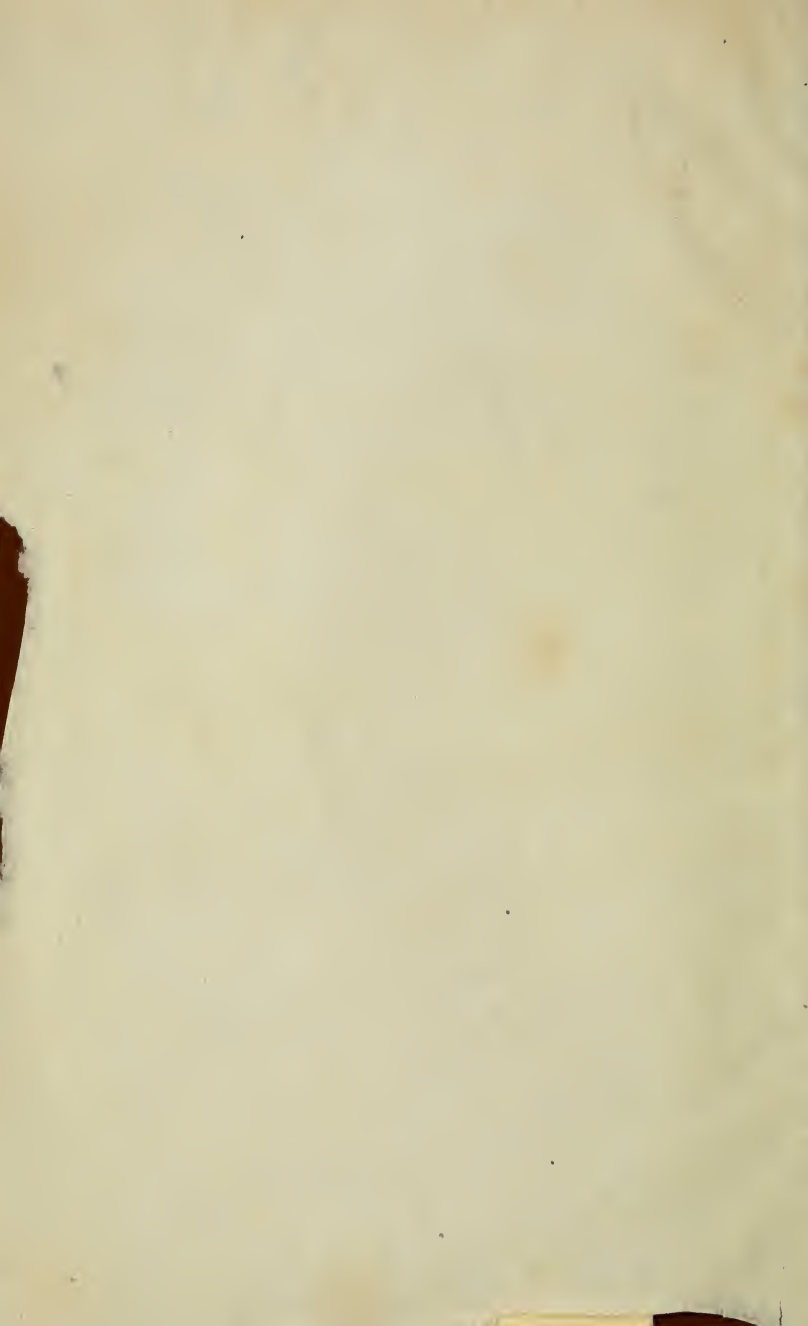
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RECORD OF HORTICULTURE.

No. II.

EDITED BY

ANDREW S. FULLER,

AUTHOR OF THE FOREST TREE AND GRAPE CULTURIST.



NEW YORK:

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OFFICE OF THE HORTICULTURIST.

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## P R E F A C E .

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WE are again called upon to christen another volume of THE RECORD OF HORTICULTURE.

The success that attended the first, bids us hope for the second, although we are not confident that it is in any respect superior to its predecessor.

One new feature has been added, which we trust will be found of great value, especially to those who are in the seed or plant business. We refer to the Horticultural Directory. This catalogue of Nurserymen, Florists, and Seedsmen we believe to be the most complete of any heretofore published, and we promise to continue this feature in future volumes until it shall be absolutely perfect, if such a thing is possible.

The number of new fruits and flowers which have been tested in the past year are quite numerous, and we have given whatever information in regard to them that could be obtained, always endeavoring to err, if at all, in saying too little, in preference to saying too much.

We again invite horticulturists to send us the reports of societies with list of officers for the year; also any other matter that shall be of general interest. We will be pleased to receive the name and description of all new fruits and flowers, and any facts relative to their history. To give each year a brief synopsis of the principal events that are likely to interest the cultivation of plants is our only object in editing the RECORD OF HORTICULTURE.

A. S. F.

RIDGEWOOD, N. J.

MAR 10 1939 Gift



# RECORD OF HORTICULTURE.



## I.

### REVIEW OF NEW BOOKS.

**American Horticultural Annual.** A Year Book of Horticultural Progress, etc. Illustrated. New York: Orange Judd & Co. 12mo ; 152 pp. ; muslin, 75 cents.

THERE is a large amount of valuable information given in this volume. Besides many useful hints and suggestions, there are several essays that are well worthy of a careful perusal. The one on Pears, by P. Barry, is particularly valuable to those who are desirous of knowing which are the best of the new varieties. The notes on Grapes are very full and complete. There is also an excellent article on New Roses, by John Saul ; one on Bedding Plants, by Peter Henderson ; another, on Gladiolus, by George Such ; these are particularly noteworthy. Mr. Thomas Meehan's "Notes on the Rarer Evergreens" is doubly interesting from the fact, that the author not only shows the importance of planting evergreen trees for the purpose of ornamentation, but that if planted abundantly, they will increase the temperature of the immediate locality, and very much lessen the rigors of our cold winters. In other words, evergreens give off heat, even in cold weather, and thereby increase the temperature of the surrounding atmosphere. If our land-owners could be made to believe this, they would have another incentive for planting evergreen trees extensively.

**American Fruit Culturist.** By J. J. THOMAS. Illustrated.  
New York: Wm. Wood & Co. 12mo; 511 pp. \$3.

Since the first appearance of this work in 1846, it has taken a high position in American Horticultural Literature. It has been several times revised and additions made thereto, showing that the author desired to make it as near perfect as possible.

In the past twenty years there have been so many new fruits introduced, and so many old theories exploded, that Mr. Thomas has found it necessary to entirely re-write his work in order to make it accord with the present condition of American Horticulture. No greater compliment can be bestowed upon an author by the public than by calling for frequent and large editions of his works. The demand for this book has been so persistent, and through such a long period of years, the author must feel highly flattered in knowing that his labors have been so fully appreciated by the public at large.

We have to regret that so few of the authors of scientific books take any interest in their works after the original manuscript leaves their hands, never attempting to revise or improve upon the first copy or edition.

Few works are as near perfect when first issued as their authors could make them by a careful revision. We know that some consider, that to correct their mistakes is merely exhibiting their own original incompetency; but this is certainly putting the matter in a false light, because it should never be considered a disgrace to acknowledge our faults, or even ignorance, for by doing so we prove to our fellow-beings that we are still capable of learning.

We have many Horticultural works issued years ago the authors of which are still living, but they have never attempted to improve upon the original copy, although the means at their command are abundant; but either through ignorance or indolence they allow their works to remain imperfect, which is a great loss to the public, and no additional honor to themselves. Mr. Thomas appears to have taken a practical view of this subject, and by constantly accumulating facts from his own experience and that of others, he has been enabled to give us the present work, which is the best book on General Fruit Culture that has ever appeared in America.

**American Pomology—Apples.** By Dr. JOHN A. WARDER.  
New York: Orange Judd & Co. 12mo; 744 pp. \$3.

Many of the readers of this volume will be surprised at the amount of matter here brought together relative to one of our most common fruits. But every one who has given the subject any particular attention is aware that the Apple has been in cultivation from the earliest times of which we have any reliable record, and not only has it been treated of in scores of volumes, but that the different varieties of a single species have become really innumerable.

With this fact before us, we may readily perceive how abundant are the materials from which not only one volume of seven hundred pages might be compiled, but seven or seventy times that number.

It is quite probable that there was a time when it might have been necessary to collect all the sayings and doings of different individuals upon a specified subject, to enable the student to become passably conversant with it. But those

days are rapidly passing away, and the demand at the present time is for thorough but condensed treatises upon all scientific subjects. In Pomology, the mass of materials has become so great, that it requires no inconsiderable skill to determine which is really worthy of preservation. Dr. Warder has certainly treated the subject of Apples most thoroughly, and no one will have cause to complain of brevity in the author, for all the different ramifications which a fertile brain would be likely to discover are minutely traced to their source. Errors there are, as might be expected in so elaborate a work, but the number is too few to materially detract from the value of the whole. We welcome this work as a valuable contribution to American Horticulture.

**Beet Root Sugar, and Cultivation of the Beet.** By E. B. GRANT. Boston, Mass.: Lee & Shepard. 12mo; 158 pp. \$1.

The author of this work is entitled to the thanks of the public for calling their attention to a source of wealth which has heretofore attracted little or no thought on the part of the American people. That beet-root sugar can be made as cheaply in this country as elsewhere, there is scarcely a doubt, and that the time will soon come when it will be an article of commerce the same as cane sugar, is a thing devoutly to be wished. This little volume of Mr. Grant gives a complete history of the discovery and progress of beet-sugar manufacture, and no one can read it without being impressed with the value of the statistics given, as well as the practical and thorough elucidation of the subject.

France at the present time depends almost entirely upon

beet-root sugar for home consumption, exporting the cane sugar produced by her colonies. Why can not the people of the United States do the same thing, thus adding another source of wealth to those which we already possess? We would recommend the careful perusal of this little book to all who feel an interest in the products of American soil.

**Champagne Country.** By ROBERT TOMES. New York: Hurd & Houghton. 12mo; 231 pp. \$2.

It is seldom that we meet a more interesting volume than the one before us; although evidently not intended to be a strictly practical work, still it contains many facts that are worthy of being remembered by every vineyardist in America.

Wine-makers who want to know how to get up a reputation for their wines, may find herein the requisite information; at least they can learn how it is done in the great champagne districts of France. The author illustrates the champagne country with the skill of an artist who not only knows how to interest, but to instruct his readers; at the same time, all the minute details as to how champagne is made are given, as well as the characteristics and habits of the people of that country, all of which is told in a rich, racy, and gossipy style, which can not fail to interest all who have the least taste for grape culture or its products. Those who indulge in sparkling wines, should not of all persons fail to read this book, for they may thereby learn to drink understandingly, which is, we fear, more than can be truly said of every disciple of Bacchus.

**Gardening for Profit.** A Guide to the Successful Cultivation of Market and Family Garden. Illustrated. By PETER HENDERSON. New York: Orange Judd & Co. 243 pp. \$1 50.

Gardening for Profit is certainly a very attractive title for a book.

Profit is the name of a brilliant star which leads the American into many unknown places, and to extremes that would astonish the slow, plodding people of the Old World. The author of this work is a well-known gardener and florist who believes in doing things with all his might. Moderation is not in his vocabulary, but to drive business has become a matter of habit. "Gardening for Profit" is just such a book as we might expect from a man like the author. It is chiefly devoted to the cultivation of vegetables, and shows plainly how to produce them in quantities, and of the best quality. Farmers and gardeners who have been used to that too common practice of skinning the soil, will be surprised at the quantity of manure which Mr. Henderson recommends per acre. But they may rest assured that the gardeners in the vicinity of our great cities can make money only in proportion to the quantity of enriching materials which they apply to the soil.

If the young men of our country who contemplate the cultivation of the soil for a living will read this work, we can assure them that they will be taught a lesson that will be worth a hundred times the cost of this volume.

Mr. Henderson shows the folly of undertaking the cultivation of too much land, a mistake which nine tenths of all the land-owners in the United States have made or are now making.



We sincerely recommend "Gardening for Profit" to all cultivators of the soil.

**Hyatt's Hand-Book of Grape Culture**; or, When, Where, and How to Plant and Cultivate a Vineyard, etc., etc. Especially adapted to the State of California. By T. HART HYATT. San Francisco, California: H. H. Bancroft & Co. 12mo; 279 pp. \$2.

Californians have become so accustomed to expansion, that it really seems to have taken a chronic form. Their great trees so far out-top all similar vegetation in other portions of this habitable globe, that they measure all their products, both present and prospective, by the same standard.

If a big beet or pear is produced, it is immediately started on a tour to the Eastern States; and we poor mortals who dwell in the land of small things are kindly requested to fall down and worship these products of this terrestrial Eden.

There may be an occasional perverse sinner among us who will have the audacity to ask questions, or even doubt whether these are fair samples of the whole crop of this kind.

We have many reasons for believing that the soil and climate of California are among the best in the world, but that there are no unfavorable aspects in this newly discovered Eden, as the author of the book before us endeavors to prove, we do not believe.

We are told, on page 20, that "the grape crop *never fails* in this State (California), either in drought or wet seasons; or has not for a period of eighty years." This,

certainly, is a great inducement to plant vines; but we are assured, farther on, that, when *properly planted*, they never suffer from mildew or noxious insects. From this we are led to infer that mildew and injurious insects are known in California; in fact, the author refers to one case at least, where a friend of his made a complete failure in his attempt to grow grapes.

Mr. Hyatt makes some prodigious estimates; but in no instance can we find that the actual results come within fifty per cent. of them. For instance, on page 22, he says "that there are 40,000,000 vines now planted in California, and when they shall all come to the age of, say, three to five years, it may be fairly calculated that they will produce 40,000,000 gallons of wine each year." But if we refer to the report of Col. Haraszthy, on page 76, we find that his vines when five years old only yield three pounds each; and as it requires fifteen pounds of grapes to make one gallon of wine, it appears that Mr. Hyatt's estimate is just five times too high. Although we are told over and over again in this volume that the grape is a sure crop in California, and that it never fails, still we are constantly reminded that there are great differences in soils and locations, some of which are really good, while many others are worthless. Again, on page 20, we are informed that "the grape requires no irrigation in California;" but on page 61, in quoting from an essay of Mr. Flint's, on the Division of the Grape Lands of California, we find that he divides them into several districts, and describes the peculiarities of each—thus: "First, all that portion south of Monterey County, with the exception of the volcanic range

of hills near San Gabriel. This district has long been celebrated for the abundance of its crops of large and luxurious dessert grapes, and, until a recent period, it furnished nearly the entire supply of wine for home consumption as well as export. The vineyards in this district are mostly planted upon a sandy loam, and receive *copious artificial* irrigation in the bearing season." It is passing strange that cultivators will go to the expense of irrigation if it is not necessary. In an extract from the essay of Wm. Daniels, given on page 57, we get another phase of California climate; he says: "A great portion of California is subject to late frosts long after the vine has put forth its young, tender shoots;" from which one might infer that frost did sometimes destroy the crop even in a land where our author has said it never fails.

Perhaps these conflicting passages are owing to the fact that the entire volume is made up of extracts from books, reports of societies, essays by different grape-growers, all of which are dovetailed together as it best suited the author. There is, however, much valuable information in the book, and no doubt it will serve the purpose for which it was written, *i. e.*, induce people to purchase California grape lands; but so far as giving the vineyardist any practical information about cultivation, pruning, training etc., it is a lamentable failure.

The author appears to have had no personal experience, but has depended mainly upon others for the few *facts* he has given; the original portion of the work is made of prospective estimates of a soap-bubble order, described in bombastic style.

**Mead's Grape Culture.** An Elementary Treatise on American Grape Culture and Wine Making. By PETER B. MEAD. New York: Harper & Brothers. 8vo; 483 pp. \$3

We always thought the law forbidding the wearing of masks a good one; but there are some kinds of masks in use that human laws do not recognize, and they are so very common, that it would be deemed impertinent to attempt their description.

There is, however, one kind which is made of materials so transparent that it does not conceal the object. Such a mask is manifestly placed before the real author of this volume.

No one who is acquainted with Mr. Mead doubts his ability as an author; but when we see such fulsome praise emanating from his pen, bestowing upon one individual horticulturist the entire credit of advancing the grape-growing interest of this country and producing the only grapes worthy the attention of our vineyardists, we can not but think he had some object besides that of the progression of American grape culture in view. Perhaps it was the lionizing of a patron. It is certainly quite evident that, however valuable the work may prove to the general reader, it was Mr. Mead's design that one person in the community besides himself should be benefited by its publication. We will quote a few passages in support of our position.

In referring to Guyot's system of training and sheltering the vine we find the following, page 94: "Dr. Grant, just before the appearance of Guyot's work, suggested a form of shelter having considerable resemblance to his."

Page 99: "Guyot's system of training improved." "We say improved, because in our hands it has yielded better results. The improvement consists chiefly in making the arm *permanent* instead of renewing it annually, and was suggested by Dr. Grant." Page 122: "To Dr. Grant belongs the merit of having brought the Thomery system pre-eminently before the American public. It was he who first studied and mastered it as a system," etc., etc. If this be true, then the intellect of American horticulturists must be weak indeed, and our author should have spared them the humiliation of proclaiming to the world their imbecility. Nearly or quite forty years ago the Thomery system was described in American pomological works, and has been repeated from time to time ever since; but if we are to believe Mr. Mead's assertion, to understand the system was reserved for Dr. Grant.

Dr. Grant's seedlings come in for the lion's share of praise throughout the work. Iona is placed as best in quality for table, market, and for wine. Israella heads the Isabella group; if it has any faults, we are not informed what they are. There is one other grape which we are assured is likely to be an acquisition, and we are gravely told, on page 220: "It is a pleasure to meet a grape sometimes that is in no danger of being confounded with something else. It is now in the possession of Dr. C. W. Grant." We wonder if this last paragraph does not account for its many good and promising qualities. Enough has been quoted from the work to show the general drift of the whole.

All the experience of the thousands of American vine-

yardists is discarded as of no value unless it proves that Dr. Grant and his pet varieties are not far ahead of all others. The thousands of tons of grapes annually produced and consumed in this country serve only to show the vitiated taste of the American people. We have been acquainted with the Iona and Israella for the past eight years, and fully believe that they are really valuable varieties in locations where they will succeed; but there is only a small portion of our country in which their success is certain; and Mr. Mead and Dr. Grant know full well that nothing less than an earthquake which shall entirely rearrange the face of the country, and change the soil and climate of a large portion of the United States, will ever enable its inhabitants to grow these varieties with any degree of success.

Mead's American Grape Culture contains many valuable suggestions and much information which will be quite acceptable to a large class of its readers. The work is splendidly illustrated, printed on fine paper, and arranged in an elegant dress. The attempt of the author to introduce new words must prove to be a lamentable failure. The English language is already sufficiently copious for all practical purposes, and no new words should be admitted unless a necessity for it can be shown.

On page 343 the author introduces *aplowing*, instead of the old and familiar term *plowing to* the vines, and on page 344, *deplowing* is used instead of *plowing from*. Now if there is any Saxon root that will admit of a Latin preposition, either compound or derivative, then we will own that it has escaped our notice. Why not go still farther,

and have *de-take*, to take up vines, for it will come under the same rule.

The new words *thallon*, *athallage*, and *athallizing*, coined by Dr. Grant, will scarcely meet with any more favor among practical men or scholars than *deplowing*.

Lateral is a term the meaning of which is fully and generally understood when applied to the vine, and it will probably be a long time before *thallon* will drive this older and better word out of use.

The learned Doctor's method of deriving the words *athallage* and *athallizing* from a Greek root will be very likely to amuse our great philologists; and among practical men it will be placed alongside of the wonderful Greek graft—described by Pliny in his seventeenth book, whereby all manner of fruits were made to grow upon one root or stock. But in these later days that kind of graft is called by another name.

**Report on the Disastrous Effects of the Destruction of Forest Trees in the State of Wisconsin.** By I. A. LAPHAM, J. G. KNAPP, and HANS CROCKER. Madison, Wisconsin. 12mo; 104 pp. Pamphlet.

It is seldom that we receive a pamphlet containing so much valuable information as this one, and we regret that it was only published for distribution in a single State, inasmuch as the subject treated of is one that should receive the attention of every citizen of the United States.

The Legislature of Wisconsin, by special act passed March 23, 1867, appointed a commission, consisting of the three gentlemen named above, to ascertain what effect the

clearing of the country of its forests had upon climate, soil, and the future welfare of the people.

The report of said commission accords with facts well known to every one who has investigated the subject, and proves beyond a doubt that whenever a country has been stripped of its forests, that the effect upon climate and people is extremely deleterious, if not wholly disastrous.

Desert wastes have been made in the Old World by the Vandals, who destroyed the luxuriant groves of those countries; and the Abyssinian deserts if again surrounded with forests would become as fertile as they were in ancient times. Man alone has cursed these lands with barrenness, and from such examples we may learn a lesson that may profit us by its frequent contemplation.

In the pamphlet before us, many instances are cited where a moist and humid climate has been changed to a dry and arid one, merely by the destruction of large forests. The cause of this is so apparent, that it is scarcely worth an explanation, at least not in this brief notice of so excellent a report.

The gentlemen have not depended upon their own observations or practical knowledge of the subject under consideration, but have collected the materials from various sources, particularly from the essays and writings of various authors in this country, with a few extracts from abroad. If the people to whom this address is made will act upon the suggestions contained therein, they will not only materially benefit themselves, but future generations.



**Squashes—How to Grow Them.** A Practical Treatise on Squash Culture. By JAMES J. H. GREGORY, Marblehead, Mass. New York: Orange Judd & Co. 12mo; 70 pp.; paper, 30 cents.

In the past few years there has been a decided change in the treatment of Horticultural subjects.

Authors have found that materials were becoming so abundant, that a single volume would no longer answer for the full elucidation of all Horticultural products.

