

S

eed Annual



Datura.

D. M. Ferry & Co.

Detroit, Mich.

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# SUPPLEMENT.



## Novelties and Specialties



### VEGETABLE & FLOWER SEEDS.

1885

IT has always been our aim to supply only the best stock, true in name and type, and of the highest vitality. We believe that our system, commencing with the pedigree of the stock seed and ending with the filling of the order, is the most perfect of any in this country. Yet we desire it distinctly understood that we do not claim a monopoly of all the good seeds in the country as some seedsmen do, but simply claim to have the best seeds that can be grown.

Believing that the province of the seedsman is to furnish only such varieties to his patrons as have been proven worthy of cultivation, we have always taken a very conservative position in regard to new varieties, (see page 1 in body of this Annual,) preferring to satisfy ourselves, thoroughly, before offering them to the public. The new varieties, described in this Supplement, we confidently recommend, as possessing high merits, while of the older varieties, each is recognized as the best of its kind.

#### B · E · A · N · S.

##### Cut Short, or Corn Hill.

An old and very popular variety, much used for planting among corn. Though principally used as a snap it is excellent either as a green shelled, or a dry bean. It is exceedingly hardy, and requires very little care; indeed, a few beans thrown in among the corn at the time of the last hoeing will supply the family throughout the season, without further care. The beans appear to be cut off diagonally at the ends, from which it derives its name. The beans we offer are the Red Speckled Cut Short.

Per packet, 10 cents; pint, 30 cents; quart, 50 cents; 4 quarts, \$1.75; bushel, \$10.00.  
*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*

##### White Crease Back.

This was first tested by us in 1882, and we found it one of the most distinct and desirable of twenty or more new sorts. Two years further trial warrants us in offering it. The vines are of medium size, but wonderfully prolific, bearing pods in clusters of from four to twelve. Its chief merit is its *extreme earliness* and habit of perfecting all its pods at nearly the same time, thus the entire crop may be used as snaps before any other pole variety is fairly fit for use. The pods resemble the Early Valentine somewhat in appearance, are of the *best quality* as snaps, and bear *shipping long distances*. The dry beans are small and white, being very similar to the Crystal White Wax.

This variety does not stand the hot sun very well, and should be planted early. For southern planting, where an early snap for shipping north is desired, we know of no better variety than this. We have found by trial that some spurious and very inferior stocks are being offered. Our stock is *northern grown*, and is *true and pure*.

Per packet, 25 cents, 5 packets for \$1.00.

## Rhode Island Crease Back.



Rhode Island Crease Back,  
Two Green and Five Ripe Pods.

We have received, under various names, a great many samples of impure stocks of this variety, the majority coming from Connecticut and Indiana; the growers all uniting in pronouncing it the most desirable sort for private gardens. After endeavoring, for years, to secure a true and pure stock of this valuable kind, we are first able to offer it this season. The vines are of good size, and vigorous climbers; they commence to bear *very early*, and continue to bear longer than any variety we know.

With us single plantings, under favorable conditions, have furnished pickings of both snap and green shelled beans for a period of from 30 to 40 days. They are of good quality as snaps and dry beans, and equal to London Horticultural as green shelled beans.



Kentucky Wonder.

Per packet, 25 cents; 5 packets for \$1.00.

## Kentucky Wonder.

Has been grown for some time in the South with the most satisfactory results; succeeds equally well in the North. For shell beans we would not recommend it, but as a snap it is a "wonder." It is *enormously productive*, and if the young pods are picked off, it will produce an abundance of crisp tender pods throughout the hottest season. The pods are long, often ten to twelve inches in length, and of the best quality. Per packet, 25 cents; or 5 packets for \$1.00.

# CABBAGE.

## Early Jersey Wakefield.

This well known and deservedly popular Cabbage is without doubt the *most profitable early variety*, being a sure header, producing compact solid heads of the *finest quality*; and maturing in season to command the highest prices. Our strain, for earliness, careful selection, and *purity*, is not surpassed by any in existence, and is not to be confounded with the many spurious stocks offered. Per packet, 5 cents; oz., 35 cents; 2 oz., 60 cents;  $\frac{1}{4}$  lb., \$1.00; lb., \$3.50.

## Very Early Etampes.

The most critical and trying tests of another year have only enhanced our good opinion of this variety. It ranks with the first in regard to earliness, being but little if any later than the Early Jersey Wakefield. It forms small, compact heads of superior quality. Our stock is *very choice*. Per packet, 5 cents; oz., 20 cents; 2 oz., 35 cents;  $\frac{1}{4}$  lb., 60 cents; lb., \$2.00.

# CARROT.

## Guérande, or Ox Heart.

All stock raisers appreciate the value of Carrots, but comparatively few have used them extensively, the difficulty and expense of harvesting them being a great objection.

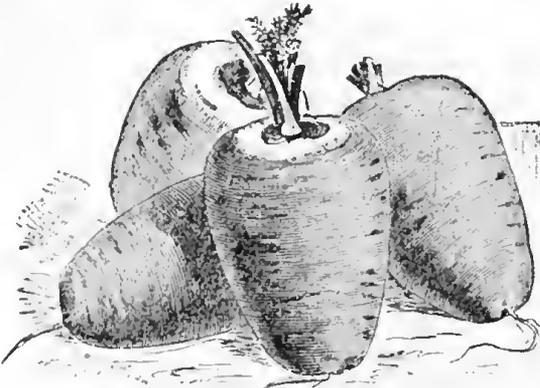
We offer this carrot to supply the great demand for a carrot of productive habit, large size, and one that is, by reason of its shape easily dug. The flesh is fine grained and of a rich orange color. It has little or no core. This variety is destined to come into very general use.

Per packet, 5 cents; oz., 20 cents; 2 oz., 35 cents;  $\frac{1}{4}$  lb., 60 cents; lb., \$2.00.

## Large White Vosges.

Very similar in general characteristics to the last, and has the same valuable qualities. It tapers more regularly to a point, has white flesh, and is preferred by some on this account.

Per packet, 5 cents; oz., 15 cents; 2 oz., 25 cents;  $\frac{1}{4}$  lb., 40 cents; lb., \$1.25.



Guérande, or Ox Heart Carrot.



Large White Vosges Carrot

## CAULIFLOWER.

### Early Snowball.

The continued cultivation of such a variety is an increasing pleasure, for every year we feel more enthusiastic in its praise. All points considered, it is unquestionably the *best type* of Cauliflower yet produced, and is *unexcelled* by any other kind for earliness. If planted March 1st, large sized heads will be produced early in June, about one week earlier than other sorts, and scarcely a single head will fail to form. The plants may be set out at from 18 to 20 inches apart owing to the shortness of the outer leaves, thus allowing the planting of from 12,000 to 14,000



heads per acre. Its dwarf compact habit of growth renders it one of the best kinds for forcing under glass. Although cultivated, principally, for an early crop, it does equally well for late planting. While not boasting that we, alone, possess a reliable stock of this variety, we confidently recommend our stock as equal to any offered.

Per packet, 25 cents;  $\frac{1}{4}$  oz., \$1.75; oz., \$6.00

# CORN.

## Ne Plus Ultra.



This is one of the most distinct varieties of Sweet Corn in cultivation. The results of very careful tests on our trial grounds during the last three years show that it is *very sweet and tender and continues in condition longer* than any other sort it has been compared with. Each stalk produces from one to four short ears, so densely covered with corn that the kernels are not only crowded out of regular rows, but are compressed into irregular forms. Its season is a little in advance of Stowell's Evergreen, but it continues bearing fully as late.

Per packet, 10 cents; pint, 20 cents; quart, 30 cents; 4 quarts, \$1.00; bushel, \$6.00.

*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*

## Extra Early Adams.

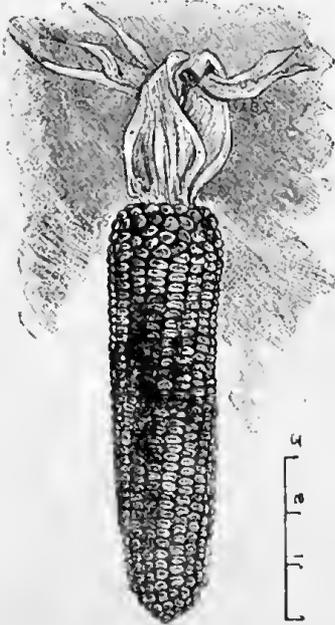
Fully 10 to 12 days earlier than the Early Adams and its equal in quality. A great favorite at the South, where it does well when other sorts fail.

Per packet, 10 cents; pint, 15 cents; quart, 25 cents; 4 quarts, 75 cents;

Ne Plus Ultra bushel, \$4.00.

*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*

## Early Yellow Hathaway Dent.



Early Golden Dent

This variety is the result of a careful selection for many years with the view of uniting the desirable features of large southern corn with the earliness and hardiness of northern corn. The stalks are above medium size, vigorous and healthy. In a number of competitive trials this corn has yielded the largest amount of shelled corn to the bushel of ears. Our stock has been carefully grown and selected for us by the originator, and is vastly superior to that grown with ordinary field culture. This variety will do well as far north as central Michigan.

Per packet, 10 cents; pint, 15 cents; quart, 20 cents; 4 quarts, 50 cents; bushel, \$2.50.

*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*



Early Yellow Hathaway Dent.

## Early Golden Dent, or Pride of the North.

A very early dent variety, ripening with the flint sorts. It can be successfully grown farther north than any other variety of dent corn.

Per packet, 10 cents; pint, 15 cents; quart, 20 cents; 4 quarts, 50 cents; bushel, \$2.50.  
If by mail or express, prepaid, 15 cents per pint, 50 cents per quart, must be added for charges.

## Early Red Blazed.

The characteristics of this flint corn are *curliness*, *productiveness*, and *great hardness*. It will germinate and grow in conditions of cold and wet that kill other sorts. In the unfavorable season of 1883, those who planted a good stock of this variety, secured fair crops of *sound corn*, while the crops of other varieties were *soft* and *worthless*. We offer a very fine stock, being a selection of the longest and most perfect ears raised in a latitude of 45 degrees. This variety is the *very best* for the extreme north.

Per packet, 10 cents; pint, 15 cents; quart, 20 cents; 4 quarts, 50 cents; bushel, \$2.50.  
If by mail or express, prepaid, 15 cents per pint, 50 cents per quart, must be added for charges.

## —❖❖ Musk ❖❖ Melon. —

### Japan Coral Flesh.

This sort originated several years ago from an extra choice melon found in a field of Surprise Musk Melon, from which, by the most careful selection, this fine and distinct variety has been obtained. It is of medium size, nearly round, slightly ribbed, and sparingly covered with a coarse, shallow netting on a light green ground. The flesh is red, remarkably thick, fine grained, and of *uniformly fine flavor*. Market gardeners will find this one of the most satisfactory sorts to grow as they can *warrant* every melon to be good.

Per packet, 5 cents; oz., 15 cents; 2 oz., 25 cents; ¼ lb., 40 cents; lb., \$1.50.



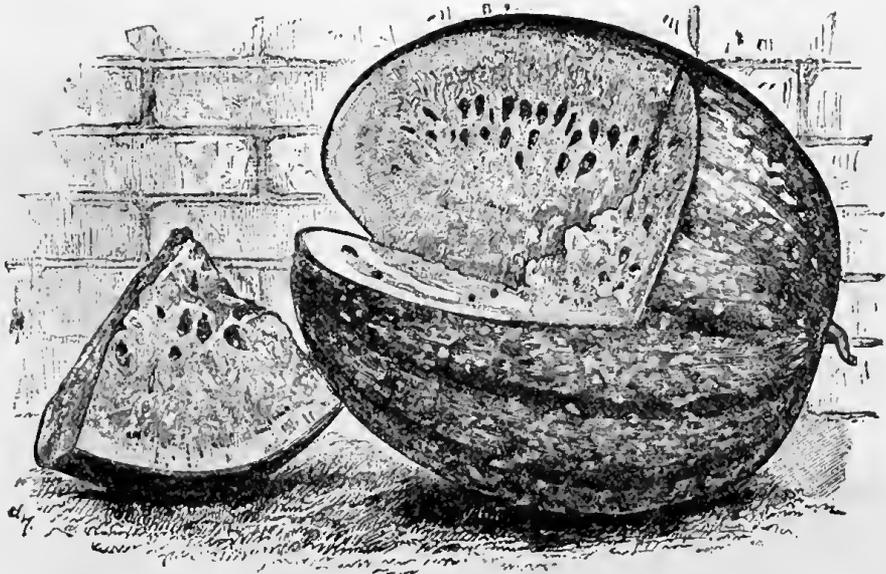
Japan Coral Flesh Musk Melon.

## —❖❖ WATER MELON. ❖❖—

### D. M. Ferry & Co's Peerless.

Our stock this season, of this melon, which is indeed "Peerless," is unusually fine. For family use we unhesitatingly pronounce it the *very best sort*. It is one of the very sweetest and of most delicious flavor.

Per packet, 5 cents; oz., 15 cents; 2 oz., 25 cents; ¼ lb., 40 cents; lb., \$1.25.



Kolb's Gem, or American Champion

## Kolb's Gem, or American Champion.

This melon comes from one of the most successful growers in the South; he sought to unite *good quality* and *large size* in a melon that would *bear shipping great distances*, and has most successfully combined these three desirable qualities.

It resembles the Cuban Queen in general appearance, but the colors are brighter, and it is more distinctly ovoid in shape. The flesh is bright red, firm, coarse grained, but exceedingly sweet and juicy. The rind is thin, but very hard and firm, forming a distinct shell which protects the melon during shipment, and also gives it remarkable keeping qualities.

Per packet, 5 cents; oz., 20 cents; 2 oz., 35 cents;  $\frac{1}{4}$  lb., 60 cents; lb., \$2.00.

## · O · N · I · O · N ·



Round White Silverskin Onion.

### Round White Silverskin for Pickling.

This Onion differs materially from the New Queen. It is a trifle later, the bulbs are more globular, and slightly larger. The principal point of difference between the two is the character of the outside sections. In the Round White Silverskin they are of an opaque white color, and do not turn green upon exposure to the light, as do the thin, tender, semi-transparent outer sections of the New Queen. They are also thick, compact, hard and firm, making it the very best of keepers, and at the same time they are very crisp and brittle. We consider this variety by far **THE BEST EVER INTRODUCED** for pickling. A number of large dealers to whom we sent samples last season, have spoken of it in the highest terms of praise.

Per packet, 5 cents; oz., 30 cents; 2 oz., 55 cents;  $\frac{1}{4}$  lb., \$1.00; lb., \$3.00.

## Three Peas of Unsurpassed Quality.

### Bliss' American Wonder.

Although but a few years old, this variety has already established itself second to none as a general favorite. It is the *earliest* of all the dwarf peas, and is, indeed, but little later than our First and Best. Habit, very dwarf and vigorous; pods long and well filled; peas exceedingly sweet, tender and well flavored.

Per packet, 10 cents; pint, 25 cents; quart, 40 cents; 4 quarts, \$1.50; bushel, \$8.00.

*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*

### Bliss' Everbearing.

The accompanying illustration was taken from a photograph of an ordinary plant on our fields, and shows the distinctive character of the variety very clearly. In order to develop the everbearing quality to the best advantage, the seed should be sown singly, or very sparsely in the drill, and in *very rich* soil; it will then throw up several stalks, each bearing from six to ten pods; remove these as they mature, keeping the ground well cultivated, and the plant will throw out short, pod-bearing branches from the axils of the leaves, and will continue to develop these branches until it has produced an incredible number of pods. The peas are wrinkled, large, and of delicious flavor.

Per packet, 20 cents; pint, 40 cents; quart, 65 cents; 4 quarts, \$2.25;  $\frac{1}{4}$  bushel, \$4.00.

*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*

## Bliss' Abundance.

While this variety does not have the peculiar branching habit of the last sort, yet in good soil, it throws up a number of branches crowded at the top with medium sized pods, well filled with large peas of most superior quality. Of all the new varieties we have tested this year, this was the best flavored, the peas kept their color the best, and cooked the quickest. It will be a favorite wherever introduced.

Per packet, 20 cents; pint, 45 cents; quart, 75 cents; 4 quarts, \$2.75;  $\frac{1}{4}$  bushel, \$5.25.  
*If by mail or express, prepaid, 15 cents per pint, 30 cents per quart, must be added for charges.*



Bliss' Everbearing Peas.



Bliss' Abundance Peas.

## Sweet Mountain Pepper.

This pepper is very vigorous and productive. The fruit is smooth, handsome and very large, often growing eight inches in length by two or three in diameter. The flesh is thick, sweet and of mild flavor. This is one of the most desirable kinds and is unsurpassed as a stuffed pickle.

Per packet, 5 cents; oz., 25 cents; 2 oz., 40 cents;  $\frac{1}{4}$  lb., 75 cents; lb., \$2.50.

## HUBBARD SQUASH.

A standard variety, and without question the best winter squash known. The flesh is a bright orange yellow, finely grained, dry, sweet and rich flavored; will keep perfectly the entire winter; boils or bakes exceedingly dry, and is esteemed by many to be as good baked as the sweet potato. We have been improving our strain for several years, and believe that we have the finest in the country. Per packet, 5 cents; oz., 10 cents; 2 oz., 15 cents;  $\frac{1}{4}$  lb., 25 cents; lb., \$1.00.

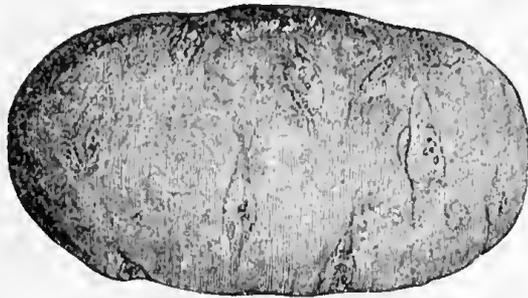
## Optimus Tomato.

We first obtained this in 1882 from one of the most enthusiastic and critical growers in New England as the *best* tomato he had ever seen. We found the fruit so handsome and of such superior quality, that we procured a stock of the seed from the originator saved from the choicest specimens. We have improved this at great expense by ripening the fruit under glass, so as to secure two germinations in a single season, and preserving only the finest plants until we are enabled to offer a small stock of seed, which for *purity* and *certainly* to produce fruit of superior quality has NEVER BEEN EQUALED. The fruit resembles the Livingston's Favorite in general appearance, but it is far more uniform in size. It is borne in clusters of five, each tomato being large and handsome. It ripens more evenly than any other sort we have ever tested, and is free from cracks and blemishes. The flesh is a beautiful crimson-scarlet color, very fine grained, solid and entirely free from the hard spots found in all other large sorts. The quality is SUPERIOR TO ANY OTHER SORT we know of. The Optimus, in its *present purity*, has been *developed on our own grounds*, and we

have never disposed of a *single seed*, so that the only possible way of securing it is from us. We very confidently recommend this sort, believing it to be one of the most valuable improvements in vegetables that has been offered for several years. Our stock is very limited this season and we are only able to offer it by the packet. Per packet, 25 cents. 5 packets for \$1.00.

# POTATOES.

## White Star.



White Star Potato.

When we introduced this variety several years ago, we asserted that it was the **VERY BEST** potato for **GENERAL CULTIVATION**. Since then we have furnished it to thousands in every part of the country. It has been successfully tested in all soils, climates and seasons, and has more than vindicated all of our claims. It combines **MORE GOOD QUALITIES** than any other sort, is enormously productive, and a splendid keeper.

Per lb., 40 cents; 2 lbs., 65 cents; 3 lbs., 90 cents;  $\frac{1}{4}$  bu., \$1.00;  $\frac{1}{2}$  bu. \$1.25; 1 bu., \$1.50; bbl., of 3 bu., \$4.00.

We send by Express or Mail, prepaid, at lb. quotations. Quarter bushels and upwards sent by Express or Freight, the purchaser paying charges.

## D·A·L·I·A·

### FINEST SINGLE MIXED.—

As an autumn flower the Dahlia is unequalled and is at its greatest glory when nearly all other flowers have ceased to bloom.



Single Dahlias.



Edelweiss.

The Single Dahlias, although comparatively new, have gained great favor. They are very beautiful and most desirable for cutting. Our mixture is very choice, and will yield a fine range of distinct sorts. Per packet, 15 cents.

### Double Daisy.—“LONGFELLOW” (Bellis Perennis, fl. pl.).

A dark rose colored Daisy of unusual size, and very double, coming true from seed. The flower stalks are long and stiff, making it a desirable variety for bouquets. Very choice. Per packet, 25 cents.

### Edelweiss.—GNAPHALIUM LEONTOPODIUM.

The true Edelweiss found on the Alps. Travellers have prized it so highly and sought for it so eagerly that it has nearly disappeared from the Alps, excepting in inaccessible places. The flowers are pure white, star shaped and downy in texture. Per packet, 15 cents.

# D. M. FERRY & CO'S

## SEEDS AND PLANTS

1885

WITH the greeting and good wishes which we send with this new issue of our ANNUAL to all our customers, old and new, we have a few words to say on the conduct of our business, to which we invite your special attention.

Perhaps it has been noticed that it is our custom each year to offer only a very few novelties. We can assure our readers, however, that our failure to do so does not arise from ignorance, or want of energy. There has scarcely been a so-called new sort offered for many years, which we have not seen growing, either in our trial-grounds or in the hands of the originators, long before it was offered to the general public. By careful testing and examination, we have usually found these much-lauded novelties, no better, or inferior to older sorts, and we think that in such cases we serve our patrons best by refusing to add them to our lists. Our introduction of such sorts as the Golden Wax Bean, Prize Head Lettuce, Peerless Water Melon, and White Star Potato, proves that if a sort really has merit, we are not backward in making it known, and bringing it into general cultivation. When we remember that most of our garden vegetables have been in cultivation for centuries, and that in spite of all effort to improve them, a permanently good and valuable sort has not been produced oftener than once in five or ten years, the absurdity of each year offering a list, one-fourth of which are claimed to be *new* and improved sorts, is evident.

In place of the fulsome praise of each and every variety with which seedsmen's catalogues are often filled, we have endeavored to give full and accurate descriptions of the varieties we have to offer, so that the reader may be guided to a wise choice of the variety best suited to his particular needs, and farther, we have in the article on "Formation and Management of Vegetable Gardens," as well as in our cultural directions, tried to give such full instruction for the culture and management of the various plants, that anyone who will carefully study and follow them, will meet with success. These directions are not simple compilations, but are the result of not only our own *experience*, but of that of the best cultivators all over the land, and can be trusted as reliable.

We make no pretense of selling \$2.00 worth of seeds for 25 cents. We believe few of our readers would care to purchase gold watches claimed to be worth \$100, but offered and advertised in all the papers of the country at \$10. In cases like this it is safe to conclude that the article is really dear at the price asked for it. Seeds are a commodity, the production and sale of which are governed by the same principles that control all other kinds of business and one can expect to purchase \$2.00 worth of seeds for 25 cents with just as much reason as he can hope to gather figs from thistles. Such flash advertisements and "special offers" are losing their attraction with careful and intelligent buyers.

We do claim, however, that we can and will sell you the best of seeds that the wide world affords, at prices as low as seeds of equal quality can be obtained for, and we ask your attention to a brief account of some of our facilities for doing this, first.

**Our Greenfield Seed Farms**, which are located just outside of Detroit, extending one and one-fourth miles along the Grand River Road. They are nearly level, but are well underdrained by tile laid two rods apart and three to four feet deep. The soil is partly sandy and partly clay loam and very rich, as we annually use two or three thousand two-horse loads of stable manure, besides about four thousand barrels of blood, meat and bone, which is composted with lime, plaster and sulphuric acid, so as to make an excellent superphosphate. The labor is mostly performed by German women, we sometimes having as many as 125 at work at once. Their manner of work is well shown in the cut on next page.