Pomology has been separated into several branches, and, in a few instances, a volume has been devoted to a single species of fruit. Mr. Gregory has adopted the same plan, and given us a very practical treatise on the cultivation of Squashes. We miss many of our old favorites in this volume, and wish that the author had said more upon the cultivation of squashes and pumpkins as food for cattle. The work, so far as it goes, is the best treatise we have upon the subject.

**The Grapevine.** A Practically Scientific Treatise on its Management. By FREDERICK MOHR, Doctor of Philosophy and Medicine, etc. Translated from the German by HORTICOLA. New York: Orange Judd & Co. 129 pp. \$1.

Very few of the European works on grape culture are of any practical value to the vineyardist of America.

This one of Dr. Mohr's, however, is an exception, as it deals mainly with principles which are as applicable to the vines in our own gardens as in that of the author.

The volume before us is full of excellent hints, suggestions, as well as the elucidations of principles, and their application to practice, all of which are of great value to the novice in grape culture as well as those who have had considerable experience.

We do not fully agree with the learned author as to some of the modes of training and pruning given by him, for they have not been successful when applied to our native varieties; still, upon the whole, the principles, as well as the practical matter, will be highly appreciated by every horticulturist in this country. A large amount of valuable matter has been added by the translator (Dr. Chas. Siedhof), who is himself a master-hand in Horticulture, and has long been known to the public under the *nom de plume* of Horticola.

**The Small-Fruit Culturist.** By ANDREW S. FULLER. New York: Orange Judd & Co. 12mo; 276 pp. \$1 50.

Small-fruit culture has made such rapid strides in the past few years, that abundant materials were at hand from which to make a volume devoted exclusively to the subject. Whether the author of the "Small-Fruit Culturist" has done justice to the subject or not, remains for the public to decide. The thousands of copies which have been sold by the publishers since it was first issued, show conclusively that the public are searching for information regarding the cultivation and propagation of the plants named in this volume. We have numerous precedents to show that an author may sometimes speak well of his own works; but fearing that we might furnish a number of small critics an opportunity of rushing into print and thereby gaining a brief notoriety for their talent, we will dismiss this work by saying that it has no competitor, being the only work of the kind in the English language.

**The Vegetable World.** Being a History of Plants, with their Botanical Description and Peculiar Properties. By LOUIS FIGUIER. New York: D. Appleton & Co. 8vo; 576 pp.; cloth. \$6.

This is most splendidly illustrated, and, on the whole, very valuable, although the reader must be well posted on the subject to avoid the numerous errors that occur in almost every chapter. We can not for a moment suppose that these mistakes are the author's, but must have been made by the translator. Louis Figuier is a very successful author of several popular works, and although he is not considered high authority in botany, he knows very well that the female organs of *Juglans regia* are not borne in catkins—page 359; or that *lilies* are not all water-plants—page 321. Many such errors might be cited; but it is doubtful if the English or American publishers will ever take the trouble to correct them, even if they were all pointed out, consequently nothing would be gained by our fault-finding.

**Vineyard Culture.** Improved and Cheapened. By A. DU BREUIL. Translated by E. and C. PARKER, with Notes and Adaptations to American Culture by JOHN A. WARDER. Cincinnati, Ohio: Robert Clarke & Co. 12mo; 337 pp. \$2.

Du Breuil's name is probably more familiar to the horticulturists of this country than that of any other French author.

Aside from the numerous copies of his works to be found in both public and private libraries, copious extracts from them are inserted in many of the English as well as American books on gardening. This of itself is sufficient

to show how highly his writings are valued wherever they are known; and we doubt not but what this translation of one of Du Breuil's best works will be quite acceptable to thousands of American horticulturists. To be sure, grape culture in Europe and that of this country are conducted upon quite different principles; but it is well for vineyardists to understand both, if they wish to attain anything like perfection. The copious notes of Dr. Warder add very materially to the value of the work, and are in themselves a treatise worthy of perusal.

We hope the success of this book will be such as to induce our publishers to give us many more of the standard European works on Horticulture.

**Whitlock's Horticultural Advertiser.** Issued quarterly from the Office of All Nurseries in One, 37 Park Row, New York. Price 50 cents per annum.

The *Horticultural Advertiser* is published mainly for the purpose of informing the public where they can purchase seeds and plants.

In addition to giving the requisite information in regard to purchasing nursery stock, it also contains many valuable essays, both original and selected. These alone are worth far more than the subscription price, and justly entitles the *Advertiser* to a place among Horticultural periodicals.

Mr. Whitlock has established a Horticultural Exchange, which will, no doubt, be of great benefit to nurserymen in general, and we wish him abundant success.

## II.

## REPORTS OF

## HORTICULTURAL SOCIETIES.

THERE are many Horticultural Societies in the United States that publish an annual report of their proceedings. These volumes usually contain a large amount of valuable matter, which would interest and instruct others besides the members of the Society from which they emanate. But under the present system of issuing only a sufficient number of copies to supply members, the public at large are debarred from any benefit therefrom. Now, as it is chiefly from the local experience of individual horticulturists in different sections of the country that we are to determine the true value of any Horticultural product, therefore by collecting the information desired from the various reports, we can very readily ascertain whether any variety of fruit, flower, or vegetable is adapted to general cultivation, or merely to certain soils and circumscribed localities. It may be said that every one who desires the reports of Societies should become members, and thereby be entitled to them; but this would not be exactly fair, inasmuch as members who reside at a distance would be debarred from attending meetings and exhibitions, consequently receive no benefit, except that derived from the published reports, which in many instances would not be worth the cost of subscription. In these days of cheap

publications, and abundance of them, few of us feel like paying one, two, or three dollars for the report of a Society which does not cost one fourth of that sum. Having experienced considerable difficulty in obtaining the reports of the various Societies, and knowing that there are others who feel the same interest on the subject as ourselves, we suggest that the different Societies shall print an extra number of copies of their proceedings, and place them in the hands of one or more of our prominent Horticultural book publishers for sale. If this or some similar plan can be adopted and carried out, the field of usefulness of each Society would be greatly enlarged, and those desiring the reports would know where to obtain them. We believe this course would have a very salutary effect upon the Societies themselves, for members knowing that their individual suggestions and recommendations were to be read by those outside of their immediate vicinity, would be more circumspect in both.

We would be pleased to notice the reports of all the Horticultural Societies in the United States and Canadas, but can not do so unless copies are forwarded to us, or we are informed where they can be obtained.

Reports of the following-named Societies have been received in the past year:

**Illinois State Horticultural Society.** Officers: Elmer Baldwin, President; W. C. Flagg, Corresponding and Recording Secretary; O. L. Barler, Assistant Secretary; Jonathan Higgins, Treasurer.

The first meeting of the Illinois Horticultural Society was held at Peoria on the 15th of October, 1846.

In November of the following year another was held at Farmington, Fulton Co., at which there was an unsuccessful attempt made at organization.

Nothing more was done toward establishing a Society until 1851, when the Northwestern Fruit-Growers' Association was organized. This Society continued to hold meetings and fairs, and to publish annual reports until 1857, when it was merged into the present State Horticultural Society.

The Legislature of Illinois having become aware of the usefulness of this Society, voted at its last session an appropriation of two thousand dollars per annum, to be expended in the payment of premiums, and publishing the transactions of the Society. This timely and well-merited assistance places the Society on a firm basis, and through the exertions of its efficient officers it will soon rank, if it does not already, among the foremost Horticultural Associations in America.

The transactions of the twelfth meeting is now going through the press, and judging from the advanced sheets, kindly furnished us by the Secretary, it will be superior to any of the previous very excellent reports.

**Fourth Annual Report of the Proceedings of the West Jersey Fruit-Growers' Association for 1866-7.** Emmor Roberts, President; William A. Garrigues, Nathan Leeds, Geo. L. Gillingham, Vice-Presidents; Samuel L. Allen, Recording Secretary; Wm. Parry, Corresponding Secretary; Edwin Roberts, Treasurer.

A very neat pamphlet of thirty-eight pages, containing lists of the fruits which succeed in West Jersey.

The small-fruits appear to receive more attention from the members of this Society than the larger ones, although apples, pears, and peaches are cultivated by those who can make them remunerative. The great value of the reports of this Association no one will doubt, because the members are practical men who give to the public whatever information they have derived from actual experience. Facts appear to be a staple commodity among the West Jersey fruit-growers, and if a particular variety of fruit is recommended, the public may rest assured that some one or more of the members of this Society has an indisputable witness of the truth in his pockets.

**Massachusetts Horticultural Society.** J. F. C. Hyde, President; Samuel H. Gibbens, Corresponding Secretary; E. Sprague Rand, Recording Secretary; Edwin W. Buswell, Treasurer; John L. Russell, Professor of Botany.

This old and very wealthy Society appears to be in the most prosperous condition. Whatever the members undertake to do, whether it be to hold an exhibition or to build a new hall, they are sure to have their efforts crowned with success. No better evidence of the prosperity of this Society could be offered than the simple fact that three thousand six hundred dollars were appropriated for premiums in 1867. The schedule of prices for the year fills thirty-one pages of an octavo pamphlet, while the annual report is a volume of over one hundred pages of the same size.

The Massachusetts Horticultural Society has become one of the permanent and useful institutions of the country.



In addition to the afore-mentioned Societies, we offer the following brief notes on Societies whose full reports we have not seen :

**Kansas Horticultural Society.**

This Society was organized at Lawrence, on Dec. 11th, 1867, at which time the various fruits cultivated in that region of country were discussed in a manner which showed that the members were awake to the importance of an exchange of facts derived from the experience of individuals. The following officers were elected for 1868: Wm. Tanner, President, Leavenworth, Kan.; C. B. Lines, Vice-President, Wabunsee; G. C. Bracket, Secretary, Lawrence; S. T. Kelsey, Treasurer, Ottawa.

**Northern Illinois Horticultural Society.** Samuel Edwards, La Moille, Bureau Co., President; Ira L. Bailey, Mt. Carroll Co., A. R. Whitney, Franklin Grove, Lee Co., Smiley Shepherd, Hennepin, Putnam Co., Tyler McWhorter, Aledo, Mercer Co., Edgar Sanders, Chicago, Cook Co., Robert Douglass, Waukegan, Lake Co., B. N. McKinstry, East Sumner, Kankakee Co., Alex. Strachan, Rockford, Winnebago Co., W. E. Luken, Sterling, Whiteside Co., C. H. Rosenstiel, Freeport, Stephenson Co., Vice-Presidents; D. Wilmot Scott, Galena, Jo Daviess Co., Corresponding Secretary; H. D. Emery, Chicago, Cook Co., D. E. Peck, Marengo, McHenry Co., Recording Secretaries; L. Woodward, Marengo, Treasurer; Samuel Edwards, *ex-officio*, Ira L. Bailey, Mt. Carroll, E. H. Skinner, Marengo, Executive Committee.

This is a new Society lately organized.

The Constitution of the State Horticultural Society, with slight amendments, was adopted.

**Missouri State Horticultural Society.** Charles Peabody, President; 1st. District, J. M. Jordon; 2d, Thomas Walker; 3d, Alvah Culver; 4th, Felix F. Fine; 5th, James L. Miner; 6th, Elbridge

Burden; 7th, H. M. Votia; 8th, J. N. Seaton; 9th, William Stark, Vice-Presidents; R. S. Elliot, Kirkwood, Corresponding Secretary; William Muir, Fox Creek, Recording Secretary; John H. Tice, St. Louis, Treasurer.

This Society is now in its tenth year, and we understand that it is in a very promising condition. The people of Missouri should aim to make their Society the beacon light of all others, for the State will soon be the great center of the Union.

**Iowa State Horticultural Society.** J. B. Grinnell, Poweshiek Co., President; James Mathews, Marion Co., Vice-President; D. W. Adams, Alamakee Co., Secretary; David Leonard, Des Moines Co., Treasurer.

**Pennsylvania Horticultural Society.**

A few years since this Society had a fearful struggle to maintain an existence. But through the exertions of a few industrious horticulturists, both amateur and professional, it has risen phoenix-like, and can now boast of one of the most beautiful horticultural halls in the world.

The first exhibition held in the new building was on the 24th, 25th, and 26th of September last, and is said to have been the most successful one ever held by the Society.

**American Pomological Society.**

The eleventh session of this truly national Society was held at St. Louis, Mo., September 11, 1867, continuing for three days.

The display of fruit was equal, if not superior, to that of any other session—and, upon the whole, the meeting

was a great success. Most of the officers were re-elected.

James Vick, Jr., the Secretary, resigned, and F. R. Elliot, of Cleveland, Ohio, elected. As this Society is a national one, every horticulturist, or those who take an interest in the subject, should become members, and thereby entitled to the reports, which are of great value.

**Lake Shore Grape-Growers' Association.** Dr. J. J. Dunham, President; Captain J. Brown, Jr., Vice-President; M. B. Bateman, Secretary; Rev. R. H. Leonard, Treasurer; L. D. Greswall, S. B. Marshall, J. E. Mottier, J. H. Tryon, G. E. Rychmon, W. H. Lewis, H. Kelley, Directors.

The grape-growers of Ohio have organized a Society under the above name, which has been quite successful.

The cultivation of the grape in Ohio is the most prominent feature in her Horticultural products—and it is no wonder that those interested in the subject should organize and sustain a Society that has for its object the promotion and extension of grape culture.

**Cincinnati Horticultural Society.** Captain W. P. Anderson, President; W. Stoms, Robert Buchanan, and George Graham, Vice-Presidents; L. A. Hine, Secretary; Robert Clarke, Treasurer; E. A. Thompson, Hermann Haerling, J. L. Stettinius, Council.

**Ohio Horticultural Society.** The officers elected for the ensuing year are: Dr. J. A. Warder, Cincinnati, President; George W. Campbell, Delaware, Vice-President; M. B. Bateham, Painesville, Secretary and Treasurer; A. B. Buttles, Columbus, N. L. Wood, Smithfield, N. Ohmer, Dayton, and D. C. Richmond, Sandusky, Committee *ad interim*.

The annual meeting of the Ohio Pomological Society was held at Sandusky last December, on the 4th, 5th, and 6th instant.

**Jefferson County (Mo.) Horticultural Society.** Officers for 1868: T. Walker, President; W. S. Jewett, Vice-President; J. E. Walker, Secretary; H. P. Bates, Treasurer and Librarian.

**Western (N. Y.) Horticultural Society.** W. B. Smith, Syracuse, President; James Vick, Rochester, J. J. Thomas, Union Springs, J. W. Helmer, Lockport, Vice-Presidents; H. G. Warner, Rochester, Secretary and Treasurer; H. E. Hooker, Rochester, Thomas Smith, Geneva, E. Ware Sylvester, Lyons, Hon. E. Moody, Lockport, E. A. Frost, Rochester, Executive Committee; J. J. Thomas, Union Springs, P. Barry, Rochester, John Crane, Lockport, F. W. Lay, Greece, C. W. Seeley, Rochester, Committee on Native Fruits; George Ellwanger, Rochester, C. Downing, Newburg, John Fisher, Batavia, E. Moody, Lockport, T. C. Maxwell, Geneva, Committee on Foreign Fruits.

## III.

## NEW FRUITS.

IN making the following notes on fruits we do not propose to confine ourselves entirely to those kinds which have been introduced in the past year.

A variety may be new in one country or locality and old in another, consequently we have to speak of things as they appear to us. Moreover, the real value of any variety can scarcely be ascertained in one or two years; and as good and bad qualities are constantly being developed in old as well as new kinds, it becomes necessary to refer to them for the purpose of keeping our record complete.

We do not, however, propose to refer to old varieties unless some new merit or demerit has been noticed in the past year.

In referring to varieties that have been figured or described in any of our Horticultural periodicals in the past year, we shall give due credit to each.

## APPLES.

*Bottle Greening.*—Yellowish green, with red cheek covered with rich purplish bloom as deep as on the plum. When fully ripe, the fruit is a golden yellow with red cheek. The flesh is subacid, almost melting; core, small. In season from October to February. From Vermont.

Figured and described, *American Journal of Horticulture*, June, 1867.

*Beauty of America*.—A large yellow winter apple of good quality, which has been but little cultivated, although known to the pomologists of Ohio for many years. It is now thought to be worthy of more extended cultivation. Figured and described in the *Horticulturist* for March, 1867.

*Crotcher*.—Medium size oblate conic; skin, whitish, sometimes with a slight blush, and thinly sprinkled with white dots. Of a rich subacid flavor. Ripens in August. Figured and described in *Horticulturist* for October.

*Dodge's Crimson*.—From Cumberland 'Co., Tenn. A promising winter variety. Figured and described in *American Agriculturist* for March.

*Duchess of Oldenburg* (Syn. *Borovitsky Carlowinsky*).—An old variety from Russia. It was placed on the rejected list of the American Pomological Society in 1858, but restored to partial favor in 1862. In the last few years it has been discovered that this is one of the most hardy varieties in cultivation, consequently it has become very popular in our Northwestern States. Nurserymen in those regions have found it impossible to supply the demand for this variety. One nurseryman in Wisconsin (J. S. Stickney) writes that a large portion of the 600,000 stocks worked the present winter will be with the Duchess of Oldenburg, and the balance with Siberian Crab Apple. Mr. Stickney has had twenty years' experience in apple-growing in Wisconsin, and we presume he knows what kinds are the most valuable in that section

of the country. We mention this circumstance for the purpose of showing that a variety of fruit may have a local value far above its general one.

*Hunt's Russet*.—From Old Concord, Mass. Medium size, russet, with red and greenish yellow on sunny side. Excellent subacid flavor, and keeps all winter. It is a popular variety in the vicinity where it originated. Described in *American Journal of Horticulture*, Vol. II., page 271.

*Huntsman's Favorite*.—From Fayetteville, Mo. Described in *Colman's Rural World* as a fine winter apple.

*Rasche* (fig. 1).—Medium, roundish, flattened at the

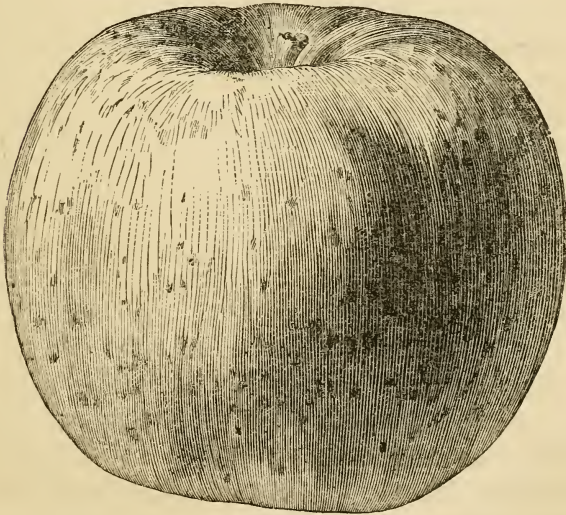


Fig. 1.

ends; skin, glossy, smooth, greenish yellow; flesh, yellowish, crisp, juicy, mild subacid, rich and high flavored.

Season, December to March. F. R. Elliot, in *Horticulturist* for December, 1867.

*Sawyer*.—From Hillsborough, Ill. A very beautiful and excellent variety which it is said will keep sound and fresh until June or July. Should it sustain its present reputation, it will be of great value, particularly for the more Southern States. Described in *Colman's Rural World*, also in *American Journal of Horticulture*.

#### PEARS.

There have been quite a number of new varieties introduced to notice in the past year. Forty-one seedlings, raised by Dr. Shurtleff, of Brookline, Mass., were described in *Hovey's Magazine of Horticulture* for March, 1867. One of these has attracted considerable attention under the name of General Banks, and was figured and described in *Hovey's Magazine* for October. In the *American Journal of Horticulture* for November, the same pear is described under the name of "Pemberton."

*Royal Pears*.—Mr. Huyshe, of England, has raised several new pears, to which he has given royal names. They were figured in the *Gardener's Year Book* (English) for 1867, also in the *Horticulturist* for April. The names of these new varieties are, Victoria, Prince of Wales, Princess of Wales, and Prince Consort. They are highly recommended by some of the English pomologists. We do not know whether they have been introduced into this country or not.

It requires many years to ascertain the real value of any variety of pear, therefore it would be folly for us to



attempt an enumeration of the good or bad qualities of new sorts.

Among the many comparatively new varieties we name the following as promising :

*Amelia le Clerc*.—Very large and beautiful dessert pear, which ripens in November. Raised by the late Leon le Clerc, of Laval. Foreign.

*Beurre de Jonghe*.—A new Belgian variety of great promise. Flesh, pinkish white; very juicy and excellent. Ripens in December and January.

*Beurre de Fromentel*.—Raised by M. Fontaine, of Ghelin, and disseminated by M. A. Verschaffelt, of Ghent, in Belgium. Fruit, very large, and described as one of the most delicious pears known. Ripens during October and November.

*Brialmont*.—Imported from Belgium several years ago. Mentioned in *Field's Pear Culture* in 1858. Trees of this variety have fruited near Boston, and we have heard it spoken of as very promising.

*Clapp's Favorite*.—A first-rate early variety, which is rapidly growing in favor. It resembles our old favorite the Bartlett, but ripens a week or ten days earlier. One of our best native varieties. Figured and described in *American Agriculturist* and *American Journal of Horticulture*.

*Dana's Hovey*.—Another comparatively new variety of excellent quality. It is not large enough to attract attention from its appearance, but like the Seckel, must become known to be fully appreciated. Described in *Hovey's Magazine*, also in *American Journal of Horticulture*.

*General Banks.*—One of Dr. Shurtleff's seedlings, the name of which has lately been changed to "Pemberton." See *Hovey's Magazine* for October, and *American Journal of Horticulture* for November.