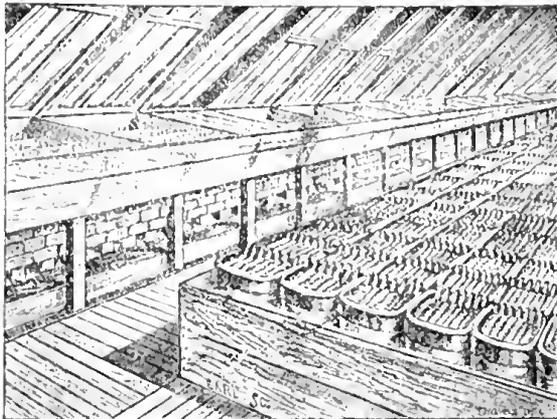
These farms are under the management of one of the most experienced and successful growers in America, and the statement has frequently been made by those fully competent to judge,



SCENE ON D. M. FERRY & CO'S SEED FARM.—WEEDING.

that while they are not the largest they are certainly the best cultivated and most productive seed farms in the country, if not in the world. But to grow all of our seeds on a single tract would be impracticable, for we require the product of nearly 800 acres of cucumbers, 650 acres of beans, and a proportionate amount of corn, tomato, melon and other seeds; nor would it be desirable to grow all our seeds at one point, for not only is there the danger of mixing the varieties, but often the soil and climate best suited to grow one sort is entirely unfitted to grow another, so we make

**Contracts for Seeds to be Grown for us** in localities ranging from Connecticut on the east to California on the west, and from Georgia to northern Michigan, besides having special crops grown for us in Canada, England, France, Germany and Italy. These contracts are with experienced growers, many of whom have devoted their entire time and attention for years to the production of some special crop to which their location is peculiarly adapted, and so have acquired a skill in growing this particular seed which no gardener or even general seed grower can hope to equal. But we are not content to rely solely on their reputation and



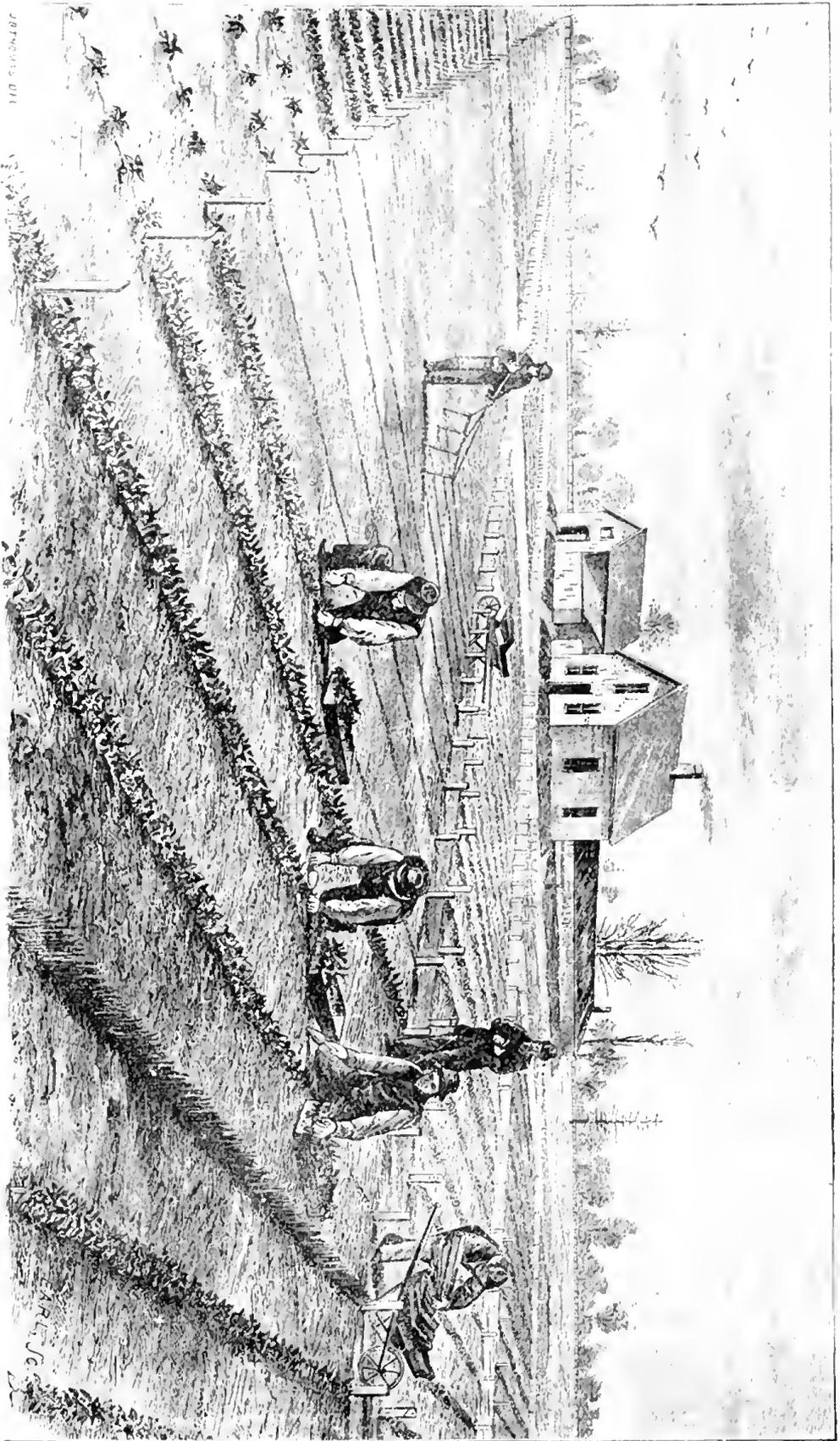
INTERIOR TESTING HOUSE ON TRIAL GROUNDS.

experience, but each crop is visited and a careful record kept, not only of its condition and quality, but of the facilities for, and pains taken to secure, the highest excellence. The stock seed used is in all cases furnished or controlled by us, and in procuring it we make every effort to secure the very best attainable, regardless of cost or trouble. In this work we are greatly aided by

**Our Trial Grounds.** These are located within the city on Woodward avenue, and here we have planted, side by side, and treated precisely alike, samples of the stocks from different growers, and also samples of any new sorts, or improved stocks of old varieties which we may be able to procure; and a careful record

is made of the slightest difference in quality or character, so that we can detect the least tendency to deterioration, or notice and take advantage of any superiority in any particular stock. Some idea of the extent of this work may be gathered from the size of our grounds which occupy nearly seven acres; and also from the number of samples planted, which last season was over

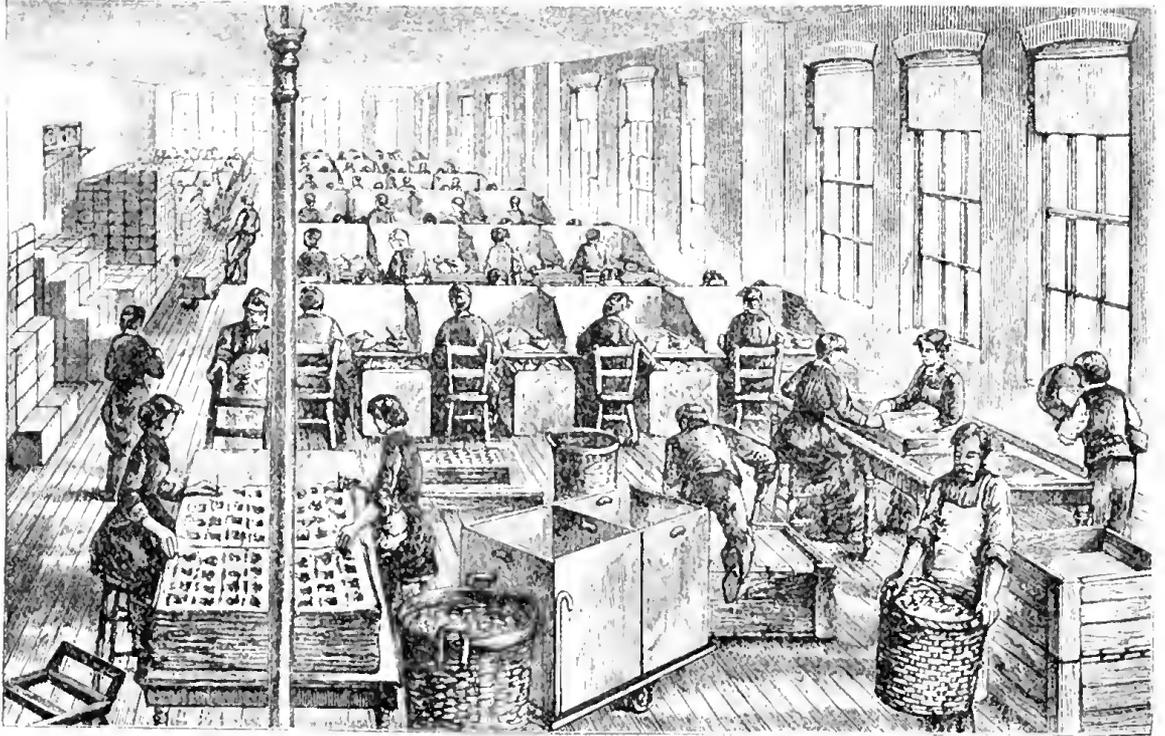
D. M. FERRY & CO'S TRIAL GROUNDS.



ARTWORK BY DILL

ARTWORK BY DILL

2,400. Here, too, seeds are tested as to vitality, a sample from every lot of seeds received being counted out and planted and a record made of the percentage that will grow. Intermediate between the Trial Grounds and the Seed Farms proper are several parcels of land devoted to the development of improved stock seed. Whenever, in visiting crops, we see a plant of noticeably superior quality, we save the seeds produced by it and plant them by themselves in one of these gardens; and if the product is found to be superior, it is saved and grown by itself as a commencement of a new or improved stock. In this way we are each year improving our seeds.



SMALL PAPER BAG MANUFACTURING ROOM.

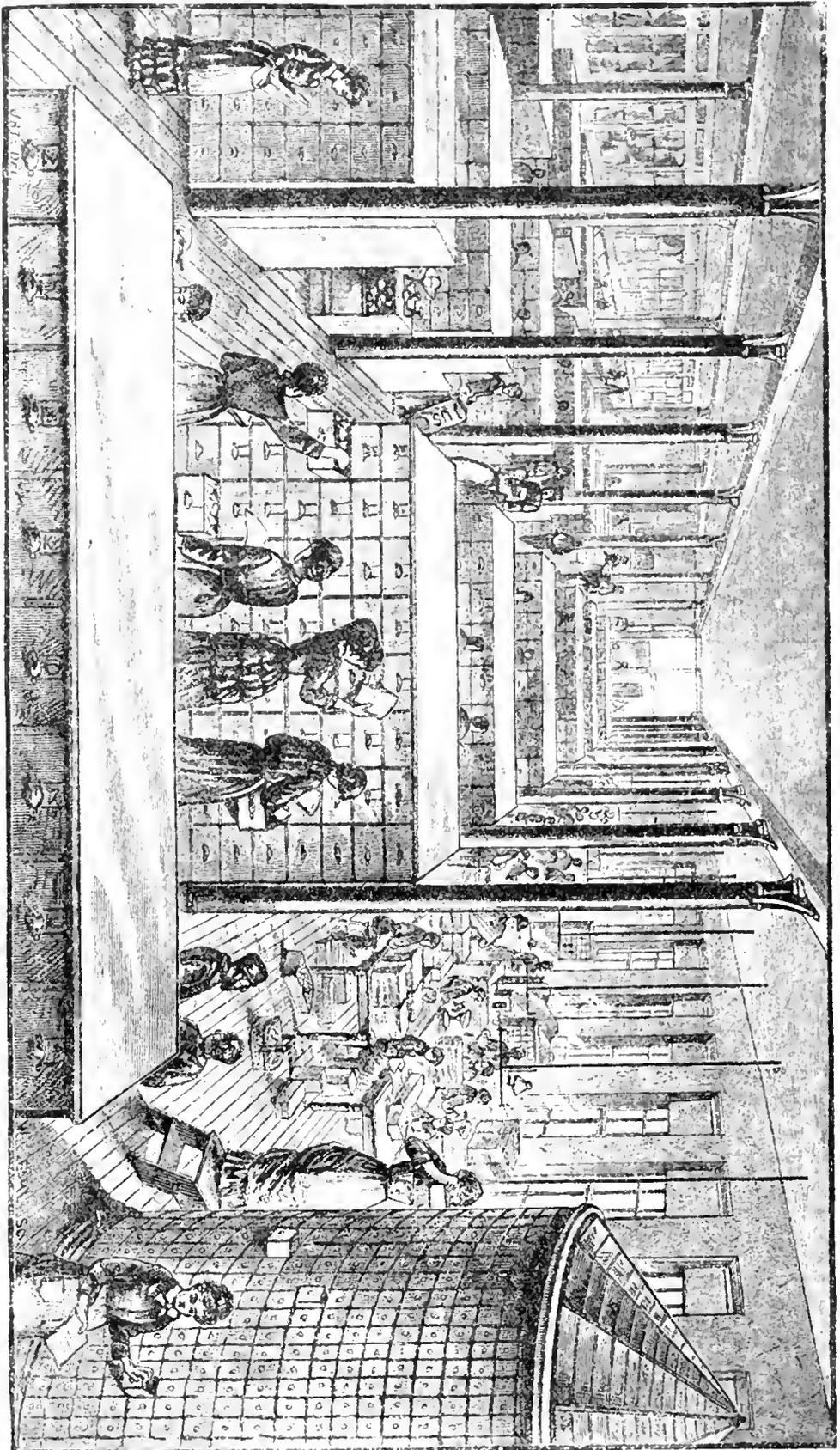
But having secured a crop of pure and well grown seeds, the work is but half done; for they must now be distributed in small quantities to those who may want them. No one can appreciate, without experience, the difficulty of so distributing the hundreds of varieties the trade now demands, without mistakes of labeling or mixing of samples, and it certainly cannot be done without the best facilities for the work. In this respect we think we have the advantage of any seedsmen in America in our

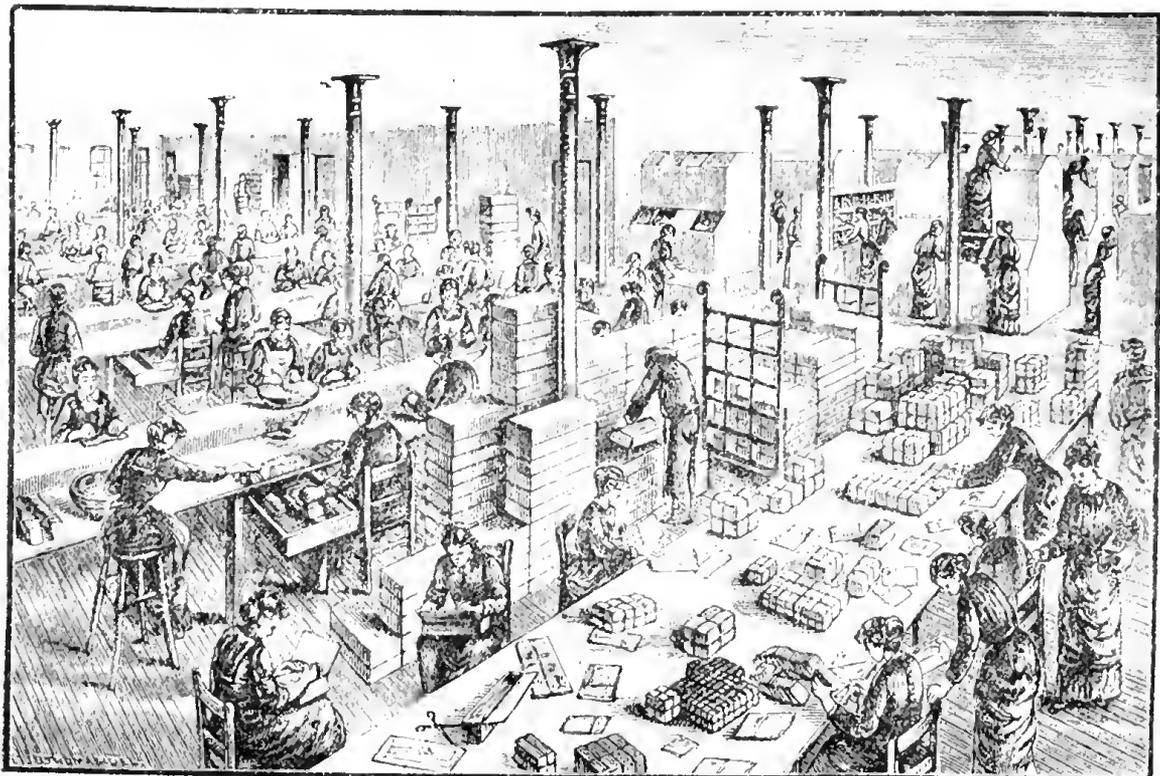
**Central Seed Store and Warehouse**, which occupies one-half of the block bounded by Randolph, Croghan, Brush and Lafayette streets, extending 300 feet on Brush and 120 feet on Croghan and Lafayette streets. It has a handsome exterior of stone and brick, is four stories high, with a well lighted and ventilated basement under the whole. The aggregate area of the several floors is between four and five acres, and all is used in the handling rather than the storing of our seeds. Our large store house at the farm, and arrangements with our growers enabling us to store our seeds so that they need be in the central building but a short time. The interior arrangements are very complete and convenient as may be judged by the illustrations of several of the rooms, and which we think are sufficiently comprehensive to render any further explanation unnecessary. Directly opposite our central store is

**Our Box Factory.** It is a three story building, in the same architectural style as the warehouse, and especially adapted to the manufacture and repair of our boxes of which we have in use over 250,000. Here, in the busy season, 100 men are at work with various machines designed especially for us, and capable of doing everything from the sawing of the lumber to the sand-papering of the finished boxes. We annually manufacture over 700,000 feet of lumber, much of it black walnut, into about 35,000 boxes.

**Our Canadian Branch.** For the accommodation of our Canadian friends we have a branch establishment at Windsor, Ontario, opposite Detroit. Although connected by telephone, and but a few minutes' ride from our central store, this is an entirely distinct establishment. The stocks, which are essentially duplicates of those used in the States, are im-

MAIL ORDER DEPARTMENT.



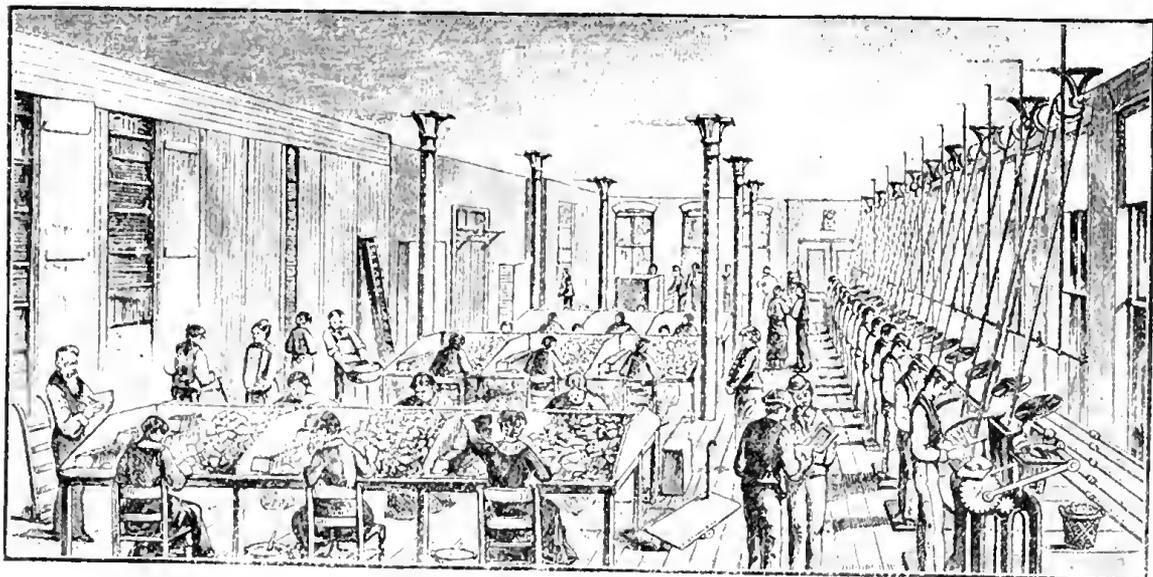


PUTTING UP SEEDS IN SMALL PACKETS.

ported directly into Canada. By this arrangement, we are enabled to execute promptly all Canadian orders in large or small quantities, by express or freight, without the vexatious delays and expensive processes of entering and paying duties on small parcels.

But all these material aids would be of but little service unless used efficiently. In this respect we have the advantage of a large body of trained assistants, the number employed in the central building often reaching six hundred, some of whom have been with us since we commenced business, and have acquired a knowledge of seeds, and a skill and accuracy in handling them, that reduces the possibility of mistakes to a minimum.

We have thus outlined our facilities for doing business, not in a boastful spirit, but to show that we have the capacity for filling your orders accurately and promptly with the best of seeds. You cannot do better than send to us for anything you may want in our line.



PRINTING OFFICE.

## FORMATION AND MANAGEMENT

OF

## VEGETABLE GARDENS.

**Situation and Exposure.** The vegetable garden should never be in an orchard, or have trees or shrubs within it. If the space must accommodate both fruit and vegetables, it is better to set the fruit at one end so as to leave the portion for vegetables unbroken and unshaded, even if it is much smaller. On the farm, it should be so placed as to be easily reached from the barn, to facilitate horse cultivation. Abrupt slopes in any direction are to be avoided. A gentle inclination to the south and east is the warmest, will give the earliest vegetables, and be best for Corn, Melons, Tomatoes, &c., but it suffers more from a spring or early fall frost, because of receiving the direct rays of the morning sun. An inclination to the north and west is later, suffers less in a drought, and is the best for Peas, Cabbage, Lettuce, &c. So it is an advantage, in a large garden, to have both these exposures, but for small gardens, a gentle inclination of the south and east, or a level surface, is the best.

**Soil.**—A good garden can be made on any soil, but that best suited to the purpose is a deep, rich, friable loam; and the more nearly other soils can be made to approach this the better. This may be accomplished in tenacious clays (and must be for a good garden) by good drainage, deep and judicious cultivation, use of coarse manure, and liberal applications of leached ashes, sand, and in some cases of peat. If the soil is naturally too light and sandy, it may be improved by rolling and the use of large quantities of well composted manure and muck, and dressings of clay.

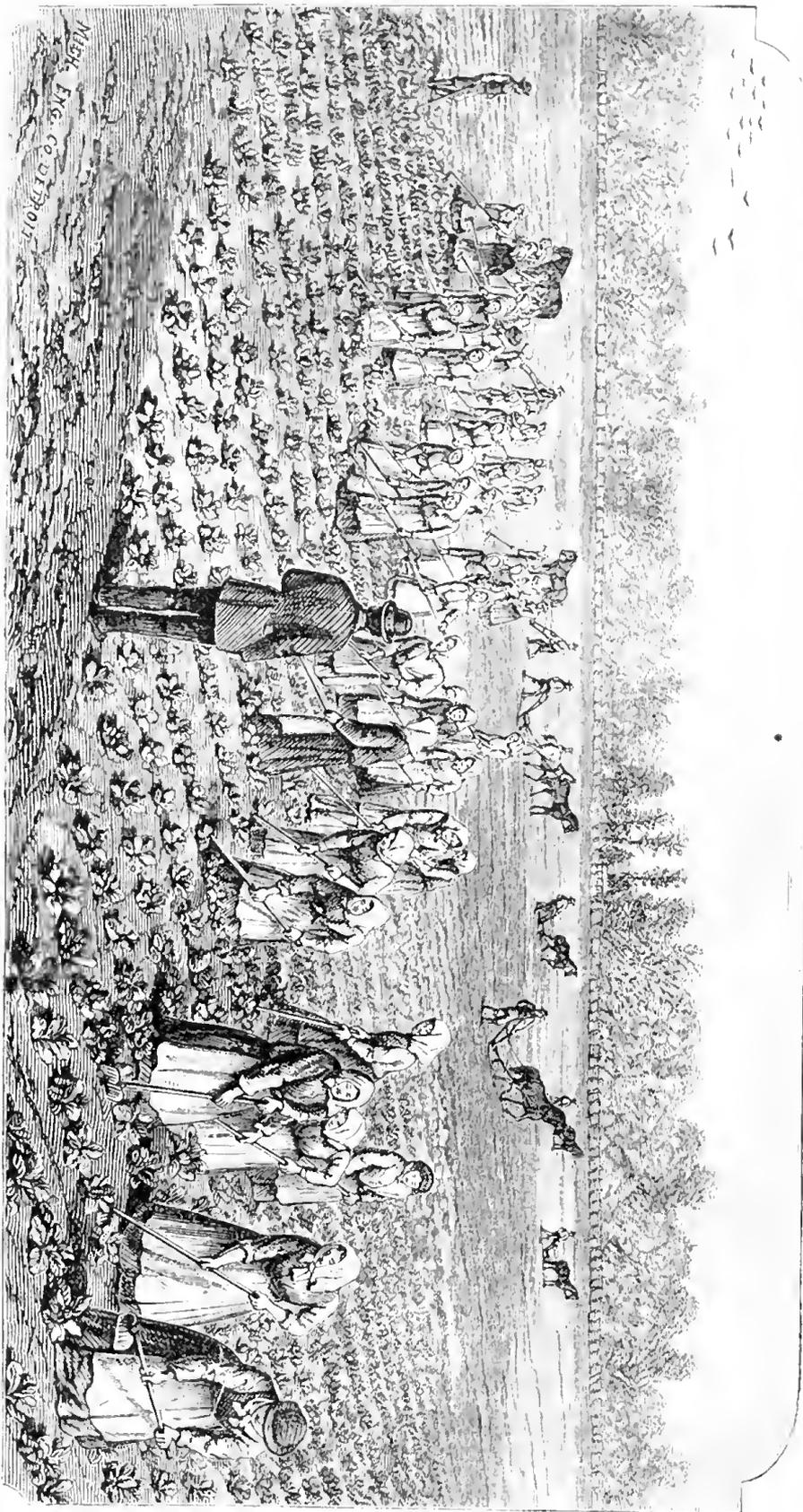
**Size and Form.**—A single bed ten feet square, well manured, well spaded, and thoroughly cultivated and cared for, will produce more good vegetables, be more profitable, and give better satisfaction, than an acre unmanured, half prepared, and poorly cared for. Our golden rule for size is, make your garden *no larger* than you can prepare and care for in the best possible manner. If it all has to be done by hand, it will take the entire time of one man to keep in good order a garden of one acre, but if it is so arranged that the horse cultivator can be used, he can care for four times that area. In village gardens, the form is usually determined by that of the lot, but where there is a choice, a rectangle several times longer than wide, the sides running from north to south, is the most economical; if this can be so placed that a space of eight feet wide at both ends or along both sides can be left for a horse to turn in, it will be a great advantage.

**Drainage.**—Nothing is more essential for a good garden than good drainage. It is impossible to raise a supply of fine vegetables without it. If the soil is at all wet, it should be well drained with tile, but if this is not possible, something can be gained by ploughing or throwing the soil up into beds from six to thirty feet wide, with smooth bottomed trenches between them to collect and carry off the surface water.

**Manures.**—For garden purposes, there is nothing better than well rotted stable manure, with which tobacco stems, bones (which after a few weeks in fermenting manure will crumble to powder) leaves, or any refuse vegetable or animal matter may be composted with advantage. This should be ploughed in unless the soil is quite sandy and the manure very fine, when it may be applied on the surface and simply harrowed or raked in. Plaster, salt, wood ashes, guano, ground bone, all are valuable and can be used to advantage in connection with the stable manure. Plaster should not be applied until the plants are well up. Ashes and salt should not be mixed with the other manures, and may be sown broadcast and raked in just before planting. Guano, ground bone, and superphosphate give better results if one-half is sown broadcast at planting and the balance when the vegetables are half grown. In some cases sand, leached ashes and peat on clay soils, and clay and muck on sandy soils will prove as valuable as manures. Occasionally a spot which has been used for a garden for many years will become unproductive in spite of liberal manurings. We know of no other remedy than to abandon it for a garden, seed down to clover and allow it to remain two years when it may be ploughed under, and the garden will be found to have regained its original fertility.

**Preparation of the Ground.**—Thorough preparation of the ground is of vital importance in raising good vegetables; if this work is well done, all that follows will be easier. The garden should be *well* ploughed or spaded taking care if it is a clay soil that the work is not done when it is too wet. If a handful from the bottom of the furrow moulds with slight pressure into a ball which cannot be easily crumbled into fine earth again, the soil is too wet, and if plowed then will be hard to work all summer. The surface should be made as fine and smooth as possible with the harrow or rake and in case of sandy soils, it should be rolled with a heavy roller. It is generally necessary to plow the whole garden at once, and to do this in time for the earliest crops, but the part which is not planted for some weeks should be kept mellow by frequent cultivation. Stiff clay soils are frequently wonderfully improved by trenching, that is spading two feet deep in such a way as to leave the surface soil on top. This is accomplished by digging a trench two feet wide across one side and a second one adjoining and parallel with it one spade deep. The remaining earth of the second trench is then thrown into the first and covered with the surface soil from a third trench; the balance of the third is then thrown into the second and covered with the surface of the fourth; and so on until all is worked over, when the soil from the first trench is used to fill the last. This is quite expensive, but frequently changes a soil upon which nothing can be grown, into one producing the finest vegetables, and its effects last for several years.





Scene on D. M. Ferry & Co's Greenfield Seed Farms:—Hoeing.

The number of rows of each vegetable and the relative proportion of each may be varied according to the wants of the family, but the proportion given here will be found to suit most families who depend upon the garden for both winter and summer vegetables.

If necessary, the turning ground at both ends may be filled with Winter Squashes, as these are planted so late and at such a distance apart that they would not seriously hinder the turning of a steady horse with a careful driver. Whatever the arrangement followed may be, we earnestly urge that every effort be made to secure straight and perfect rows. There is perhaps no one thing that will make the subsequent cultivation easier, or contribute more to the owner's satisfaction in his garden than this, and a little extra effort in this respect at the first will give pleasure all through the season.