*Quinn.*—Supposed to be of European origin, but named for P. T. Quinn, Newark, N. J., who exhibited it at the Farmer's Club of the American Institute. The committee appointed by the club to report upon its merits describe

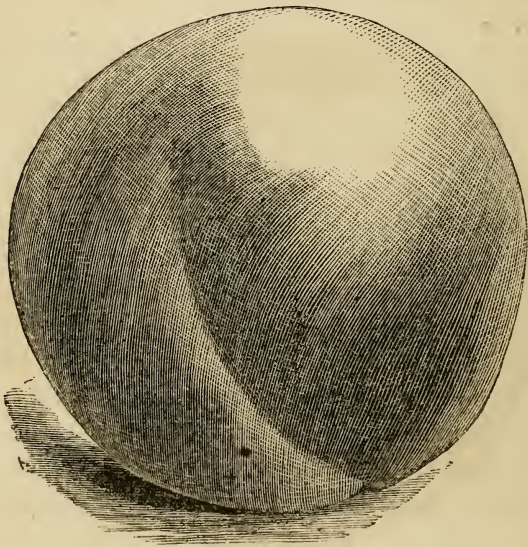


Fig. 2.

it as a fruit below medium size, pyriform, tapering rapidly toward the stem; flesh, rich and juicy, and free from grittiness; in flavor and aroma, best. Ripens January and February.

## PEACHES IN 1867.

Very few new varieties have appeared the past season. Many of our old sorts are so near perfection that we can hardly expect to make much further progress in the way of new varieties. An occasional freak of nature may present us with a new feature, but in intrinsic value there is little to be hoped for.

*Alida* (fig. 2).—Originated with Charles Carpenter, of Kelly's Island, Ohio. Supposed to be a seedling of Craw-



Fig. 3.

ford's Late; quite as large, but much darker, red cheeked, and nearly round. Flesh, dark yellow, rich, juicy, and excellent. Figured and described in *Horticulturist*, February.

*Amelia* (fig. 3).—Originated with George Husmann,

Hermann, Mo. Fruit, large, round, with well defined suture; color, clear, rich yellow, marbled with dull red; flesh, thick, yellow, rich, juicy, sweet, and separating freely from the stone. Described in *Horticulturist* for December.

*Foster's Seedling*.—Originated with J. T. Foster, of Medford, Mass. Fruit, large, slightly flattened, with slight suture; flesh, yellow, very rich and good. Described in *American Journal of Horticulture*, Vol. II., page 277.

*Flat Peach of China*.—We notice this peach for the

Fig. 4.



Fig. 5.

purpose of eliciting information in regard to its merits. It was introduced into this country many years since, but we are not aware that any of our nurserymen or amateurs have it in their collections at the present time. The singular form of this variety makes it an object of curiosity, if nothing more.

Fig. 4 shows a cross-section, natural size of a specimen

exhibited before the London Horticultural Society in 1821. The stone is quite small and deeply furrowed, as shown in fig. 5. A full description and colored plate is given in the Transactions for 1821 of the above-named Society. As varieties of peculiar habit are becoming quite popular of late, it would be well for some of our enterprising nurserymen to re-introduce this species if it has become extinct in this country.

*Italian Dwarf.*—When or by whom this variety was

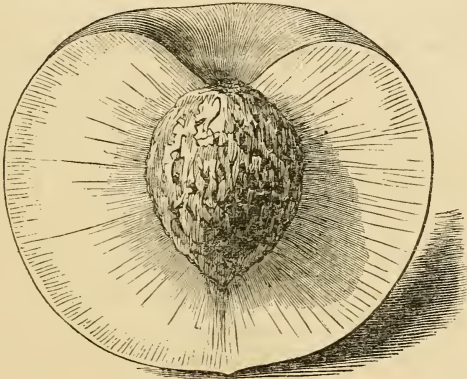


Fig. 6.

introduced we are not informed. It is very dwarfish in its habit, more so than any other variety in cultivation. Fruit, medium size, greenish white; flesh, white, with red stains near the center; in quality not first-rate; stone, small; flowers, large and showy; leaves, serrate. Specimens started in January in green-house did not ripen their fruit until the 1st of September. The pots were removed to the open border in summer. The past season was very wet in the vicinity, New York city, and this may account

for the late ripening. We fear, however, that this variety is naturally too late for open culture in the Northern States.

Fig. 6 shows a cross-section of a specimen which ripened on a plant grown in a pot the past season. The tree was sixteen inches high and eight inches in diameter, and ripened six peaches. Described in *American Journal of Horticulture*.

*Van Buren's Golden Dwarf*.—Another dwarf variety, but not quite so much so as the Italian. Fruit is also larger and more oblong, although it is sometimes quite round. Skin, yellow, with red cheek; flesh, yellow, sub-acid, and good, adheres firmly to the stone. Ripens rather late for the Northern States, unless started under glass or placed on the south side of a wall. Figured and described in *American Journal of Horticulture*.

The dwarf peaches are worthy of a place in every garden as ornamental plants, if for nothing more. With a little care in giving protection, and a warm situation in summer, they may be made to produce a fine show of fruit.

#### PLUMS.

For a number of years past the cultivation of the plum has been confined to such narrow limits, that little attention has been paid to the production of new varieties. The curculio is fast becoming master of the field, and we fear that plum culture will have to be abandoned unless some effectual remedy can be discovered to protect them against the ravages of the little *turk*.

New varieties have been introduced from time to time which were said to be curculio proof, but these promises were never made good, and we may rest assured that no such variety will ever be produced. The curculio is not very particular as to the kind of fruit in which it deposits its eggs, and if none is at hand, the warts on a cherry-tree or a fresh oak gall will be used instead. The wild plum in some sections has partially escaped, while the foreign species has been destroyed, and this has induced a

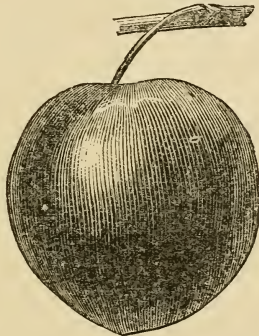


Fig. 7.

few cultivators to suppose that our native varieties would always be exempt from the attacks of this insect. Some of our native kinds are worth cultivating, but they are not any more reliable than some of the foreign varieties. One of the largest and best of the natives is the Miner Plum, fig. 7. It is quite large, of a deep red color, and as good as the best of this species. Tree, a strong and vigorous grower, and quite productive. Figured and described in *Horticulturist* for October.

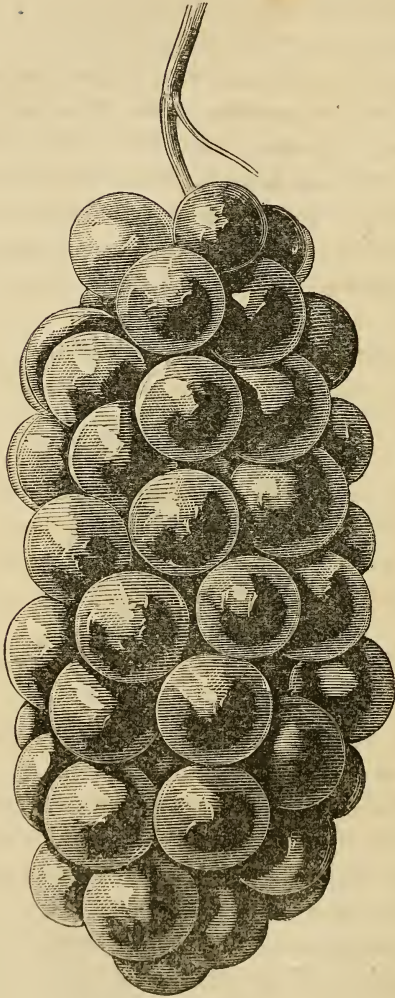


Fig. 8.



## NATIVE GRAPES.

In some portions of the Eastern States, the past season was a very wet one, and but few varieties of the grape fully matured. At the West, the other extreme was experienced, but not to such an extent as to materially injure the crop. All of the more delicate varieties of grapes have suffered more or less in all sections, and our vineyardists will be more cautious in the future, and avoid those kinds which are likely to fail when a slight change in seasons occurs. Very few new varieties have been announced, and we have little cause to change our opinion in regard to those of previous years.

*Arnold's Hybrids.*—Mr. Charles Arnold, of Paris, Canada West, has been very successful in his experiments with grapes. He has produced several very promising hybrids, some of which we have had an opportunity of testing the past season, and we append our notes made at the time.

*Arnold's No. 1.*—Bunch, large, shouldered, moderately compact; berry, medium, slightly oval, black, with thin bloom; flesh, firm, sprightly, rather acid, will probably be better in more favorable seasons.

*No. 2.*—Bunch, large, long, and tapering, shouldered; berry, medium, round, black, with very thin bloom; skin, thin; seeds, small; flesh, tender, with little pulp, juicy, sprightly, and good.

*No. 5.*—Bunch, very long, shouldered, rather loose; berry, small, round, greenish white, with thin bloom; flesh, with considerable toughness, rather acid, and not

rich. It is a very handsome grape, and we hope will improve in quality in more favorable seasons.

*No. 8.*—Bunch and berry small, about the size of the Clinton; black; of a rich subacid flavor; flesh, very tender; seeds, small. In quality we consider this the best, but may change our opinion another year.

*No. 16.*—Bunch, medium to large, compact; berry, medium, nearly round; color, black, with bloom; flesh, slightly pulpy, rather acid, specimen evidently not fully matured. Fig. 8 is a fair representation of the specimen received from Mr. Arnold. Figured and described in *Horticulturist* for December.

*Arrott.*—A new white grape, which promises well in the vicinity of New York, also at the West. In quality it is good, if not first-rate.

*Amanda.*—From Missouri, where it is said to promise well.

*Aughwick.*—A new black grape from Pennsylvania, resembling the Clinton, recommended for wine.

*Berks* or *Lehigh.*—We received a vine of this variety several years since, and this season it bore fruit, which, to our taste, is very much like the Catawba.

*Black King.*—Said to be a fox grape; but the specimen vines we received from a very reliable source, have persisted in bearing Clinton grapes.

*Christine.*—This is also sent out under the name of Telegraph; the first is, however, the right name; so say those who are presumed to know its history. It promises to be a valuable wine grape, not only in this country but in Europe, where it is now under trial.

*Claret*.—We have received vines of this variety from three different vine-growers, all of which have proved to be the Clinton. If there is a distinct variety known as the Claret, we shall be happy to learn where it can be obtained.

*Eumelan*.—A new black grape, not yet disseminated.

*Hine Seedling*.—Supposed to have originated in Ohio. A small red variety of excellent quality. Exhibited before the Pennsylvania Horticultural Society.

*Janesville*.—Raised by Mr. Loudon, of Janesville, Wis. The original stock of vines is said to have been sold for \$1,000. We shall probably hear more of this variety another season.

*Keuka*.—An accidental seedling found on the west shore of Crooked Lake, N. Y. Keuka is said to be the old Indian name of this lake. We give the description furnished us by Mr. J. M. McDowell, who exhibited the Keuka at the grape show held at 245 Broadway, New York, in October last. Bunch, medium, loose, and sometimes shouldered; berry, medium to large, oval, black; skin, thin and tender, rich in coloring matter; flesh, tender, juicy, with little pulp, sprightly and vinous. Ripens early, 1st to 10th of September. Vine, a good grower and productive. Promises to be a very valuable wine grape.

*Lydia*.—The more experience we have with this variety the less we value it. Our vines not only winter kill to the ground, but the young growth is badly affected with mildew.

*Martha*.—This new white grape is not so good in

quality as we anticipated, being a little too foxy in flavor; still, it is passably good. The vine is hardy and healthy, and that is a great recommendation, particularly while we have so few varieties that possess these merits.

*Omega*.—A new variety from the West, resembling the Catawba, but said to be better. Not known at the East.

*Onondaga*.—Exhibited at the American Institute Fair in 1865, by L. P. Noble. It resembles the Diana both in color and quality, although not quite so musky in flavor. The vines are now in the hands of W. Brown Smith, of Syracuse, N. Y., and will be disseminated so soon as a sufficient stock can be grown.

*Paxton*.—A new variety discovered by F. F. Merceron, Catawissa, Pa. It is said to resemble the Concord, but superior. Not yet disseminated.

*Red Shepherd*.—Our oldest vines of this variety fruited abundantly the past season. Fruit of the smallest size, and not edible. Mr. Estell can claim the honor of introducing the most worthless grape ever seen in America.

*Rogers' Hybrids*.—These varieties have been so generally disseminated in the last five or six years, that their real value should soon be fully ascertained.

There is, however, one great impediment to our obtaining reliable information in regard to the different numbers, for the very good reason that they have been so inextricably mixed that few of our growers are able to separate and place each under its original number. There are a few of these varieties that are so distinct that they may readily be known; but there are others which will require considerable skill and long acquaintance to enable one to

identify them. We have now another source from which confusion is to be multiplied many-fold, and that is in sending out the Salem, which was formerly distributed as No. 22. Salem was selling the past season for \$10 per vine, while good vines of 22 could be had for a dollar, and both are the same variety. It may be said (and in fact it has been), that few possessed the genuine No. 22, and this may be true; but every one who has purchased a vine under that number will be very likely to think that he has the genuine, whether it is true or not. Many of us purchased our first samples of Mr. Rogers or Col. Wilder six or seven years ago, and have full as much confidence in our stock as we would have in that of others.

We have heard that it is proposed to name No. 4, Col. Wilder. If this is done, it will be bestowing great honor upon the grape. Nurserymen should take warning, and be ready with a large stock.

These Hybrids, upon the whole, are growing in favor, and it is a pity that a few of the best could not be selected by a competent committee and the others laid aside. Progress is retarded in this instance by numbers.

*Vanderburgh.*—A new and promising variety from Lansingburg, N. Y., not yet sent out.

*Weehawken.*—We had an opportunity of examining the original vine of this variety when in fruit the past season. Bunch, medium, shouldered, compact; berry, medium, round, greenish white; flesh, firm, sweet, and delicious. It is a seedling of a foreign variety, and succeeds well in the garden of the originator, Dr. Charles Siedhof, Weehawken, N. J.

*Wylie's Hybrids.*—Mr. A. P. Wylie, of South Carolina, is said to have produced some very promising hybrids between the Clinton and Black Hamburg. The Clinton is one of our hardiest and most healthy varieties, and a good stock from which to raise new sorts. Mr. Arnold's success with the Clinton has, as well as Mr. Wylie's, proved beyond a doubt that some very valuable varieties may be expected from this source.

#### BLACKBERRIES.

The blackberry appears to attract the larger share of attention among the small-fruit growers. Several new varieties have made their appearance in the past year, and most of the older ones have done so well that plantations of this fruit are being greatly extended. The prospects of small-fruit culture are certainly very encouraging, but it is to be hoped that our horticulturist will not go to such extremes as in the days of the *morus multicaulis*, or get up a *rubus mania*. If all the world were honest as well as cautious, then we should have little to fear, but the truth compels us to say that they are not, at least not as a whole; and there are men who will swindle the people if they can, and there always seems to be a chance, as there are plenty who have more money than caution. We still need a national experimental garden in which to test the new varieties, or that which would be far better, a national committee, the members of which should be located in different portions of the country, their duty being to test or gather information and report upon the new and old varieties of fruits in their vicinity. The time must come when no new variety of fruit or flower

will be purchased or allowed to be sold until good reference can be given. At the present time the rascal is the equal of the honest man (if they are both strangers to the public), and often his superior, for, generally, he has more money to spend in advertising. This is not as it should be, and progress in Horticulture is not accelerated by the present system of management. Only a very few of the older varieties of the blackberry call for a notice in this volume of the RECORD.

*Adair's Claret.*—From Kentucky, and a very good variety, but the color is not attractive. Will not do, as we have many others that are better.

*Crystal White.*—The best that we have yet seen of this color. Fruit, medium size, pale lemon color, very good flavor; promises well.

*Hurd's Thornless.*—From Sussex Co., New Jersey. Found growing wild not far from where the original Kittatinny was discovered. The canes were destitute of thorns when first received, but a few have been developed on some of the plants the past season. It is said to be very early, and the fruit delicious. The plant is quite distinct in both leaves and stem. We would advise no one to purchase it until it has been thoroughly tested. We will advise the readers of its merits or demerits when ascertained. Since our call for Thornless Blackberry plants in the *Horticulturist* for September, we have received several new varieties that are very promising, so much so, that we can confidently state that ere long good varieties of thornless blackberries will soon be as common as others.

*Kittatinny*.—Favorable reports are received from all sections of the country in respect to this very popular variety. The abundance of suckers which it produces in light rich soils is certainly an objection. If the suckers are allowed to grow, the crop of fruit will be small. The great hardiness of the *Kittatinny* is now fully ascertained and fully appreciated in those sections where the *New Rochelle* is tender.

*Mason's Mountain*.—In our grounds this is a small, worthless variety. It was highly recommended and sent out by R. O. Thompson, of Nebraska Territory.

*Missouri Mammoth*.—This variety is now being disseminated by Thomson & Barter, of Missouri. The praise bestowed upon it in Thomson & Barter's circular would lead us to think that this Western wonder was sure to excel all of our Eastern varieties. Plants of the *Mammoth* were sent to Eastern nurserymen early in 1867, but we understand that none of them fruited the past season. Our engraving, fig. 9, was made from a photograph sent us by Thomson & Barter. The engraver has followed copy very correctly, except that one berry of the cluster was left out, so that the cut would only fill a page of the RECORD. We furnished Thomson & Barter electrotype plates from the original engraving, and we see by the Western papers that they have not remained idle. Plants of this variety have been pretty freely distributed the past fall, and we shall soon know whether it is all that it is represented to be. In the mean time we say to our readers, know more about it before you purchase largely.



*Needham's White*.—Is not a white as its name indicates, but a grayish brown. It is worthless.



Fig. 9.

*Newman's Thornless*.—Less thorns than some others, but far from *thornless*; should be discarded.

*Wilson's Early*.—Those who have had this variety in full bearing the past season must have been *agreeably* disappointed in the large size as well as the quantity of fruit. The engravings which have appeared in the papers, previous to 1867, of the Wilson, were far below the average size of the fruit the past season. The New Rochelle is a large berry, but the Wilson excels it in size. But one merit remains to be determined, and that is hardiness, in the more Northern States. If it should prove to be as hardy as the Kittatinny, then its reputation will be all that its most ardent admirers can wish. Fig. 10 is an exact representation of a cluster of the Wilson, gathered from a two-year-old plant the past season.

#### RASPBERRIES.

*Arnold's Hybrids*.—These are new varieties, produced by Mr. Charles Arnold, who has been so successful in hybridizing grapes. We have taken more interest in Mr. Arnold's new raspberries than in the grapes, because they are the first real hybrids which we have ever met, that is, the first produced by the direct personal efforts of any American horticulturist.

Mr. Thomas Rivers is said to have hybridized raspberries many years ago, but we think none of them ever reached this country.

Mr. Arnold has not as yet named any of his new raspberries, as he intends to fully test them before offering them to the public.

We fruited several of these hybrids the past year, and prize them highly. There are both yellow, orange, and



Fig. 10.

red varieties, some of which will equal if not excel some of the old sorts of the same color. No. 3, Orange, is a most delicious berry, and we think nearly or quite equal to Brinckle's Orange. No. 1, Red, is a most vigorous grower, in fact, tree-like, growing six to eight feet high with stocky cane, with large lateral branches. All the varieties appear to be perfectly hardy. Another season we hope to give an accurate description of all of these hybrids, and their names.

*Burlington (Prosser).*—The late Benjamin Prosser, of Burlington, N. J., raised several varieties of raspberries from seed. None of them, however, we believe, were disseminated by him; but since his death, a son has been selling one or more of them as Prosser's Seedling. Mr. Edmund Morris proposed, in 1866, that as no name had been fixed upon for it, as it was then supposed *one* variety, it should be called the Burlington, and his proposition was adopted. See "Small Fruit Culturist," page 159.

In company with two well-known fruit-growers we visited the Prosser garden the past summer and saw the Prosser, or Burlington, in fruit. We found not only one variety, but four, mixed together in one bed, and we failed to learn which one was to be called the Prosser or Burlington. Some of these varieties, and perhaps all of them, are really worthy of trial elsewhere; but some one should see that they were separated and described before the public are asked to pay five to ten dollars per plant, as has been done in the past year. We do not think that those who have these varieties in charge would intention-

ally defraud the public, but a blunder is being propagated through ignorance.

*Clarke*.—This comparatively new variety is rapidly gaining a popularity which it fully deserves. It is hardy, prolific, and best in flavor. After a six years' trial we place it at the head of the list of all the foreign species. There may be others that are better for particular localities, but the Clarke will grow splendidly in soils where no other of the Antwerp family will thrive.

*Davison's Thornless* still holds to its good reputation. We thought that after being propagated for a few generations that the plants might show a tendency to revert back to the original type, and that thorns would be developed, but among the thousands of plants that are grown, nothing of the kind has as yet been observed. In a few nurserymen's catalogues we notice that this variety is called the Sinton; this is an error that should be corrected, as it is already causing confusion. Mr. Sinton sent out the variety under the name of Davison's Thornless Black Cap, and it should be known by this name, and no other. One catalogue which we have received, offers both the Sinton and Davison, as though they were distinct sorts—the Sinton being quoted at \$200 per thousand higher than the Davison.

*Duhring*.—We think the Duhring Raspberry has been very much overrated. It may do in localities and soils where the Antwerp and similar varieties succeed, but in our grounds, and many gardens in southern New Jersey, where we saw it in fruit the past season, it was a decided

failure. It is, no doubt, a fine raspberry, but will scarcely answer for general cultivation.