**Sowing the Seed.**—There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute plant minus the roots; with a sufficient amount of food stowed in or around it to sustain it until it can expand its leaves, form roots, and provide for itself, the whole enclosed in a hard and more or less impervious shell. To secure germination, moisture, heat, and a certain amount of air are necessary. The first steps are the softening of the hard, outer shell, the developing of the leaves of the plant from the absorption of water, and the changing of the plant food from the form of starch to that of sugar. In the first condition the food was easily preserved unchanged, but the plant with its undeveloped leaves and no root was incapable of using it, while in its sugary condition it is easily appropriated; but if not used it speedily decays itself and induces decay in the plant. A seed then may retain its vitality and remain unchanged for years, while after germination has commenced, a check of a day or two in the process may be fatal. There is no time from that when the seed falls from the parent plant until it in turn produces seed, ripens and dies, when the plant is so susceptible of fatal injury from the overabundance or want of heat and moisture, as at that between the commencement of germination and the formation of the first true leaves, and it is just then that it needs the aid of the gardener to secure favorable conditions. These are:

*First*—A proper and constant degree of moisture without being soaked with water. This is secured by making the surface of freshly dug soil so fine that the smallest seeds may come in immediate contact on all sides with the particles from which they are to absorb the required moisture, and the pressing of the soil over the seeds so firmly with the feet or the back of the hoe that the degree of moisture may remain as nearly as possible the same until the plants are up.

*Second*—A proper degree of heat, secured by sowing each variety of seed when the average temperature of the locality is that most favorable for its germination. This may be learned from a careful study of the following pages and the experience of the most successful gardeners of your vicinity.

*Third*—Covering the seed to such a depth that while it is preserved at a uniform degree of heat and moisture, the necessary air can readily reach it, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the Turnip should be covered with half an inch of earth pressed down, while Corn may be an inch, Beans two or three, and Peas two to six inches deep.

*Fourth*—Such condition of soil that the ascending stem can easily penetrate it, and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground, and taking care never to sow fine seeds when the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases our only remedy is to plant again.

**Cultivation.**—Every weed should be removed as soon as it appears, especially while the plants are young; this will require almost daily attention, but if well done early in the season, the later work will be light, but mere destruction of weeds is by no means the only object of cultivation. A. J. Downing, who was perhaps the best horticulturist America has known, said; "If I were to preach a sermon on horticulture, I should take as my text, 'STIR THE SOIL,'" and certainly the text would contain much of the gospel of successful gardening; frequent and deep stirring will enable one to grow fine vegetables on comparatively poor and slightly manured soil, while without it one fails to gain much advantage from the richest and finest soil. Care should be taken that the cultivation is not done when the soil is wet, or Peas, Beans and Melons stirred when the leaves are wet with dew, as such disturbance is liable to injure the leaves, and make them susceptible to injury from rust. With this exception, cultivate as often and as thoroughly as possible.

## HOT-BEDS.

For early vegetables, some provision for starting certain plants earlier than can be done in the open air is necessary; for this purpose nothing is better than a good hot-bed, and its construction is so simple and the expense so light that every garden should have one. A hot-bed proper not only protects the plants from the cold, but supplies *bottom heat*; by this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition so far as heat is concerned which is most favorable for rapid and vigorous growth. It is evident that to produce this we must in some way apply our heat below the surface, and it is usually done by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

**Heating Material.**—The best heating material that is easily available is *fresh* horse manure, containing a liberal quantity of bedding, which may be straw, shavings, or best of all, leaves. Such manure, if thrown into a loose pile, will heat violently and unevenly and will soon become cold. What is wanted in the hot-bed is a steady and moderate but lasting heat. To secure this, the manure should be forked over and thrown into a loose pile, which should remain undisturbed for a few days and then be forked over again, piled and allowed to heat a second time, when after a few days more it will be ready for use. The object of this repeated forking over and piling is to get the whole mass into a uniform degree of fermentation.

**Sash.**—Gardeners commonly use sash made especially for hot-beds and glazed with small lights cut from odds and ends and so furnished at very low rates. Such sash can usually be procured in any of our large cities and cost much less than if made to order. For garden use, however, we much prefer a small size that can be easily handled, and the use of larger and better glass. We would recommend that the sash be three by five feet, and

that the glass be not less than 10x14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like sky-light sash.

**The Frame.**—This may be made of sound one-inch lumber, the back twelve to fourteen inches high, the front ten to twelve. It should be well fitted to the sash so as to leave as little opening as possible and yet allow the sash to be easily slid up and down, even when the frame is quite wet.

**The Soil.**—This should be *light, rich, friable*. Any considerable amount of clay in it is very objectionable. If possible, it should be quite dry and unfrozen when put into the bed; for this reason it is much better to prepare it the fall before and cover the pile with enough coarse manure or straw to keep out frost.

**Making the Bed.**—This requires careful attention, as future success depends largely upon the manner in which this work is done. Having cleared away all snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully shaking out and spreading each forkful, and repeatedly treading down the manure so as to make the bed as uniform as possible in solidity, composition and moisture; unless this is done, one portion will heat quicker than the others, and the soil will settle unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season, and the kind of plants to be raised. A shallow bed will give a quick sharp heat and soon subside; a deeper one, if well made, will heat more moderately but continue much longer. For general purposes, a bed one and a half to two feet deep will be best.

The bed completed, the frame and sash may be put on, and fresh manure carefully packed around the outside to the very top (this outside banking should be replenished as it settles, if the weather is at all severe). The bed should then be allowed to stand a few days with the sash partially open, to allow the steam and rank heat to pass off. The heat will at first be quite violent, frequently rising in the first few days to 120°, but it soon subsides, and when it recedes to 90° the earth may be put in and the seed planted. If from any reason you are obliged to use frozen soil, it may be placed in small piles upon the manure immediately upon the completion of the bed, but it should not be again disturbed until it has thawed and dried out, and care should be used to give free vent for the escape of the steam and moist air. The importance of allowing this gross heat to pass off before planting the seeds is very great, as every season thousands of hot-beds are failures, and their builders blame the seedsmen for sending them poor seed, when the real difficulty was that their seeds were burned up by this first heat.

**Management of the Bed.**—The essentials for success are a steady, uniform degree of heat and moisture; keeping the soil at all times a few degrees warmer than the air, and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these seem to be, there are many difficulties in the way of securing them, prominent among which are overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature inside of a well built hot-bed will rise to 90 or 100 degrees upon a still, sunny day, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open ever so little; besides, such a rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again, a bed will go several days without watering when kept closed except during cloudy weather, but will dry out in an hour when open on a sunny day. The details of management, however, must be learned by experience, but may easily be acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

**A Cold Frame** is a simple construction of boards for wintering cabbage, lettuce, cauliflower, brocoli, &c., for planting out early in the spring.

Select a dry, southern exposure; form a frame from four to six feet wide and as long as required. The back should be fourteen and the front six inches high, with a cross tie every six feet. Seeds of the above named vegetables, sown in open border early in September, will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting. Admit air freely on all pleasant days, but keep close in severe weather.

These frames are particularly useful at the south, and may be covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit over the bed, and of a width to receive some common brand of cotton cloth. The cloth may be unbleached, and should be stretched over and securely tacked to the frames. Coating the cloth with oil, as is sometimes recommended, we find is of no advantage.

**Shades.**—At the south it is frequently desirable to shade beds of seedlings. This can best be done by shades made as follows. Make light frames the length of the width of your bed and four feet wide; to these tack common lath so as to leave from one to three inches between them. Support them about eight inches above the plants by tacking the frames to short stakes or securing them by easily removed pins. They are more effective if the beds are so placed that the lath will run north and south.

**Transplanting.**—In transplanting, the main points to be regarded are care in taking up the plants so as to avoid injury to the roots, planting firmly so as to enable the plant to take a secure hold of the soil, reducing the top to prevent evaporation, and shading to prevent the hot sun from withering and blighting the leaves. In transplanting from a hot-bed, harden the plants by letting them get quite dry a day or two before, but give an abundance of water a *few hours* before they are taken out. It is most apt to be successful if done just at evening, or immediately before or during the first part of a rain, about the worst time being just *after* a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely and the wet surface immediately covered with dry soil.

**Watering.**—The best time to water plants is at sunrise or just at evening, and always use rain water when it is to be had. If well water is to be used it should be exposed to the sun a day or two till it rises to the temperature of the air, before it is applied. Water may be given to the roots at any time, but should never be sprinkled over the leaves in the hot sun, for it will make them blister and cover them with brown spots wherever it touches. If watering a plant has been commenced, keep on until the necessity ceases, or more injury than good will result from it; one copious watering is better than a little and often. The use of the hoe should always follow the watering pot as soon as the ground becomes dry.

**VALUABLE TABLES.**

*Quantity of Seed requisite to produce a given number of plants and sow an acre of ground.*

	Quantity per acre.		Quantity per acre.
Artichoke, 1 oz. to 500 plants	1/2 lb.	Hemp	1/2 bu.
Asparagus, 1 oz. to 200 plants	5 lbs.	Kale, 1 oz. to 3,000 plants	4 oz.
Barley	2 1/2 bu.	Kohi Rabi, 1 oz. to 200 feet of drill	1 1/2 lbs.
Beans, dwarf, 1 quart to 150 feet of drill	1 1/4 "	Leek, 1 oz. to 250 feet of drill	4 "
Beans, pole, 1 quart to 300 hills	1 1/2 "	Lettuce, 1 oz. to 250 feet of drill	3 "
Beet, garden, 1 oz. to 100 feet of drill	10 lbs.	Martynia, 1 oz. to 50 feet of drill	10 "
Beet, Mangle, 1 oz. to 150 feet of drill	6 "	Melon, Musk, 1 oz. to 100 hills	1 1/4 "
Brocoli, 1 oz. to 3,000 plants	5 oz.	" Water, 1 oz. to 25 hills	1 1/2 "
Broom Corn	10 lbs.	Nasturtium, 1 oz. to 50 feet of drill	10 "
Russels Sprouts, 1 oz. to 3,000 plants	5 oz.	Oats	2 1/2 bu.
Buckwheat	1 1/2 bu.	Okra, 1 oz. to 50 feet of drill	10 lbs.
Cabbage, 1 oz. to 3,000 plants	5 oz.	Onion Seed, 1 oz. to 200 feet of drill	4 to 5 "
Carrot, 1 oz. to 150 feet of drill	2 1/2 lbs.	" for Sets	30 to 50 "
Cauliflower, 1 oz. to 3,000 plants	5 oz.	Onion Sets, 1 quart to 20 feet of drill	8 bu.
Celery, 1 oz. to 10,000 plants	4 "	Parsnip, 1 oz. to 250 feet of drill	5 lbs.
Clover, Alsike and White Dutch	6 lbs.	Parsley, 1 oz. to 250 feet of drill	8 "
" Lucerne, Large Red & Crimson Trefoil	8 "	Peas, garden, 1 quart to 150 feet of drill	1 1/2 bu.
" Medium	10 "	" field	2 1/2 "
Collards, 1 oz. to 250 plants	6 oz.	Pepper, 1 oz. to 1,500 plants	4 oz.
Corn, sweet, 1 quart to 500 hills	8 qts.	Potatoes	8 bu.
Cress, 1 oz. to 150 feet of drill	3 lbs.	Pumpkin, 1 quart to 300 hills	4 qts.
Cucumber, 1 oz. to 80 hills	1 1/4 "	Radish, 1 oz. to 150 feet of drill	3 lbs.
Egg Plant, 1 oz. to 2,000 plants	8 oz.	Rye	1 1/2 bu.
Endive, 1 oz. to 300 feet of drill	3 lbs.	Salsify, 1 oz. to 60 feet of drill	8 lbs.
Flax, broadcast	1 1/2 bu.	Spinage, 1 oz. to 150 feet of drill	10 "
Garlic, bulbs, 1 lb. to 10 feet of drill	2 1/2 lbs.	Summer Savory, 1 oz. to 500 feet of drill	2 "
Gourd, 1 oz. to 25 hills	2 1/2 lbs.	Squash, Summer, 1 oz. to 40 hills	2 "
Grass, Blue Kentucky	2 bu.	" Winter, 1 oz. to 10 hills	3 "
" Blue English	1 "	Tomato, 1 oz. to 3,000 plants	3 oz.
" Hungarian and Millet	1/2 "	Tobacco, 1 oz. to 5,000 plants	2 "
" Mixed Lawn	3 to 5 "	Turnip, 1 oz. to 250 feet of drill	1 1/2 lbs.
" Orchard, Perennial Rye, Red Top, Fowl	"	Vetches	2 bu.
" Meadow and Wood Meadow	2 "	Wheat	1 to 2 "
" Timothy	1/4 "		

*Number of Plants or Trees to the Acre at given distances.*

Dis. apart.	No. plants.	Dis. apart.	No. plants.
1/4 foot	174,240	6 feet	1,210
1 foot	43,560	7 "	889
1 1/2 feet	19,350	8 "	680
2 "	10,890	9 "	573
2 1/2 "	6,960	10 "	435
3 feet by 1 foot	14,520	11 "	360
3 " 2 feet	7,260	12 "	302
3 " 3 "	4,840	15 "	193
4 " 1 foot	10,883	18 "	134
4 " 2 feet	5,444	20 "	108
4 " 3 "	3,629	25 "	69
4 " 4 "	2,722	30 "	49
5 " 5 "	1,742		

*Weight of Various Articles in the State of Michigan.*

Apples	per bush.	48 lbs.	Onions	per bush.	54 lbs.
" dried	"	22 "	Peas	"	60 "
Barley	"	48 "	Plastering Hair	"	8 "
Beans	"	60 "	Rape	"	50 "
Buckwheat	"	48 "	Rye	"	56 "
Broom Corn	"	46 "	Red Top Seed	"	14 "
Blue Grass, Kentucky	"	14 "	Salt, Coarse	"	50 "
" English	"	24 "	" Michigan	"	56 "
Bran	"	20 "	Sweet Potatoes	"	56 "
Canary Seed	"	60 "	Timothy Seed	"	45 "
Castor Beans	"	46 "	Turnips	"	58 "
Clover Seed	"	60 "	Wheat	"	60 "
Corn, shelled	"	56 "	Beef and Pork, per bbl., net		200 "
" on ear	"	70 "	Flour, per bbl., net		196 "
Corn Meal	"	50 "	White Fish and Trout, per bbl., net		200 "
Charcoal	"	22 "	Salt, per bbl.		280 "
Coal, Mineral	"	80 "	Lime	"	220 "
Cranberries	"	40 "	Hay, well settled, per cubic foot		4 1/2 "
Dried Peaches	"	28 "	Corn, on cob, in bin		22 "
Flax Seed	"	50 "	" shelled, "		45 "
Hemp Seed	"	44 "	Wheat, "		48 "
*Hungarian Grass Seed	"	50 "	Oats, "		25 1/2 "
Irish Potatoes, heaping measure	"	60 "	Potatoes, "		38 1/2 "
Millet	"	50 "	Sand, dry, "		95 "
Malt	"	30 "	Clay, compact, "		135 "
Oats	"	32 "	Marble	"	160 "
Osage Orange	"	33 "	Seasoned Beech Wood, per cord		5,616 "
Orchard Grass	"	14 "	" Hickory, "		6,960 "

\*In Chicago and all the other large seed markets of the country Hungarian is sold at 48 lbs. per bushel, so we are compelled to conform, and we buy and sell 48 lbs. per bushel.

## ILLUSTRATED AND DESCRIPTIVE CATALOGUE

— OF —

## Vegetable Seeds.

— WITH —

## GENERAL DIRECTIONS FOR CULTIVATION.

As usual we have endeavored to cultivate only the best varieties, and to present their claims faithfully with accurate descriptions.



The Terms and Prices of Vegetable Seeds will be found in the Price List, in the back part of this Catalogue.

**ARTICHOKE.**

French, *Artichaut*.—German, *Artichoke*.

**CULTURE.**—Sow in seed beds early in spring, in drills twelve inches apart. The permanent beds should be spaded deep, and well dressed with rotten manure, ashes and a little salt. When the plants are six inches high, transplant, setting them about two feet apart. The edible portion is the undeveloped flower heads.



Large Globe.

which should be used before they begin to open, and then the stalk cut to the ground, for if the flowers expand they weaken the plants. In the fall, cover with manure, which should be spaded in the following spring, taking care not to injure the plants. The crop is the largest and best the second year, after which the bed should be renewed by seed or suckers.

**Large Globe.**—The best sort for general use. Buds large, nearly round; scales deep green, shading to purple, very thick and fleshy.

**ASPARAGUS.**

French, *Asperge*.—German, *Spargel*.

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the prevalent idea that it is difficult to grow it. We think this is a mistake, and that there is no vegetable on our list that can be produced so cheaply and easily as this. It delights in a moist, sandy soil, but can be grown in any garden by following the directions given below.

**CULTURE.**—Beds are usually formed by setting plants one or two years old, which can be procured of us; but if you wish to grow them yourself, prepare a light, rich spot as early as possible in the spring, and after soaking the seed twenty-four hours in warm water, sow in drills one foot apart. When the plants are well up, thin to two or three inches in the row, and give frequent and

thorough cultivation during the summer; and if this has been well done, the plants will be fit to set the next spring. The permanent bed should be prepared by deep spading, working in a large quantity of rotted manure—the more the better. Dig trenches four feet apart and twelve to eighteen inches deep, and spade in at least four inches of well rotted manure in the bottom. Set the plants about one foot apart in this trench, and cover with about two inches of fine soil. After the plants are well up gradually fill up the trenches, and give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure, and two quarts of salt to each square rod, and cultivate well until the plants begin to die down. The next season it may be cut for the table two or three times, taking care to cut all the shoots, large and small, as soon as they appear. After the final cutting, give a good dressing of manure and salt. The next season, and ever after that, the bed should give a full crop and be annually dressed with manure and salt after the last cutting, and well cultivated until the plants occupy the whole space. In the fall the tops should be cut and burned, *but not until they are dead* *is p.*

**Conover's Colossal.**—A mammoth sort, frequently sending up fifteen to thirty sprouts from one to one and a half inches in diameter from a single plant, and spreading less than most sorts. Color deep green; quality good.

**Giant.**—An old and popular variety, producing green or purple shoots according to the soil it is grown in. Very hardy, but not so large, or the plants as compact as the last.

**BEANS.**

**Dwarf, Bush, or Snap.**

Fr. *Haricot*.—Ger. *Bohne*.

Under this name are classed all the low growing sorts, called in different catalogues *Bush*, *Bunch*, *Snap*, *String* or *Dwarf Beans*.

**CULTURE.**—It is a great mistake to suppose, as many do, that Beans do best on light, *poor* land. No crop responds more readily to good soil



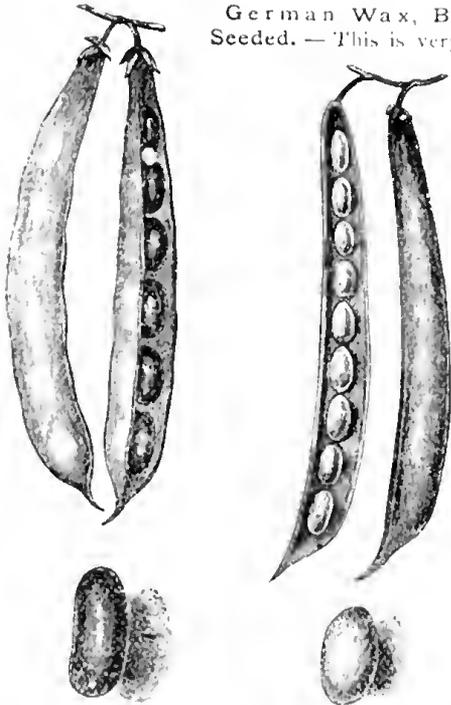
D. M. F. & Co's Golden Wax.

and cultivation than this, and the finer garden varieties must have it to do well, the best adapted to them being a light, rich, well drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make them grow too much to vine. They are all extremely sensitive to frost and wet, and it is useless to plant them before the ground has become warm and light. The largest return will result from planting in drills about two feet apart and the plants two to eight inches apart in the row. Up to the time of blossoming they should be frequently cultivated, *but never* when the ground or plants are wet with rain or dew, as it would be sure to injure them; nor should they be disturbed after they commence to bloom, as it would prevent their setting well.

In the following descriptions the varieties are placed about in the order of ripening, and it is assumed that they are grown on rich, light soil, as different soils produce quite a variation in vines, pods and beans:

**D. M. Ferry & Co's Golden Wax.**—Introduced by us, and we think it decidedly the earliest and best for general use. Vines, medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small white blossoms. Pods long, nearly straight, broad, flat, golden yellow, very fleshy and wax like, with short, fleshy, green point, cooking quickly as snaps, and shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purplish red.

**German Wax, Black Seeded.**—This is very pop-



German Wax, Black Seeded. Crystal White Wax.

ular with market gardeners for use as snaps, nearly all the pods being fit for use at the same time, but it needs rich soil and good cultivation. Vines small to medium, with light green leaves and reddish-white or purple flowers; pods short, curved, round, nearly white, thick fleshed and wax like, with long, slightly curved point, remaining a long time in condition for use as snaps. Beans small, oblong, jet black and of little value, either green or dry.

**Ivory Pod Wax.**—Vine large, spreading, but slender, with long runners, large, thin leaves, and large, white blossoms, very productive; pods medium length, oval, with small, white point, very white, wax like and handsome, but inferior in quality to either of the above.

Dry beans, small, oval, white.

**German Wax, White Seeded.**—Vines small, stout, erect, with large, light colored leaves and white blossoms. Pods short, broad, flat, white, fleshy and wax-like, of medium quality but very handsome. Beans medium size, oval, white.

**Crystal White Wax.**—New and distinct, but not strictly a wax bean. Very desirable for snaps or for pickles. Vines large, spreading, very productive, making many runners, producing pods in pairs throughout their whole length; blossoms small, yellowish white; pods greenish-white, medium length, curved, round, or thicker than wide, with crease in the back, very fleshy and brittle. Ripe beans small, oval, white.

**Lemon Pod Wax.**—An acquisition, in that it is very late and prolongs the season for dwarf wax beans at least two weeks. Vines less productive, but similar to Crystal White Wax, with more and longer runners, and the leaves are irregular in size and color; blossoms large, white; pods long, broad, flat, waxy in outline, very wax like, a beautiful golden color, and of best quality. Dry beans white, variable in size and shape.

The following are green podded varieties, and are named about in the order of ripening, although this varies in different seasons. The earliest are about one week later than the Golden Wax:

**China Red Eye.** Vines medium, stout, erect; bushy, with large leaves and white blossoms; pods short, straight, flat, and if picked young, of good quality as snaps; beans medium size, oblong, white with reddish-purple blotch about the eye. When green they are thin skinned, mealy and excellent, and when dry are one of the best for baking.

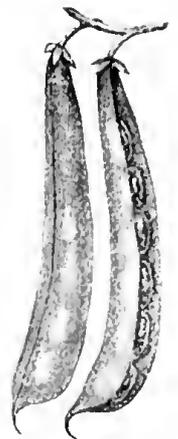
**Early Round Yellow Six Weeks.** Much used at the south for shipping north. Vines medium, stiff, erect, with large, thin leaves, and lilac or white blossoms; pods slightly curved, narrow, with long, straight point, of fair quality; beans ovoid, orange yellow.

**Early Yellow Kidney Six Weeks.**—Vines large, vigorous, branching, productive, with large leaves and lilac blossoms; pods long, straight, narrow, handsome, and when young, of good quality; beans long, kidney shaped, yellowish-drab with darker marks about the eye.

**Early Red Valentine.** One of the finest of the green podded varieties for snaps, and by some preferred to the wax sorts. Vines medium spreading, with coarse dark green leaves, and large, white blossoms; pods medium length, curved, round, being thicker than broad, with crease in back, very fleshy, crisp and tender; beans medium sized, long, irregular, pink, marbled with red.

**Early Mohawk.**—The hardiest of any, and it can frequently be planted so as to afford beans earlier than the above more tender sorts. Vines large, stout, with large, coarse leaves, which will stand a slight frost; blossoms large, purple; pods long, straight, coarse, with long, tapering point; beans long, kidney shaped, variegated with drab, purple and brown.

**Dwarf Horticultural.** Vines vigorous, stout, erect, with occasionally short runners, leaves large, thick, coarse; blossoms large, purple; pods short, broad, green, changing to white, with red markings, of little value as snaps; beans large, ovate, yellow flesh color, streaked and splashed with red. Of the best quality, either green or dry.



Early Red Valentine

**Refugee, or Thousand to One.** Vines large, spreading, with small, smooth leaves, and large, lilac flowers, very late and esteemed for late planting and for use as pickles; pods long, cylindrical, green, becoming white, streaked with purple, of good quality as snaps; beans long, light drab, dotted and splashed with purple.

The following sorts are planted as field beans:

**Royal Dwarf Kidney.** Not as productive as some of the following, but of very superior quality. Plant large, branching, with large, broad leaves and white flowers; pods medium sized, variable in shape, dark green, coarse; beans large, kidney shaped, slightly flattened, and of excellent quality, green or dry.

**Large White Marrow, or Mountain.** Vines large, slender, spreading, with short runners, small leaves and small, white blossoms; very prolific; pods medium sized, green, changing to yellow; beans large, clear white, ovoid, cooking very dry and mealy.

**Early Marrow Pea, or Dwarf White Navy.**—A comparatively new variety developed in western New York, and not only a surer cropper and much more prolific, but of better quality than the common white bean, and the beans are so hard as to resist the attacks of the bean weevil. Vines large, spreading, with occasional runners and small, thin leaves, and small, white flowers, very prolific, and ripening its crop early and all at once; pods short, straight, small, but containing six beans; beans small, oval, white, handsome, and of superior quality.

**Prolific Tree Bean.**—A new variety often sold at a very high price with extravagant claims of its productiveness, but it is an uncertain cropper and the claims will only be realized when one happens to have suitable soil and gives it good culture. Under these conditions it has been known to yield as high as sixty bushels per acre. Vines large, spreading, slender, with many runners having pods to the end; beans small, oval, dull white, of good quality.

**BEANS, Pole or Running.**

*Fr. Haricots a rames. Ger. Stangenbohne.*

**CULTURE.**—These are even more sensitive to cold and wet than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather, set poles six to eight feet long in rows north and south four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of about thirty-five degrees. Set in this way, the vines climb better, bear earlier and the pods are straighter and more easily seen. Around each hill plant from six to ten beans, taking care to place the eye down in the case of Lima or other flat varieties. When well started, thin to four plants, and start any that fail to climb, around the pole in the same direction as the others, for they will not grow in the opposite direction. When the vines reach the top of the poles pinch them off or train them along strings stretched on the tops of the poles.

**London Horticultural.**

—Vines small, weak, with large, light colored leaves,



London Horticultural.

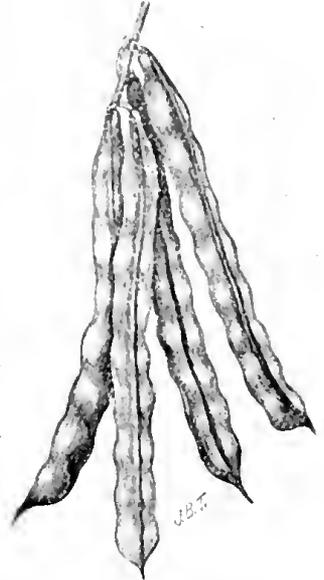
and purple blossoms; pods short, broad, pale green, but becoming streaked with bright red; beans large, ovate, splashed and spotted with wine red, and of the highest quality, either green or dry, many people esteeming them better than the Limas.

**Dutch Case Knife.**—Vines moderately vigorous, climbing well but not twining so tightly as some, and so may be used for a corn hill bean. Leaves medium sized, crumpled; blossoms white; pods very long, flat, irregular, green, but becoming cream white; beans broad, kidney shaped, flat clear white, and of excellent quality green or dry.

**Indian Chief, or tall Black Wax.**—Vines large, but frequently not climbing well, with rough leaves and flat purple blossoms; pods short, broad, flat, fleshy, white, very wax like and of superior quality as snaps, remaining in suitable condition longer than most varieties; beans indigo blue, medium sized, oblong, shortened abruptly at the ends.

**Southern Prolific.**

A very prolific sort, and popular at the south for snaps. Vines vigorous with large, thin, smooth leaves; blossoms white, growing in fours; pods green, nearly round, long, fleshy, crisp and excellent; beans small, oval, dark colored, veined with a darker shade.



Southern Prolific.

**Cut Short, or Corn Hill.**—An old variety,

very popular for planting among corn; vines medium, not twining tightly, with dark colored, smooth leaves and white blossoms in small clusters; pods short, round and tender; beans nearly oblong, cut off diagonally at the ends; white, covered at one end and partially over the whole surface with reddish-brown dots.

**Giant Wax.**—Vines large, with large, broad, deeply veined leaves and large, white blossoms; pods large, long, broad, flat, irregular, fleshy and of beautiful golden wax color, very handsome, but not of superior quality; beans small, red, irregular.



Extra Early Lima.

**Extra Early Lima.**—A decided acquisition, with beans as large and good as the late Limas, and as early as the small Lima. Vines vigorous, and very productive; leaves large, pointed, whitish-green; blossoms white; pods borne in fours, large, broad, flat, curved to a sharp point, smoother than the large Lima; beans large, flat, greenish-white.

**Small White Lima, Carolina, or Sieva.**—Vines vigorous but short, with many short branches, so that they are sometimes grown without poles; very early and productive, with small, smooth, dark green leaves and small, yellowish-white blossoms; pods short, curved, thin, flat; beans white, small, broad, kidney-shaped, but inferior in quality to the other Limas.

**Dreer's Improved Lima.**—Vines vigorous and productive, with pointed leaves and white blossoms in racemes; pods short, broad, straight, coarse, and thicker than the other Limas; beans large, broad, but much thicker than the other sorts of Lima beans.

**Large White Lima.** Too late for the extreme north, but the standard for quality. Vine tall growing, vigorous but slender; leaves medium sized, smooth, light green; blossoms small, white; pods borne in clusters, long, broad, very thin, dark green; beans large, ovoid, kidney shaped, greenish-white, flat.

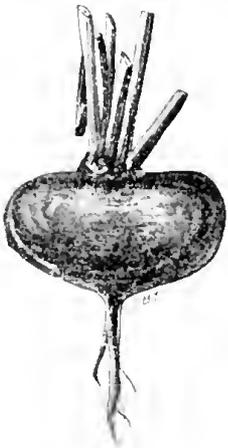
**White Runner.**—Cultivated chiefly for its beauty. Vines and leaves large and coarse; blossoms in long racemes, large, pure white; pods large, broad, coarse; beans large, kidney shaped, thick, white, fair quality.

**Scarlet Runner.**—Similar to the last, but with scarlet blossoms, and the beans are lilac purple, variegated with black.

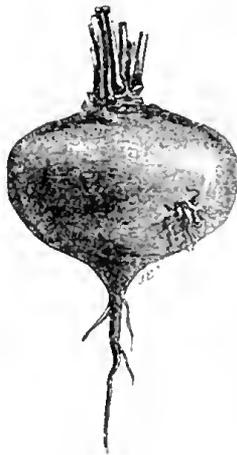
**BEEF.**

*Fr. Betterave. Ger. Runkel Rube.*

**CULTURE.**—The best results are obtained on a deep, rich, sandy loam. For table use, sow in hot-beds and transplant, cutting off the outer leaves; or sow as soon as the ground will permit in drills eighteen inches apart



Extra Early Egyptian Blood Turnip.



Early Blood Turnip.

and thin out to three inches in the row. For winter use, the turnip varieties may be sown in June. If possible, always sow in freshly prepared soil, which should be pressed firmly over the seed

**Extra Early Egyptian Blood Turnip.**—By many considered the best variety for forcing, being very early, with small top; leaf stems and veins dark red, leaf dark green, dotted with red; roots very dark red, flat on top but rounded beneath, with very small tap root; flesh dark red, zoned with lighter shade, hard, crisp and tender when young, but becoming woody with age.

**Improved Early Blood Turnip.**—Excellent either

for forcing or for early planting. Tops small; leaf stems and veins dark red; leaves green; roots round or ovoid with small top, dark red; flesh marbled, bright and light red, which color it retains when cooked; crisp, tender and sweet, and continuing so until full grown. A good keeper.

**Dewing's Early Blood Turnip.** Tops medium sized; leaf stems and veins dark red; leaves green; roots dark red, turnip shaped, with large tap; flesh carmine red, zoned with lighter shade, tender, sweet and good.

**Bastian's Early Blood Turnip.** Tops small, stems red, leaves green; roots turnip shaped with medium sized tap, bright red. Flesh purplish red, zoned with white, crisp, tender and of good quality.

**Early Blood Turnip.**—Tops and necks medium sized; leaf stems and veins red with green or red leaves; roots turnip shaped, deep purple, flesh blood red, zoned with lighter color, crisp, tender and sweet

**Early Turnip Bassano.**—Not maturing as early as the above, but growing to a large size, may be used early, and is the best variety to sow for greens. Tops large; leaf stems light red; leaves light green; roots large, round, turnip shaped; flesh pink, zoned with white, very sweet and tender when young, becoming woody and tasteless with age.

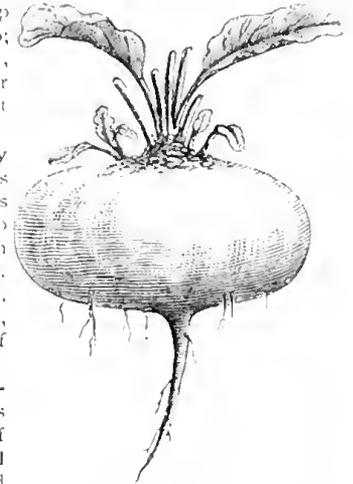
**Henderson's Pine Apple.**—Tops medium; leaf stems and veins red; leaves dark green or red; roots long, top shaped, small, dark red; flesh dark red, tender, crisp, and sweet.

**Half Long, Dark Blood, Rough Skinned.**—Tops large; leaf stems and leaves red; roots long, top shaped, irregular and with black skin resembling bark; flesh very dark red, tender, brittle and of the best quality.

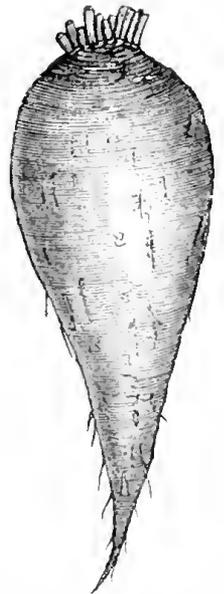
**Improved Long Dark Blood.** The most popular variety for winter use. Tops large; neck small; leaf stems and veins red; leaf green; roots large, tapering toward both ends, growing even with the surface, dark red; flesh dark red zoned with lighter shade, very tender and sweet, and remaining so when kept till spring.

**Long Dark Blood.**—Tops large; neck large; leaf stem and veins red; leaves red; roots very long, cylindrical, smooth, growing one-half out of the ground, brown above, dark red beneath; flesh, dark red, crisp, tender and keeps well.

**French White Sugar.**—Grown as a field beet, but liked by some for table use. Tops large, bright green; roots large, broad, top shaped, white, washed with green or brown; flesh tender and very sweet.

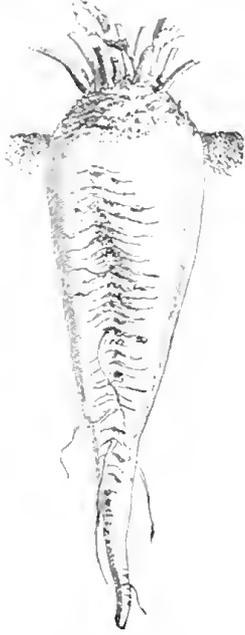


Early Turnip Bassano.



Henderson's Pine Apple.

**Swiss Chard, Silver, or Sea Kale Beet.**—A distinct vegetable, and much superior to the common beet for greens. If sown at the same time it will be fit to use before them. Later, the plants form broad, flat beautiful white and wax like stems to the leaves which are very delicious cooked as beets, or pickled. We recommend all of our customers to try it.



The following varieties are used for stock feeding. They are easily grown and harvested, keep well through the winter, and give an immense amount of cattle food at a small cost, but need a rich, well prepared soil. Sow in drills thirty inches apart, as early as the ground can be got in condition. Cultivate well when young, and thin out the plants to one foot apart in the row. If these thinnings are carefully handled and the larger leaves cut off they can easily be reset to fill vacancies, and will make the largest roots. Care should be taken not to break or bruise the roots in harvesting.

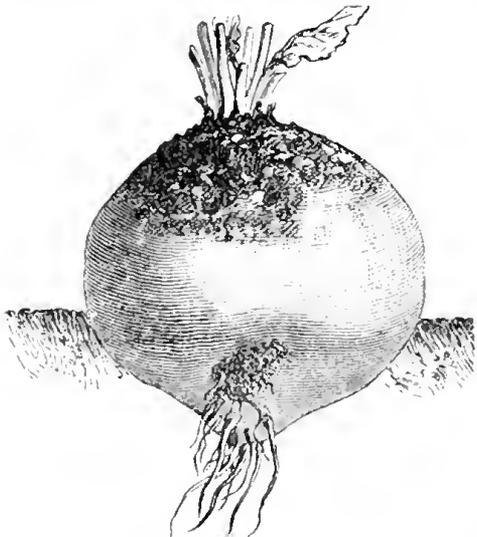
**French Yellow Sugar,**—Grows to a large size, much above ground; roots half long, yellow; grown in this country for feeding stock. In France it is cultivated extensively for the extraction of sugar.

**Vilmorin's Improved Imperial Sugar.**

**Vilmorin's Improved Imperial Sugar.**—An improved variety from France. It affords the largest percentage of sugar of any known variety.

**Lane's Improved Imperial Sugar.**—This superb variety is the result of a careful selection for several years of the French Imperial Sugar Beet. After careful trial we recommend it as being hardy, productive and very sweet.

**Long Red Mangel Wurzel.**—A large, long variety, grown for stock feeding. It stands a good deal out of ground; color light red; flesh white and rose colored.



Yellow Globe Mangel Wurzel.



D. M. Ferry & Co's Improved Mammoth Long Red Mangel Wurzel.

**D. M. Ferry & Co's Improved Mammoth Long Red Mangel Wurzel.**—An improvement on the old variety. The roots are uniformly straight and well formed, and deeper colored than the common sort. Highly recommended for stock feeding.

**Norbitan Giant Long Red Mangel Wurzel.**—Very large, growing well out of ground. The roots are well formed, straight, smooth, and of a fine scarlet color, with comparatively small top and neck.

**Yellow Globe Mangel Wurzel.**—A large, round, orange colored variety, of excellent quality, which keeps better than the Long Red, and produces better crops on shallow soil.

**Carter's Warden Prize Yellow Globe Mangel Wurzel.**—A most excellent, yellow fleshed, globe variety. The tops are small, and the roots, although large, are of excellent quality. Average weight fifteen to eighteen pounds. Highly recommended for shallow soil.

**Yellow Ovoid.**—Root ovoid, intermediate between the long and globe varieties; flesh solid, usually white, zoned with yellow; hardy, vigorous and productive.

**Red Globe Mangel Wurzel.**—Similar to Yellow Globe, except in color, which is a light red or pink.

## BROCOLI.

Fr. *Chou Brocoli*.—Ger. *Spargel Kohl*.

Although originating from a very distinct type, the modern improved sorts of Brocoli can scarcely be distinguished from Cauliflower; the points of difference being that it is generally taller and the heads more divided. By some considered more delicate than the Cauliflower.

**CULTURE.**—The same as that given for Cauliflower on page 21.

**Early Purple Cape.**—This is the best variety for our climate. It produces large heads, of a brownish purple color, very close and compact, and of excellent flavor.

## BRUSSELS SPROUTS.

Fr. *Chou de Bruxelles*.—Ger. *Sprossen Kohl*.

**CULTURE.**—The plant grows two or three feet high, and produces from the sides of the stalk numerous little sprouts one or two inches in diameter, resembling cabbages. The leaves should be broken down in the fall, to give the little cabbages more room to grow. They should be treated in all respects like winter cabbage or kale.

## CABBAGE.

Fr. *Choux Pommés*.—Ger. *Kopfkohl*.

There is no vegetable which is more universally cultivated than this. It is found in the poorest and smallest garden and it responds so readily to better care, that it claims a place in the finest garden, and the attention of the most skillful gardener.

**CULTURE.**—The requisites for complete success are: *First*, good seed; there is no vegetable where the seed has more influence on the quality of the product than in this, and gardeners should invariably select the best procurable. *Second*, rich, well prepared ground. *Third*, frequent and thorough cultivation. A heavy, moist and fresh loam is most suitable, which should be highly manured and worked deep. The early sorts should be sown very early in hot-beds, hardened off by gradually exposing them to night air, and transplanted eighteen to twenty-four inches apart, early in the spring. At the south, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible.

The late autumn and winter varieties may be sown from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stumps. In transplanting, *they must be set into the ground up to the first leaf, no matter how long the stem may be.*

Cabbages should be hoed every week, and the ground stirred deeper as they advance in growth, drawing up a little earth to the plants each time, until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full grown heads.

Of late years many crops of early cabbage have been destroyed by maggots at the root. The best remedy seems to be to remove the earth from around the stem and apply an emulsion of kerosene oil made as follows: Add one quart of kerosene oil to two quarts of *boiling* soft soap which has been thinned to the consistency of cream. Stir the oil thoroughly until it has united with

the soap and then dilute with five times as much water.

The cabbage worms which destroy the plants later may be killed by sprinkling the plants with the same emulsion, or by dusting with pyrethrum powder.

To preserve cabbages during the winter, pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them, with the head downwards, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stump in the open ground, and place over them a light covering of straw or boards, to protect them in severe weather.



Early Jersey Wakefield.

so hard. Forms small, compact heads as early as the earliest, and is of excellent quality. Well worthy of a trial by every one who plants either for market or home use.



Very Early Etampes.

and is equally desirable. It is of larger size, about ten days later, more robust, and bears the heat better.

**Early Sugar Loaf.**—A very compact growing variety, and the plants may be set as close as sixteen inches apart each way; very early, but is more affected by the heat than most early varieties.

**Little Pixie.**—Heads small, very hard, and of very fine flavor. Plants dwarf but vigorous.

**Henderson's Early Summer.**—The earliest, large heading cabbage; growth compact, so that it may be set as close as the smaller sorts. Heads large flat or slightly conical, handsome, and they keep longer without bursting than most of the early sorts. Valuable for both family and market.

**Newark Early Flat Dutch.**—The favorite second early sort with Long Island market gardeners. Heads large, solid, broad and roundish, very tender, fine grained and of the best flavor. Not only an excellent summer market sort, but well adapted for second crop for fall and winter use.

**Early Dwarf Flat Dutch.**—An excellent second early sort which does particularly well in the Southern States. Head of medium size, solid, flat, grows low on the stump, and is of good flavor.

**Early Winnigstadt.**—One of the best for general

**Early Jersey Wakefield.**—Heads very compact, of medium size, conical. An early, sure heading sort; very popular with eastern market gardeners and the best for wintering over in cold frames.

**Very Early Etampes.**—Similar to Jersey Wakefield, but is not so pointed, nor

**Early York.**—A very valuable early variety. Heads small, heart shaped, firm and tender; of very dwarf growth, and may be transplanted fifteen or eighteen inches apart.

**Early Large York.**—Succeeds the Early York,



Early Dwarf Flat Dutch.

use, being a very sure header, and will grow a hard head under circumstances where most sorts would fail. Heads regular conical shape, very hard, and keep well both summer and winter. It seems also to suffer less from the cabbage worm than any other sort.

**Filderkraut.**—Similar to but larger, much more pointed, and heading up with fewer outside leaves than the Winnigstadt, and highly esteemed for making kraut. Good either for first or second crop.



Filderkraut.



Fottler's Early Drumhead, or Brunswick Short Stem.

**Fottler's Early Drumhead, or Brunswick Short Stem.**—An excellent second early sort, and particularly recommended for the South, as it withstands the heat well, and is a sure header. Heads low on the stump, compact, solid, weighing from ten to fifteen pounds.

**Early Large Schweinfurt.**—Forms a *very large*, showy head of excellent quality, but does not stand the heat well. When grown in perfection, one of the handsomest of the second early sorts.

**Imperial French Oxheart.**—Grows low on the



D. M. Ferry &amp; Co's Premium Flat Dutch.

stump, and heads very close and firm; color yellowish green.

**Red Dutch, for Pickling.**—Excellent for pickling or for eating raw. Forms very hard, oblong heads, round at the top, of a dark red, or purple color.

**Fine Blood Red.**—Of remarkably deep, blood red color, and a great favorite with the Germans. It is very true and constant.

**Stone Mason Marblehead.**—Characterized by its sweetness and delicacy of flavor, and by its reliability in forming a large head. Very hardy, and will endure the cold of extreme northern climates.

**Late Flat Dutch.**—A low growing variety; heads large, bluish green, round, solid, broad and flat on the top, and often tinted with red and brown. An excellent fall and winter variety, and a good keeper.

**D. M. Ferry & Co's Premium Flat Dutch.**—This we consider superior to any late cabbage in cultivation. It possesses all the good qualities of the Late Flat Dutch, and is a sure header. Our stock of this variety is of our own raising from carefully selected heads, and we think it superior to any other strain of this popular variety.

**Large Drumhead.**—The Drumhead cabbage is a large fall or winter variety, with a broad, flat or round head, short stump, tender and good flavored, and an excellent keeper; grown extensively for shipping purposes.

**D. M. Ferry & Co's Premium Drumhead.**—We recommend this sort to market gardeners and growers, for shipping purposes. In good, rich soil, and with a favorable season, the heads will grow to enormous size; very compact and solid, and of excellent flavor.

**Marblehead Mammoth Drumhead.**—The largest cabbage known, weighing in some instances over *fifty pounds*. Under good cultivation, acres have been grown where the heads would *average* thirty pounds each.

**Quintal Drumhead.**—A French variety corresponding to our Flat Dutch, and one of the best of the foreign sorts. Heads quite flat on the top, with few side leaves; solid, firm, hard, and of good flavor.

**Green Glazed.**—A standard late variety in the south, as it is not affected by the heat. Heads large, but rather loose and open. Very desirable, from the comparative immunity it enjoys from the attacks of insects.

Our English friends think the Savoys alone are fit for the table, and they are certainly of much better flavor than the smooth sorts.

**Early Dwarf Utm Savoy.** One of the earliest and sweetest of the Savoys. Heads round, solid; leaves small, thick, fleshy, of fine deep green color, and of most excellent quality.



Improved American Savoy.

**Green Globe Savoy.**—This does not make a firm head but the whole of it being very tender and pleasant flavored, is used for cooking; leaves wrinkled and dark green; is very hardy and improved by frost.

**Improved American Savoy.**—Closely approaching the Cauliflower in delicacy and delicious flavor. The best of all the Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and is a sure header.

**Drumhead Savoy.**—Grows to a large size. Heads nearly round, a little flattened on the top; color dark green.

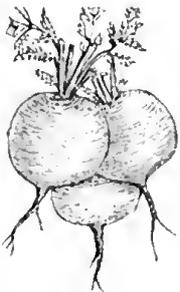
**CARROT.**

Fr. Carotte.—Ger. Moehren.

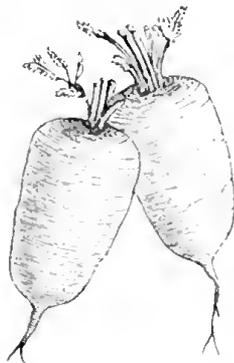
The Carrot is one of the most healthful and nutritious of our garden roots, and deserves to be more extensively used for culinary purposes, and we urge our readers to give some of the early table sorts a trial. As an agricultural root, the Carrot is not surpassed for feeding horses and milch cows, and every farmer should plant a few for this purpose.

**CULTURE.**—The Carrot succeeds best on a light, sandy loam, made rich by manuring the previous year. In freshly manured land, the roots often grow pronged and ill shaped. It is better to sow as early in the spring as the ground can be made ready, but if planting is necessarily delayed until late in the season, soak the seed twenty-four hours in tepid water, then dry by mixing in sifted ashes or plaster, and sow on freshly prepared soil.

**Earliest Short Horn, (FOR FORCING.)**—The earliest variety in cultivation, and best suited for forcing. Tops small, finely divided; root round, two inches in diameter, with slender tap, and grooved at the crown, reddish orange.



Earliest Short Horn.



Early Scarlet Horn.

**Early Scarlet Horn.**—Best for early planting out of doors. Tops small,

coarsely divided; roots top shaped, but tapering abruptly to a small tap; surface dented, orange red; flesh thick, with indistinct yellow core.

**Early Half Long Scarlet Stump Rooted.**—Excellent for early market and for field culture on shallow soils. Of medium size; flesh bright scarlet, brittle and of fine flavor.

**Half Long Scarlet Nantes, Stump Rooted.** Tops medium, finely divided, dark; roots medium, cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core, of the finest quality.

**Danvers.** One of the most productive, and best for field culture. Tops medium, dark colored; roots large but short, tapering abruptly at the point very uniform and handsome, flesh deep orange with yellow center, sweet and tender.

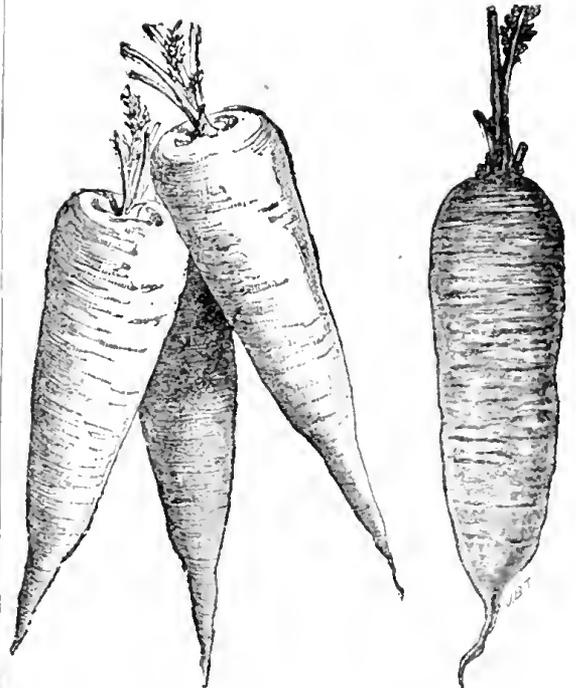
**Long Orange.**—A well known standard sort. Roots long, thickest near the crown, tapering regularly to a point; color deep orange; suitable for the table and main field crop. It requires a deep soil, and the plants should stand eight inches apart, in eighteen inch drills, for the roots to attain their full size.

**Improved Long Orange.**—An improvement on the preceding, obtained by careful selection for years, of the best formed and deepest colored roots.

**Large White Belgian.**—Grows one-third out of the ground. Root pure white, green above ground, with small top. It will grow to a very large size on light, rich soil, and is very easily gathered. Flesh rather coarse; is raised extensively for stock.



Early Half Long Scarlet Stump Rooted.



Improved Long Orange.

Danvers

## CAULIFLOWER.

Fr. *Chou-fleur*. Ger. *Blumen-Kohl*.

The Cauliflower, although one of the most delicious of vegetables, is little known outside of our large cities. It needs, to bring it to perfection, a cool, moist atmosphere, and if this condition occurs when the plant is about to head, fine, large heads will result, while if the air is hot and dry, failure will result in spite of the best of seed and cultivation. The seed we offer is the finest procurable, and is obtained from the most careful growers in Europe.

**CULTURE.**—For the spring and summer crop, sow the early varieties about the last of winter, in a hot-bed, and transplant into the open air as soon as the ground can be worked. For the late, autumn crop, sow the late kinds about the middle of spring, and transplant like winter cabbages. In dry weather, water freely, and as they advance in growth, hoe deep, and draw earth to the stems. After they begin to head, they should be watered every other day, and the leaves gathered and pinned together over the heads to protect them from the sun and keep them white. On the approach of frost, those plants which have not headed, may be set out in a cellar, where they can be aired in mild weather. In two or three weeks the strongest will begin to form flower heads, which should be cut for use while the "curd" is close and compact. It is then tender and delicious, but later the head opens, separates into branches, and soon becomes coarse, fibrous, strongly flavored and unfit for use.



Cauliflower.

**Extra Early Dwarf Erfurt.**—An extra early variety, much prized in Germany for early market use. Scarcely a plant fails to produce a good head. It is of dwarf habit, compact growth, short outside leaves, and can be planted twenty inches apart each way. The best for early market and family use, and we think can be entirely relied upon, as the seed is selected with extra care, by one of the most careful growers in Germany.

**Early Snowball.**—Highly esteemed by market gardeners, for its earliness and reliability as a sure header. Tested with several other varieties, it has proved to be as early, if not earlier than any other sort.

**Extra Early Paris.**—Heads large, white, compact and solid, of excellent flavor, tender and delicious. Leaves large, stalk short. Being so early, it must always be a favorite, especially with market gardeners.

**Early Erfurt.**—One of the best for general cultivation. Heads large, but close and compact and very white.

**Early London.**—This is a standard variety; very tender and quite early; heads compact, solid; and of delicious flavor; good for general use.

**Early Paris or Nonpareil.**—A most excellent French variety with good sized, uniform, close heads, which are tender and delicious. Planted at same time with the Extra Early Paris, it will afford a succession.

**Le Normand's Short Stem.**—Considered by the French one of the very best sorts. Plant hardy, semi-dwarf, producing many leaves which protect the close, solid curd, keeping it well blanched.

**Large Algiers.**—A valuable late sort, sure to head, of the best quality, and very popular with market gardeners everywhere. One of the very best.

**Late London.**—A fine, large, white, compact variety, taller, with larger leaves, and somewhat later than the Early London. Sown at the same time it will afford a succession.

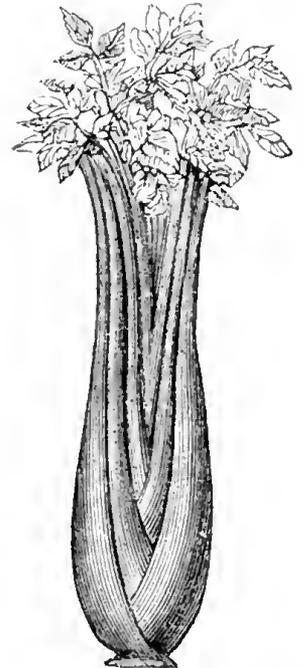
**Veitch's Autumn Giant.**—A distinct and valuable late variety. The heads are very large, beautifully white, firm and compact, and being well protected by foliage, remain a long time fit for use. The plants should be started and transplanted early in the season, to insure their full development.