*Elm City*.—Probably a seedling of our native red raspberry; said to be hardy, prolific, early, and with all the other good qualities generally belonging to *new* varieties. We have seen the plants and tasted the fruit, but shall want to know more of it before giving a decided opinion upon its merits. From New Haven, Conn.

*Ellisdale*.—After another year's trial, we are inclined to place this variety among those adapted for general cultivation. It certainly belongs to the Purple cane family, the plant being perfectly hardy and very vigorous and productive. The berry is much larger than the old Purple cane, not so fragile; but when fully ripe it is much darker in color, being a dark purple. In quality, it is scarcely more than second-rate, if compared with other choice varieties; but the plant possesses other merits which in a great measure make up for this deficiency.

We do not wish to be understood as placing the *Ellisdale* alongside, or in competition with, the *Clarke*, *Orange*, or similar sorts, but do recommend it to those who want a hardy and productive raspberry, which will thrive even if it is not planted in the best of soils or in the most favorable locations.

*Globose Scarlet*.—This is not a new variety, but one that has not been very generally disseminated. The berry is large, roundish, light red, subacid, and not very rich, brittle, juicy; seed grains, large; canes, erect, stocky, branching, apparently quite hardy. May prove to be a

valuable market variety, although it is not firm enough to bear long carriage.

*Garden Raspberry.*—This was sent out by Mr. H. H. Doolittle last season under the name of Red-flavored Black Raspberry, but has been re-named as above. Our plants have not yet fruited, and we have seen no report the past season in regard to its merits.

*Lum's Everbearing.*—Nearly related to the old Ohio Everbearing, but said to be better in quality and more prolific. New, not yet fully tested. From H. B. Lum, Sandusky, Ohio.

*Mrs. Wood.*—This is also from Ohio. Mr. F. R. Elliott, who has been acquainted with it for several years, says that it is the largest of the black raspberries. Figured and described in *Horticulturist*, August, 1867.

*Naomi.*—Plants received for the Naomi have borne fruit, but not equal to the description we received. It is quite probable that they are not the genuine variety, as we have learned that the original stock was mixed with inferior sorts. One gentleman who was well acquainted with the Naomi when it was growing in the grounds of Mrs. Wood, informs us that he had only sixteen genuine plants in the one hundred he received from the original bed.

We have lately secured a few plants propagated from these sixteen plants, and shall have an opportunity the coming season of comparing them with plants received from another source. The Naomi is no doubt a valuable new variety, but from what we can learn of the stock offered to the public, there is a possibility of its being somewhat mixed with inferior sorts.

*Rivers' Black.*—A very hardy and prolific dark-colored variety, which is but little known in this country. For some soils and situations we think it will be valuable. It will probably succeed in any soil or locality where the Purple cane does. It is at least worthy of a trial. Originated with Thomas Rivers, Sawbridge worth, England.

*Scarlet Raspberry.*—This supposed new variety has proved to be the Allen's Red Prolific. The fruit is really good, and of a handsome light red color. The plants are moderately prolific and quite hardy, but they produce such an immense number of suckers that they become a nuisance. This variety will be found on the rejected list of the American Pomological Society.

*Seneca Black Cap.*—A new variety which is being sent out by Mr. Doolittle. Our information in regard to it is as meager as that which relates to the garden raspberry from the same source. We have both of these varieties growing, and hope to give a full and accurate description in the next volume of the RECORD.

*Susqueco.*—A new red raspberry, which it is thought will be a successful rival of the Philadelphia. The fruit is of a light red or scarlet color, of good quality, and very handsome. Origin unknown, but is being disseminated by Edward Tatnall, Wilmington, Del.

*Summit Yellow Cap.*—This is probably the handsomest light-colored variety of the *Rubus occidentalis* species. Color, bright yellow, with a small purple spot upon each grain; canes, a light yellow, with slight markings of red; a strong grower; and very productive. This is certainly a very beautiful variety, and we shall be surprised if it



does not become exceedingly popular with amateurs, if not with growers for the market.

#### CURRANTS.

A few new varieties have been introduced the past year, but their merits have not as yet been ascertained. The older sorts are in great demand, probably more so than in any year previous.

At no one time in our twenty years' experience have we known such a demand for currant bushes as in the past autumn. A few years since the best of plants could be had in any quantities, and at low prices; but the demand has gone ahead of the supply at present, which shows conclusively that the currant is being more highly appreciated than formerly. Cherry, White Grape, Imperial White (or Yellow, as it is known by both names), Red and White Dutch, Victoria, and Versailles appear to be varieties chiefly planted for market.

The question as to whether the Cherry and Versailles, as known in this country, are both the same, is yet undecided. We have not only watched the plants, but the reports of the various societies throughout the country, for more than ten years, and still we are not positive either way.

Ten years ago we imported five hundred Versailles, from one of the most reliable firms in France, but they were not as large a currant as the one we now grow for that variety. There is one thing quite certain, and that is, the great reputation of the Versailles commenced on this side of the Atlantic, and it is barely possible that the

Long-Bunched Cherry of the French catalogue is sent us for the Versailles and for the true Cherry as well. The public are still anxiously waiting for some two or more currant-growers to give the unmistakable marks of distinction.

#### GOOSEBERRIES.

Progress in native gooseberries is exceedingly slow. The Downing was certainly a move in the right direction, and now stands at the head of American varieties. The Mountain is larger, but not quite so good, while the Cluster and Cluster Seedling and Houghton about complete the list of pure native sorts. Dana's Improved Houghton promises well, but it will require several years' more experience to determine its true value.

Our fruit-growers are sadly neglecting this fruit, for there is no reason why we should not have native sorts equal to the best imported. It is well known that the foreign varieties do not succeed generally, while the native sorts do, consequently it is to the latter we must look for permanent and valuable improvement.

#### STRAWBERRIES.

New strawberries are as abundant as the most ardent admirer could wish. We have become so accustomed to the annual announcement of new varieties of this fruit, that we should feel disappointed if none were offered. The time was when we looked to Europe for our supply of novelties, but that time is past, and the catalogues of fruit-growers glow with the brilliant names of poets, warriors, and philosophers, which are bestowed upon some

pet seedling strawberry. Even the precious metals and royal families do not escape the honor of having their names blazoned before the world in connection with this choicest of fruits.

Our old *Victoria* strawberry has been re-gilded and re-christened, under the name of *Golden Queen*; and having again entered the field with all the pomp attainable in an advertisement, she will no doubt receive a conspicuous place in many an amateur garden. Fruit-growers' societies and conventions may enter their protests against this practice of sending out old varieties under new names, but it is of no use so long as the advertising columns are open to all who choose to use them.

Many an old variety has been sent out under a new name, and still no blame could be attached to the disseminator, because he was not aware that it was an old variety; but when the discovery was made, he restored to it the original name. We have to regret, however, that this course is not always pursued; if it were, we should have less cause for complaint.

*Brooklyn Scarlet*.—We have received more letters in the past year commending this variety than in the six previous ones. It was always one of the reliable varieties for home use with us, and we are happy to hear that so many have discovered its good qualities. It is quite probable that if it had been sold at five to ten dollars a dozen when first sent out, it would have been considered valuable; but, unfortunately, one hundred and twenty-five thousand were distributed gratuitously, and that was enough to destroy the reputation of any strawberry.

*Boyden, No. 30.*—This new variety was exhibited the past summer for the first time. The berry is of an immense size, roundish conical, with neck; crimson or dark scarlet. As Mr. Boyden intends competing for the Greeley prize, he will not send out any plants at present. Figured in *American Agriculturist*, August.

*Charles Downing.*—We like the idea of honoring our great horticulturists by attaching their names to choice varieties of fruits. But those who attempt it should be very careful lest they should take from, more than they add to, the fame of those they intended to honor. Let us for a moment suppose that this variety should not prove to be as good as expected, and at some future meeting of the American Pomological Society the Charles Downing strawberry is named for discussion. How will the name of Downing sound in connection with such words as “humbug,” “worthless,” “a perfect failure,” and other choice epithets usually bestowed upon varieties that are not first-rate? We hope such a thing will never occur, and that this new seedling of Mr. Downer will be worthy of the name it bears.

*Canada.*—This is supposed to be a cross between the Wilson and Triomphe de Gand. It is described as a large and beautiful variety, and of excellent quality; very productive and hardy. It has not as yet been tested in the States, but will ere another season.

*Durand.*—A large and very good variety. Color, bright scarlet; flesh, moderately firm and highly perfumed; plant, vigorous and apparently quite hardy and productive. Promises to be valuable.

*Dr. Nicaise.*—Another foreign variety, which comes to us with a great recommendation. We have had so many of this sort, that no one will feel very much disappointed even if this last new wonder should prove to be no better than its predecessors. The plants are offered at \$10 per dozen, which we think is a large sum to pay for learning so little.

*Ida.*—From the advertisements of those who had plants of this variety for sale, one might suppose that it was a brilliant star; but experience has proved that it is a will-o'-the-wisp, and a very small one at that. In other words, it is a great failure, being too small, and not good enough to be worthy of any great attention.

*Meicalf's Early.*—This is another great failure. Thousands of dollars were expended by our fruit-growers for plants of this much-lauded variety, and although but two years have passed since they obtained them, we have heard of acres being already plowed under.

*Napoleon III.*—A large and very good variety for the amateurs, but not for market. It has been in this country for several years, but up to the present has not become very popular. Having been extensively advertised of late, we presume it will be widely disseminated, and if it has any decided valuable merits, they will soon be fully known.

*Nicanor.*—We have considerable faith in this variety, because it was raised and is being disseminated by the well-known firm of Ellwanger & Barry, of Rochester, N. Y. Very large size is not claimed for it, but in other good qualities it is said to be equal to the best.

The following are new varieties, but few of which we have seen :

A few years since there were some new seedling strawberries exhibited in New York under the names of Gen. Scott, Gen. Lyons, Gen. Garibaldi, etc., which have scarcely been heard of since. It now appears that the remainder of our generals are to be honored in a similar manner. We hope the growers of new varieties will not, in their enthusiasm, forget the most worthy of all, viz., General Culture.

*Bourdinat*.—Similar in appearance to the Wilson. Exhibited at the American Institute, New York, June, 1867.

*Cramer*.—From Iowa; a seedling of the Wilson. Mentioned in *Hovey's Magazine* for June.

*Gen. Grant*.—Dark red, color of the Wilson. Exhibited at Rochester, N. Y., June 27.

*Gen. Meade*.—Bright scarlet; seeds deeply imbedded; quality good.

*Gen. Sherman*.—Medium size; light scarlet.

*Gen. Sheridan*.—Medium size; dark red, somewhat irregular in form. This and the three preceding varieties were described in the *Horticulturist* for August, 1867.

*Iron Duke*.—From Canada. Said to be very large and wonderfully productive.

*Julien*.—From Iowa. Said to be a seedling of the Peabody.

*Philadelphia*.—Highly recommended by fruit-growers in South Jersey, and by a few in Pennsylvania.

*President*.—The variety shown at the fair of the American Institute under this name was the Jucunda. Prob-

ably this was a mistake, and the genuine is a distinct sort.

*Reeves' Seedling.*—A new variety, from Long Island. It is large and handsome, and ripens very late.

*Romeyn's Seedling.*—This was exhibited at the fair of the American Institute; but the specimens shown were neither large, handsome, or very good.

## IV.

## NOTES

ON SOME OF THE NEW HARDY ORNAMENTAL TREES,  
SHRUBS, AND HERBACEOUS PLANTS.

IN most of the European countries there are Horticultural societies which receive the special aid of the government under which they exist. But the societies of our country receive no such patronage, and having to depend wholly upon the exertions of individuals for their support, it is not surprising that they should so often languish for the want of means to prosecute their great work.

The great Horticultural societies of England, France, Belgium, and other foreign countries, keep a record of the introduction of new plants, so that at any future time the date of their discovery or advent may be known. Having no national society in the United States, nor a local one which attempts the introduction or cultivation of new plants, we have to depend upon the reports of foreign societies or the Horticultural periodicals for our information upon this subject. Could we ascertain the names of the new plants which were introduced into the United States in 1867, we would place them on record, and omit all others. But as we can not do this, we will content ourselves by referring to a few of those noticed in foreign journals, which promise to be worthy of introduction, although it is quite probable that some of them have



already been received. We shall also notice some of the new native plants, which are worthy of more extended culture.

#### DECIDUOUS TREES.

*Acer (Maple)*.—A new variety; described in a French magazine the past year under the following very long name: *Acer (polymorphum) palmatum fol, dissectus pennatifidis rosea-pictus*; all of which means that this is a very pretty variety of maple-tree, the leaves of which are very finely cut, and of a purplish or pale rose color. Figured and described in the *L. Illust. Hort.*

*Acer palmatum sanguineum*.—A variety of the Palmate-leaved maple, with dark, blood-red leaves. This variety and the preceding will probably be perfectly hardy in this country. They can be readily propagated by grafting or budding upon our native species. Figured and described in *L. Illust. Hort.*

*Larix Kæmpferi*.—This is said to be one of the most beautiful of the Larch tribe. We can readily credit the statement, so far as its being a beautiful tree, as all of the varieties and species of the genus are handsome; and even our native Larch, or Tamarack, as it is usually called, is well worthy of cultivation. Figured and described in *L. Illust. Hort.*

*Magnolia Lennei*.—The magnolias are all beautiful trees or shrubs, and well worthy of attention. Our native species should not be overlooked by those who are endeavoring to ornament their grounds; for they are all beautiful, and most of them hardy in the Northern States. The

Magnolia Lennei is a new foreign variety, a few plants of which have already been introduced into this country. The flowers are large, reddish purple on the outside and pure white within. Figured and described in *Flore des Serres*.

*Ulmus campestris aurea*.—A variety of the English Elm, with deep golden yellow leaves. It is quite probable that this variety has already been introduced into some of our larger nurseries. Figured and described in *La Belg. Hort.*

#### NEW HARDY SHRUBS, DECIDUOUS AND EVERGREEN.

*Æsculus Michauxi*.—This is probably a variety of our native species, *Æsculus Pavia*, or red-flowering buckeye. The plant, however, is more dwarfish in habit than the species, and the spikes of flowers much larger. When worked on the common buckeye or horse-chestnut, it forms a beautiful shrub or small tree, producing its large spikes of flowers in great abundance. We are indebted to Mr. Wm. S. Carpenter for a specimen plant imported by him from France.

*Azalea*.—The catalogues of European nurserymen contain long lists of new varieties of this beautiful shrub. The tender Chinese azaleas are far better known in this country than the hardy species. This is to be regretted, inasmuch as the hardy sorts may be grown by every one, and not be confined to those whose circumstances allow them to build costly green-houses for the purpose of growing tender exotics. We shall not attempt the naming of the best foreign varieties, but merely call the attention of our readers to this most beautiful class of shrubs.

Even our own country furnishes a great variety, and by a little care in the selection a splendid collection may be obtained from our woods and fields. We have found varieties of every shade of color, from the purest white to the darkest purple, and we have experienced no difficulty in making the plants live when removed from their localities in the open fields to the garden. Those who are seeking for choice ornamental shrubs should not overlook the native azaleas.

*Arbor vitæ* (Tom Thumb).—This new variety of arbor vitæ, sent out by Messrs. Ellwanger & Barry, is really a valuable acquisition. It forms a dense mass of fine, delicate foliage, not surpassed by any other hardy variety. It also retains its color well through the winter, not turning a sickly yellow, as many others do, thereby detracting much from their beauty as evergreens. The Tom Thumb will certainly become one of the most popular varieties of the dwarf arbor vitæ.

*Arbor vitæ* (Golden Tipped).—A variety of the common native species (*Thuja occidentalis*). It is a strong and vigorous grower, and apparently as hardy as its parent. The foliage is a rich golden yellow, there being scarcely any green leaves, except in the center of the plant. It is quite distinct from the common Variegated American or Chinese Golden arbor vitæ. It is the only variety which we have seen that is really deserving the name of Golden. Where or by whom it originated is unknown to us, our plant being received a few years since from a friend, who said that it was supposed to have originated in a garden in New Rochelle, N. Y.

*Cotoneaster Fontanesii*.—A handsome shrub, with oval leaves and numerous small white flowers, which are succeeded by spherical-shaped fruit of a coral-red color (*Revue Horticole*, 1867). The cotoneasters are very pretty shrubs, with small but numerous flowers. A number of the species are evergreen in the Northern States, while the deciduous varieties retain their leaves until quite late in the autumn. Most of the species and varieties are readily propagated by ripe wood cuttings, taken off in the fall, and preserved in sand or moss during the winter.

*Deutzia crenata-pleno*.—We named this shrub in our list of choice varieties in the first volume of the RECORD, and we again call attention to it, for it is worthy of a special notice. The flowers are quite double, pure white within and a deep pink without; the strong contrast between the two colors gives the flower spikes a very unique and pretty appearance. It forms a shrub from four to six feet, of a dense, compact habit. The plants are now offered at a very low price, and no one should fail to procure this really very desirable shrub.

*Hydrangea Deutziaefolia*.—This new hydrangea bloomed in several gardens in this country the past year. The flower spikes are of an immense size, white at first, changing to a dull purple or pink. Like all of the hydrangeas, it is a coarse-looking plant when in bloom, and only suitable for the open border. It is apparently quite hardy, a merit which will make it quite acceptable to those who have room for a great variety of shrubs.

*Hydrangea paniculata grandiflora*.—Another new

half-hardy shrub, with elliptic leaves and large, branched, pyramidal panicles of white flowers.—*Flore des Serres*.

*Hydrangea Japonica macrosepala*.—A variety somewhat resembling the *rosalba* of Van Houtte, but having the segments of the sterile flowers one and one-third inch broad.—*Gartenflora*.

*Rhododendrons*.—We have several native species of the rhododendron, all of which are beautiful shrubs, and well worthy of cultivation. They were, long ago, sent to Europe, where, through the skill of the gardeners of the Old World, hundreds of new varieties have been produced, many of which far excel the original species. There are also many species natives of the Eastern Hemisphere, and new ones are being constantly discovered. Hybrids in great number have also been produced, not only between the different foreign species, but those of our own country, until it is quite certain that no genus of evergreen shrubs can at all compare with the rhododendron for handsome foliage and gorgeous flowers. Many of the foreign varieties and species are not hardy in the Northern States, but there is a sufficient number to satisfy the most ardent admirer of this class of plants. It requires experience with each kind to determine its character, therefore one must import many to find a few that are suited to the climate; and the high price at which all new sorts are sold, prevents the majority of our nurserymen from testing them. There are, however, a few of our larger establishments that have expended thousands of dollars in testing the various species and varieties of rhododendrons; and they now offer to the public the benefit of their labors in

lists of sorts which have proved to be perfectly hardy and reliable. We would advise those who want rhododendrons—and who does not?—to examine the catalogues of these nurserymen. There are so few nurserymen who make a specialty of this class of plants, that we shall take the liberty of naming two firms whose stock we have lately examined, and think it worthy of a special notice. We refer to Parsons & Co., Flushing, N. Y., and Hovey & Co., Boston.

*Spiræa callosa alba*.—This is quite a distinct variety of the old spiræa callosa. The flowers are pure white, and the plant of a very dwarf habit. It blooms quite freely, and is altogether a desirable hardy shrub.

*Weigela nivea*.—This splendid weigela was introduced into Europe several years ago from Japan, but it is comparatively new in this country. The plant is similar in habit to the well-known weigela rosea. The leaves are large and conspicuously veined, and of a light green color; flowers, pure white, and produced in great abundance. A beautiful shrub, and worthy of a place among the many fine varieties of this species.

*Weigela Middendorffiana, purpurea*.—A new purple-flowering variety of weigela Middendorffiana; a robust, hardy shrub, with handsome dark-green leaves and large panicles of flowers, which are a purplish red, shading to black at the base of the petals.—*Floral World*, March, 1867.

For other species and varieties of hardy ornamental shrubs, see RECORD OF HORTICULTURE for 1867, Vol. I.

## HARDY HERBACEOUS PLANTS.

But few really good varieties of this class of plants have been introduced in the past year. Some of the older sorts which have long been neglected have again appeared, and claim attention. This shows progress, although at first we might look upon it as a retrograde movement. The aim of the horticulturist should be, not only to improve upon the old, but to produce new varieties of superior merit; while, at the same time, the old ones should not be discarded just because they are old, or others petted for the only reason that they are new. Progression may be shown in careful and judicious selection as well as in production, for valuable qualities are constantly being discovered in plants that have long been known. In the first volume of the RECORD we gave a list of some of the most popular species and varieties; we now add a few more.

*Aquilegia cœrulea* (Blue Columbine).—A beautiful native species, lately introduced from the Rocky Mountains. The flowers are of a peculiar shape, having long spurs, which point downward, while the flowers stand erect, similar to the *A. Siberica*. The color is azure blue, slightly shaded with a yellowish pink or cream.

*Aquilegia pyrenica*.—A beautiful dwarf variety, resembling *A. alpina*, but smaller, and with fewer flowers, these being comparatively large, and of a pale lavender blue.—*Floral Magazine*.

*Aquilegia glandulosa*.—An old species, introduced from

Siberia about forty years ago, but is still one of the best. Flowers, blue and white, and very showy.

*Anemone Japonica*.—The red-flowering Japan anemone was introduced in 1844, and is now quite common. It is really a superb plant, blooming in profusion in the latter part of summer, and often continuing until late in autumn. A variety with white flowers has lately been introduced, and is now offered by some of our florists. Its name is *Anemone vitifolia* Honorienne Jobert.

*Astilbe Japonica aurea reticulata*.—This very long name might as well be abbreviated into *Astilbe variegata*. The old variety of astilbe is well known under the name of *Spiræa Japonica*, and in some nurserymen's catalogues it is called *Hottea Japonica*. *Astilbe*, however, we believe is the proper name. This new variety has the same habit as the old one, but the leaves are beautifully variegated with yellow. The plant is very hardy, and the flowers pure white. The markings on the leaves are more distinct when the plant is grown in partial shade or in the greenhouse.