## CELERY.

Fr. *Celeri*—Ger. *Sellerie*.

This is becoming more and more popular, and whole farms are given up to its production. It delights in a rich, friable, well drained muck soil, but can be grown of excellent quality in any good garden soil.

**CULTURE.**—Sow the seed (which slow to germinate) in shallow boxes, or in a finely prepared seed bed out of doors, in straight rows so that the small plants may be kept free from weeds. When about two inches high thin out and transplant so that they may stand two inches apart, and when the plants are four inches high cut off the tops, which will cause them to grow stocky. The crop is usually made to succeed an earlier one, and if good plants are used they may be set out as late the middle of August, but the best results are obtained from setting about the middle of June or first of July. In setting prepare broad shallow trenches about six inches deep and four feet apart, in which the plants should be set six inches apart, cutting off the outer leaves and *pressing the soil firmly about the roots*. In about six weeks the plants should be "handled," which is done by one man's gathering the leaves together, while a second draws the earth about the plant to one-third its height, taking care that none of the



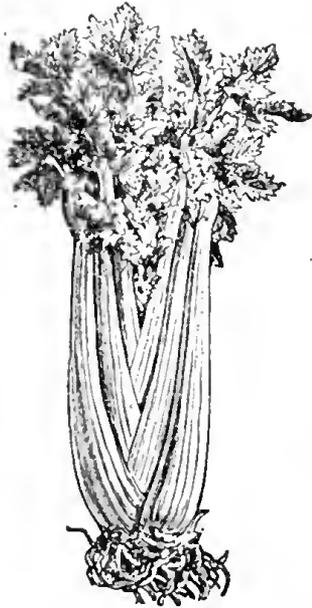
Crawford's Half Dwarf.

earth falls between the leaves as it would be likely to cause them to rust or rot. After a few days draw more earth about them and repeat the process every few days until only the top of the leaves are visible,

when in a few days more it will be fit to use. Care should be taken that the plants are not disturbed while they, or the ground is wet, as it would be sure to injure them. A part of the crop may be simply "handled," and then at the approach of severe freezing weather taken up and set out compactly so that all but the tops of the leaves can be covered with sand, in a light cellar or an unused cold frame, which can be kept just above the freezing point, and will then gradually blanch so that it may be used throughout the winter.

**Golden Heart.**—A distinct variety, of sturdy, dwarf habit. It is solid, an excellent keeper, and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making this an exceedingly showy and desirable variety for both market and private use.

**Crawford's Half Dwarf.**—The favorite variety with New York City market gardeners. When blanched, it is of rather a yellowish white, and is entirely solid, possessing the nutty flavor peculiar to the dwarf kinds, while it has much more vigor of growth, surpassing most of the large growing sorts in weight of bunch.



**Dwarf White Solid.**

**Seymour's White Solid.**—A large sized, vigorous growing variety; stalks white, round, very crisp, perfectly solid, and of superior flavor.



**Celeriac, or Turnip Rooted Celery**

**Incomparable Dwarf Crimson.**—The red varieties keep better through the winter, and are generally considered to be of superior flavor, and they are yearly becoming more popular. This is a dwarf sort of deep, rich color, very crisp, and of the highest flavor.

**Celeriac, or Turnip Rooted.**—The root of this variety is turnip shaped, tender, and marrow like, having a sweeter taste, and stronger odor than other varieties. It is used principally for seasoning meats and soups.

## CHICORY.

*Fr. Chicoree — Ger. Cigorien.*

**Large Rooted, or Coffee.**—Much used in Europe as a substitute for coffee, and large quantities of the prepared root are annually exported to this country for similar use. In the fall, the roots require to be taken up and cut in small pieces and put where they will dry. Give the same treatment as in drying apples. When required for use, it should be roasted and ground like coffee.

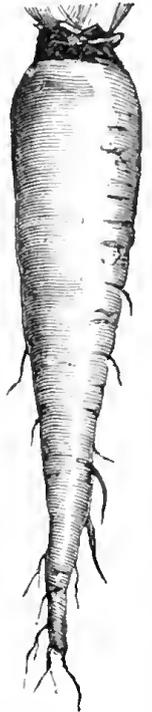
## COLLARDS.

A species of cabbage, known in different sections as "Cole" and "Colewort." It is almost universally used in the South for "greens," where it continues in luxuriant growth all winter.



**Collards.**

**Georgia, or Southern.**—This is the variety so extensively used in the south, where it furnishes an abundance of food for both man and beast. Forms a large, loose, open head, or a mass of leaves on a tall stem, which are the better for freezing. Sow thick, in drills, in rich ground, transplanting when four inches high. In the south, sow from January to May and August to October. Manure like cabbage.



**Chicory.**

**CORN.**

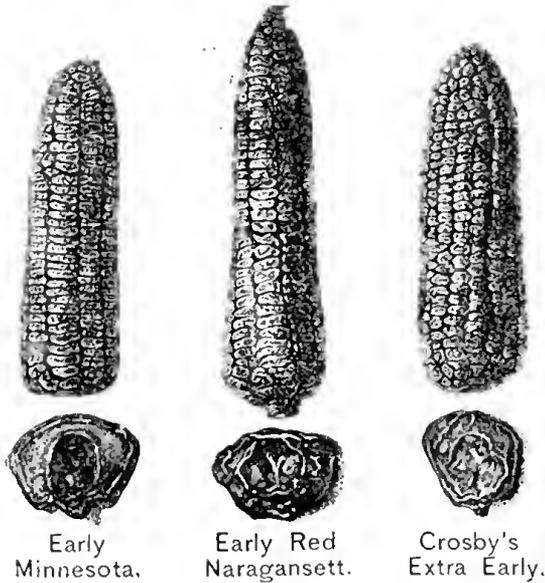
Fr. *Mais*.—Ger. *Mais*.

**CULTURE.**—A rich, warm, alluvial soil is best, and immediately before planting this should be as deeply and thoroughly worked as possible. Cultivate deeply and thoroughly as soon as possible after the plants appear and every few days until it tassels. Thorough cultivation and warm, rich soil are the keys to success.

**Early Marblehead**—The earliest sweet corn, and best for first crop. Quality excellent. Cook quickly using boiling hot water, for if simmered over a slow fire, or if it is allowed to stand in the water after cooking, its red cob will color the grain. Stalk very short, with many suckers from the root; ears medium size, long, with few husks; cob red, small; kernel broad, shallow, white or tinged with red.

**Dolly Dutton, or Tom Thumb.**—Stalk very short, with few suckers and fine leaves; ears small, straight, well covered with husks. The smallest sort in cultivation.

**Extra Early Adams.**—Nearly as early as the last, and inferior in quality, but will succeed at the south where other sorts fail. Stalks very short, with no suckers, bearing a single, very full, round, *short* ear, well covered with husks; kernels white, smooth.



**Early Minnesota.**—Very little later than the above, but an old and popular market sort. Stalks short and not suckering, bearing one or two ears well covered with husks; ears long, pointed; kernels very broad, sweet and tender, not shrinking much in drying.

**Early Red Naragansett.**—We think this the best *red* variety of sugar corn grown. It is early, following the Minnesota. The kernels are much shriveled, and exceedingly sweet and tender. A good table variety, and many prefer it to any other sort.

**Crosby's Extra Early.**—A most excellent variety, and remarkably early. Ears of good size, medium length, sweet, rich and delicate.

**Russell's Early Prolific Sugar.**—Comes into use a few days after the preceding. Is of excellent quality, very productive, and one of the best for family use.

**Early Sweet, or Sugar.**—Ears good size, tender and sugary; plant productive, hardy and quite early. An excellent table sort.

**Moore's Early Concord Sweet.**—Produces its very large, handsome ears very low on the stalk and comes



into use after Crosby's Extra Early. The quality is unexceptionable, and it is valuable as an intermediate variety.

**Black Mexican.**—Although the ripe grain is black, or bluish black, the corn, when in condition for the table, cooks remarkably white, and is surpassed by none in tenderness. This by many is considered the most desirable for family use of the second early sorts.

**Excelsior.**—The best quality of the second early sorts, and the best for general crop. Stalks medium, bearing from three to six small, curved ears,

which are filled out to the end with broad, white kernels, that cook exceedingly sweet and tender.



**Triumph.**—Stalks large, with large ears of fine quality. The earliest of the very large sorts; highly esteemed by canners.

**Ne Plus Ultra.**—A new late variety which promises to become very popular. Stalks of medium height, being very short between joints, without suckers, dark green with some marking of red; bearing from two to five ears, well covered with tassels and red silk. Leaves numerous, husks, which are gathered into a point, broad, dark green. Ears short, tapering, always well filled out. Kernels not in rows, small, very long, white and exceedingly tender and sweet. One of the best late varieties particularly for amateur use.



**Egyptian Sweet.**—A variety noted for its productiveness—the stalks having from two to four ears each—the large size of its ears, its sweetness and tenderness. It is peculiarly adapted for canning purposes, and the superiority of the canned green corn of this variety is noticeable. Its season is about the same as the Evergreen.

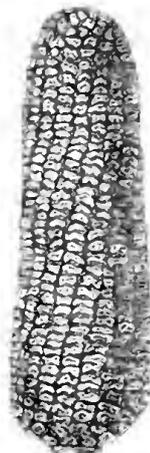
**Mammoth Sweet.**—This variety produces the largest ears of any sort with which we are acquainted, a single ear sometimes weighing two or three pounds. The quality is excellent—sweet, tender and delicious. For family use, it cannot be excelled.

**Stowell's Evergreen Sweet.**—This variety is intermediate in its season, and if planted at the same time with earlier kinds, will keep the table supplied till October. It is hardy and productive, very tender and sugary, remaining in a condition suitable for boiling a long time.

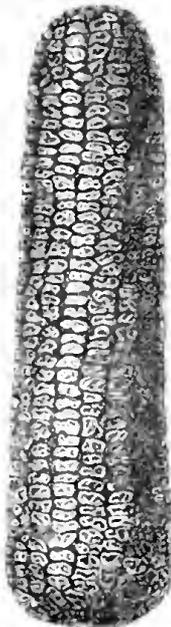
**Early Adams, or Burlington.**—An excellent early field variety, and often used for table, particularly at the south. Ears about eight inches long, twelve or fourteen rows; kernels white, rounded, somewhat deeper

than broad, and indented at the outer end, which is whiter and less transparent than the inner.

**Early Red Blazed.**—The experience of 1883 demonstrated that this is the hardiest field corn in cultivation. It is not only early but will endure a degree of cold and wet that would be fatal to other sorts. Stalks medium height without suckers, dark green with red or bronze markings. Leaves broad, green at base but bronze at top, particularly while the plant is young. Ears long, eight rowed, well filled, small at base. Grain flinty and of fine quality, bright yellow at base of ears but red at the tips.



**Early Golden Dent, or Pride of the North.**—A very early dent variety, ripening with the flint sorts and can be successfully grown further north than any other variety



Mammoth Sweet.

**Stowell's Evergreen Sweet.** Stalks small with broad leaves. Ears short, twelve to sixteen rowed, well filled. Grain long, yellow, making an extra quality of meal.

**Early Yellow Hathaway Dent.**—A variety established by annual selection of best types for over thirty years, and one of the most prolific of the early dent corns. Stalks above medium, stout, with many broad leaves and bearing two ears on long foot stalks so that they hang point downwards, thus protecting the grain from rain. Ears medium size for dent corn with very small cob, especially at the base; sixteen to twenty rowed, grain yellow, dented with small projecting point, very long and wedge shaped. We recommend this sort as the best for cultivation as far north as central Michigan.

**Rice, for Parching.**—A very handsome variety. Ears short; kernels long, pointed, and resemble rice; color white; very prolific; used entirely for parching, for which purpose it has no superior.

**CORN, BROOM.**

There are many farmers who might make this a very profitable crop, as an acre will give about five hundred weight of broom and nearly forty bushels of seed, worth nearly as much as oats for feed.

**CULTURE.**—It requires similar soil and culture to corn, but should be planted later. It is frequently planted in drills three and a half feet apart, leaving the plants six inches apart.

**Dwarf.**—Grows from three to five feet high, and produces short, fine brush suitable for whisk brooms and brushes. Our stock is very pure and true.

**Improved Evergreen.**—Grows to a height of seven to nine feet; early, and produces a very fine brush of good length and of green color. Our stock is choice, having been established by a careful selection for many years of the finest plants.

**Corn Salad, Feticus, or Lamb's Lettuce.**

Fr. *Mache*, *Salade de ble*.—Ger. *Ackersalat*, *Lam-marsalat*.

This small salad is used during the winter and spring months as a substitute for lettuce, and is also cooked and used like spinach. In warm weather, the plants will mature in from four to six weeks.



Corn Salad.

**CULTURE.**—Sow the seed in shallow drills about one foot apart, during August and September. If the soil is dry, it should be pressed firmly over the seed, in order to secure prompt germination. On the approach of severely cold weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in the spring, and like most salad plants, are greatly improved if grown on *very* rich soil, indeed, the ground can scarcely be made too rich for them.

**Cress, or Peppergrass.**

Fr. *Cresson*.—Ger. *Kresse*.

**Curled.**—This small salad was formerly much used with lettuce, to which its warm, pungent taste makes a most agreeable addition.

**CULTURE OF THE CURLED VARIETIES.**—The seed should be sown in drills about eighteen inches apart, on very rich ground, and the plants well cultivated. Keep off insects by dusting with Pyrethrum powder. It may be planted very early, but repeated sowings are necessary to secure a succession.



Water Cress.

**True Water.**—This is quite distinct from the last, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads, and should be planted wherever a suitable place can be found.

**CULTURE.**—The seed should be sown and lightly covered, in gravelly, mucky lands along the borders of small, rapid streams, and the plants will need no subsequent culture, as in favorable condition they increase very rapidly by self-sown seed and extension of the roots.

## CUCUMBER.

Fr. *Concombre*.—Ger. *Gurken*.

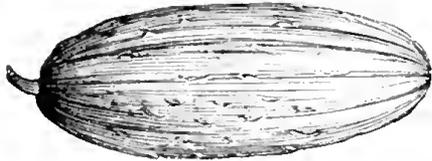
This is one of those vegetables which can be grown to perfection by anyone who can control a few square yards of soil which is fully exposed to the sun, and the fruit is so much better when gathered fresh from the vines than it is when obtained in the market, that every family should be supplied from its own yard.

**CULTURE.**—The plants are tender, and planting should be delayed until settled warm weather, or ample facilities are provided for protecting them from frosts and during *cold storms*. Form low, flat hills six feet apart each way, of *rich soil*, by mixing in a quantity of *thoroughly decomposed manure*, stirring the soil to a depth of sixteen inches or more; or open shallow trenches the same distance apart and mix with the bottom earth a quantity of similar manure and replace the surface soil. Scatter on each hill fifteen or twenty seeds, or one every inch along the rows, and cover one inch deep, pressing the soil firmly over them.

As soon as the plants are up, they will be liable to attack by the striped cucumber beetle. These may be kept off by frequent dusting with air-slaeked lime, soot, or sifted ashes diluted with fine road earth; care should be taken not to use too much, for if too strong, any of the above materials will kill the vines. When the plants are well established, thin to three plants to each hill. In gathering, pick all the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed commences to mature. In field culture, plow furrows four feet apart across the field, and similar ones, but omitting every fourth furrow, at right angles to the first; this will form paths for the distribution of manure and the gathering of the fruit. At each intersection drop a shovelful or more of *well rotted manure*, which should be *well mixed* with the soil, so as to form a low flat hill. In gathering for pickles, cut the stem, instead of pulling the fruit off, and be careful not to mar the fruit in any way, for if the skin is broken, the pickles will not keep.

**Early Russian.**—Earliest and hardiest. Vines vigorous and productive. Fruit three to four inches long, small, oval, pointed at each end, covered with fine small spines.

**Early Cluster.**—Vines vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, holding full size to each end, dark green but paler at blossom end. Good for table use but not adapted to pickling.



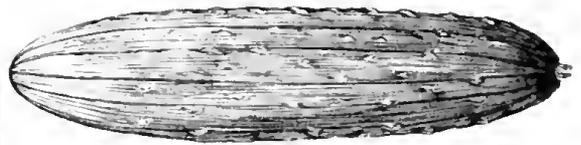
Early Short Green or Early Frame.

**Early Short Green, or Early Frame.**—Plants very vigorous and productive. Fruit straight, handsome, smaller at each end, bright green, lighter at the blossom end, with crisp, tender flesh, and makes excellent pickles when young.

**Early White Spine.**—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, light green with a few white spines; flesh tender and of excellent flavor.

**Bismark.**—A cross between the White Spine and Long Green; established by careful selection. Fruit long, cylindrical, very handsome and constant in form and color, dark green, with few spines; flesh very crisp and tender.

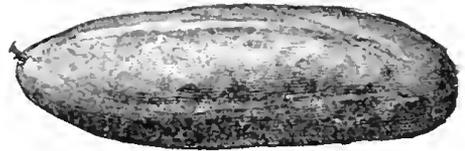
**Improved Long Green.**—Produced by selection



Improved Long Green.

from the long Green. Vines vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about twelve inches long, firm and crisp, with very few seeds. The young fruit makes one of the best of pickles, and when ripe is the best of any for sweet pickles.

**Long Green.**—Fruit shorter than the above, and makes a good pickle, but is less crisp and tender.

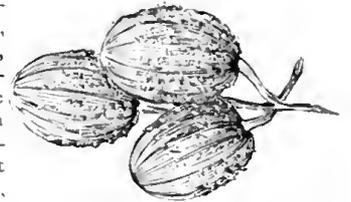


D. M. F. & Co's Perfection Pickling.

**D. M. Ferry & Co's Perfection Pickling.**—This variety is not only the best for pickles, but is one of the best for the table. Vines vigorous, producing their fruit early and very abundantly; fruit of very distinct form, having three distinct ribs; color dark green, which they retain as pickles; flesh very crisp and tender.

**Boston Pickling, or Green Prolific.**—A distinct variety very popular for pickles. Fruit short, nearly cylindrical but pointed at each end, bright green, and a great producer.

**Gherkin, for Pickling.**—A very small, oval shaped, prickly, variety, having somewhat the appearance of a burr. It is grown exclusively for pickling; is the smallest of all the varieties, and should always be pickled when young and tender. The seed is slow to germinate.



Gherkin.

## EGG PLANT.

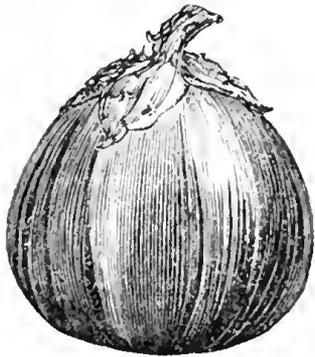
Fr. *Aubergine*.—Ger. *Eierpflanze*.

The Egg Plant, when well grown and properly cooked, is a delicious vegetable, and it should find a place in every garden.

**CULTURE.**—The seed germinates slowly, and should be started in strong heat, for in this, as in all sub-tropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed two rough leaves, transplant to three or four inches apart. Keep the bed closed and very warm, shading from the direct rays of the sun, and giving abundance of water until the ground is warm and all danger not only from frost, but from cold nights is past; then harden off the plants by gradual exposure to the sun and air, and decrease the supply of water, then *carefully* transplant into *very* warm, rich soil, setting the plants two and a half feet apart. If needed, shade the young plants and protect them from the potato bug which is very fond of them, and if not prevented, will soon destroy the young plants.

**Early Long Purple.**—This is one of the earliest and most productive varieties; fruit long, dark rich purple and of fine quality.

**Black Pekin.**—Nearly as early as the last, and as large as the later sorts. Very prolific, and desirable for market gardeners' use. Fruit nearly round; skin smooth, black and glossy; flesh white, fine grained and delicate.



D. M. Ferry & Co's Improved Large Purple.

**Large New York Purple.**—Large, round, of excellent quality; later than the preceding and highly esteemed in the New York market.

**D. M. Ferry & Co's Improved Large Purple.**—The best variety in cultivation, being early, a sure cropper and of fine quality. Plants large, vigorous with light green leaves; fruit very large, oval, deep purple, with occasional dash of green about the stem; flesh white, tender, and of superior quality.

## ENDIVE.

Fr. *Chicoree*.—Ger. *Endivien*.

Endive in its natural state, is very bitter, but when properly blanched, its leaves make a fine salad, and coming as it does after lettuce is past, is very useful.

**CULTURE.**—It may be grown at any season of the year, but is more generally used late in the fall. Sow the seed during June or July, in drills fourteen inches apart, and when well established, thin the plants to one foot apart. When nearly full grown, tie the outer leaves



Green Curled Endive.

together over the center in order to blanch the heart of the plant. This will usually be fit for the table in ten days, and continues in condition for use about one week, so that the tying up should be done every few days in order to secure a succession.

**Green Curled.**—Is the hardiest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender.

**Broad Leaved Batavian.**—Has broad, thick, plain or slightly wrinkled leaves, forming a large head which is preferred for stews and soups; but if the outer leaves are gathered and tied at the top, the whole plant will blanch nicely, and make an excellent salad for the table.

## GARLIC.

Fr. *Ail*.—Ger. *Knoblauch*.

A bulbous rooted plant with a strong, penetrating odor, but much esteemed by some for flavoring soups, stews, &c. We frequently receive orders for *garlic seed*, but we can supply the bulbs only.

**CULTURE.**—Prepare the ground the same as for onions, and plant the bulbs in drills eight inches apart,

and four inches apart in the rows, and cover two inches deep. When the leaves turn yellow, take up the bulbs and dry in the shade, and lay them up in a dry loft, as you would onions.

## GOURD.

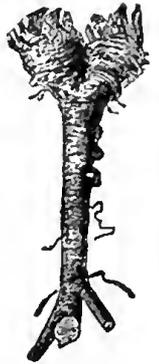
**Sugar Trough.**—This variety grows to a very large size, and is valuable, when dry, for a variety of household purposes, such as baskets, buckets, cans, &c.

**CULTURE.**—The Gourd is a tender annual, and should not be planted till all danger of frost is over and not less than six feet apart each way, in good, rich loam. Three plants in a hill will be sufficient to leave at the last hoeing.

For Ornamental Varieties, see Flower Seeds.

## HORSE RADISH.

The best Horse Radish is produced from small pieces of root; these are to be set small end down so that the top will be two inches below the surface. The soil should be very rich and well cultivated. It is also grown but of inferior quality from the crowns of the old plants. It is hardy and may be left in the ground until spring before digging. We frequently receive orders for the seed of this vegetable, but we can supply the roots only.



Horse Radish.

## KALE.

Fr. *Chou Vert*.—Ger. *Bluetter Kohl*.

Borecole, Kale, or German Greens are general terms applied to those classes of cabbage which do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy, and improved rather than injured by frost.

**CULTURE.**—As far north as New York, they may be sown in September and treated like spinach, although at the south they will live and grow throughout the winter without protection, or they may be planted and treated like winter cabbage, and will continue growing till very late. If cut when frozen, thaw out in cold water before boiling.

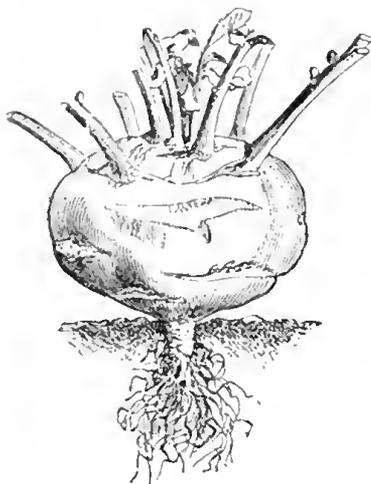
**Tall Green Curled Scotch.**—This is very hardy, and improved by a moderate frost. About two feet high, with an abundance of dark green, curled and wrinkled leaves. It stands the winters in the Middle States without any protection.



German Dwarf Purple Kale.

**German Dwarf Purple.**—A dwarf, compact plant composed of a mass of large, finely frilled leaves of a deep purple color. Tender, and of excellent quality; so handsome that it is frequently grown for ornament.

**German Dwarf Green.**—A smooth leaved sort, very popular at the south, where, if sown in the fall, it needs no protection, growing vigorously all winter; but is not equal to the other sorts for use at the north.

**KOHL RABI.**Fr. *Chou-rave*.—Ger. *Kohl-rabi*.

Large Green Kohl Rabi.

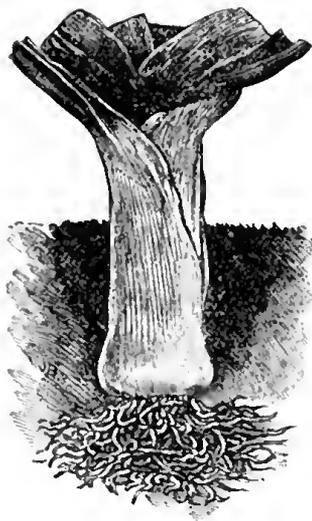
The Kohl Rabi is a vegetable intermediate between the cabbage and turnip, and combines the flavor of both. The edible part is a turnip shaped bulb formed by the swelling of the stem. When used for the table, this should be cut when quite small, as it is then very tender and delicate, but if allowed to reach its full size it becomes tough and stringy.

**CULTURE.**—Cultivate same as *ruta baga* for general, and like early cabbage for early crop. They should be used before they have attained their full growth.

**Early White Vienna.**—Very early, small handsome, white bulb. Best early variety for table.

**Early Purple Vienna.**—Nearly identical with the last except in color, which is a bright purple, with the leaf stems tinged with purple.

**Large Green.**—Hardy, quite late, and used for feeding stock. Bulbs large, weighing eight to ten pounds, whitish green in color; leaves large and numerous.

**LEEK.**Fr. *Poireau*.—Ger. *Lauch*.

Leek.

This is a branch of the onion family, is very hardy, and by some is preferred to the onion.

**CULTURE.**—Dig trenches eight inches deep, and make the soil at the bottom fine and rich (it can scarcely be made too rich). Sow the seed early in the spring, and cover lightly with earth. Thin to six inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant. Dig, and store in the cellar, or out of doors like celery, before severe weather.

**London Flag.**—Is the variety more generally cultivated in this country than any other. Is hardy and of good quality.

**LETTUCE.**Fr. *Laitue*.—Ger. *Lattich-salat*.

There is no vegetable which is more universally used than this, and yet few people know how inviting and appetizing it is when brought to the table fresh and unwilted, a condition in which it is rarely, if ever, found in our markets, and which can only be secured by growing the plants in one's own garden. So we earnestly urge all of our readers who can possibly do so, to grow their own lettuce.

**CULTURE.**—The quality of lettuce depends largely upon rapid and vigorous growth; and to secure this we need *very rich, mellow soil*, frequent surface cultivation, and an abundant supply of water. For the earliest crop, sow under glass in March, and thin out the plants so as to prevent their becoming crowded. If it is intended to mature the plants under glass, keep the bed quite close, give frequent and abundant watering with liquid manure, and shade during *very sunny days*; if the plants are to be set in the open ground, give all the air possible without freezing the plants, and "harden off" by full exposure and withdrawal of water before transplanting. The plants should be set out as soon as a warm spot can be made very rich and mellow. At the time the plants are set out, sow seed in drills fourteen inches apart, and thin out as wanted for the table until they stand eighteen inches apart. Give frequent hoeings, and if possible, water during any dry time. The *Cos* varieties should be tied up seven to ten days before using, in order to blanch the inner leaves.

**Early Tennis Ball.**—(TRUE BLACK SEEDED).—The

best variety of head or cabbaging lettuce for growing under glass. Very hardy. Leaves thick, crisp and tender, forming under glass a compact head, but apt, unless planted very early, to be loose and open in the open air.

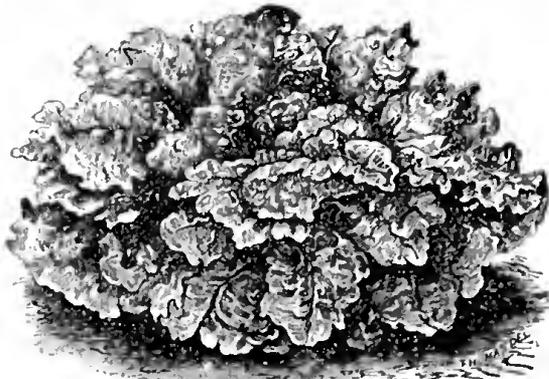


Early Tennis Ball.

**Black Seeded Simpson.**—The leaves of this variety are very large, and form a compact mass rather than a distinct head; they are thin, very tender, of superior quality and of a very light green color, which prevents any wilting of the plant from being noticed, and so the sort is exceeding popular among market gardeners.

**Simpson's Early Curled.**—One of the best early sorts for market or family use. All the leaves tend to produce a large, loose head. Leaves beautifully crimped, dark green, very tender and crisp. Recommended for general cultivation.

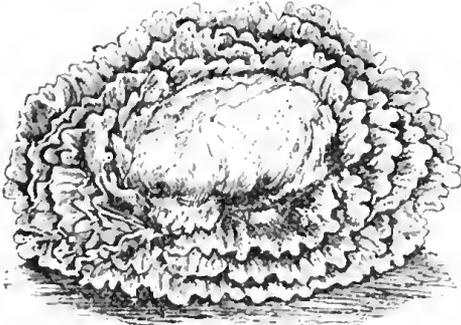
**Early Boston Curled.**—Leaves numerous, large, dark green, growing close together, and the edges deep-



Ferry's Early Prize Head.

ly frilled, so that the whole plant forms a round mass closely resembling a bunch of moss. Quality good.

**Ferry's Early Prize Head.**—For home use the best lettuce known. It forms a mammoth plant, in which even the outer leaves are crisp and tender, and remains so throughout the season. It is slow to run up to seed, of superb flavor and very hardy. We desire to call the attention of families and amateurs to this variety, as being decidedly the best in cultivation for home use, but it is unsuited for market gardeners, as it is too tender to bear much handling.



Hanson.

**Hanson.**—A very fine heading variety of the largest size, and standing the sun better than any other sort. The heads are very large, solid, sweet, tender and crisp throughout, and entirely free from any bitter taste. We have a very fine stock of this variety, and can recommend it as one of the best on our list.

**Deacon Hine, or Ice.**—Plant small, with very thick smooth, dark green leaves, which are very crisp and tender. Highly esteemed.

**Early Curled Silesia.**—An early variety of very strong growth; leaves large, light yellow, wrinkled. In quality resembling the Cos varieties. It does not form a head, but is the best variety for cutting and bunching when young.

**Frankfort Head.**—A dark green curled variety with close, round heads, which cut open finely blanched and very crisp. It remains a long time in head; seeds black, produced very sparingly.

**Large Drumhead, or Victoria Cabbage.**—Heads remarkably large, somewhat flattened, compact; pale green without, and white at the center, crisp and tender; one of the finest summer varieties; seeds white.

**Philadelphia Butter, or Early White Head.**—Medium size; leaves smooth, thick, bluish green, forming a compact, hard head very early. Desirable for forcing and for very early planting out of doors, but does not stand the sun well.



Brown Dutch.

**Brown Dutch.**—An old sort, noted for its hardiness. Leaves large, thick, green, tinged with brown. It

always forms a large, solid head which is somewhat coarse looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and good flavored. Desirable because of its hardiness and fine quality.

**Green Fringed.**—An exceedingly ornamental variety. The inside of the leaves is white, the edges a delicate green, and beautifully fringed and crimped, making this the most beautiful variety on our list, and well worthy of cultivation for table decoration, although the quality is quite inferior.

**White Paris Cos.**—The heads are long, upright, with oblong leaves. It is very hardy, of large size, and long in running to seed; tender, brittle, and high flavored. Considered in England to be far better than the other varieties.

## MARTYNIA.

A strong growing, hardy, annual plant, with curious shaped seed pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance, and should be gathered when about half grown; after the hardening of the flesh they are worthless.

**Proboscidea.**—The common variety. Sow in rich, warm soil after corn is well up, in drills three feet apart, and thin the plants out to two feet in the row.

## MELON, MUSK.

Fr. *Melon.*—Ger. *Zucker-Melons.*

The Musk Melon is too universally popular to need any special description.

**CULTURE.**—Cultivate as recommended for cucumbers, except that the hills should be six feet apart, but avoid planting near those plants, as they will mix with and injure the quality of the melons; this and heavy rains at the time of ripening will destroy the flavor of the finest stock. *Rich earth* for the young plants is far better than manure, but if the latter must be used, see that it is well rotted. If the plants grow very rank, more and finer fruit will be secured by pinching off the ends of the shoots when about three feet long.

**Jenny Lind.**—The earliest green fleshed melon, and we think the sweetest variety in cultivation. Quite small, round, much flattened at the ends, ribbed, finely netted. Flesh green and very sweet, but not high flavored.

**Skillman's Fine Netted.**

A very early melon of small size varying in shape from almost oval to a flattened globe. Skin green until the fruit is over ripe, when it becomes yellow, covered with fine netting. Flesh light green, very thick, sweet and of moderately high flavor.

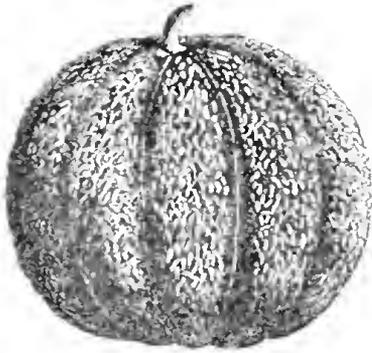
**Surprise.**—Skin yellowish white;

vines hardy and productive; fruit not deeply ribbed, and the flesh a deep salmon color. Quality *the very best.*

**Improved Large Green Nutmeg.**—We think we have by careful selection and growing secured in this a variety of the largest size, but having all the good qualities of the old Green Nutmeg. We consider this the

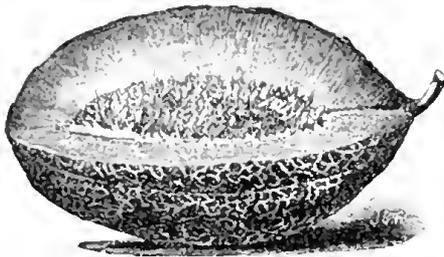


Surprise.



Improved Large Green Nutmeg

oval, tapering to stem, medium size, slight ribs and dark green at first, but becoming covered with shallow gray netting. Flesh green, very thick, soft, delicate and exceedingly sweet and high flavored. One of the best of all the melons for home use.



Pine Apple.

**Small Green Nutmeg.**—Fruit of medium size, slightly ribbed, globular. Skin dark green, becoming yellow when over ripe, and nearly covered with broad shallow netting. Flesh green, very thick, a little coarse but of fine flavor.

**Bay View.**—Fruit large, often sixteen to eighteen inches long, and will ripen up finely if picked quite green, making it one of the best for shipping long distances, and this combined with its great beauty, makes the variety a favorite with market gardeners. Flesh thick, of rich green color, juicy and very sweet and rich.

**Improved Green Fleshed Cantaloupe.**—Fruit above medium size, oval, moderately ribbed, skin very dark green partially covered with coarse netting. Flesh very thick, sweet and of fine quality.

**Casaba, or Green Persian.**—One of the largest and best musk melons in cultivation. Fruit, long, oval, a little pointed at each end; flesh green, very sweet, melting and delicious.

**Long Yellow.**—A large variety; long, oval shape, deeply ribbed; flesh thick, light salmon colored, and of a peculiar musky flavor. This variety is used in its green state for Mangoes.

## Melon, Water.

Fr. *Melon d'eau.*—Ger. *Wassermelone.*

The Water Melon is a tropical fruit, and can be produced to perfection only on warm, light soil, and under a bright, hot sun.

**CULTURE.**—Although the finest melons are produced on light, sandy, comparatively poor soil,

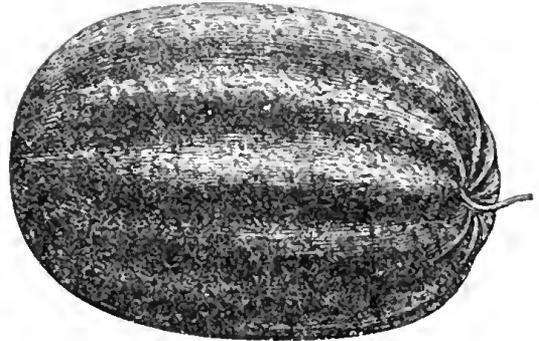
best variety for family use in cultivation. Vines vigorous, hardy, productive; fruit very large, round, slightly flattened at both ends, ribbed, covered with coarse netting; flesh very thick, green and of the highest flavor.

**Pine Apple.**—Vines medium, very productive and hardy. Fruit

a vigorous start for the young plant is necessary, and for this we need a hill of rich earth, similar to that for cucumbers. If very large fruit is desired, pick off all but a few melons.

**Early Jersey.**—Fruit medium size, oval-round, light green, mottled. Flesh scarlet, solid, fine grained, juicy, but inferior in quality to some of the other sorts. Vine small but very hardy, producing well when all other sorts fail.

**Phinney's Early.**—A valuable variety for use at the north, hardy and a sure cropper. Vine vigorous and productive, fruiting quite early; fruit oblong, smooth, marbled with two shades of green; rind thin; flesh pink, *very sweet*, tender and brittle.



D. M. Ferry &amp; Co's Peerless.

**D. M. Ferry & Co's Peerless.** The best melon for general use, particularly, at the north. Vine vigorous, hardy, productive; fruit medium, oval, finely mottled, light and dark green, somewhat in stripes; rind thin; flesh bright scarlet, solid to the center, crisp, nutty and sweet. Our stock of this variety is most carefully selected.

**Black Spanish.**—Vine small, so that they may be planted closer than most sorts. Round, very dark green, with scarlet flesh and black seeds. It is not so large as some of the other sorts, but is very sweet and of fine flavor.

**Gypsy, or Georgia Rattlesnake.**—One of the largest varieties, and stands shipment long distances. This sort is widely used at the south for northern shipments. Fruit cylindrical, square at the ends, smooth, distinctly striped and mottled light and dark green. Flesh bright scarlet, and very sweet.

**Scaly Bark.**—A new variety exceedingly popular at the south; it will keep in good condition after picking longer than any other sort. Vine large with large coarse foliage; fruit large, oblong, covered with mottled green, with white spots in groups, looking something like fish



Gypsy, or Georgia Rattlesnake.

scales; rind thin, but very tough; flesh red, very tender, nutty, crisp; seeds reddish brown.

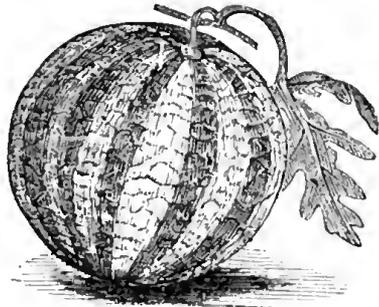
**Cuban Queen.**—One of the largest melons known, specimens having been grown that weighed *eighty-two pounds*. Vine vigorous; skin striped light and dark green. Rind medium thick, but the fruit stands shipment well. Flesh bright red, solid, very crisp and sugary.

**Kolb's Gem, or American Champion.**—A new and very distinct variety originating at the south, and becoming very popular with southern growers because of its size, beauty and remarkable shipping and keeping qualities. Specimens have been shipped from the extreme south to New York and from there back to Philadelphia, yet they arrived in the best possible condition.

Vines of medium size but remarkably vigorous and healthy. Leaves of medium size, deeply cut with a peculiar frilled edge. Fruit of the largest size, round or slightly oval with a cavity, at the blossom end marked with irregular mottled stripes of dark and very light green in sharp contrast, which gives it a bright and attractive appearance. Outer rind or shell exceedingly hard and firm resembling that of a winter squash. Flesh bright red extending to within half an inch of the rind; always solid, very firm, a little coarse but sweet and tender. Seeds dark grey.

**Mountain Sweet.**—A large, long, oval variety; flesh scarlet, and quite solid to the center; very sweet and delicious.

**Mountain Sprout.**—A large, long, striped variety, with bright scarlet flesh and drab colored seeds; it differs from the Mountain Sweet in color and shape, is rather late, and will keep longer in the fall.



Citron.

good variety for main crop.

**Citron.**—Employed in making preserves. Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red.

## MUSHROOMS.

The Mushroom is an edible fungus, of a white color, changing to brown when old. The gills are loose, of a pinkish red, changing to liver color. It produces no seed, but instead, a white, fibrous substance in broken threads, called spawn, which is preserved in horse manure, being pressed in the form of bricks. Thus prepared, it will retain its vitality for years.

**CULTURE.**—Mushrooms can be grown in the cellar, in sheds, or in hot-beds in open-air, on shelves, or out-of-the-way places. Fermenting horse manure, at a temperature of about 70 degrees, is made into beds the size required, eighteen inches deep. In this bed plant the broken pieces of spawn six inches apart, covering the whole with two inches of light soil, and protect from cold and severe rains. The mushrooms will appear in about six weeks. Water with lukewarm water, and only when quite dry.

## MUSTARD.

*Fr. Moutarde.—Ger. Senf.*

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach.

**CULTURE.**—Should be the same as that of cress.

**Southern Giant Curled.**—This mustard is very highly esteemed in the south, where the seed is sown in the fall, and the plants used very early in the spring as a salad. The seed is brown and produces plants which grow about two feet high and form enormous bunches, *six of which will fill an ordinary barrel.*

**White English.**—The leaves are light green, mild and tender when young; seed light yellow.

**Brown Italian.**—This is a larger plant than the preceding, with much darker leaves; seed brown, and more pungent.

## NASTURTIUM.

*Fr. Capucine. Ger. Kapuziner Kress.*

**CULTURE.**—Sow after the ground is warm, in drills one inch deep, by the side of a fence, trellis work, or some other support to climb upon. They will thrive in good ground, in almost any situation, but are more productive in a light soil.

**Tall Mixed.**—Cultivated both for use and ornament. Its beautiful, orange colored flowers serve as a garnish for dishes, and the young leaves are excellent for salads. The flower buds, scarcely formed, and the green seed pods preserved in vinegar, make a pickle greatly esteemed by many.

*For other varieties, see Flower Seeds.*

## OKRA.

*Fr. Gombo.—Ger. Ocher.*

This is an annual from the West Indies, cultivated for its green seed pods, which are used in soups or stewed and served like asparagus. It is highly esteemed at the south for making gumbo soup. The pods when young and tender should be sliced in sections, strung on a thread and hung up in the shade to cure like dried apples. In this condition it can be used for soup at any time.

**CULTURE.**—Sow the seed thinly in dry, warm soil, in shallow drills two feet apart. Cover the seeds lightly. After the plants are up, thin them out to nine inches apart; hoe frequently and draw a little earth to the stems as they continue to



Okra.

grow. Gather the pods when quite green, and about an inch and a half long.

**Tall White.**—About four feet high; pods eight to ten inches long.

**Dwarf White.**—A decided improvement on the preceding. Two and a half feet high, very productive; pods a foot long, very thick and fleshy.

## ONION.

Fr. *Oignon*.—Ger. *Zwiebeln*.

The Onion not only contains considerable nutriment and has valuable medicinal properties, but is most useful in counteracting the bad effects of sedentary life. The disagreeable odor it imparts to the breath may be avoided in a great measure by thorough cooking, or by eating a few leaves of parsley.

There is no vegetable where the quality of the seed exerts a greater influence upon the crop than in onions. On our trial grounds we have found a difference of over 400 per cent. in the marketable product of two rows of onions, planted the same day, side by side, thinned to the same number of plants to the rod, hoed and treated in every way precisely alike, the difference being entirely owing to the seed, which were samples of stock offered us by two growers. Here, then, if nowhere else, the greatest care should be taken to secure the best possible seed. Seed grown in the north will be pretty sure to produce better onions when sown in the Southern States, than southern grown seed.

We make a specialty of onion seed, and grow and dispose of many tons annually. The demand for our seed has increased so rapidly that we are yearly increasing our facilities for growing, so that we think we annually produce on our seed farms near Detroit, the largest crop grown by any one firm in America. Our stock is all grown from choice, selected bulbs, under our own supervision, therefore those who order seed of us will be sure of getting new, choice seed of the best quality.

### ONIONS—HOW TO RAISE THEM.

This is a question we are asked many times every year, and which we will try to answer from our experience in raising many thousands of bushels.

**Soil.**—A good crop of onions can be raised on any soil which will produce a full crop of corn, unless it be a stiff clay, very light sand or gravel, or certain varieties of muck or swamp lands. We prefer a rich, sandy loam, with a light mixture of clay. This is much better if it has been cultivated with hoed crops, kept clean of weeds, and well manured for two years previous, because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once, it is likely to make the onions soft.

**Manure.**—There is no crop where the quality of the manure used is of greater importance than in this. If it is too rank it is quite sure to make soft onions, with many scallions. It should be well fermented and shoveled over at least twice during the previous summer to kill weed seeds. Of the commercial manures, we prefer fine ground bone to any other, but large crops are raised by the use of superphosphates. If these manures are used, one-half should be applied when the crop is sown, and the rest just before they begin to form bottoms.

**Preparation.**—In time to complete the work before the ground freezes up, remove all refuse of previous crops, and spread the composted manure evenly, at the rate of about fifty cart loads to the acre. This should first be cultivated in, and then the ground ploughed a moderate depth, taking a narrow furrow, in order more thoroughly to mix the manure with the soil. Carefully avoid tramping on the ground during the winter, and as early in the spring as it can be worked, cultivate or thoroughly drag it with a heavy harrow, and then in the opposite direction with a light one, after which the entire surface should be raked with steel hand rakes. It is impossible to cultivate the crop economically unless the rows are perfectly straight; to secure this, stretch a line along one side, fourteen feet from the edge, and make a distinct mark along it; then, hav-

ing made a wooden marker something like a giant rake with five teeth about a foot long and standing fourteen inches apart, make four more marks by carefully drawing it with the outside tooth in, and the head at right angles to the perfectly straight mark made by the line. Continue to work around this line until on the third passage of the marker you reach the side of the field where you began; measure fifteen feet two inches from the last row, stretch the line again, and mark around in the same way. This is much better than to stretch a line along one side, as it is impossible to prevent the rows gradually becoming crooked, and by this plan we straighten them after every third passage of the marker.

**Sowing the Seed.**—This should be done as soon as the ground can be got ready, and can best be done by a hand seed drill. This should be carefully adjusted (testing it by running it over a barn floor), to sow the desired quantity of seed and about one-half inch deep. The quantity needed will vary with the soil, the seed used, and the kind of onions desired. Thin seeding gives much larger onions than thick. Four or five pounds is the usual quantity needed to grow large onions. We use a drill with a roller attached, but if the drill has none, the ground should be well rolled with a hand roller immediately after the seed is planted.

**Cultivation.**—As soon as the onions are up so they can be seen the length of the row, give them the first hoeing just skimming the ground between the rows. We use a hoe made expressly for that purpose. The blade is eight inches long and one and a half broad, with a long, crooked shank set in a handle five feet long. The shape of the hoe allows the earth to pass over the blade without moving it out of its place. A few days after give them the second hoeing, this time close up to the plants, after which weeding must be continued. This operation requires to be carefully and thoroughly done; the weeder must get down to his work on his knees astride of the row, stirring the earth around the plants, in order to destroy any weeds that have just started and cannot be seen. In ten days or two weeks they will require another hoeing and weeding similar to the last; and two weeks later give them still another hoeing, and if necessary, another weeding. If the work has been thoroughly done, and at the proper time, the crop will not need anything more until ready to gather.



Extra Early Red.

**Gathering.**—As soon as the tops die and fall, the crop should be gathered by pulling four rows and laying them in a single one the tops all one way, and then returning on the next four forming a similar row, but with the tops in the opposite direction; laying the tops in this way greatly facilitates the "topping." If the weather is fine they will need no attention while curing, but if it is not, they will need to be stirred by simply moving them slightly along the row. When the

tops are perfectly dry, cut them off about half an inch from the bulb and throw each pair of rows together forming windrows about nine feet apart. After a few days more of bright weather, they will be fit to store.

**For Pickles or Sets.**—Good ground should be used prepared as above, but the seed sown in broad *Drills* and *very thick*, thirty to sixty pounds per acre.

### How to Keep Onions through Winter.

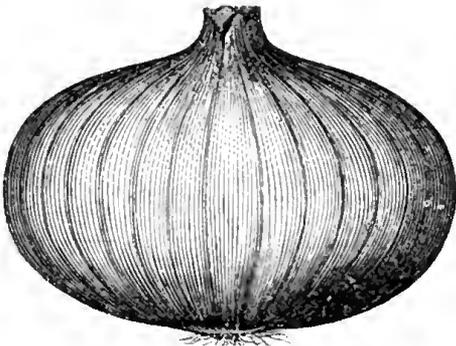
The essentials for the preservation of onions are dryness, thorough ventilation, coolness, and freedom from frost, or if frozen, they must not be permitted to thaw and freeze again.

One of the most popular methods of keeping onions, is to spread straw to the depth of eighteen inches upon the barn floor, scaffold or garret; upon this spread the onions six to ten inches deep, and cover with two feet of straw. If in good condition and sufficient depth of covering is used, they will keep in fine condition till May.

A cool, dry cellar of some out-building, barn or carriage house will be found excellent for keeping onions, if it has windows for ventilation. The cellar of a dwelling house is usually too warm. They should be spread on scaffolds, about six inches deep, with room enough between the boards for the air to circulate. On approach of cold weather, close the doors and windows, and keep the temperature just above the freezing point. With proper care, they can thus be kept without freezing at all, and will come out sound and nice in the spring.

**Extra Early Red.**—A medium sized, flat variety; an abundant producer, and very uniform in shape and size; moderately strong flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

**Early Red Globe.**—A comparatively new variety, maturing as early as the flat sort. It is globe shaped; skin deep red; flesh mild and tender. Very handsome in appearance.



Large Red Wethersfield.

**Large Red Wethersfield.**—This is the standard variety; and the favorite onion in the east, where immense crops are grown for shipment. Large size; skin deep purplish red; form round, somewhat flattened; flesh purplish white; moderately fine grained, and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation.

**Large Yellow, or Yellow Dutch.**—One of the oldest sorts, and as a market variety, probably better known than any other. Flesh white, fine grained, mild, and well flavored.

**Yellow Danvers.**—A fine variety, originated in South Danvers, Mass. Above the medium size, globular in form; skin yellowish brown; flesh white, comparatively mild and well flavored; productive, six



Yellow Danvers.

hundred bushels per acre from seed being a not uncommon crop. By careful selection, we have improved the original shape of this variety, so that to distinguish it from the old stock, many seedsmen catalogue it as *Yellow Globe Danvers*.

**White Portugal, or American 'Silverskin.**—A

large, flat onion; of mild flavor; fine for early winter use, and much esteemed for pickling. It is the best keeper of the white varieties.

**White Silverskin, for Pickling.**—

This is of small size, sil-

very white, and, on account of its small size and handsome appearance, is preferred for pickling.

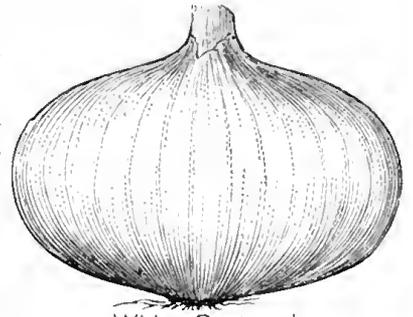
**White Globe.**—Yields abundantly, producing handsome and uniformly globe shaped bulbs. The flesh is firm, fine grained, and of mild flavor. Sometimes called *Southport White Globe*.

**El Paso, or Large Mexican.**—Grows in Mexico to a diameter of six inches and to a weight of two or three pounds, and used in that region in preference to any other sort. Color variable from white to light red; flesh white, rather coarse grained, but of very mild flavor. Resembles a mammoth *White Portugal*.

### FOREIGN ONIONS.

The following varieties have been tested in this country, and have given perfect satisfaction. While we would not recommend the risking of a large crop of onions by sowing imported seed, we believe the following varieties will be found very desirable for early market and home garden use. The flavor of the Italian varieties is milder, and they seem every way well adapted to culinary purposes:

**Giant Rocca.**—An immense onion. Globular in form; skin light brown; flesh mild and tender. It will produce a large onion from seed the first season, but to attain the largest growth, the smallest bulbs should be

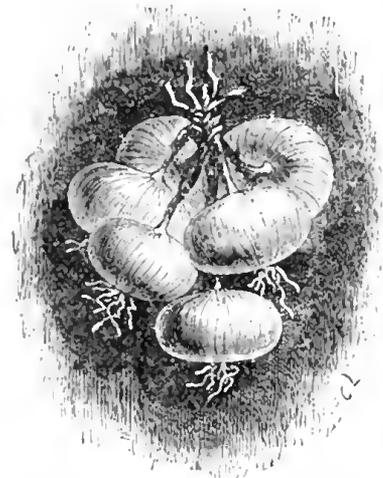


White Portugal.

set out the next spring, when they will continue increasing in size, instead of producing seed, as is the case with American onions.

**Early Neapolitan Marzajola.**—A beautiful, flat, white skinned variety, one of the *earliest of all*, and a good keeper. It can be sown in February or March, and will mature a crop very early in the season; or sown in July, the crop will be matured the same season. In the south the seed can be sown in the autumn, and large onions produced in March.

**Giant White Italian Tripoli.**—A large, beautiful, pure white, flat onion of mild and excellent flavor, and will produce a somewhat larger onion from seed than our White Portugal; but to attain the full size, the small bulbs should be set out the next spring.



New Queen.

for use until the following autumn. Particularly valuable for pickles, as if sown thickly they will mature perfect, hard onions from one-half to three-quarters of an inch in diameter.

### BULBS.

**Top Sets, or Buttons.**—Produce, instead of seed, a number of small bulbs or onions, about the size of acorns, on the top of the stalk, which, if planted, will produce a large onion, maturing earlier than from seed. The large onion produces the top onion, and the little top onion produces the large onion.

**Red Bottom Sets.**—Produced by sowing seed very thickly in the spring, and not thinning out. They mature under this method when about half an inch through, and are used precisely as top onions are, setting them out in the spring, instead of sowing seed.