*Delphinium triomphe de Pontoise*.—A new hardy perennial variety, with double flowers of a pale azure blue color.—*Floral Magazine*.

*Hemerocallis fulva Kwanso*.—A variety of the old and well-known *H. fulva*, the leaves of which are striped with white.—*Gartenflora*, 1867.

*Iris*.—There are so many really beautiful irises in cultivation that one can scarcely go amiss in making a selection. There are hundreds of varieties, and new ones are annually produced; therefore we will not attempt to give



the names of any, but advise our readers to procure a collection from any of the importers of bulbs, or from the nurseries, and they will have little cause to complain of the results.

*Phloxes*.—The same may be said of the hardy phloxes as of the iris. The number of new varieties announced each year is altogether too great for any one except the professional florist to think of purchasing. It is to be feared that in the race for *new* varieties, that real marked distinction between them is often overlooked. The phlox is one of our most beautiful plants, and the endless variety of colors which may be obtained from seeds constitute one of its greatest charms. Seedlings of the hardy species are so easily grown that any one can produce varieties in abundance. Our plan is to purchase a few distinct varieties, and then raise seedlings from them, selecting the very best each year, and discard the others. We will name a few of the really good sorts; we will not say the best, for that would be a difficult task where all are so fine:

1. Andromeda. White, with scarlet eye.
2. Boree. Violet crimson.
3. Coquette. Pink and white.
4. Cross of St. Louis. Lilac and white striped.
5. Countess of Breadalbaine. Rosy crimson.
6. Edward About. Rich rosy crimson.
7. Fusi-gama. Dark violet.
8. Lady Hume. White, crimson eye.
9. Madame Lauriston. White, scarlet eye.
10. Madame Marie Belanger. Large, deep lilac.

11. Miss Hare. Pure white, deep violet center.
12. Napoleon. Fine striped.
13. Ruby. Fine scarlet crimson.
14. Rosy Gem. Deep pink, very large spike.
15. Triomphe de Twickle. Purple, edged with pure white; very fine.
16. Volcano. Dark, rose-red eye.
17. Victor Hugo. Large, deep purple.
18. Vesuve. Carmine, pink eye.

## BEDDING PLANTS.

Bedding plants have become very popular in the last few years. No particular genus or species is referred to under this head; but they are simply plants that are usually tender, requiring protection in winter, either by being kept in a green-house, room, or warm cellar. In a few instances annuals are used, but they are mainly perennial. Many of them are tuberous-rooted, like some of the caladiums, and may be preserved in a dormant state throughout the winter months. The great variety of these plants now cultivated by our florists is so great, and their character so diversified, that the utmost extreme of one's fancy may find abundant materials with which to arrange the most elaborate or magnificent design. In many of the species the flowers are of secondary importance, as they are small and inconspicuous, the foliage of the plant being the portion most admired; and as this is usually more permanent and lasting than the flowers, we therefore secure a longer lease of beauty than if the former were their only merit. With the great variety of handsome foliaged

plants now in cultivation, our gardens can be made superbly beautiful throughout the summer, even without the aid of flowers, although to dispense with the latter might still leave our creation divine without a divinity. We give in the following list such plants as can be obtained in this country. Some are old and well known, others are new and quite rare.

*Achyranthus aureo reticulata*.—A beautiful but rather delicate plant, with a rich variegated foliage. The leaves are light green, marked with bright yellow; stems are more or less shaded with carmine or purple. This plant should not be planted out until the weather has become quite warm, and then it should have a half-protected situation. This and the older and better known *Coleus Verschaffeltii* are somewhat similar in habit, and they are two of the very best ornamental foliage plants.

*Aubretia deltoidea Campbellii*.—This plant is probably hardy, as it belongs to a species which succeeds without protection in England. This variety has purplish blue flowers, produced in great abundance. The plant is of a compact and bushy habit, and with very pretty foliage. It may be that our hot, dry summer weather will be too severe upon this species, as it is upon many other alpine plants.

*Bouvardias*.—Half shrubby plants, with flowers of various shades of color. They are usually cultivated as house plants, but they are well adapted for bedding purposes. The flowers are small but very beautiful, and suitable for making hand-bouquets. The following are a few of the best:

*Bouvardia grandiflora*.—Pure waxy white.

*B. Leiantha*.—Bright scarlet.

*B. Hogarth*.—Deep carmine.

*B. Laura*.—Light rose.

*B. tryphilla*.—Orange scarlet.

*Cannas*.—Large, coarse, tropical-looking plants, which produce a fine effect when planted in groups. The flowers are of various shades of color, from a brilliant scarlet to crimson. The plants grow from four to eight feet high, and the leaves of some of the species are three feet long and a foot broad. They require a deep, rich soil, to insure a full development of foliage. The roots may be kept through the winter in any warm, dry cellar. European catalogues contain the names of some one hundred and fifty species and varieties. The following dozen sorts we obtained from B. K. Bliss & Son, of Springfield, Mass., last year, and they proved to be very distinct and fine :

*C. Annei floribunda*.—Leaves smooth, green; of medium size.

*C. Annei discolor*.—Stems, purple; flowers, orange.

*C. Discolor*.—Leaves very large, and beautifully veined with purple.

*C. Gigantea splendidissima*.—Leaves very large; flowers, bright scarlet.

*C. Houletti*.—Leaves large, richly veined with purple.

*C. Krelagi discolor*.—Leaves large, striped with rose; stems, dark purple.

*C. Nigricans*.—Leaves very dark, with a light-shaded border.

*C. Porteana*.—Leaves very large and handsome.

*C. Van Houttei*.—Leaves large, with black veins.

*C. Zebrina*.—Leaves beautifully variegated and striped.

*C. Zebrina violacea*.—Leaves large, of a fine purple color.

*C. Warscewiczii*.—Leaves large, striped; flower, brilliant red.

*Calceolarias*.—Many of the half-shrubby varieties are suitable for bedding. They are of various colors, and, planted in good soil, they will continue to bloom through a greater part of the summer months. The varieties are quite numerous, most of which are worth cultivating.

*Chrysanthemums*.—In light soils most of the Chinese chrysanthemums are hardy, but in heavy loam or clay they will usually perish in winter. The roots may be kept in the cellar, or protected in the open ground. In situations where they are not hardy they should be treated as bedding plants, or grown in pots. They are esteemed for their beautiful flowers, which are produced very late in the autumn.

*Dahlias*.—The new pompone varieties are at present more generally esteemed than the larger-growing sorts. The varieties are already too numerous for us to attempt to make a selection of the very best. In fact, between many of them there is really very little difference, except in name. Very few new dahlias are produced in this country, most of them being imported from Europe, where great attention is paid to raising new varieties from seed. There is no reason why new sorts may not be produced in this country as well as elsewhere, and the few attempts made by our gardeners have in most cases been quite suc-

cessful. The best American seedlings that we have seen are those raised by A. Burgess, of East New York, John Spaulding, of Saybrook, Conn., and Gerhard Schmitz, of Philadelphia, Pa. Mr. Schmitz has produced quite a number of new varieties that will compare very favorably with the best of the imported ones.

*Erythrina crista-galli*.—This very old but beautiful plant is too seldom seen in our gardens. Its brilliant scarlet flowers have few successful competitors in beauty, and their peculiar form is such, that once seen they will ever be remembered. The plants are tender, but may be kept safely during winter in a dry, warm cellar. There are several species and varieties, but the *crista-galli* is the most common in this country.

*Farfugium ligatum*.—A new variegated-leaved herbaceous plant, from Japan. The leaves are larger than the old *Farfugium grande*, and beautifully marked with carmine and white. This will probably prove to be hardy.

*Fuchsias*.—Fuchsias are much used for bedding purposes. The varieties in cultivation are almost innumerable, and it would be a difficult task to determine which were the best where there are so many that are first-rate. When planted in the open border, a half-shady situation is preferable to one that is fully exposed to the sun.

*Geraniums*.—There is probably no one species of ornamental plant that has attracted so much attention of late as the geranium. This is particularly the case with the variegated-leaved and Zonale varieties. All of these geraniums bloom freely when planted in the open ground, and their flowers are in great part composed of the most

brilliant colors. The variegated-leaved varieties are doubly attractive, on account of the various colors of their foliage in addition to their beautiful flowers, although the color of the leaves often becomes quite dull when planted in the open ground. There are at least one hundred varieties now in cultivation of each class, consequently we will not attempt to name them, but content ourselves by giving a list of six good varieties of each class.

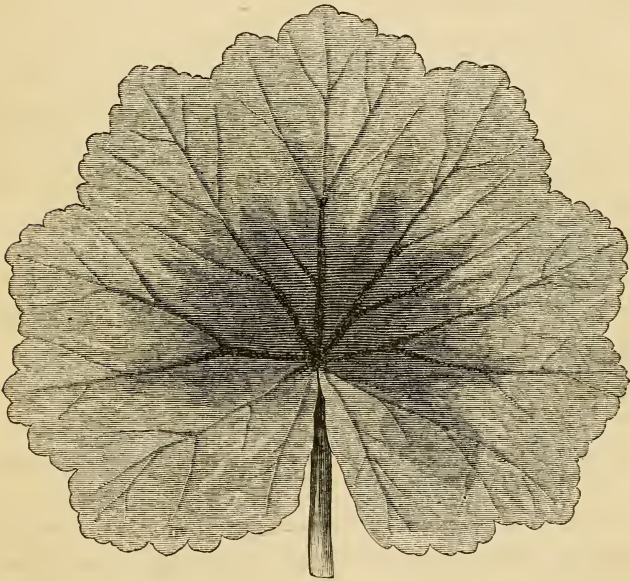


Fig. 11.

VARIEGATED-LEAVED GERANIUMS.

*Alma*.—Flowers, scarlet crimson; leaves, dark green, edged with silvery white.

*Brilliant*.—Flowers, dark scarlet; leaves, green, bordered with white.

*Cloth of Gold*.—Flowers, dark scarlet; leaves, bright yellow, with dark center. Fig. 11 shows the form of the leaf, but does not give the least idea of the color.



Fig. 12.

*Mountain of Snow*.—Flowers, scarlet; center of leaves, green, with a broad margin of pure white (fig. 12).

*Mrs. Pollock*.—Flowers, dark scarlet; the leaves have a dark-green center, with a zone of reddish bronze, edged with bright red (fig. 13).



*Glowworm*.—Flowers, scarlet; leaves, sulphur, with a broad zone of rosy crimson.

## ZONALE GERANIUMS.

We select the following from Mr. Peter Henderson's list for 1868:

*Beaton's Rival*.—Rich orange scarlet; splendid.

*Bicolor*.—Ground color of the flowers nearly pure white, the center markings being of a rich, deep salmon rose; leaves, light green, with a clearly-marked zone.



Fig. 13.

*Donald Beaton*.—Dwarf; dazzling scarlet.

*General Grant*.—Scarlet, large truss.

*Madam Rudersdorf*.—White, with salmon center.

*Ranunculaeflora*.—Flowers, double, and of a rich, dark scarlet color.

*Petunias*.—Great attention has been paid to this species in the past few years. New varieties there are in abundance, a few of which are a marked improvement upon the older sorts. Double flowers have become rather more popular of late than the single ones, but there are very few of them that would be called handsome so far as it relates to form, but in color many of the varieties are exceedingly beautiful. Our florists have excellent success in producing new varieties of petunias, therefore have no need of importing them. We name six of the best new ones of the year; they are all variegated; the first three have double flowers, the others single: Beauty of Baltimore, Cinderella, Edward Bech, Fascination, Morning Glory, and Ruby.

*Pyrethrum parthenium aureum*.—This is a golden-leaved variety of an old and well-known species. Many will recognize the plant more readily under its common name of Feverfew than Pyrethrum. This new sort is called Golden Feather, and it is a fine bedding plant, as its golden leaves afford a striking contrast when planted by the side of some of the dark-colored species.

*Verbenas*.—Our remarks in reference to the petunia are equally applicable to the verbena, except that double-flowering varieties have not as yet been produced. No flower-garden is considered as passably good unless well stocked with verbenas. Our florists never fail to have a choice selection of new varieties every season, and it may

be said to their credit, that they do actually make improvements upon the older sorts. We will not name the new varieties that are to be sent out in 1868, as we presume our readers have already been fully informed upon that point through the catalogues of our leading florists.

#### NEW AND OLD ROSES.

It is seldom that we hear of a new variety of the rose being produced in this country. To be sure, there is an occasional one announced, but this is rather an exception to the general rule. Our florists probably have good reasons for not paying more attention to the production of new roses; still, we can not help thinking if more experiments were made in this field, we should have little need to send to foreign countries for new varieties. The few that have been produced in this country are certainly equal to those produced abroad. With such examples before them as America, Isabella Sprunt, Mrs. Boll, and several others equally as good, our florists should feel encouraged to progress still further, until we shall have no occasion to send our money to Europe to purchase that which might be produced at home.

It is not every new variety that will succeed in our climate; we therefore have to import many, and then select the few that are really valuable. There is certainly no scarcity of varieties, either new or old, but the greatest difficulty we encounter is to determine which are really the best.

There are but comparatively few persons who can afford to purchase all the new sorts as they appear, consequently

the masses have to depend upon the professional rose-growers for selections. These gentlemen are becoming aware that their reputation and success in business depends not only upon the quality of the plants they send out, but also the variety, for purchasers are learning that their best guide in obtaining good things is the character of the one who offers them for sale. A great change in this respect has been wrought in the last half-dozen years. Some of our florists who imported new plants last year, for which they must have paid a large price, and who have scarcely had an opportunity of being reimbursed for their outlay, have boldly announced that certain species and varieties have proved to be utterly worthless for this climate, thereby showing that they value more highly a good reputation than any pecuniary reward that might be gained by the sale of such plants. We gave a list of choice roses in the RECORD of last year, and we will now add a few more. The first on the list shall be a new American seedling.

*Gem of the Prairies.*—This is supposed to be a hybrid between the Queen of the Prairies and Madame Laffay. It is a strong and vigorous grower, similar in habit to the Queen, but the flowers are considerably darker in color, besides being fragrant. We have been acquainted with this variety for the past five years, and believe that it is the best of what are known as the Prairie Roses. It was raised by A. Burgess, of East New York, and the stock is now in the hands of Peter Henderson, who will send it out the present season.

The following list is probably as good a one as it is possible to make. It is made up of old and new varieties,

and no regard is paid to any other character except absolute perfection in the color and form of flower. This selection was made by three of the most noted rose-growers of England, viz., W. D. Prior, William Paul, and Mr. John Fraser. It was published in the *Floral World* for June, 1867, from which we copy. Nearly or quite all of these varieties are cultivated in our larger nurseries, and a majority of them succeed finely, therefore we may add our own experience to that of the gentlemen named above in indorsement of the value of the selection.

“*Hybrid Perpetuals*.—Achille Gonod, Alfred Colomb, Alpaide Rotalier, Baronne Prevost, Beauty of Waltham (W. Paul), Caroline de Sansal, Centifolia Rosea, Charles Lefevre, Charles Rouillard, Comte de Nanteuil, Comtesse de Chabrilland, Comtesse de Palikao, Dr. Lindley (Wm. Paul), Duchesse d’Orleans, Elizabeth Vigneron (William Paul), Exposition de Brie, Gabriel de Peyronny, General Jacqueminot, Globosa (William Paul), Gloire de Vitry, Hyppolite Flandrin, Jean Goujon, Jean Lambert, John Hopper, Josephine Beauharnais, Jules Margottin, King’s Acre, La Duchesse de Morny, La Ville de St. Denis, Lælia or L. Peyronny, Le Rhone, Maurice Bernardin, Madame C. Wood, Madame C. Joigneaux, Madame Domage, Madame Knorr, Madame de Cambaceres, Madame Fillion, Madame E. Vilmorin, Madame Moreau, Madame Roussett, Madame Rivers, Madame Victor Verdier, Madame Vidot, Madlle. Marie Rady, Madlle. Marguerite Dombtrain, Marcella, Marguerite de St. Amand, Olivier Delhomme, Pierre Notting, President Mas, Prince C. de Rohan, Prince de Porcia, Princess of Wales (Wm. Paul),

Senateur Vaise, Sœur des Anges, Viscount Vigier, Victor Verdier, Wm. Rollisson, Xavier Olibo.

“*Bourbon Perpetuals*.—Baron Gonella, Catherine Guillot, Emotion, Rev. H. Dombrain.

“*Bourbons*.—Paxton, Malmaison.

“*Noisette Perpetuals*.—Madame Alfred de Rougemont, Louise Darzins, Pavillon de Pregny.

“*Noisettes*.—America, Celine Forestier, Cloth of Gold, Jaune Desprez, Lamarque, Maréchal Niel, Triomphe de Rennes.

“*Teas*.—Alba Rosea, Devoniensis and its climbing sport, Gloire de Dijon, Madame Falcot, Madame Bravy, or its synonym Madame Sertot, Madame Margottin, Madamè Willermoz, Niphotos, President, Souvenir d'Elise, Souvenir d'un Ami, Triomphe de Guillot Fils.”

#### NEW LILIES.

The introduction of the magnificent *Lilium auratum* has awakened a new interest in this genus of plants. Many of the old and almost-forgotten sorts are again in great demand, and new beauties are being discovered in these old favorites of the garden. This is just as it should be, for old things ought not to be laid aside simply because they are *old*, any more than new things should be admired for no other reason than because they are *new*.

When the *Lilium auratum* was first received from Japan, many of our great florists suggested that there were probably other varieties of this species which would soon be discovered. These suppositions have proved true, and several new sorts, which are evidently nearly related to

the auratum, have lately been obtained. Most of these have come to us mixed with the true auratum, and without names; but when they came into bloom, it was very easy to distinguish them. One of the most distinct of these is probably the *L. Leichtlinii*, received among some auratums from Japan by Messrs. Vetch & Son, of England. This variety is figured and described in *Curtis' Botanical Magazine* for December, 1867. Our engraving (fig. 14) represents the flower very accurately, although it is but about two thirds the natural size. We give a condensed description, taken from that given it by Mr J. D. Hooker, editor of the magazine named above. Stem, tall, slender, two to three feet high; leaves, alternate, linear-lanceolate acute, spreading, ends re-curved three to four inches long by a quarter of an inch broad, pale bright green; flowers, solitary, in our specimen, nodding, four inches in diameter, pale golden yellow, spotted with small oblong blotches of clear red purple or maroon brown.

Several new lilies have just been received direct from Japan by B. K. Bliss & Son, of New York. Coarse Japanese drawings accompanied each variety, and these are our only guide in the following notes of them.

*Aka Oskukuja*.—Scarlet.

*Akalokash*.—Large; scarlet.

*Akalokash Uree*.—White, with spots of the auratum species.

*Howajaka*.—Scarlet.

*Kanaka Uree*.—Similar to auratum.

*Yamo Uree*.—White, spotted, with stripe in center of petal.



Fig. 14.



*Zeppo Uree*.—White; of the *Longiflorum* species.

If we judge of the future by the past, then we may expect to receive many more very fine lilies from Japan. By crossing the many varieties already in our possession we shall be able to produce new sorts, equal, and probably much superior, to any that we now have.

In the first volume of the *RECORD OF HORTICULTURE* will be found a list of the best species and varieties of lilies, and notes on their cultivation and propagation.

#### NEW GLADIOLUS.

The list of new varieties is very large, as usual; in fact, there are altogether too many. No one can think of keeping them all, and they are becoming so numerous, that few will attempt to remember their names, much less the characteristics of each. In addition to our list of last year, we give the names and a condensed description of twelve more really splendid new varieties:

*Anais*.—Flower, of handsome form, white, slightly tinged with lilac, with broad sulphur stains, and stripes of lilac carmine; plant, of a dwarf habit.

*Bernard de Jussieu*.—Flower, very large, violet shaded with cherry color and purple.

*Eugene Scribe*.—Flower, large, light, rose splashed with carminate red.

*Etendard*.—Flower, very large, white blazed with lilac.

*La Fiancee*.—Flower, large and very perfect, pure white, with small violet stains.

*Monsieur A. Brengmart*.—Flower, large and perfect, rose color, slightly tinged with orange blazed with red.

*Mozart*.—Flower, very large and broad, bright rose slightly shaded with violet and blazed with dark carmine.

*Norma*.—Flower, medium, pure white, occasionally slightly tinted with lilac.

*Rossini*.—Flower, very large, and of excellent form, dark red striped with white.

*Semiramis*.—Flower, large and broad, white blazed with carmine.

*Sir William Hooker*.—Flower, large and very perfect in shape, light cherry color, with carmine stains on a pure white ground.

*Urania*.—Flower, very large, pure white blazed with bright carminate rose.

## V.

## A FEW CHOICE

## VEGETABLES MELONS, ETC.

## CABBAGE.

THE improvements made in this vegetable have been but slight in many years. The Marblehead Mammoth, it is true, excels all others in size, but in quality is inferior to many of the older sorts. It may be that some of the new sorts form solid heads more readily than the older ones; if so, then they are better for market, and may be called improved varieties.

*Fottler's Improved Brunswick Cabbage*.—This is a very popular sort with the market gardeners near Boston. It is one of the drumhead varieties, very early, stem short, and thought to be the best yet introduced.

*Early Pancalier Joulin Savoy*.—Earlier than the old Savoy, but scarcely any better in quality.

## CORN.

*Crosby's Early Sugar*.—This is certainly a very early variety; but we do not think it is as sweet and good as some of the later kinds.

*Stowell's Evergreen*.—An old sort, but one of the best, on account of its remaining a long time in a green state.

## CUCUMBERS.

The most notable of the new sorts is the one called

General Grant. It is very long, twenty to thirty inches; very solid and crisp. A fine variety for forcing, and does tolerably well in the open ground.