**Yellow Bottom Sets.**—Identical with the preceding, except in color, and used in the same manner.

**White Bottom Sets.**—The seed of the White Silverskin or White Portugal varieties is used to produce the white set. They do not keep as well as the red or yellow, but produce beautiful, white onions, early in the season.

**English Multiplier.**—Esteemed by many as the best variety for early use. It is large sized, of a mild, sweet, sugary flavor; very early, and a large producer. The large onion produces several small ones in clusters around the bulb, growing mostly on the top of the ground.



Top Onion.

### New Queen.

—A silver skinned variety, of quick growth and remarkable keeping qualities. If sown in February it will produce onions one to two inches in diameter early in summer, which will keep good until the following summer; and if sown in July, will be ready to pull late in autumn, and be sound and fit

**Potato Onion.**—Produces a quantity of young bulbs on the parent root, which should be planted early in spring, in rows eighteen inches apart, six inches apart in the row, and covered one inch deep. With this and the preceding variety, the large bulbs produce the small and the small the large alternately.

Any of the preceding six varieties can be recommended as a small, early crop for family use and early home market, but *not as a main crop*, the increase of marketable onions over the seed being too small. *Of all the various modes of propagation, sowing the seed for a main crop deserves the first rank. Its cheapness compared with other modes, the facility with which it is sowed, and the superior bulbs which it produces, recommend it to general use.*

## PARSNIP.

Fr. *Punais.*—Ger. *Pastinake.*

The value of the Parsnip as a culinary vegetable is well known, but it is not generally appreciated at its full value for stock feeding. On favorable soil, it yields an immense crop of roots, which are more nutritious than carrots or turnips, and particularly well adapted for dairy stock.

**CULTURE.**—They do the best on a deep, rich, sandy soil, but will make good roots on any soil which is deep and mellow and moderately rich. Do not enrich with fresh manure, as it is apt to make the roots coarse and ill shaped. As the seed is sometimes slow to germinate, it should be sown as early as possible; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation, and thin the plants to six or eight to the foot. In digging field crops, they may be thrown out so as to be easily gathered, by running a subsoil plow along one side of the row.

**Long White Dutch, or Sugar.**—Roots very long, white, smooth, tender, sugary, and most excellently flavored. Very hardy, and will keep through winter without protection.

**Hollow Crown.**—Roots oblong, ending somewhat abruptly, with a small tap root; grows mostly below the surface; has a very smooth clean skin, and is easily distinguished by the leaves arising from a cavity on the top or crown of the root.



Hollow Crown.

## PARSLEY.

Fr. *Persil.*—Ger. *Petersilie.*

A very useful vegetable for flavoring soups and stews, and for garnishing. For flavoring, the green leaves are used, or they may be dried crisp, rubbed to a powder, and kept in bottles until needed.

**CULTURE.**—It requires rich, mellow soil. The seed is even slower than parsnip in germinating, and should be sown as early in the spring as possible, and the plants

transplanted when they are two inches high. The oftener they are transplanted and cut back, the finer and more perfect the leaves will be. When well grown, each plant will form a handsome rosette eighteen inches or more in diameter.

**Carter's Fern Leaved.**—A new variety, of most beautiful form and coloring, and is well adapted for garnishing dishes on the table, and also makes a very ornamental plant in the flower garden.



Fine Triple Curled Parsley.

**Fine Triple Curled.**—A fine, dwarfish, curled variety, which, when well grown, resembles a tuft of finely curled moss. It is hardy, and slow in running to seed, but liable to degenerate, as it constantly tends to increase in size, and to become less curled.

**Myatt's Garnishing.**—This variety is larger, and the plant of stronger habit than the preceding, with foliage as finely curled. The leaves are bright green above, paler beneath. Admirably adapted for garnishing purposes.

## PEAS.

*Fr. Pis. Ger. Erbsen.*

In spite of the multitude of varieties now in cultivation, there are each year many new sorts brought out, each of which is claimed to be superior. We take great pains to secure and test on our trial grounds samples of all these new sorts, and present the following list as containing all which are really desirable.



Ferry's First and Best.

**CULTURE.**—For early peas, the soil should be light, warm and sheltered, but for general crop, a moderately heavy soil is better. Sow as early as possible a few of the earliest variety on warm, quick soil prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The first sowing will be earlier if covered only one inch deep; the other sorts should be covered from two to six inches deep, the deep planting preventing mildew, and prolonging the season. Fresh manure, or wet, mucky soil should be avoided, as they cause the vines to grow too rank and tall.

*The crop should be gathered as fast as it becomes fit for use. If even a few pods begin to ripen, young pods will not only cease to form, but those partly advanced will cease to enlarge.*

ALL WRINKLED PEAS are superior to, more delicate in flavor, and remain longer in season than the smooth sorts, for, as in sugar corn, the wrinkled appearance indicates a greater amount of saccharine matter.

### EXTRA EARLY SORTS.

**Ferry's First and Best.**—Another season of careful comparison convinces us that this is the earliest and most uniformly ripening pea in existence, and decidedly the best of any for market garden use, maturing all the pods in about forty-five days, so that frequently the ground can be ready for a second crop in seven weeks from planting. Vine small, about eighteen inches high, bearing three to seven straight handsome pods, each containing six to eight medium sized round peas of good quality.

**D. M. Ferry & Co's Extra Early.**—For family use, this is probably equal to the preceding, though it does not ripen as evenly. Peas large enough to eat are afforded as early as from any variety, and the vines continue bearing for a week or ten days, which, for family use, is a desirable quality. The Rural New Yorker pea which is offered at a high price has proved on our grounds very similar but in no way superior to our Extra Early.

**Bliss' American Wonder.**—A variety, whose stout, branching vines grow only about nine inches high, and are covered with long, well filled pods containing seven or eight large, exceedingly sweet, tender and well flavored peas, and are produced nearly as early as First and Best. We have taken particular pains in raising our stock, to be sure it was true and of the best quality, as some spurious stock is being offered.

**Kentish Invicta.**—Vines about two feet in height, with straight, handsome, well filled pods. Peas superior in flavor to the white sorts; when ripe of a dull blue color. Tested by the side of our Extra Early, it proved only two days later; it is the earliest of the blue sorts.

**Laxton's Alpha.**—The earliest wrinkled pea known. About three feet high; seeds much indented and wrinkled, light blue, very tender, and of delicious flavor; one of the best in every respect.

**Ferry's Extra Early Tom Thumb.**—Established by many years' selection from the Common Tom Thumb Vine dwarf, about nine inches high, so that it can be planted in rows ten inches apart. Peas small, round, and not of the best quality.

**Blue Peter.**—Sometimes called Blue Tom Thumb. A blue pea of fine quality; as dwarf as the Tom Thumb, and a great producer. An excellent pea in all respects, and one of the best of the dwarf varieties. Peas large, round, semi-wrinkled; dull blue in color.

**EARLY SORTS.**

**McLean's Little Gem.**—A very desirable early, dwarf, green, wrinkled variety, growing about fifteen inches high. When in a green state, it is very large, sweet, and of delicious flavor.



McLean's Little Gem.

**Premium Gem.**—Somewhat like the last, but with a little heavier, more prolific vines and larger pods. This and the last fully equal the later sorts in quality, which with their earliness, dwarf habit and productiveness, make them the most desirable for private gardens, of any on the list.

**Bliss' Everbearing.**—A new variety maturing soon after the Gems and continuing a long time in bearing. Vine stout, about eighteen inches high, bearing at the top six to ten broad pods. If these are removed as they mature and the season and soil are favorable the plant will throw out from the axil of each leaf branches bearing pods which will mature in succession, thus prolonging the season. Peas wrinkled, large, cooking quickly, and very tender, of superior flavor, and on this account preferred by many to any other sort, although they are not quite so sweet as some.

**Carter's First Crop.**—This English variety has been grown in this country several years, but we fail to discover any superiority over our Extra Early. It grows from two to three and a half feet high, is prolific, and of good flavor.

**Caractacus.**—Nearly identical with the preceding, though perhaps not quite so early.

**Extra Early Kent.**—This is a very early variety, growing about three feet high. Pods well filled with good sized peas; productive, ripening nearly all at once. An early market variety *when true*, but has greatly degenerated of late years. *Our stock is true.*

**Improved Daniel O'Rourke.**—By careful selection we have secured a stock of this old and popular variety, which has all the good qualities it originally possessed.

**Extra Early Philadelphia.**—A variety somewhat in demand in the vicinity of Philadelphia. We have failed to discover any merit in it over earlier and more prolific varieties.

**Dwarf Champion.**—In quality and flavor equal to the Champion of England, while the vine is much more prolific. Peas white, much shriveled and indented.

**McLean's Advancer.**—A green, wrinkled variety, about two and a half feet high, with broad, long pods, which are abundantly produced and well filled to the end. Considered by some the best of its season, being of most excellent flavor.

**Bliss' Abundance.**—Vine of medium height and bearing along its entire length numerous well filled pods each containing six to eight medium sized roundish wrinkled peas which are of most superior flavor. Of the 49 sorts tested on our trial grounds last summer this cooked the quickest and was considered one of the very best in quality.

**LATE SORTS.**

**Yorkshire Hero.** Vines stout, about two feet high, bearing at the top a number of broad pods filled with large peas, which keep a long time in season, and never become as hard as most sorts. They are of fine quality, and will be preferred to any other by those who like a rich, marrow like pea.

**Champion of England.** Universally admitted to be one of the richest and best flavored peas grown, and very productive. Height four or five feet; seed whitish green and much shriveled. We consider this equal in quality to any in cultivation, either for the amateur or market gardener, as it is always more salable than other sorts.

**Carter's Little Wonder.**—One of the newer large podded English sorts which seems to do better in our climate than most of this class. Vine stout, about two feet high, bearing near the top a good number of very long, broad pods, containing eight to ten very large peas of good flavor.

**Large Blue Imperial.**—About three feet high, and very strong. Pods large, long, pointed, rather flat, containing eight or nine peas. Seed large, blue and a little flattened. A good bearer, and one of the best varieties for summer use, but requires to be planted early, or it will be apt to mildew.

**Large White Marrowfat.**—Cultivated more extensively for the summer crop than any of the others. About five feet high, of strong growth. Pods large, round, rough, light colored and well filled; seed large, round and yellow or white, according to the soil in which they are grown. It is excellent for summer use, but inferior in quality to the newer sorts, although undoubtedly the most productive of the garden varieties.

**Large Black Eyed Marrowfat.**—An excellent variety, growing about five feet high; pods large and full; a prolific bearer, and can be recommended as one of the very best Marrowfat sorts.

**EDIBLE PODDED SORTS.**

**Dwarf Gray Sugar, Edible Pods.**—Grows about two feet high, and is remarkable for its earliness as well as its prolific character. The seeds are large, shriveled and indented, of a dark brown color. The pods are broad, flat and crooked, and contain five or six peas.

**Tall Sugar, Edible Pods.**—About five feet in height; very sweet and tender. Designed only to be eaten with the pods.

**FIELD SORTS.**

The Golden Vine, Crown and Blue Prussian are, perhaps, the best varieties on the list for general cultivation, though large quantities of Creepers, Common White and Common Blue are used annually. The Golden Vine can be sown later than any other variety, and on lower land, as they are not liable to mildew. These varieties are used for field culture only. In their dry state they are used extensively for feeding stock, for

making soups, and in the manufacture of coffee. It is highly essential to have them as free from bugs as possible, and for soups and coffee, absolutely necessary. We keep constantly on hand a large stock of all these varieties, obtained from the north, where the bugs do not infest them. Our customers may rely on having the seed pure and free from bugs.

**PEPPER.**

Fr. *Piment*.—Ger. *Pfeffer*.

The Pepper is much esteemed for its seasoning qualities. In all the various methods of preparation, it imparts vitality and promotes digestion. It is extensively used for pickling, and is valuable for feeding to fowls during winter, a few chopped up with their feed once a week having a marked influence in increasing the number of eggs.

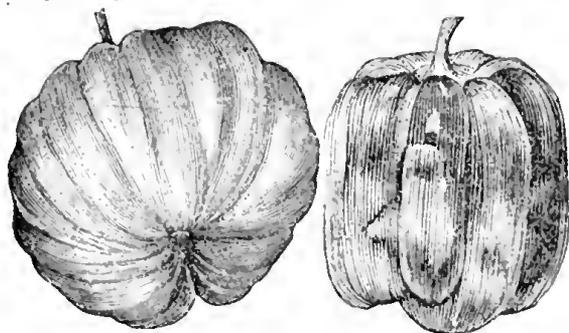
**CULTURE.**—Should be the same as for egg plant, and the plants need quite as much heat to perfect them, but taking a shorter time to mature, the seed may be sown later, or even planted out of doors after warm weather has fairly set in. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will be found to increase the product wonderfully.

**Chili.**—Used in the manufacture of pepper sauce. Pods sharply conical, brilliant scarlet, and exceedingly pungent when ripe. Requires a long, warm season, and plants should be started quite early in hot-bed.

**Long Red Cayenne.**—A long, slim, pointed pod, and when ripe, of a bright red color. Extremely strong and pungent.

**Large Squash.**—Fruit large,

flat, tomato shaped, more or less ribbed; skin smooth and glossy; flesh mild, thick meated, and pleasant to the taste, although possessing more pungency than the other large sorts; very productive, and the best variety for pickling.



Cayenne. Large Bell, or Bull Nose.

**Large Bell, or Bull Nose.**—A very large sort, of inverted bell shape, suitable for filling with cabbage, &c., and for a mixed pickle. Flesh thick, hard and less pungent than most other sorts, and one of the earliest varieties.

**Sweet Mountain.**—Plants very vigorous and productive, growing upright with moderately large leaves. Fruit very large, long, often eight inches or more in length by two or three in diameter, very smooth and handsome, being when green of a bright deep green color, entirely free from any purple tinge, and when mature, of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle.

**Monstrosum.**—Fruit the largest of any, often eight inches or more in length and two to three inches thick. Quality good, and desirable for pickling.

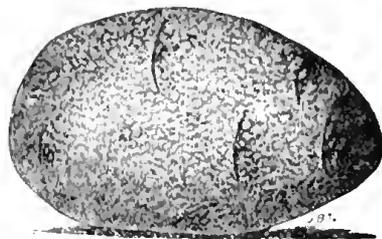
**POTATOES.**

Fr. *Pommes de terre*.—Ger. *Kartoffeln*.

Every year we receive samples of a score or more of new potatoes, each of which is claimed to be new, distinct, and superior in some respects to any in the market. These are all carefully tested, and are usually found to be practically identical with, or inferior to some established variety; but among these hundreds of seedlings, there is occasionally an improvement, and we aim to include in our list all such new sorts together with the best of the older kinds.

**Early Mayflower.**—We think we have found in the Mayflower what we have been looking for, namely an

early potato which is of the best quality. It is an excellent keeper, and does not start readily in the spring, and needs high culture and rich soil. It is of medium size, the crop running



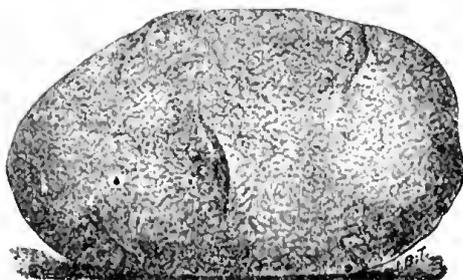
Early Mayflower.

very evenly, with scarcely any very large or very small potatoes, slightly flattened oval shape, light lemon color, with smooth skin well covered with very fine netting. Eyes few, small, and nearly even with the surface; flesh white, solid; cooks evenly and thoroughly without falling to pieces, and has no hard center or spots so common to many of the modern varieties, and is entirely free from any strong or earthy flavor. We recommend it as the best early potato and the best variety for culture in the garden.



White Star.

**White Star.**—This valuable variety is proving to be all we claimed for it, that is the best sort for general crop. The vine is strong, semi-erect, branching, a single stem being produced from each eye. The foliage is very abundant and vigorous, the leaves medi-



Early Telephone.

um sized, smooth, dark green. The tubers are produced abundantly, in a compact cluster, are large, oblong, of uniform size; and very handsome. The skin is white, covered with a minute russet netting. The flesh is white, of the finest quality either baked or boiled. The White Star is suited to all soils and is fast becoming a standard sort in nearly every part of the country.

**Early Telephone.**—A new and valuable variety, produced by a cross of the Snowflake and Peachblow. The skin is a light russet color, smooth and very handsome. The flesh pure white, fine grained, dry and mealy; flavor exceedingly delicate. This potato is a great producer and splendid keeper. So far, this potato has been entirely free from rotting. The potato is in all respects a very fine and desirable one, and ranks among the very best.

**Beauty of Hebron.**—One of the best of the early varieties. In some sections it proves earlier than the Early Rose, and in others it is reported as later. Vine vigorous, growing very rapidly; productive, the tubers lying compactly in the hill. Tubers similar in shape to the Early Rose, but shorter. Skin tinged with pink at first, but becomes pure white during the winter. Flesh solid to the center, even in large specimens, and of the finest quality.

## PUMPKIN.

Fr. *Courge*.—Ger. *Kuerbis*.

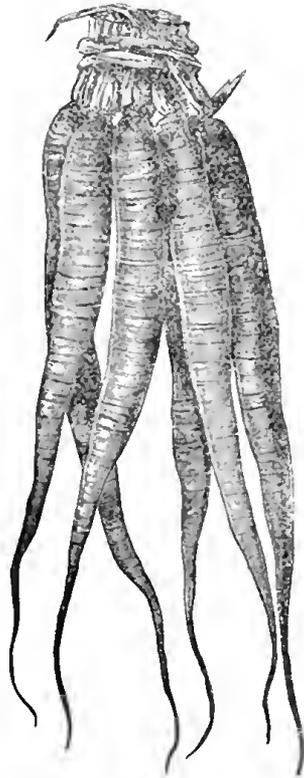
The pumpkin more properly belongs to the farm than the garden, especially as it readily mixes with and injures the quality of the finer squash.

**CULTURE.**—Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated in a similar manner, though on a larger scale. They are generally raised on cultivated farms between hills of corn, and may be planted with success, in fields by themselves.

**Large Yellow.**—Grows to a large size, and is adapted for cooking purposes and feeding stock. It is irregular in shape and size; some being depressed and flattened at the ends, others round or elongated, of deep, rich yellow color; of fine grain and excellent flavor.

**Cushaw.**—A great favorite in the Southern States, but too tender for general cultivation in northern climates. In form much resembling the Winter Crookneck Squash, though growing to a very large size, frequently weighing seventy pounds; color light cream, sometimes slightly striped with green; flesh salmon colored. Very productive.

**Sweet Cheese, or Kentucky Field.**—By far the best variety for culinary use, large, oblong, mottled, light green and yellow, with very thick, sweet, tender yellow flesh.



Early Long Scarlet Short Top Improved.

## RADISH.

Fr. *Radis*.—Ger. *Kettig*.

Cultivated for its roots, which should always be eaten when quite young, as they are apt to be pithy and tough when full grown. The young seed leaves are used as a small salad, and the green seed pods for a pickle.

**CULTURE.**—A warm, sandy loam, made rich and light by some good, well rotted manure and a liberal dressing of salt, will be most likely to afford them brittle and free from worms. Sow in twelve-inch drills as early as the ground can be worked, and once in two weeks for succession, and thin to one or two inches apart as soon as the rough leaves appear.

*It should be borne in mind that radishes must have plenty of room, and be grown quickly, or they will invariably be tough and wormy.*

**Early Long Scarlet, Short Top, Improved.**—This is unquestionably the best standard variety for private gardens or market use. It grows six or seven inches long, half out of the ground; is very brittle and crisp, and of quick growth; color bright scarlet; small top; and is uniformly straight and smooth. Highly recommended.

**Wood's Early Frame.**—A sub-variety of the preceding, a little shorter and thicker at the top; brilliant scarlet color, mild, brittle, of fine flavor, and better adapted to forcing.

**Early Round Deep Scarlet.**—Similar in form to the scarlet turnip but much darker in color. Flesh white, very crisp and tender; top small. Well adapted for growing in frames, and the roots bring the highest price because of their peculiarly beautiful color.

**Early Scarlet, Turnip Rooted.**—A small, round, red, turnip-shaped radish with a small top, and of very quick growth. A very early variety, deserving general cultivation on account of its rich color, crisp and tender qualities; should be used while young. The white and red do well mixed.

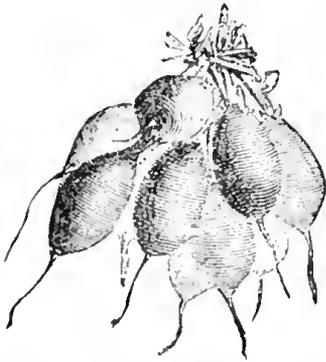
**Early Scarlet Turnip, White Tipped.**—A beautiful variety, deep scarlet with white tip. It is very ornamental for table use, and is becoming very popular as a market variety. It is of same size and shape as the Early Scarlet Turnip.

**Early White, Turnip Rooted.**—A little flatter in shape than the preceding and pure white in color, with a very small top; flesh pure white, and semi-transparent. It is a few days later than the last, and will bear the heat longer without becoming spongy.

**Early Scarlet, Olive Shaped.**—In the form of an olive, terminating in a very slim tap root. Skin fine, scarlet; neck small; flesh rose colored, tender and excellent. Early, and well adapted for forcing or general crop.



Early Scarlet, Turnip Rooted.



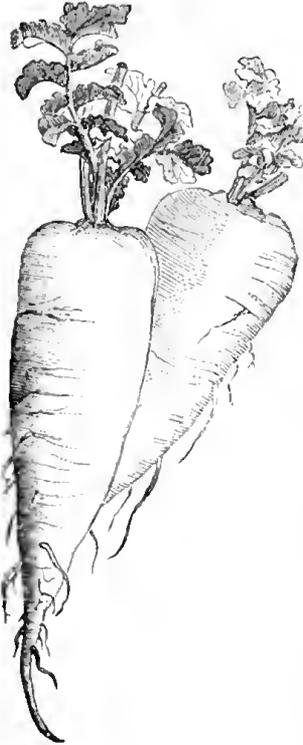
Early Scarlet, Olive Shaped.

It is of quick growth, tender and brittle, of perfect globe shape and golden colored skin. It seems to produce tender radishes in the hottest climates.



French Breakfast.

crisp, and very good flavored.



Dayton.

inches apart. For winter use, pull before severe frost, and store in damp sand in cellar.

**French Breakfast.**—A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the root, which is pure white. A splendid variety for the table, not only on account of its excellent qualities, but for its beautiful color.

**Golden Globe.**—This variety is very popular in the Southern States.

**Grey Summer Turnip.**—Round, turnip shaped, though often irregular in form. The skin of the upper part is mottled with greenish brown, wrinkled and often marked with transverse white lines. Flesh mild, of greenish white color, and tolerably solid. Half-early, and a good variety for summer use.

**Long White Napes.**—Skin white, and of fine texture, flesh fine grained, crisp, and very good flavored. A late, fall variety.

**Dayton.**—This splendid radish, in size, is intermediate between the California Mammoth Winter and the White China Winter, being six or seven inches in length and three inches in diameter at the crown, tapering pretty regularly to the point. The skin is very thin, clear white with greenish purple tinge at top; flesh pure white, crisp and firm; flavor very pleasant and free from any sharp taste. It is a late summer or fall radish. It is in condition for table use when quite small, and continues so during its full period of growth.

**Winter Varieties.**

**CULTURE.**—Sow about the same time as winter turnips, on light, rich soil, in drills eighteen inches apart; give frequent cultivation, and thin to two or three

**Scarlet China, Winter.**—Form rather conical, and very smooth; of a bright rose color; flesh firm, like the Black Spanish, but more pungent. Cultivation the same as for that variety.

**Long Black Spanish, Winter.**—One of the latest as well as the hardiest of the radishes, and is considered an excellent sort for winter use. Roots oblong, black, of very large size and firm texture.

**Large White Spanish, Winter.**—Roots somewhat fusiform, retaining their diameter for two-thirds their length, sharply conical at the base, and when full grown, measuring seven or eight inches in length, by about three inches in diameter at the fullest part. Skin white, slightly wrinkled, sometimes tinged with purple, where exposed to the sun. Flesh white, solid and pungent, though milder than the Black Spanish.

**California Mammoth White China, Winter.**—First introduced into this country by the Chinese, in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the root. The flesh is tender and crisp, and it keeps perfectly well through the winter.

**RAPE.**

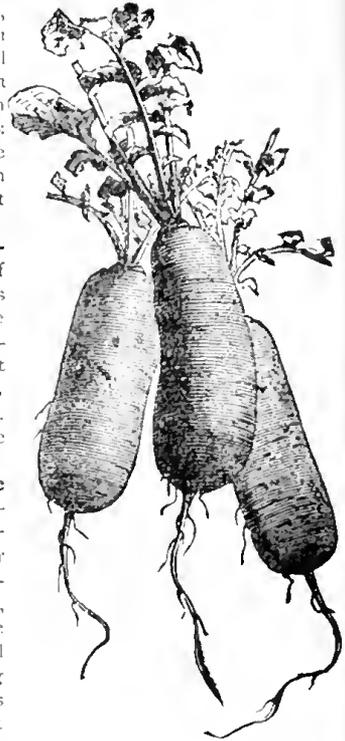
This plant is extensively cultivated in England, both for forage and for the seed, from which is manufactured rape seed oil. The seeds are also much used as food for canary birds. It is often used as a salad plant like mustard. As a forage plant, the yield is abundant, and fed green, it is very nutritious, and nearly all animals are very fond of it. Sow in May, either broadcast or in drills; if the former, ten pounds, and if the latter, four pounds per acre.

**RHUBARB, or PIE PLANT.**

Fr. *Rhubarbe*.—Ger. *Rhabarber*.

Rhubarb, familiarly known as Pie Plant or Wine Plant, is cultivated in gardens for its leaf stalks, which are used for pies and tarts. Immense quantities are now annually sold in all the large markets. No private garden should be without a bed of it.

**CULTURE.**—Rhubarb succeeds best in deep, somewhat retentive soil. The richer its condition, and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall trench a piece of ground, and manure it well; then transplant the young plants into it three feet apart each way. Cover with leaves or litter the first winter, and give a dressing of coarse manure every fall. The stalks should not be plucked till the third year, and the plant



Scarlet China, Winter.



Rhubarb.

never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of Linnæus, Giant and other improved sorts. Like the seeds of fruit trees, seed cannot be relied upon to reproduce the same variety.

## RICE, WILD.

*Zizania aquatica.*

An annual which sows itself in the fall, about middle of September, lies dormant all winter, in spring commences to sprout as soon as the water gets warm, reaching the surface during the first half of June. It grows very rapidly, in one to eight feet of water, ripens late in August or early in September. It should be planted in the fall, before ice forms, broadcast, from a boat, in two or three feet of water, having a mud bottom. It has been successfully planted through the ice in winter and in the spring, but it succeeds best when planted in the fall. As an attraction for wild fowl, it cannot be equaled. In large ponds and lakes it purifies the water, affords a refuge for the small fry from the large fish, as well as furnishing the small fry plenty of food from the animal-culc upon its stalks; for planting in fish ponds it is especially desirable. It also does well along the shores of marshes, and makes a good hay. At the south, two crops can be cut, and all cattle are very fond of it.