*Narbiton's Giant*.—Another very long variety, of good quality. Should be planted in a hot-bed or forcing-pit.

#### CELERY.

The two most popular varieties of this vegetable is the Boston Market and the Incomparable Dwarf. The latter is chiefly relied on for New York market and the former for Boston. They are both dwarf-growing kinds, of excellent quality, and are always sure to produce good heads with fair treatment.

#### KALE.

The most popular sort of kale in the vicinity of New York is the Dwarf German, although many other sorts are occasionally grown.

*Abergeldie Kale*.—This is a new sort, with very finely curled leaves. It is of fine flavor, and will probably become quite popular on account of its handsome leaves.

#### LETTUCE.

We have tested many varieties of lettuce, and like the Curled Simpson best for early, and the Curled India for late.

#### MELONS.

*Ward's Nectar*.—A green-fleshed musk melon of high flavor. From our experience with it the past year, we are inclined to place it among the very best varieties.

*Nutmeg*.—Old and well known, and has scarcely a superior.

*White Japan*.—This has been highly praised. We have cultivated it for the past four years, but do not consider it sufficiently high flavored to rank with the Nutmeg or Ward's Nectar.

#### WATER MELONS.

Having tested nearly every variety that has been introduced in the past twenty years, we still hold on to the Old Mountain Sweet. If there is any better or more reliable sort, we have not been able to obtain it. To preserve the excellent qualities of this or any other variety, the seeds should be saved from the very best specimens every season.

#### PEAS.

A pea of poor quality is but little better than none. This must be considered as only an individual opinion; others will think differently. The very early varieties have never been among our favorites; for the Dan O'Rourkes and Tom Thumbs, and similar sorts, were never sweet enough for our taste, and we preferred to wait even a week or ten days for a first-rate dish than to partake of a second or third rate one, even if sooner obtained.

But in these progressive days we all stand a chance of being suited. Drew's New Dwarf is really a fine sort; although not quite so early as some, still it is so much better than the very earliest, that one can afford to wait three or four days longer for the sake of obtaining one so good.

*McLean's Little Gem.*—This is another sort which matures very early, and of good quality.

*Champion of England.*—One may be considered an *old foggy* to recommend this *old* variety; but we confess that among the host of new ones tested we have not as yet found its superior. There are certainly others that will yield more in measure, but none in richness.

#### TOMATOES.

The tomato war has raged fearfully throughout the year 1867. The conflict was opened with Keyes' Early, which was claimed to be thirty days earlier than the earliest of the old sorts. This was certainly claiming too much advance on time for a too often humbugged people to believe, and many were ready to denounce the variety before they gave it a trial. With us, it was no earlier than several of the older sorts, still we are not ready to condemn or highly praise it from a one season's trial. The war of words which has raged in our magazines over the Keyes' Early is likely to be productive of much good, for it has waked up our gardeners, and every one who could find a choice tomato has brought it forward. We name a few of the most promising:

*General Grant.*—This new and very promising variety was awarded the first prize "for the best single dish of tomatoes," at the annual exhibition of the Massachusetts Horticultural Society for 1867. We had an opportunity of testing this tomato the past season, and believe it will prove to be one of the very best varieties in cultivation. It is of medium size, round, slightly flattened, without cor-

rugations; very solid; color, deep reddish scarlet; promises to be very early. Washburn & Co., of Boston, have control of the stock, and will soon offer the seeds for sale.

*Cedar Hill*.—Medium size, very uniform; bright reddish scarlet; flesh, solid, with few seeds; quality, best; ripens very early. Introduced to public notice by F. W. Woodward, editor and publisher of the *Horticulturist*, New York.

*Foard's Tomato*.—Large, round, and quite smooth; flesh, solid, and of good quality. This promises to be a first-rate variety in every respect.

*Maupay's Tomato*.—A new variety, sent out from Philadelphia. It is of large size, firm, and promises well.

*Sim's Early Cluster*.—A new variety, introduced from England the past season. It has not been sufficiently tested to decide upon its merits.

*Tilden*.—This is really a good variety, but it does not possess any very remarkable qualities. It is simply a good, medium, early, and prolific sort.

## VI.

## PLANT LABELS.

AMONG the various methods and materials used for the purpose of labeling plants, it would be difficult to decide which one or more were really the best. The chief object with all of them is to employ some means by which we may preserve the identity of each species or variety of plant; and it is not of so much importance how it is done as it is to have it well done.

A cheap and simple method is certainly preferable to a costly and troublesome one, even if the latter should be a little more permanent.

Labels are used for the purpose of giving information relating to the plants on which they are placed; but in some instances secret signs are used instead of writing the full names, and no one except those who possess the key to these characters is supposed to know what they are.

This method, however, of labeling plants is far more common in European countries than in ours; and we may here remark that mystic signs and secrets, formerly so abundant among nurserymen, are being rapidly done away with, for we have few men in the profession at the present time who desire to keep their workmen in ignorance regarding the plants which they are cultivating. As it will not be necessary for us to go back many years to learn all that is of any practical use to us on this sub-



ject, we shall therefore confine our remarks to the kinds of labels which are now in use, or were until within a few years.

## STAKE LABELS.

Writing upon stakes which are driven in the soil is a common method of labeling plants. The place on the stake where the name or other characters are to be written should be made smooth, and coated with white paint before being used. Two applications of paint are sometimes put on, the first being allowed to get hard; afterward a second coat is applied, and the name of the plant written with a common blacklead or other pencil while the paint is still soft.

We generally use but one coat of paint, writing upon the label at the time of applying it; but after it has become dry, give the label a coat of pure boiled linseed-oil. This not only preserves the wood, but fixes the writing, and makes it more permanent than it would be without this application. Another excellent plan for preserving the writing is to use a small wedge-shape label, which may be attached to the stake either by a screw, nail, or by a staple, the face of the small label being placed against the side of the stake, so that it shall not be exposed to the weather. Red cedar and yellow locust are probably the two best kinds of wood for stake labels. They are both fine grained and readily made smooth, and their lasting qualities are well known. White oak, pitch-pine, cypress, white cedar, and several other kinds of native wood, will answer the purpose very well; but we have none equal to the red cedar or locust.

Chestnut stakes will last for a long time; but the wood is very coarse grained, and it is difficult to make it sufficiently smooth for writing upon with a pencil; besides, paint will not adhere to it for any considerable time when exposed to the weather. The light, soft kinds of wood, such as white pine, white-wood, bass-wood, etc., may be used for stakes, if they are previously steeped in some one of the wood-preserving liquids. Coal-tar is an excellent preservative, but it should be applied when hot to that portion of the stake which is to be buried in the soil—the upper portion may be painted or soaked in oil.

Kyanizing the wood which is to be used for stakes is a simple process for making it almost indestructible. We have seen common white pine stakes one inch and a half in diameter that had been prepared by this process, and after being exposed to the weather fourteen years, they had not decayed to the depth of one fourth of an inch. These stakes were prepared by soaking them for two or three days in a solution composed of one pound of corrosive sublimate and twenty quarts of water.

Kyanizing is derived from Kyan, the inventor of this process of preserving wood, but of late it has been rather loosely applied to other methods.

Chloride of zinc, blue vitriol, and other similar substances, are also used for preserving timber.

Whenever it is desirable not to place the name of the plant upon the label, figures or other characters may be used, and the names be recorded in a book. The Roman numerals are often employed, and these are cut on the label thus: I., II., III., IV., etc., or any number required—

these corresponding with names and numbers in the catalogue.

Another method of labeling, by using notches, is called the Anderson system, which was invented in England many years ago, and is described in "Loudon's Encyclopedia of Gardening." This method requires a less number of notches than in using the Roman numbers; otherwise it has no advantages. We give an illustration of it in fig. 15, which shows a label with the characters representing the numbers from one to ten.

## SLATE LABELS.

A few years since we received several thousand slate labels from Germany. They were of various shapes and sizes, some for hanging upon trees, and others for placing in the ground. The directions accompanying them said that if written upon with a common carmine-colored pencil, that it would remain legible for many years. This, however, has not proved true with us, for the rain has generally obliterated the writing done with a pencil in two or three months. We have tried several methods of writing upon these slate labels, but have found none better than common white paint, using a small camel's hair pencil for the purpose. The greatest objection to them is, that they are very easily broken. They are in other respects almost indestructible, and very appropriate for using among rock-work and other styles of rustic gardening.

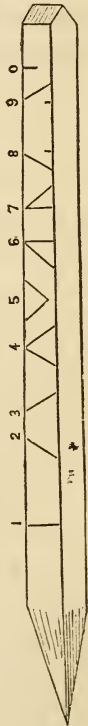


Fig. 15.

## ZINC LABELS.

These are made of various patterns, both for hanging upon trees and shrubs as well for the open ground or for pots. Zinc labels have been in use for a number of years past, and some of our horticulturists prefer them to any other. They are, however, too expensive for commercial purposes; that is, to affix to plants that are being sold from the nursery; but for a permanent label on specimen plants, they are certainly worthy of attention.

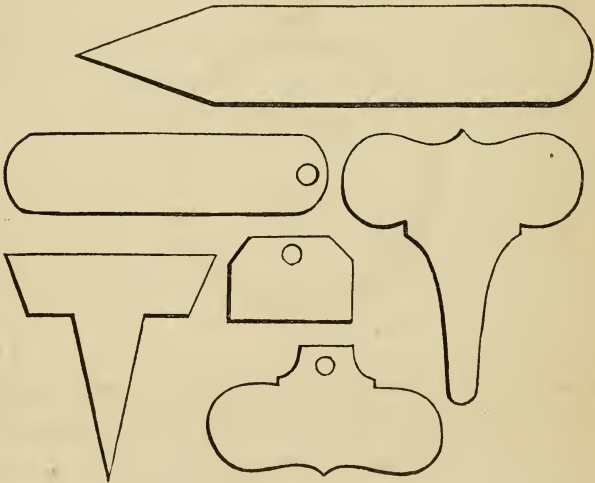


Fig. 16.

We are not quite sure whether there are any who make a business of manufacturing these labels in this country or not, but almost any one can make them from sheet zinc with a good strong pair of shears. Zinc labels are im-

ported in large quantities and of various styles. Bliss & Son, 41 Park Row, New York, are agents for what are called Yeats' metallic labels. They are sold in boxes containing 100 labels, a pen and ink accompanying each box. They are made of zinc, and of different forms, as shown in fig. 16.

Another style of zinc label is shown in fig. 17. It is a circular piece of zinc with the edges turned over upon a mica front, between which and the back a strip of paper is placed with the name of the plant printed thereon. By

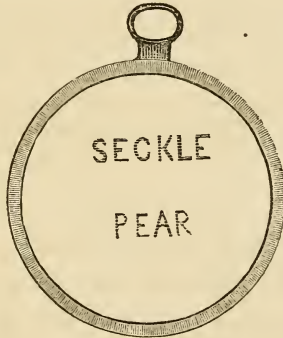


Fig. 17.

the aid of a little cement, the whole is rendered impervious to water, and forms an indestructible, neat, and always legible label.

#### GLASS LABELS.

Owing to the brittleness of glass, it can not be used where it will be subjected to rough usage. The proper place for glass labels is in the conservatory or private garden. For these purposes there is scarcely anything

more beautiful or useful than some of the styles which have lately come into use. One of the best we have seen is an oval glass tube, about three inches long, closed at the upper end, and made with a hole through which to put a wire or twine, as in the common wooden tag. The name of the plant to which the label is to be attached is printed upon a small strip of paper; this is rolled up and inserted into the tube from the lower end; afterward the aperture is sealed up with wax.

The printed slips used in the labels may be cut from any ordinary catalogue of plants. The labels may be suspended upon the plants; or if made five or six inches long, they may be used for pot plants, and inserted in the soil. Fig. 18 represents one of the sizes generally used for hanging upon shrubby green-house plants.

#### WOOD LABELS.

Small wooden tags or labels (as they called by both names) are more extensively used than any other. They were formerly made by hand, and the ordinary three-inch label cost from one to two dollars per thousand; but the demand for this article has increased so rapidly of late that it was found necessary to substitute machinery for hand-labor, and this has been so successfully accomplished, that the price of labels has been reduced more than one half in consequence. Besides the reduction in price, the article furnished is far superior to that made by the old method.

If greater durability is required than that of the natural wood, it is a very easy matter to kyanize or soak the

labels in oil before using them. But the cost of these labels is so little that few persons will take the trouble to add any composition to them for the purpose of increasing



Fig. 18.

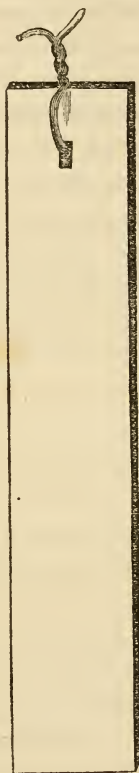


Fig. 19.



Fig. 20.

their durability. A good smooth wooden label, painted white and written upon before the paint gets dry, will remain legible for two to five years.

Small copper wire is the best material with which to fasten the label to the plant. Annealed iron or brass wire will answer the purpose very well, but neither of them is as flexible or durable as copper.

There are two modes of attaching the wire to the label: one is, to pass the wire through a hole in the label and give it a twist, as shown in fig. 19; and in the other the wire is passed around the ends fitting into two notches made for the purpose, as shown in figs. 20 and 21.

Labels are now manufactured of almost any size required, and of various kinds of wood. White pine and white wood are mainly used for all kinds of small labels.

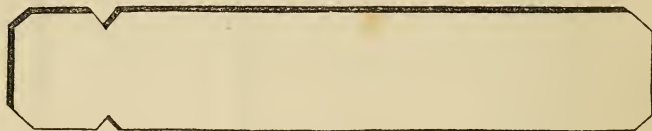


Fig. 21.

W. W. Trevor, of Lockport, N. Y., manufactures an immense quantity of these labels, and furnishes them at very low rates.

Judson & Co., of Rochester, N. Y., also manufacture them extensively; and they have lately added a new feature in this line—that is, of printing the names of the plants upon the label. For nurserymen who sell large quantities of a single variety, these printed labels are very convenient, and save considerable time. Judson & Co. charge only five cents per thousand extra for printing these labels, which would scarcely pay for the wear on a Faber pencil, to say nothing about the time occupied in writing.



We think that this firm deserves great credit for furnishing so good an article and at such a low price.

It may appear to many as though we had at the present time everything in the way of labels that is required; still there is a want which is not yet fully supplied, and that is, a cheap and durable label that can be written upon with a pencil, and have it remain legible, not for one or two years, but for ten or twenty.

We have plenty of what are called indelible pencils, but none of them are any better, if as good, as the ordinary pencil when used upon a painted surface.

There is still a chance for improvement in labels, and we are all looking for the man who will make them.

## VII.

## IMPLEMENTS FOR THE GARDEN.

THERE are a few implements which have been introduced within the past year that are worthy of special notice.

Anything that will lighten the labors of the gardener and assist him to do his work better than formerly, is just as sure a sign of progress as it is to produce a new variety of fruit or flower. Many of the old clumsy implements used in the garden are being laid aside, and those that are lighter and better adapted to the work are being introduced. The steel spading-fork has in a great measure taken the place of the common spade, and the light, steel rake superseded the malleable iron and wooden one.

Similar changes are observed in all departments of Horticulture; and so long as they show that they are improvements upon the old forms, they should be encouraged by every one who takes an interest in the cultivation of fruits and flowers.

## HEXAMER'S PRONG HOE.

It is often said that "necessity is the mother of invention," and we have no doubt but that in many instances it is true; still, we fear that all inventions are not really necessary. Hexamer's Prong Hoe, however, owes its origin to the want of just such an instrument; and as none were in market, the inventor set himself to work to pro-

duce one that should be as near the thing required as possible.

Every one who has ever had an occasion to work in ground that was filled with quack-grass roots must have felt the need of an implement with which to readily extract them. The Prong Hoe we believe is the thing required for that purpose; besides, it is well adapted to various other kinds of work, such as leveling the soil and thoroughly manipulating it preparatory to sowing of seeds. For digging potatoes, it is far superior to the common hoe, and many will prefer it to the spading-fork.

Fig. 22 gives a good idea of the form of the implement. The tines are made in pairs, and of the best spring steel. They are fitted into a malleable iron head and firmly secured by a wedge. If a tine should be accidentally broken, it may be readily taken out and repaired without injury to the other parts, as is often the case with similar implements which are made of one piece of steel. We would recommend the Prong Hoe as a very handy tool to have about the garden.

#### NEFF'S PRUNING-SHEARS.

A good pair of pruning-shears is one of the indispensable implements to every farm, garden, or nursery. For many kinds of work shears are preferable to a knife, especially in pruning vines,

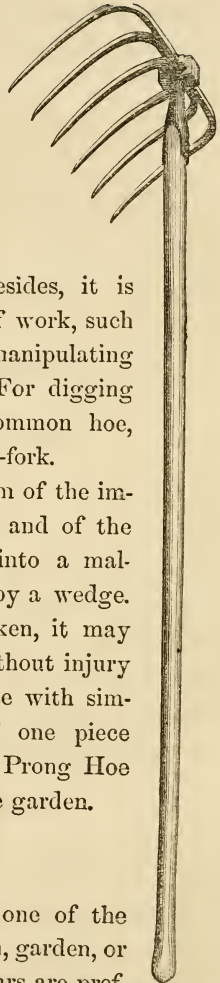


Fig. 22.

shrubs, and small trees. There are several styles of pruning-shears that are made in this country which are equal,

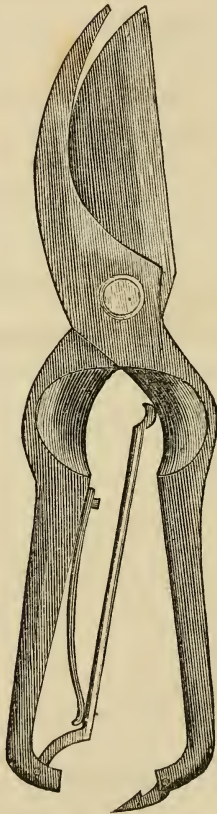


Fig. 23.

if not superior, to the best imported ones; and we believe there is no longer any reasonable excuse for sending

abroad for anything in the way of implements that are required in the garden or nursery.

If our manufacturers are only informed as to what is wanted, they will soon produce it in the cheapest and best manner.

Neff's Pruning Shears are very similar in form to the well-known Weiss pattern, but with a different arrangement in the springs, these being of unequal lengths, as shown in fig. 23. The peculiar arrangement of the

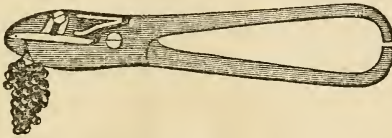


Fig. 24.

springs allows of a ready adjustment of the tension to suit different kinds of work and the strength of the operator's hand. Some will prefer a stronger spring than others, and Mr. Neff has devised a plan by which all may be suited. These shears may be obtained of F. M. McDowell, Wayne, N. Y., or at the agricultural warehouses in New York city.

#### KEUKA GRAPE AND FLOWER PICKER.

This is a very simple invention, adapted for gathering fruits and flowers, and especially for grapes. By a simple contrivance the shears are made to hold the bunch of grapes after it is cut from the vine, thereby preventing it

falling, even if it is not caught by the hand. Fig. 24 shows the grape picker as it appears when holding a bunch of grapes.

#### GALVANIZED IRON TRELLIS.

Wm. W. Wilcox, of Middletown, Conn., has lately invented a very useful article for the garden, which he has named as above. These trellises are well adapted for the purpose for which they are designed, and are made

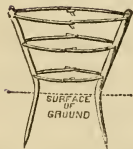


Fig. 25.

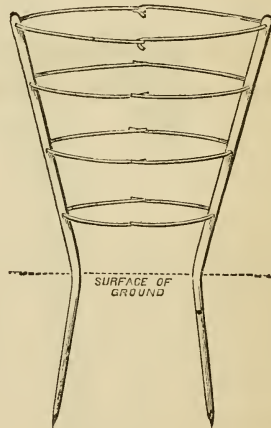


Fig. 26.

of various sizes, from seven inches high up to three or more feet. The smallest size is suitable for protecting strawberry plants or low herbaceous plants, while the larger may be used for tomatoes, raspberries, climbing vines, etc.

Figs. 25 and 26 give a very good idea of the general

form of the circular trellis, while in fig. 27 is shown what is called a fence trellis, which is made by using the same standards, but straight rods instead of circular ones.

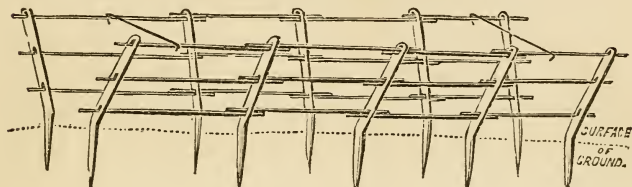
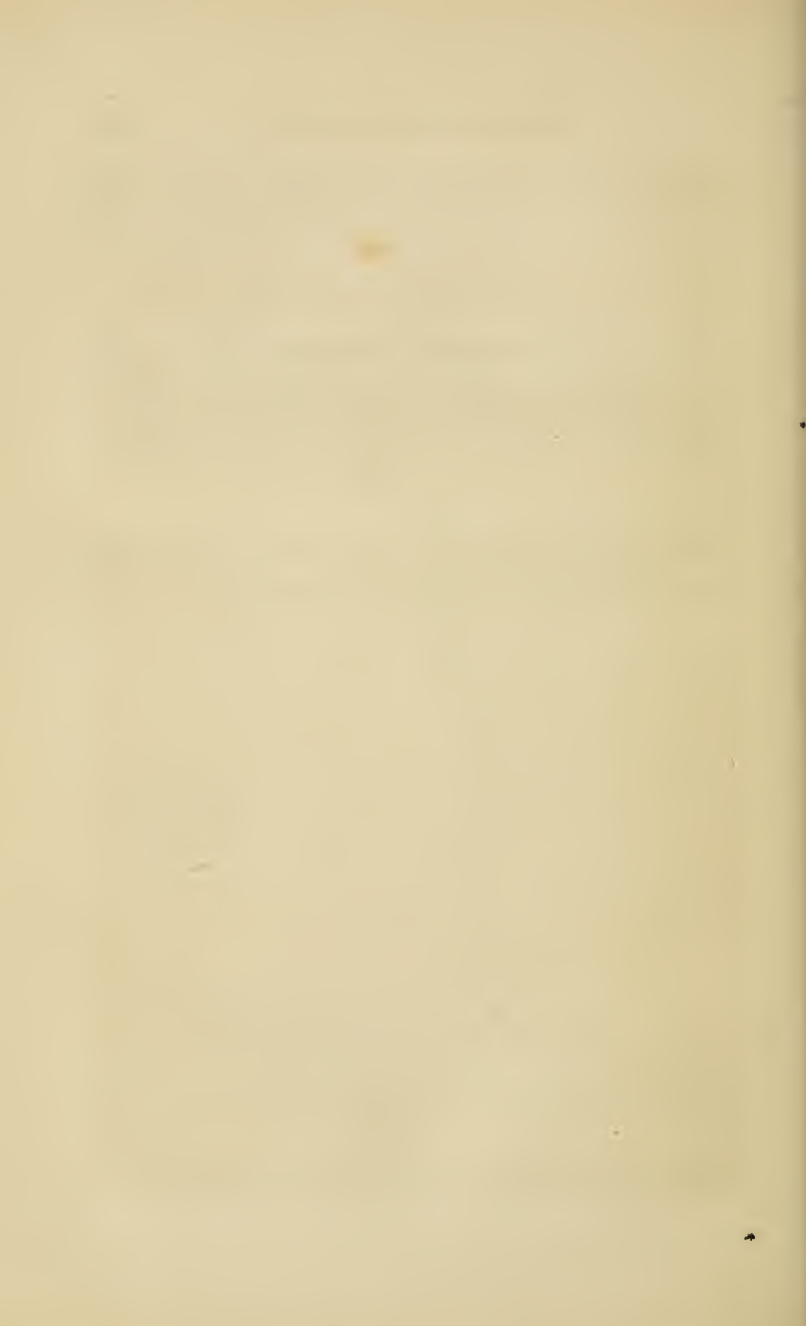


Fig. 27.

Mr. Wilcox's invention is a very useful and ornamental one, and just what is needed in every garden.





# HORTICULTURAL DIRECTORY.

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THE name and address of every Nurseryman, Florist, and Seedsman, in North America, will be inserted without charge in the future volumes of the RECORD OF HORTICULTURE, provided they are forwarded to us by the 1st of December of each year. The following list we believe to be the most complete of any heretofore published; still, it may not be perfect, and we should be pleased to receive notice of any error or omission:

Abel, C. C., <i>Bulbs</i> .....	New York City.
Adair, William.....	Detroit, Mich.
Adair, D. L., <i>Small Fruits</i> .....	Hanesville, Ky.
Adams, J. W.....	Springfield, Mass.
Allen & Johnson.....	Richmond, Va.
Allen, Samuel L., <i>Small Fruits</i> .....	Cinnaminson, N. J.
Allen, Edwin.....	New Brunswick, N. J.
Allen, Martin.....	Mendota, Ill.
Allis, S. J., <i>Vines</i> .....	North East, Pa.
Albaugh, N. H.....	Tadmire, Ohio.
Aldrich, Berry.....	Tiskilwa, Ill.
Andrews, Thomas C.....	Morristown, N. J.
Anderson, S., <i>Small Fruits</i> .....	Hammonton, N. J.
Anderson, Sears & Co.....	Geneva, N. Y.
Archer, Thomas.....	St. Joseph, Mich.
Arnold, Charles.....	Paris, Canada West.
Asmus, R., <i>Florist</i> .....	Hoboken, N. J.
Atwood, Isaac.....	Lake Mills, Wis.
Augur, Charles P., <i>Small Fruits</i> .....	Whitneyville, Conn.
Avery, Henry.....	Burlington, Iowa.
Ayers, A. P.....	Des Moines, Iowa.
Babcock, I. H., & Co.....	Lockport, N. Y.
Babcock, E. F.....	Summerville, Ill.
Bacon, E. E.....	Toledo, Ohio.
Bailey, John W., <i>Vines</i> .....	Plattsburgh, N. Y.
Baird, J. C.....	Easton, Kansas.
Batters, J. R. & A.....	Clinton, Iowa.
Barber, James.....	Richmond, Ill.
Barber, Joel.....	Lancaster, Wis.
Baker, George.....	Toledo, Ohio.
Baker, Charles R.....	Dorchester, Mass.
Baker, W. H.....	Dorchester, Mass.
Banks, Slingerhoff & Co., <i>Seeds</i> .....	St. Louis, Mo.
Bannan, Benjamin.....	Pottsville, Pa.
Banta, Garret H.....	Tappan, N. Y.
Barnard, Norris.....	Still Pond, Cross Roads, Md.
Barnett, W. N., <i>Vines</i> .....	West Haven, Conn.
Barrett, S.....	Vincennes, Ind.
Barnes & Kelly.....	Cove Creek, Kansas.
Barnes & Carlin.....	Sandusky, Ohio.
Bassett, Lyman, <i>Raspberries</i> .....	West Haven, Conn.
Bassett, W. F., <i>Small Fruits</i> .....	Hammonton, N. J.

Bauman, P.	Pottsville, Pa.
Baumann, E. A.	Rahway, N. J.
Bayles & Brothers.	Carondelet, Mo.
Beaumont & Lealand	Bloomington, Ill.
Beebee, W. W., Secretary Iowa Horticultural Society.	Dubuque, Iowa.
Beck, Charles.	Dayton, Ohio.
Belleville, Dr. J. B., & Son	Mount Washington, Ohio.
Bement, Samuel	Toledo, Ohio.
Bennet & Davidson, <i>Florists</i>	Flatbush, N. Y.
Berkmans, P. J.	Augusta, Ga.
Berst, H.	Erie, Pa.
Best, John	Utica, N. Y.
Beyer, Hugo, <i>Seeds</i>	New London, Iowa.
Bissett, James, <i>Florist</i>	Philadelphia, Pa.
Black, Charles	Hightstown, N. J.
Blackwell, Atchley & Co.	Titusville, N. J.
Blair, John, <i>Landscape Gardener</i>	Chicago, Ill.
Blair & Co.	Lee's Summit, Mo.
Blake, W.	Chester, S. C.
Bliss, B. K., & Son	Springfield, Mass.
Bliss, B. K., & Son	41 Park Row, New York City.
Blumenschein, A. D., <i>Florist</i>	Chicago, Ill.
Bluffton Wine Co.	Bluffton, Mo.
Boalt, G. & S.	Norwalk, Ohio.
Boardman & Co.	Rochester, N. Y.
Bolgiano, J., & Son, <i>Seeds</i>	Baltimore, Md.
Bockstoce, Henry	Pittsburgh, Pa.
Borman, Andrew, <i>Seeds</i>	London, Ohio.
Bondurant & Todd, <i>Seeds</i>	Louisville, Ky.
Bowditch, A. C., <i>Seeds</i>	Boston, Mass.
Bowen, E. P.	Buffalo, N. Y.
Bowen, Edward	Buffalo, N. Y.
Bowman, Marshal D., <i>Small Fruits</i>	Vincennes, Ind.
Bracket, G. P.	Denmark, Iowa.
Brackenridge, W. D.	Govanstown, Md.
Breck, J., & Son, <i>Seeds</i>	Boston, Mass.
Brehm, F. C., <i>Vines</i>	Waterloo, N. Y.
Breusing, Hermon, <i>Florist</i>	Weekawken, N. J.
Bridgeman, Andrew, <i>Florist</i>	New York City.
Bridgeman, Alfred, <i>Seeds</i>	New York City.
Bright, William, <i>Landscape Gardener</i>	Germantown, Pa.
Brill, Francis	Newark, N. J.
Briggs & Potter	Kalamazoo, Mich.
Brinckerhoff, Charles	Fishkill Landing, Dutchess County, N. Y.
Brooks & Stagg	Paris, Ill.
Brooker & Holmes	Junction Grove, Ill.
Bronson & Dodge	Warsaw, Ind.
Bronson, Graves & Selover	Rochester, N. Y.
Brown, W. F., <i>Seeds</i>	Oxford, Ohio.
Brown, W. C.	Monmouth, Ill.
Brown, D. H.	New Brunswick, N. J.
Brown, John P.	Ottawa, Kansas.
Brubacker, J. P.	Nachusa, Ill.
Bryant & Son	Princeton, Ill.
Bubach, J. G.	Princeton, Ill.
Budd, J. L., & Co.	Shellsburg, Iowa.
Buchanan, D. D.	Elizabeth, N. J.
Buchanan, Isaac	Astoria, N. Y.
Buist, Robert	Philadelphia, Pa.
Buist, R. Jr., <i>Seeds</i>	Philadelphia, Pa.
Burgess, A., <i>Florist</i>	East New York, N. Y.
Burgess, Ed., <i>Small Fruits</i>	Poughkeepsic, N. Y.
Burgess, W. A., <i>Florist</i>	Glen Cove, N. Y.
Burkholder & Wilson	Bendersville, Pa.
Bushnell, H., <i>Vines</i>	Peekskill, N. Y.

Burroughs, Solon.....	Vergennes, Vt.
Burns, A. M., <i>Vines</i> .....	Manhattan, Kansas.
Cadness, John.....	Flushing, N. Y.
Caldwell & Sexton.....	Kankakee, Ill.
Caldwell, William B.....	Paris, Ill.
Caldwell, Joseph.....	Troy, N. Y.
Callahan & McGrane.....	Bloomington, Ill.
Calkins, John S., <i>Vines</i> .....	New Market, N. J.
Campbell, G. W., <i>Vines</i> .....	Delaware, Ohio.
Cartwright, George & Co.....	Wellesley, Mass.
Cartwright & Co.....	Baltimore, Md.
Carpenter, William S.....	Rye, N. Y.
Carpenter, J. A.....	Cobden, Ill.
Carpenter, Edward J.....	Pleasantville, N. Y.
Cavanach, Thomas, <i>Small Fruits</i> .....	Brooklyn, N. Y.
Cavanach, Owen, <i>Florist</i> .....	Brooklyn, N. Y.
Chapin, Willard & Co.....	Kewanee, Ill.
Chapman, L. D., <i>Trees</i> .....	Portland, Me.
Charlton, John, <i>Vines</i> .....	Rochester, N. Y.
Chatfield, A. F., <i>Florist</i> .....	Albany, N. Y.
Chamberlain & McDonald, <i>Florists</i> .....	Brooklyn, N. Y.
Christy, J. R.....	Hackensack, N. J.
Claggett, Dr. H.....	St. Louis, Mo.
Clapp, C. W., <i>Vines</i> .....	Wappinger Falls, N. Y.
Clark, N.....	Westchester, Pa.
Clarke, F. N., <i>Small Fruits</i> .....	New Haven, Conn.
Clarke, E. E., deceased. See F. N. C., his successor.	
Clement, A., & Co.....	Lowell, Mass.
Cline, J. B., <i>Small Fruits</i> .....	Rochester, N. Y.
Closson, William, & Son.....	Prairie City, Ill.
Coburn, J. W.....	Flushing, N. Y.
Cochrane, James.....	Havana, Ill.
Cocklin, E. H., <i>Small Fruits</i> .....	Shepardstown, Pa.
Coleman, O. M.....	Bloomington, Ill.
Collins, Anderson & Co., <i>Seeds</i> .....	Philadelphia, Pa.
Collins, Charles, <i>Small Fruits</i> .....	Moorestown, N. J.
Collins, John S., <i>Small Fruits</i> .....	Moorestown, N. J.
Colman & Sanders.....	St. Louis, Mo.
Comstock, Ferre & Co., <i>Seeds</i> .....	Wethersfield, Conn.
Cone, J. W., <i>Vines</i> .....	Vineland, N. J.
Connor & Highland, <i>Vines</i> .....	Neoga, Ill.
Connor, Charles.....	St. Louis, Mo.
Cook, J. S.....	Cincinnati, Ohio.
Cook, M. S.....	Avondale, Pa.
Copeland, C. D.....	Lima, N. Y.
Copeland, R. M., <i>Landscape Gardener</i> .....	Boston, Mass.
Corse, William, & Son.....	Baltimore, Md.
Covell & Sons, <i>Small Fruits</i> .....	Sandusky, Ohio.
Cowdery Brothers, <i>Vines</i> .....	Sandusky, Ohio.
Cox, P.....	Morrow, Ohio.
Craft, George.....	Brookline, Mass.
Craig, R. G., & Co., <i>Seeds</i> .....	Memphis, Tenn.
Crane, C. G., & Co., <i>Seeds</i> .....	Newark, N. J.
Crane, John, <i>Small Fruits</i> .....	Union, N. J.
Cripps, J. B.....	Albion, Iowa.
Cromwell, R.....	Baltimore, Md.
Crowell, H. F., <i>Small Fruits</i> .....	Hammonton, N. J.
Crucknell, Charles.....	Pottsville, Pa.
Cummings, D., <i>Vines</i> .....	Conneaut, Ohio.
Curtis, George D., & Co.....	Moundville, W. Va.
Curtis, Henry.....	Owego, N. Y.
Curtis & Cobb, <i>Seeds</i> .....	Boston, Mass.
Daillidouze, Zeller & Co.....	Flatbush, N. Y.
Dake, L. E., & Co.....	Rochester, N. Y.
Davenport, George, & Co.....	Boston, Mass.

Davis, Charles	Phillipsburgh, N. J.
Davis, F., & Co.	Richmond, Va.
Davies, John, <i>Florist</i>	College Hill, Ohio.
Davis, H. W.	Oakley, Ill.
Davidson, N. N.	Indianapolis, Ind.
Davidson & Syred, <i>Florists</i>	Brooklyn, N. Y.
Day, William	Morristown, J. J.
Deitz, George A., <i>Seeds</i>	Chambersburg, Pa.
Deliot, J. F., <i>Vines</i>	Sing Sing, N. Y.
De Con, Samuel C., <i>Small Fruits</i>	Reckletown, N. J.
De Pew, Peter, & Son, <i>Vines</i>	Nyack, N. Y.
Deem, D., <i>Small Fruits</i>	Knightstown, Ind.
De Wolf, M., <i>Small Fruits</i>	Delavan, Wis.
Dingce & Conrad	West Grove, Pa.
Dingwall, John, <i>Florist</i>	Albany, N. Y.
Dick, John, <i>Florist</i>	Philadelphia, Pa.
Doane, Charles N., <i>Florist</i>	Jamaica, N. Y.
Doolittle, H. H., <i>Raspberries</i>	Oaks Corners, N. Y.
Doolittle & Wight	Waterloo, N. Y.
Donaldson, John	Kittanning, Pa.
Donnelly, R. J.	Rochester, N. Y.
Downer, J. S., & Son	Fairview, Ky.
Douglass, Robert	Waukegan, Ill.
Dreer, Henry A., <i>Seeds and Plants</i>	Philadelphia, Pa.
Duffell, Samuel T., <i>Small Fruits</i>	Yardville, N. J.
Dunlap, M. L.	Champaign, Ill.
Dunlap, H. J.	Champaign, Ill.
Dunlap, John	Milwaukie, Wis.
Duquett, Morris & Co.	Frederick City, Md.
Eber & Kœneke, <i>Seeds and Plants</i>	Quincy, Ill.
Edgerton, John	Coal Creek, Iowa.
Edwards, Samuel	La Moille, Ill.
Edmiston, D. G., <i>Small Fruits</i>	Adrian, Mich.
Elder, Walter, <i>Landscape Gardener</i>	Philadelphia, Pa.
Ellsworth, L., & Co.	Napierville, Ill.
Elliott & Sons, <i>Vines</i>	Pittsburgh, Pa.
Ellwanger & Barry	Rochester, N. Y.
Ellis, John, <i>Landscape Gardener</i>	White Plains, N. Y.
Engle & Brothers	Marietta, Pa.
Eunis, Dr. J. E.	Lyons, Iowa.
Erhard, Charles T.	Hunter's Point, N. Y.
Evans, William	Montreal, C. East.
Evans, Edward J., & Co.	York, Pa.
Fahenstock, L.	Toledo, Ohio.
Fancher, F. B.	Lansingburgh, N. Y.
Farrell, H. T.	Kenosha, Wis.
Feast, Samuel, & Son	Baltimore, Md.
Feast, John, <i>Florist</i>	Baltimore, Md.
Ferguson, David	Falls of Schuylkill, Philadelphia, Pa.
Ferris, J. C.	Seymour, Ind.
Ferris & Caywood	Poughkeepsie, N. Y.
Ferris, William	Throgg's Neck, N. Y.
Ferrand, E.	Detroit, Mich.
Fish, A. C.	Rochester, N. Y.
Flagg, W. C., Secretary Illinois Horticultural Society	Alton, Ill.
Flender, John, <i>Seeds</i>	Philadelphia, Pa.
Fletcher, Thomas J.	Delanco, N. J.
Fogg, Waldo	Salem Center, Ohio.
Fogg, J. P., & Son, <i>Seeds</i>	Chicago, Ill.
Foot, J. A., <i>Seeds</i>	Terre Haute, Ind.
Ford, L. M., & Co.	St. Paul, Minn.
Food & Co.	Anuburn, N. Y.
Foster, J. H., Jr.	Glendale, N. J.
Foster, Suel	Muscataine, Iowa.
Fraker, William A., <i>Vines</i>	Shirleysburgh, Pa.

France, E. ....	Cobleskill, N. Y.
Freeman, Isaac.....	New Carlisle, Ohio.
Fritts, C. E. & J. S., <i>Small Fruits</i> .....	Ellwood, N. J.
Frost & Co.....	Rochester, N. Y.
Frost, E. C.....	Watkins, N. Y.
Fryer, Dr., & Son.....	New Orleans, La.
Fuller, H. H., <i>Roses</i> .....	Wheaton, Ill.
Fuller, A. S., <i>Small Fruits</i> .....	Ridgewood, N. J.
Fuller, H. C., <i>Small Fruits</i> .....	Albion, N. Y.
Furnas, H. ....	Danville, Ind.
Galloway, J. L. ....	Milford, Ohio.
Galusha, O. B. ....	Lisbon, Ill.
Gates, Leroy.....	Kilbourn City, Wis.
Gardner, <i>Seeds</i> .....	Fredonia, N. Y.
Garretson, G. R., <i>Seeds</i> .....	Flushing, N. Y.
Geissel & Kressen, <i>Seeds</i> .....	Louisville, Ky.
Grant, C. W., <i>Vines</i> .....	Peekskill, N. Y.
Gregory, J. J. H., <i>Seeds</i> .....	Marblehead, Mass.
Greenman, C. H. & J. M.....	Milton, Wis.
Griffith, J. M., <i>Seeds</i> .....	Baltimore, Md.
Griffith, William, <i>Vines</i> .....	North East, Pa.
Grubb, W. S., <i>Hop Roots</i> .....	Baraboo, Wis.
Goebel, G. ....	St. Louis, Mo.
Goddard, C. S., <i>Florist</i> .....	Portland, Maine.
Goodale, S. L. ....	Saco, Maine.
Goodnough, W., <i>Small Fruits</i> .....	Lyons, N. Y.
Gould, Beckwith & Co.....	Rochester, N. Y.
Guest, James.....	Richmond, Va.
Gurney, John.....	Philadelphia, Pa.
Hacker, William, <i>Seeds</i> .....	Philadelphia, Pa.
Hague, John.....	Clinton, Iowa.
Haines, R. B. ....	Cheltenham, Pa.
Hall, D. S. ....	Alton, Ill.
Hall, A. S. ....	Vineland, N. J.
Hall, I. ....	Toledo, Ohio.
Hall, Joshua.....	Tipton, Ill.
Halliday & Sons.....	Baltimore, Md.
Hance, A., & Sons.....	Red Bank, N. J.
Hanford, R. G. ....	Columbus, Ohio.
Hanford, W. C. ....	Rockford, Ill.
Hanford & Co.....	Bristol, Ind.
Hanmore, J. W., <i>Vines</i> .....	Newburgh, N. Y.
Hammond, A. C. ....	Warsaw, Ill.
Hammond, A. ....	Geneva, N. Y.
Hargis & Sommer.....	Quincy, Ill.
Harmon, Charles, <i>Small Fruits</i> .....	Gray's Ferry, Pa.
Harnden, N. B. ....	Atlanta, Ga.
Harvey, J. J. ....	Newark, N. J.
Haskell & Kimball, <i>Seeds, etc</i> .....	Rockford, Ill.
Hatch, A. L. ....	Jackson, Miss.
Hatfield, A. J., <i>Small Fruits</i> .....	Niles, Mich.
Hawthorn & Howell.....	Leavenworth, Kansas.
Heaver, William.....	Cincinnati, Ohio.
Heffron, D. S. ....	Utica, N. Y.
Heiks, George.....	Dayton, Ohio.
Heine Brothers.....	Terre Haute, Ind.
Helmer, J. W. ....	Lockport, N. Y.
Henderson, John, & Co., <i>Florists</i> .....	Flushing, N. Y.
Henderson & Fleming, <i>Seeds</i> .....	New York City.
Henderson, Peter.....	South Bergen, N. J.
Henriot, Francis, <i>Vines</i> .....	Paterson, N. J.
Herenden, E. W. ....	Macedon, N. Y.
Hester, William.....	Terry, Miss.
Hexamer, <i>see</i> Reisig & Hexamer.	
Hicks, Isaac, & Son.....	North Hempstead, N. Y.

Hicks, Samuel	North Hempstead, N. Y.
Higley, S. H., <i>Small Fruits</i>	Port Byron, N. Y.
Higgings, Daniel	Flushing, N. Y.
Hinks, J. W., & Co., <i>Vines</i>	Bridgeport, Conn.
Hislop, Thomas, <i>Florist</i>	Milwaukee, Wis.
Hoag, John W., <i>Small Fruits</i>	Waterford, N. Y.
Hoag, C. L., & Co.	Lockport, N. Y.
Hoff, O. W.	Wataga, Ill.
Hogg, R. & W. S., <i>Florists</i>	Providence, R. I.
Holding, J. H., <i>Small Fruits</i>	Hammonton, N. J.
Holman, D. F., & Co., <i>Vines</i>	Chicago, Ill.
Holton, R. W., <i>Vines</i>	Haverstraw, N. Y.
Hooker, H. E., & Brothers	Rochester, N. Y.
Hooper Brothers & Thomas	Westchester, Pa.
Hoppes, Samuel, <i>Small Fruits</i>	Cherry Grove, Ohio.
Hopper, J. V.	Bunker Hill, Ill.
Houpt, E., <i>Small Fruits</i>	Hammonton, N. J.
Hovey & Co.	Boston, Mass.
Hovey, A. H., <i>Seeds</i>	Chicago, Ill.
How, Henry K.	New Brunswick, N. J.
Howitt, Gerald, <i>Florist</i>	Paterson, N. J.
Hoyt, S., & Sons	New Canaan, Conn.
Hoyt, D. J. B., <i>Small Fruits</i>	Gaines, N. Y.
Huggins, Z. R.	Glasgow, Ky.
Huggins, Jona.	Woodburn, Ill.
Hunter, J. M.	Ashley, Ill.
Hummer, L. O.	Montondon, Pa.
Husted, Noah P.	Lowell, Mich.
Husted & Hazelton	Delaware, Ohio.
Hussey, A. H., <i>Osage Orange</i>	Mount Pleasant, Ohio.
Hyde, J. F. C.	Boston, Mass.
Ingle & Brothers	Marietta, Ohio.
Ives, J. S., <i>Seeds</i>	Salem, Mass.
Jackson, Isaac, <i>Vines</i>	West Grove, Pa.
Jackson, Thomas, <i>Trees</i>	Portland, Maine.
Jenkins & Williams, <i>Vines</i>	Salem, Ohio.
Jennys, E. B., <i>Seeds and Plants</i>	Bridgeport, Conn.
Johnston, M. W., <i>Small Fruits</i>	South Bend, Ind.
Jones & Baker	Troy, Kansas.
Jones, Ellinwood & Bradley	Chicago, Ill.
Jordan, J. M.	St. Louis, Mo.
Judson & Co., <i>Labels</i>	Rochester, N. Y.
Kadletz, J., <i>Florist</i>	Stapleton, S. I., N. Y.
Kauffman, S.	Iowa City, Iowa.
Kauffman, D. W.	Des Moines, Iowa.
Keech, J., <i>Small Fruits</i>	Waterloo, N. Y.
Keeley, Edward J., <i>Small Fruits</i>	Ridgewood, N. J.
Kellogg, George	Janesville, Wis.
Kelley, James	St. Louis, Mo.
Kendig, R. P.	Waterloo, N. Y.
Kempton, E., <i>Small Fruits</i>	Hammonton, N. J.
Kepple, John	Harrisburgh, Pa.
Kern, N. G., <i>Landscape Gardener</i>	Alton, Ill.
Kift, Joe, <i>Florist</i>	Westchester, Pa.
Kimball, G. E.	Iowa City, Iowa.
King & Murray	Flushing, N. Y.
Kinsey & Gaines	Dayton, Ohio.
Knanth, Nachod & Co., <i>Importers</i>	New York City.
Knox, J., <i>Small Fruits</i>	Pittsburgh, Pa.
Knodle, J. W. & G. W.	Hillsboro, Ill.
Knowlton, I. S.	Byron, Ill.
Koenig, William, & Co.	St. Louis, Mo.
Koler & Bledsoe	Collinsville, Tenn.
Landreth & Son, <i>Seeds</i>	Philadelphia, Pa.
Langdon, C. C.	Mobile, Ala.

Lauer, A.	Smith's Station, Ky.
Lawyer, A. M., <i>Peaches and Apples</i>	South Pass, Ill.
Lambert, George	New Brunswick, N. J.
Leeds, Nathan	Cinnaminson, N. J.
Lenk & Co.	Toledo, Ohio.
Lennox, Charles, <i>Florist</i>	Philadelphia, Pa.
Leonard, Bailey & Co., <i>Vines</i>	Cleveland, Ohio.
Leonard, J. T., <i>Hedge Plants</i>	Albion, N. Y.
Lewis, Martin	Chicago, Ill.
Lewis, H. M., & Co.	Sandusky, Ohio.
Little, W. S.	Rochester, N. Y.
Little, J. T.	Dixon, Ill.
Lindley, N. H.	Bridgeport, Conn.
Lines, Richard, <i>Small Fruits</i>	Spring Valley, N. Y.
Livingston, A. W., <i>Seeds</i>	Reynoldsburg, Ohio.
Lond, G. B.	Romeo, Mich.
Long, D., & Son	Mount Carroll, Ill.
Long, David	Williamsville, N. Y.
Long, George	Lanark, Ill.
Luckhurst, J., Jr., & Co.	Rochester, N. Y.
Lukens, W. E.	Sterling, Ill.
Lum, H. B., <i>Small Fruits</i>	Sandusky, Ohio.
Lyman, W. H.	Leveritt, Mass.
Lynch, Edward, <i>Florist</i>	New York City.
Lyons, N. C., <i>Small Fruits</i>	Coral, Ill.
Mace, B. H., <i>Vines</i>	Newburgh, N. Y.
Mackey, William	Morrisiana, N. Y.
Mattison, James M.	Jacksonville, N. Y.
Mann, W. H., & Brothers	Gilman, Ill.
Manhard, E. A., & Co.	Canton, Miss.
Manning, J. W.	Reading, Mass.
Manning, R. J.	Demopolis, Ala.
Manson & Murry	Marfreesboro, Tenn.
Marc, Gabriel	Astoria, N. Y.
Marc & Witman	Astoria, N. Y.
Marshall, Edwin	Poughkeepsie, N. Y.
Marshall, S. B.	Massillon, Ohio.
Martin, J. F.	Mt. Washington, Ohio.
Mason, Charles, <i>Vines</i>	West Hartford, Conn.
Maupay, S., & Co.	Rising Sun, Philadelphia, Pa.
Maxwell, O. B., & Co.	Danville, N. Y.
Maxwell, T. C., & Co.	Rochester, N. Y.
McArthur, John G., & Co.	Tomola, Miss.
McCarthy & Flower	Penfield, N. Y.
McCartney	Cameron, Mo.
McGown & Ware	South Union, Ky.
McLain & Son	Charlestown, Ill.
McLaury, D.	New Brunswick, N. J.
McKee, J. A.	Cynthiana, Ky.
McKinstry, B. N.	East Sumner, Ill.
McWhorter, Tyler	Millesburgh, Ill.
Meech, F. J.	Albany, N. Y.
Meehan, Thomas	Germantown, Pa.
Merceron, F. F., <i>Vines</i>	Catawissa, Pa.
Merritt, Edward	Poughkeepsie, N. Y.
Merrick, J. M.	Walpole, Mass.
Meissner, G. E., <i>Vines</i>	Richmond, S. I., N. Y.
Merrill, A., <i>Vines</i>	Geneva, N. Y.
Meserole, P. S., <i>Seeds</i>	Chicago, Ill.
Messeburg, A., <i>Florist</i>	Flatbush, N. Y.
Michel, Henry, <i>Florist</i>	St. Louis, Mo.
Miller & Co.	Setzler's Store, Pa.
Miller, Charles H., <i>Landscape Gardener</i>	Philadelphia, Pa.
Miller & Sons, <i>Florists</i>	Chicago, Ill.
Miller, Dr. C. C.	Marengo, Ill.

Miller, Samuel	Bluffton, Mo.
Miller, Mark	Des Moines, Iowa.
Miller, Washington, <i>Vines</i>	Des Moines, Iowa.
Mills, J. W., <i>Vines</i>	Vineland, N. J.
Mittag, Louis	Ravenswood, N. Y.
Miner, T. B., <i>Vines</i>	Oneida, N. Y.
Minkler, S. G.	Oswego, Ill.
Montgomery & Heind	Mattoon, Ill.
Moody, E., & Sons	Lockport, N. Y.
Moon, Mahlon	Morrisville, Pa.
Moore, Jacob, <i>Vines</i>	Rochester, N. Y.
Morris, Paschal, <i>Seeds</i>	Philadelphia, Pa.
Morris, E., <i>Small Fruits</i>	Burlington, N. J.
Morse & Rike	Le Roy, Ill.
Moses, R. J.	Columbia, Ga.
Moulson, Samuel	Rochester, N. Y.
Munn, W. H., & Co.	Normal, Ill.
Musgrove, Pence & Barnes	Young America, Ill.
Munson & Kiel	Zanesville, Ohio.
Munson, D. O.	Fall's Church, Va.
Muir, Samuel, <i>Florist</i>	Chicago, Ill.
Murdock, J. R., & Co.	Pittsburgh, Pa.
Murphy, John	Dansville, N. Y.
Mumma, G. R., <i>Florist</i>	Dayton, Ohio.
Nelson, David	Philadelphia, Pa.
Nelson, J. A.	Mercer, Pa.
Nelson, I. D. G.	Fort Wayne, Ind.
Nelson, W. T., & Co.	Wilmington, Ill.
Nicholas, O. P., <i>Hedge Plants</i>	Davenport, Iowa.
Nicholas & Newson	Geneva, N. Y.
Nesbit, W. L.	Lewisburg, Pa.
Newbury, E., <i>Seeds and Plants</i>	Brooklyn, Conn.
Nevin, A. N.	Chenoa, Ill.
Nourse, W. A.	Moline, Ill.
Noyes, A.	Bangor, Maine.
Nye, J. B. B., <i>Small Fruits</i>	Marion, Mass.
O'Keefe & Son, <i>Seedmen and Florists</i>	Rochester, N. Y.
Olm Brothers	Springfield, Mass.
Osburn, W. D.	Port Byron, N. Y.
Osburn & Sons, <i>Small Fruits</i>	Benton Harbor, Mich.
Otis, C. S.	Charles City, Iowa.
Otto & Achelis	Westchester, Pa.
Palmer & Turpin, <i>Seeds and Plants</i>	Richmond, Va.
Patrick, William	Terre Haute, Ind.
Parkman, F., <i>Florist</i>	Jamaica Plains, Mass.
Parker, W. W.	Vinton, Iowa.
Parsons & Co.	Flushing, N. Y.
Partridge, Stephen	St. Louis, Mo.
Parmlee, William	New Haven, Conn.
Parry, William	Cinnaminson, N. J.
Paul, Chauncey	Vineland, N. J.
Paulsen, Julius, <i>Florist</i>	Weehawken, N. J.
Payne, Thomas H.	Libertyville, Ill.
Pearsall, W. C.	Port Byron, N. Y.
Pearson, J. H.	Ainsworth, Iowa.
Peirce, Lukens	Ercildoune, Pa.
Pennock Brothers	Upper Darby, Pa.
Penniman, H. P.	Battle Creek, Mich.
Pentland, James, <i>Florist</i>	Baltimore, Md.
Pentland, F.	Lockland, Ohio.
Peter, Robert	Lexington, Ky.
Peters, George, & Brothers	New Carlisle, Ohio.
Peters, R. S.	Newark, Del.
Peters, W. M.	Centerville, Del.
Peterson, P. S., <i>Trees</i>	Chicago, Ill.



Pettigrew & Reid, <i>Florists</i> .....	Chicago, Ill.
Pettingill, J. H. ....	Bunker Hill, Ill.
Perkins, John .....	Moorestown, N. J.
Perry, George, & Co. ....	Georgetown, Conn.
Perry, F. L. ....	Canandaigua, N. Y.
Pfeiffer, A., & Son .....	Cincinnati, Ohio.
Pfeiffer & Marquardt .....	Delaware, Ohio.
Phelps & Zetterstrom .....	Kenosha, Wis.
Phillips, R., <i>Small Fruits</i> .....	Matawan, N. J.
Phillips, Z., & Son .....	Moline, Ill.
Pitkin, Wiard & Co. ....	Louisville, Ky.
Platt, G. F., <i>Seeds</i> .....	New Haven, Conn.
Platt, J. S., <i>Fruit Dealer</i> .....	Chicago, Ill.
Plattman, I. A. ....	Erie, Pa.
Plant & Brothcr, <i>Seeds</i> .....	St. Louis, Mo.
Plenders, John, <i>Small Fruits, etc.</i> .....	Philadelphia, Pa.
Plumb, J. C. ....	Milton Junction, Wis.
Pool, I. A., <i>Florist</i> .....	Chicago, Ill.
Pope, R. F. ....	Pimmundy, Ill.
Potter, H. H., <i>Hop Roots</i> .....	Baraboo, Wis.
Potter, T. G., <i>Seed Grower</i> .....	East Providence, R. I.
Potter, E. J., & Co., <i>Small Fruits</i> .....	Knowlesville, N. Y.
Pouley, Robert, <i>Florist</i> .....	Chicago, Ill.
Prestle, Jos., Sen., <i>Fruit Painter</i> .....	Homestead, Iowa.
Prince & Co. ....	Flushing, N. Y.
Prentiss, E. C., <i>Small Fruits</i> .....	Reading, Mass.
Price, James S. ....	Media, Pa.
Purdy, A. M. ....	Palmyra, N. Y.
Purdy & Hance .....	South Bend, Ind.
Purple, S. H., <i>Florist</i> .....	Columbia, Pa.
Quinn, P. T. ....	Newark, N. J.
Ramsay, Wilfred, <i>Seeds</i> .....	Albany, N. Y.
Ramsey & Co., <i>Hop Roots</i> .....	Reedsburg, Wis.
Ransom, James O., <i>Small Fruits</i> .....	Hammonton, N. J.
Raoux, Clemence, <i>Importer</i> .....	New York City.
Raymond Brothers .....	Cedar Rapids, Iowa.
Reagles, C., & Son .....	Schenectady, N. Y.
Redmond & Hill .....	Augusta, Ga.
Reese, James .....	Ridge Farm, Ill.
Reeves, J. B. ....	Moulton, Ill.
Reeve, Edward .....	Medford, N. J.
Reihl, E. A., & Brothers .....	Alton, Ill.
Reissig, Charles, <i>Florist</i> .....	Chicago, Ill.
Reissig & Hexamer .....	New Castle, N. Y.
Rennison, J. C. ....	Bloomington, Ill.
Requa, James A., <i>Vines</i> .....	Brocton, N. Y.
Richardson & Bellows .....	Geneva, N. Y.
Richmond, C. W. ....	Napierville, Ill.
Richmond, J. ....	Genesee, Ill.
Roberts, J. A. ....	Paoli, Pa.
Robinson, W. D. ....	Henry, Ill.
Root, James H., <i>Seeds and Plants</i> .....	Skanateles, N. Y.
Rogers, E. C., <i>Vines</i> .....	Salem, Mass.
Rommel, Jacob, <i>Vines</i> .....	Hermann, Mo.
Ross, W. T. ....	Vineland, N. J.
Royce, W. A., <i>Vines</i> .....	Newburg, N. Y.
Rudd, D. P., & Co., <i>Hop Roots</i> .....	Reedsburg, Wis.
Rudisill, H. ....	Fort Wayne, Ind.
Rutter, J. ....	Westchester, Pa.
Ryder, B. L. ....	London, Pa.
Ryder & Co. ....	Sing Sing, N. Y.
Ryder & Wilson .....	Vineland, N. J.
Sacksteder, John, <i>Vines</i> .....	Louisville, Ky.
Safford, R. R. ....	Aurora, Ill.
Satterthwaite, E., <i>Seeds, etc.</i> .....	Philadelphia, Pa.

Sanders, Edgar, <i>Florist</i> .....	Chicago, Ill.
Sanders, Carew.....	St. Louis, Mo.
Saunders, William.....	Government Garden, Washington, D. C.
Saul, John.....	Washington, D. C.
Savage & Wing, <i>Hedge Plants</i> .....	Lyons, Iowa.
Scarborough, A.....	Payson, Ill.
Schaffer, G. W.....	Terre Haute, Ind.
Schlegel, A., & Co., <i>Seeds</i> .....	Boston, Mass.
Schroeder, Dr. H.....	Bloomington, Ill.
Schmidt, F. A., & Brothers, <i>Seeds</i> .....	Cincinnati, Ohio.
Schmidt, Augustus, <i>Seeds</i> .....	London, Ohio.
Schofield, D. C.....	Elgin, Ill.
Scott, R., <i>Florist</i> .....	Philadelphia, Pa.
Scott, Robert, <i>Vines</i> .....	Laporte, Ind.
Scott, L. D., & Co., <i>Seeds</i> .....	Huron, Ohio.
Seal, Thomas F.....	Unionville, Pa.
Sias, A. W.....	Rochester, Minn.
Simonson, I. J., & Co., <i>Florist</i> .....	New Springfield, N. Y.
Sincock & Co.....	Quincy, Ill.
Sinton, Joseph.....	Angola, N. Y.
Shaffer, G. W.....	Terre Haute, Ind.
Shaw & Atwood.....	Carver, Mass.
Shearman, J. S.....	Rockford, Ill.
Sheehan, J., <i>Florist</i> .....	Springfield, Mass.
Shepperd & Co., <i>Seeds</i> .....	New York City.
Skinner & Wedgewood.....	Marengo, Ill.
Small, A. L.....	Kankakee, Ill.
Smith, F. M.....	St. Paul, Minn.
Smith, J. C.....	Des Moines, Iowa.
Smith, J. F.....	Brentwood, N. H.
Smith, W. & T.....	Geneva, N. Y.
Smith, W. Brown.....	Syracuse, N. Y.
Snow, Dexter, <i>Florist</i> .....	Chicopee, Mass.
Snyder, E.....	Highland, Kansas.
Snyder, Dr. George.....	Magnolia, Miss.
Somerville, T.....	Lexington, Ky.
Southwick, T. T.....	Dansville, N. Y.
Sowell, A. H., <i>Florist</i> .....	Philadelphia, Pa.
Spalding & Co.....	Springfield, Ill.
Spalding, E. R.....	Toms River, N. J.
Spangler, N. H.....	Fruitlands, N. J.
Starr, Barton, <i>Small Fruits</i> .....	Mount Vernon, Ohio.
Stayman, Dr. J.....	Philadelphia, Pa.
Steevens, D. B., <i>Small Fruits</i> .....	Essex, Conn.
Stevens & Somers, <i>Seeds</i> .....	Madison, Wis.
Steensland, Halle, <i>Seeds</i> .....	Madison, Wis.
Stewart, W.....	Quincy, Ill.
Stilz, George.....	Indianapolis, Ind.
Stickney & Baumbach.....	Wapun, Wis.
Stickney, J. S.....	Wauwatosa, Wis.
Stokes, Ezra, <i>Small Fruits</i> .....	Berlin, N. J.
Stoms & Son, <i>Seeds</i> .....	Cincinnati, Ohio.
Storrs, Harrison & Co.....	Painesville, Ohio.
Strong, W. C.....	Brighton, Mass.
Strowger, W. D., & Co.....	Oswego, N. Y.
Such, George.....	South Amboy, N. J.
Summer, William.....	Pomaria, S. C.
Sutton, P., <i>Small Fruits</i> .....	Pittston, Pa.
Sulzer, F., & Co.....	Chicago, Ill.
Swasey, H. A.....	Tangipahoa, La.
Sylvester, E. Ware.....	Lyons, N. Y.
Tait, A. R., <i>Vines</i> .....	Morrisania, N. Y.
Tanner, W.....	Leavenworth, Kansas.
Tasker & Earl.....	Lawrence, Kansas.
Tatnall, Edward J.....	Wilmington, Del.

Tatnall, Edward	Wilmington, Del.
Taylor, O.	Lincoln, Va.
Teas, J. C.	Raysville, Ind.
Tear, E. Y.	Richmond, Ind.
Templeton, John T.	Davenport, Iowa.
Terry, H. A.	Crescent City, Iowa.
Thomas & Herendeen	Macedon, N. Y.
Thompson, Rufus, <i>Hop Roots</i>	Oregon, Wis.
Thompson & Myers	Brookfield, Mo.
Thompson, J. C.	Tompkinsville, N. Y.
Thorburn, J. M., <i>Seeds</i>	New York City.
Thorburn, S. T., <i>Seeds</i>	Albany, N. Y.
Thurlow, T. C.	Newburyport, Mass.
Tildon, Henry, <i>Seeds</i>	Davenport, Iowa.
Tillson, O. J., <i>Small Fruits</i>	Highland, N. Y.
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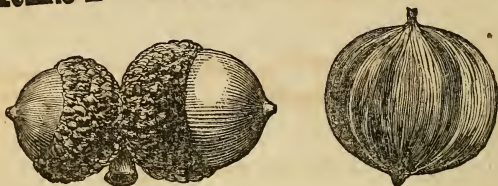
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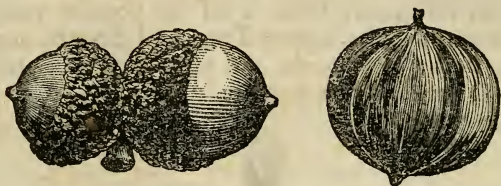


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