## ROQUETTE.

An annual plant, of which the leaves are used as a salad.

Sow thinly in drills a foot apart as soon as spring opens. Watering often, when necessary, diminishes the tart taste of the leaves. This is objectionable only as the leaves become old; they should be used while young.

## Salsify, or Vegetable Oyster.

Fr. *Salsifis*.—Ger. *Hafer-wurzel*.

The long, white, tapering root of Salsify resembles a small parsnip, and when cooked, is a good substitute for oysters, having a very similar flavor.

CULTURE.—It succeeds best in a light, well enriched soil, which should be stirred to the depth of twelve or fourteen inches. If it is necessary to use manure, it should be very fine and well rotted, for if it is fresh and coarse, the roots will grow irregular and ill shaped.

Sow early and quite deep, and give the general culture recommended for the parsnip. The roots are perfectly hardy, and may remain out all winter, but should be dug early in the spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in sand.

## SPINAGE.

Fr. *Epinard*.—Ger. *Spinat*.

The Spinage is very hardy, extremely wholesome and palatable, and makes a delicious dish of greens, retaining its bright green color after cooking.

CULTURE.—Should be planted in very rich ground, the richer the better. Sow in drills one foot apart, and commence thinning out the plants when the leaves are an inch wide, and all should be cut before hot weather, or it will be tough and stringy. For early spring use, the seed should be sown early in autumn, and every two weeks thereafter if a succession is desired. In the Northern States, the plants will require a slight protection of leaves or straw, but in the Southern States, no protection is necessary, and they will continue their growth most of the winter.

**Round Summer.**—This variety is generally preferred for early sowing, and is the most popular with our market gardeners; leaves large, thick and fleshy; not quite so hardy as the Prickly, but stands the winter very well.

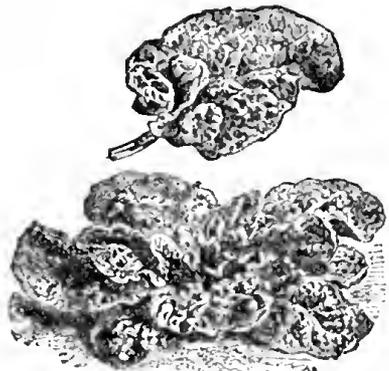
**Improved Thick Leaved Summer.**—An improvement on the preceding, with larger and thicker leaves, and of more substance. Particularly recommended for market garden use.

**Long Standing (Late Seeding).**—An improved strain of excellent merit, having all the good qualities of the ordinary sorts; what renders it especially desirable is the fact that it is much later in going to seed than any other variety. This valuable property will be appreciated by market gardeners.

**Prickly Winter.**—The hardiest variety, and will withstand the se-



Salsify.



Round Summer.



Prickly Winter.

verest weather, with only a slight protection of leaves or straw. The seed is prickly, leaves triangular, oblong, or arrow shaped. It is employed for fall sowing, which in this latitude is made about the first of September.

## SQUASH.

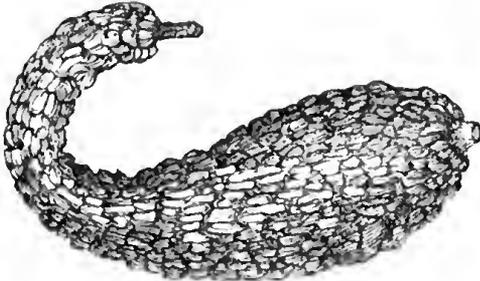
Fr. *Couge*.—Ger. *Kuerbis*.

The Squash is one of the most nutritious and valuable of all our garden vegetables. The summer varieties come to the table early in the season, and are very palatable, while the winter sorts can be had in perfection from August until the summer varieties are again in condition. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate, and much less to secure, will give twice as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

**CULTURE.**—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted six feet apart each way, and the winter sorts eight feet. Three plants are sufficient for a hill; and care should be taken not to injure or break the stems from those intended for winter use, as the slightest injury will increase the liability to decay.

**Early Yellow Bush Scallop.**—An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored; very productive; used when young and tender for boiling, and at maturity for making pies.

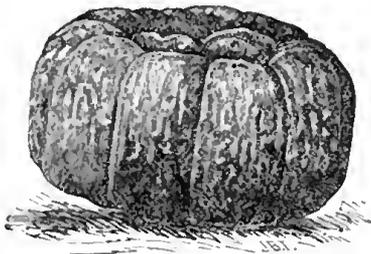
**Early White Bush Scallop.**—Similar to the preceding, except in color which is white.



Summer Crookneck.

**Summer Crookneck.**—One of the best; very early and productive. It is small, crooked neck, covered with warty excrescences; color bright yellow; shell very hard when ripe.

### WINTER VARIETIES.

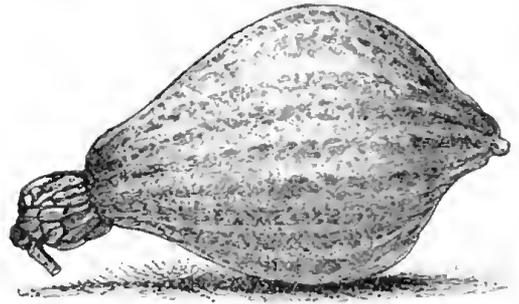


Improved American Turban.

low, thick, fine grained, sugary and well flavored.

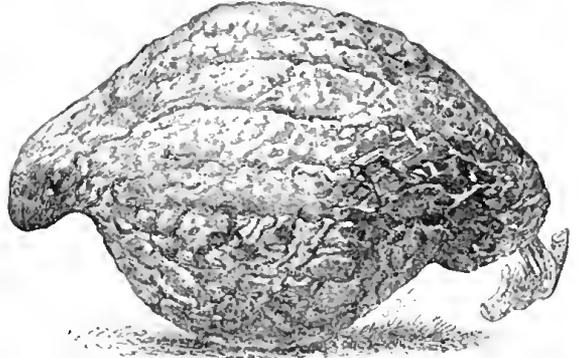
**Boston Marrow.**—A fall and winter variety, very popular in the Boston market. Of oval form; skin thin; when ripe, bright orange mottled with light cream color; flesh rich salmon yellow, very dry, fine grained, and for sweetness and excellence, unsurpassed, but not as dry as the Hubbard.

**Improved American Turban.**—An excellent variety for use in the autumn and early winter. Shaped somewhat like a turban, light yellow color with occasionally a dash of light bluish green. Flesh orange yellow,



Boston Marrow.

**Hubbard.**—This is a superior variety, and the best winter squash known; flesh bright orange yellow, fine grained, very dry, sweet and rich flavored; keeps perfectly good throughout the winter; boils or bakes exceedingly dry, and is esteemed by many to be as good baked as the sweet potato. We have an unusually fine strain of this variety, and can recommend our stock as in all probability the best in the country



Hubbard

**Butman.**—This is a cross between the Yokohama and Hubbard. The flesh is between a salmon and a lemon color. It has all the qualities of a first class squash, being very dry, fine grained, and of excellent flavor. Size medium; color light stone, distinctly striped and splashed with yellowish white.

**Marblehead.**—It is unquestionably an excellent keeper, and is finer grained and drier than any sort we have seen. About the size of the Hubbard with shell of bluish green, and bright orange flesh. Requires the whole season to mature.

**Winter Crookneck.**—The most certain to produce a crop of any, the strong growing vines suffering less from insects than those of the othersorts. Color varying from dark green to clear yellow, frequently changing to the latter after being gathered.



Winter Crookneck.

Flesh variable, sometimes close grained and fine flavored and in other cases coarse and stringy. If kept from cold and damp, they will keep the entire year.

## SUGAR CANE.

**Early Amber.**—This comparatively new variety is now being successfully grown in our extreme northern latitudes. It may be planted as late as the 15th of June, and will be ripe enough to manufacture in September. It is the earliest variety with which we are acquainted. The beautiful, amber colored syrup it produces is thought to be superior in flavor to any other, and for sugar, it is unsurpassed. There are many varieties that can be profitably grown where the seasons are long, but this can be grown wherever Indian corn will grow. It is useless to plant cane seed before the weather is warm in spring. Three or four pounds are required per acre.

**Early Orange.**—An exceedingly valuable variety. Very large, of strong and vigorous habit, and does not fall down. Its yield is twenty-five per cent. in excess of the Early Amber, and has a very pleasant flavor. It is an early cane, maturing only ten days later than the Early Amber. We recommend it highly to all desiring a superior article, for all localities, excepting the extreme north.

## SUNFLOWER.

**Large Russian**—*Helianthus*.—The Sunflower, during the past few years, has attracted considerable attention as a profitable field crop, its leaves being used for forage, and its seeds as food for poultry, and the manufacture of oil. It is also planted with satisfactory results on low, swampy grounds, to absorb miasma.

## TOBACCO.

Tobacco is an annual plant, and although it grows to greater size in the south, an equally good quality can be produced in the hot, dry summers of the north.

**CULTURE.**—The seed should be sown as early as possible after the danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring, on the ground intended for the seed bed, then dig and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches



Tobacco.

high, transplant into rows six feet apart each way, and cultivate thoroughly with plow and hoe.

**Connecticut Seed Leaf.**—Best adapted to the climate of the Middle and Northern States, as it is more hardy and endures the cold better than the tender varieties grown south. In many of the Northern States and in Canada, this variety is a staple crop.

**Yellow Oronoko.**—This variety has smaller leaves than the preceding, and is intermediate in size and vigor.

**Silky Prior.**—Used very largely in the manufacture of bright wrappers, for which purpose this variety and the preceding are unexcelled.

**White Burley.**—Especially desirable for the manu-

facture of cigars, as the leaf of this kind readily absorbs a large quantity of manufacturing material.

**Havana.**—Pure Cuban grown seed, raised in the famous district of Vuelta de Abajo. When grown in this country commands a high price for cigar stock.

## TOMATO.

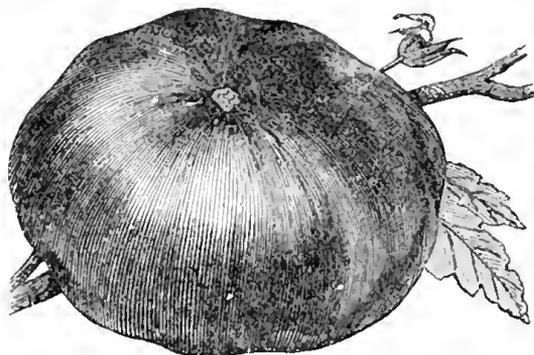
*Fr. Pomme d'Amour.*—*Ger. Liebesapfel.*

This vegetable is too well known to need any description. There has been a great improvement in it during the last few years, and the varieties now offered are greatly superior to those known a few years ago.

**CULTURE.**—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. Sow in hot-beds during March, or from six to eight weeks before they can be set out of doors; when the plants have four leaves, transplant into shallow boxes, setting them four or five inches apart; give plenty of air, and endeavor to secure a vigorous, but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky, about as broad as high. A slight check while the plants are small, will materially diminish their productiveness. Set out of doors as soon as danger from severe frosts is over, but before doing so, harden off the plants by gradually exposing them to the night air and the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully, and cultivate well as long as the vines will permit. The fruit is improved in quality if the vines are tied to a trellis or to stakes.

### FIRST EARLY SORTS.

**Early Conqueror.**—This seems to be the earliest at the north, and is very popular. Vine medium size, vigorous, productive, bearing immense clusters of fruit, which is medium in size, irregular, flattened and slightly corrugated, scarlet crimson color, often dotted and splashed with gold color.



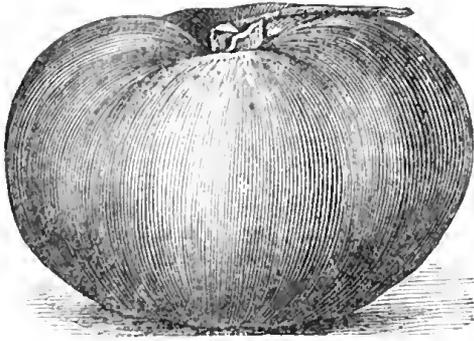
Early Conqueror.

**Hundred Day.**—At the south, this seems to be the earliest sort, and is largely used for shipping north. Vine medium, with few and small leaves, bearing small clusters of irregular shaped fruit of medium size, distinct bright scarlet vermilion color, flat, with broad, shallow corrugations at the stem, but perfectly smooth and of a regular, wavy outline at center. Quality very good, and ripens well after picking.

**Canada Victor.**—Very early. Vines large, spreading, productive. Fruit of light scarlet color, round, smooth, of medium size, solid, and ripening up well. A very popular variety.

**Hathaway's Excelsior.**—Vines large, vigorous, continuing productive through the season; fruit a little below medium size, always round, smooth, apple shaped,

and when fully ripe, of a dark, rich color. Those who insist upon perfectly smooth fruit will find this the best early sort.



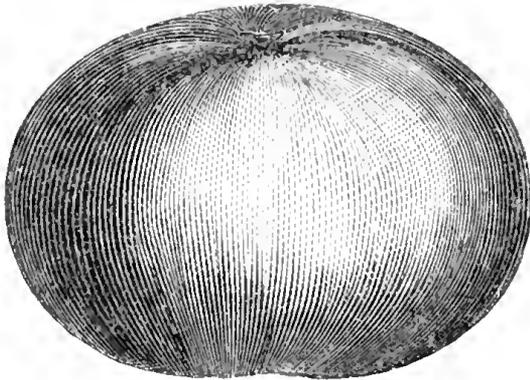
Canada Victor.

**Hubbard's Curled Leaf.**—Vines very dwarf, so that the plants can be set closer than most; leaves broad and thick, but curling up at the edges as the fruit ripens; fruit in small clusters, of rich, dark color, and fair quality, but stands shipment and ripens up better after picking than any other sort.

#### VARIETIES FOR GENERAL CROP.

**Ferry's Improved Early Large Smooth Red.**—A valuable variety for general crop. Vine vigorous and productive. Fruit medium size, oval form, light crimson color, and of excellent flavor.

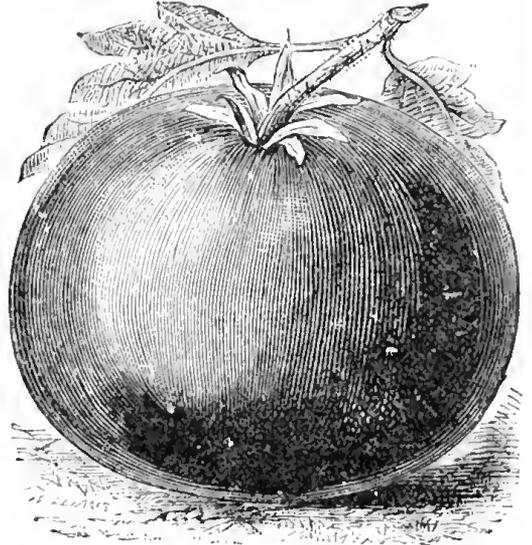
**Acme.**—One of the most popular varieties, both with marketmen and consumers. Vines large, and continuing to produce abundantly until frost. Fruit in clusters of four or five, invariably round, smooth, and of good size, ripening evenly and without cracking, and stands shipping well; color purplish pink; flesh solid and of good flavor.



Trophy.

**Trophy.**—Well known as one of the best. Vines of medium size, but producing compact clusters of fruit in immense quantities; fruit large, smooth, of bright red color, solid and of good flavor. Our stock is from carefully selected specimens grown from seed procured directly from the originator.

**Livingston's Favorite.**—Originated with Mr. Livingston, who also introduced the Acme and Paragon, and presents this as the largest perfect shaped tomato in cultivation. On our Trial Grounds, and in the hands of many others who have tested it during the past season, it has proved not only the largest and handsomest, but one of the best in quality of any on our list. Vine medium, with large, dark green, healthy leaves, having numerous clusters of from three to seven very large, smooth tomatoes which are a rich, dark red color, oval



Livingston's Favorite.

outline, exceedingly smooth, free from all cracks or blemishes, and ripening evenly throughout; flesh very firm but without green spots. This variety seems remarkably free from rot, and must become a favorite with all who try it.

**Essex Hybrid.**—Similar to the Acme, but with larger, darker colored fruit, which is always smooth and handsome. Quality among the best. An improved Acme.

**Paragon.**—Vine very large, vigorous and productive, and continuing so until killed by frost. Fruit large, round, of a very dark, rich crimson scarlet color, with occasionally a purplish tinge. It ripens up evenly, and the flesh is thick and fine flavored.

**Livingston's Perfection.**—A new variety, similar to the last, but an improvement upon it, it being a little earlier, and invariably smooth and handsome. It is probably the handsomest tomato grown and all who have tried it pronounce it of the highest quality.

**Queen.**—A new sort, very popular at the east for canning. Vine very large and late, producing a large quantity of very large, solid, well ripened fruit of fine scarlet color, and which is so firm that it will stand rough usage better than any other large sort.

#### TURNIP.

Fr. *Navet.*—Ger. *Rueben.*

This wholesome and agreeable vegetable has been cultivated from time immemorial, as a field crop, and is one of the staple products of the farm. It is most easily affected in its form and flavor by soil, climate and mode of culture. There are a great many varieties, but we have selected the following as the best for the garden or farm.

**CULTURE.**—Sow in drills fourteen inches apart, and half an inch deep, or they may be sown broadcast, but in either case be sure to have the ground freshly dug. Keep them perfectly free from weeds, and when the bottoms begin to enlarge, brush away the earth from about the roots to the depth of half an inch or more, and give them a light dressing of wood ashes. This is the surest mode of obtaining fair and smooth turnips in old gardens, where they are almost certain to grow wormy if the earth is allowed to remain in contact with the roots. For the spring and summer crops, it is important to get them started very early so that they may have time to grow to sufficient size before hot weather, when they will soon become tough and strong.

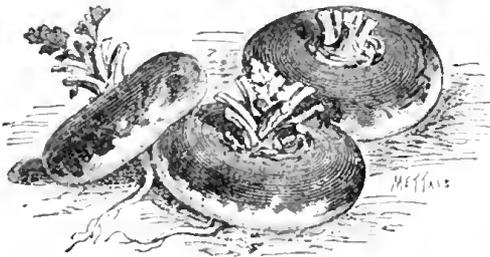
**FOR TURNIPS.**—For the fall and main crop, sow in the

Middle and Western States, from the middle of July to the last of August, as directed for the spring sowing. In the field, turnips are more generally sown broadcast, though much the larger crops are obtained by drill culture.

**FOR RUTA BAGAS.**—The Ruta Baga is usually sown from the 20th of June till the 15th of July, in two-foot drills, and thinned out to ten inches apart. It is necessary that the ground should be dry and made very rich. To preserve turnips in good order for winter, store them in barrels placed alongside the wall of a cool cellar, and cover them with sand or turf to keep them fresh. Another method is to put them in a cellar or dry pit, and cover with straw, and then earth over to the depth of eight or ten inches. Thus protected, they will keep well till spring.

*For feeding stock in fall and winter, there is nothing superior to turnips and ruta bagas, and they will yield a larger amount of food than almost anything else, on the same space of ground. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure no crop will prove more remunerative.*

### WHITE FLESHED SORTS.



#### Early Purple Top Munich.

**Early Purple Top Munich.**—A very handsome, early turnip, decidedly earlier than any other sort, color white, with bright purplish red top; of fine quality when young, but becoming bitter with age; we can recommend this variety as the best for first crop.

**White Egg.**—A quick growing, egg shaped, perfectly smooth, pure white variety, growing half out of the ground, with small top and rough leaves. Its smooth, white skin and quick growth make it particularly adapted for fall market purposes. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties.

**Early White Stone.**—This is an English, garden variety, of round shape, firm texture, quick growth, medium size, and is cultivated extensively as an early market variety.

**Jersey Navet.**—An exceedingly delicate, sweet, white turnip for table use. It is very popular in Paris markets, where it is esteemed one of the best. Grows long, somewhat like a parsnip in form.

**Early White Flat Dutch.**—A medium sized, white, flat turnip, of quick growth, juicy, and of excellent quality when young. Sow in spring or fall. It is designed



White Egg.

for table use, and is spongy and inferior when overgrown.

**Early White Flat Dutch, Strap Leaved.**—A most excellent, early, garden variety, much used in the Southern States. Is sure to bottom; very early, sweet and tender, and grown for table use. The seed we offer is our own growing, from selected bulbs.



#### Early Purple Top, Strap Leaved.

**Early Purple Top Strap Leaved.**—This is very similar to the preceding, except in color, being purple, or dark red on the top. It is of good quality, and recommended highly as a garden turnip.

**D. M. Ferry & Co's Improved Purple Top, Strap Leaved.**—This is a very early variety, and is rapidly becoming the favorite for table use; form round, flat, medium size, very small top, with but few leaves, which are entire and of upright growth, resembling horseradish leaves in shape; flesh fine grained and tender; a purely American variety.

**Cow Horn, or Long White.**—This variety is carrot like in form, growing nearly half out of the ground, and generally slightly crooked. It is pure white, except a little shade of green near the top. It is delicate and well flavored, of very rapid growth, and has obtained considerable favor as a market sort for fall and early winter use. It is in increasing demand every year.

**Improved Purple Top Mammoth.**—Globe shaped, large, firm in texture, juicy, and of exceedingly quick growth, and very hardy.

**Large White Flat Norfolk.**—A standard sort for field culture, and is extensively grown all over the world for stock feeding. It is round, flat; color white; often attains a very large size. The seed should be sown a little earlier than the table sorts. It is allowed to stand out during the winter at the south and southwest, where the tops are used for greens.

**Red Top Flat Norfolk.**—A handsome, flat shaped root, purple above ground, with small top and tap root. An excellent variety, grown both for table use and stock, differing but little in shape from the Purple Top Strap Leaved, except in the form of the leaf, though not of so fine a quality.

**Pomeranian White Globe.**—Is one of the most productive kinds; in good, rich soil, the roots will frequently grow to twelve pounds in weight; it is of the most perfect globe shape; skin white and smooth, leaves dark green, and of strong growth.

**Purple Top White Globe.**—A variety of the purple top flat turnip, from which it originated. It is globular in form, and nearly as large as the Pomeranian White Globe; of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well, and is a fine market sort.

**Sweet German.**—This variety is very popular in many sections, notably so in the New England States. It partakes largely of the nature of the ruta бага, and should be sown a month earlier than the flat turnips. The flesh is white, hard, firm and sweet, and it keeps nearly as well as the ruta бага. Highly recommended for winter and spring use.

**Seven Top.**—Cultivated extensively in the south for the tops, which are used for greens. It is very hardy, and will grow all winter, but does not produce a good bulb, and is only recommended for the tops.

### YELLOW FLESHED SORTS.



**Early Yellow Montmagny.**—A new early sort, the most beautiful of the yellow fleshed varieties. Leaves medium sized, green stained with purple; bulb oval, medium sized, clear yellow stained with bright purple at the top; flesh yellow, fine grained, sweet and tender. Among the earliest and promises to be an exceedingly popular sort.

**Large Amber Globe.**—

One of the best varieties, either for table use or for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow, with green top. Hardy, keeps well, a good cropper, and grows to a very large size. Very popular south.

**Orange Jelly, or Robertson's Golden Ball.**—Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet introduced. Not of large size, but firm, hard and of most excellent flavor. Keeps well, and as a table variety is superior.

**Purple Top Yellow Aberdeen.**—Roots medium size, round form; flesh pale yellow, tender and sugary; hardy and productive, and keeps well. It is an old, esteemed variety, considered as approaching very nearly to the ruta бага in hardness and firmness of texture.

**Early Yellow Finland.**—An early yellow fleshed variety, of beautiful form, medium size, flat shape. The flesh is remarkably fine and close grained, and of rich, sugary flavor. A most excellent early, garden variety, and said to be less troubled by worms eating the roots, than most sorts.

**Early Yellow Malta.**—This is a beautiful, symmetrical, early variety of medium size. Skin very smooth, bright orange yellow, fine grained, sweet and tender. Foliage small and bulbs can be grown quite close to-

gether. One of the best yellow summer turnips in every respect.

### SWEDES, OR RUTA BAGAS.

**Yellow Swede or Ruta Baga.**—This and the following form a distinct class, and should be sown at least a month earlier than the preceding. Shape oblong; dull reddish color above ground, but yellow underneath; is harder than the common turnip, and will keep solid till spring.

**Carter's Imperial Hardy Purple Top Yellow Ruta Baga.**—A most excellent sort for either table use or feeding stock. Flesh yellow, solid, firm, sweet and rich. It is a hardy sort, yields heavily, with no tendency to long necks.

**Large Ovoid Purple Top Swede.**—This variety is the result of a long selection of roots to obtain the highest perfection of weight, quality, purity, and permanence of type. In size it is mammoth, and is a very heavy cropper. It closely resembles D. M. Ferry & Co's celebrated Improved Purple Top Yellow Ruta Baga, except in shape and size, this variety being longer and more oblong. When a large Swede of superior quality is desired, we recommend this variety.

**D. M. Ferry & Co's Improved Purple Top Yellow Ruta Baga.**—The best variety of Swedish turnip in cultivation. Hardy and productive. Flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly with no side or bottom roots; color deep purple above, and bright yellow under the ground; leaves small, light green, with little or no neck; the most perfect in form, the richest in flavor, and the best in every respect.

**Bangholm Ruta Baga.**—A very superior variety, both in form and quality, and held in high estimation in many parts of England. Of large size, small neck, few or no side roots, and yields well. Flesh yellow, sweet and solid; skin yellow, with purple top.

**Sweet Russian, or White Ruta Baga.**—This variety is a most excellent kind, either for the table or stock. It grows to a very large size; flesh white, solid, firm texture, sweet and rich; keeps better than any of the preceding, and is very popular.



D. M. Ferry & Co's Improved, Purple Top, Yellow Ruta Baga.

# AROMATIC, MEDICINAL

—AND—

# POT HERBS.

**GENERAL CULTURAL DIRECTIONS.**—Most of the varieties thrive best on rich, sandy soil, which should be carefully prepared and well cultivated as the young plants are for the most part delicate and easily choked out by weeds. Sow as early as the ground can be made ready, in drills sixteen to eighteen inches apart; or they may be planted as a second crop—the seed sown in beds in April, and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun, and then thoroughly dried in the shade.

**Anise, (*Pimpinella Anisum*).** Fr. *Anis*.—Ger. *Anis*.—A well known annual herb whose seeds, which have an agreeable aromatic odor and taste, are used for dyspepsia and colic and as a corrective of griping and unpleasant medicines. Sow early, and thin to three inches apart in the row.

**Balm, (*Melissa officinalis*).** Fr. *Melisse*.—Ger. *Melisse*.—A perennial herb. The leaves have a fragrant odor, similar to lemons, and are used for making balm tea for use in fevers, and a pleasant beverage called balm wine. Plant early, and thin to ten inches apart.

**Bene, (*Sesamum Indicum*).** Fr. *Bene*.—Ger. *Bene*.—Much used at the south, but too tender at the north. The seeds are used for food, and furnish an oil which does not easily become rancid, and is used for softening and whitening the skin. The leaves, if immersed in a tumbler of water, will convert it into a mucilaginous drink very beneficial in cases of cholera infantum, diarrhoea, etc. Do not plant until settled warm weather, and allow the plants to stand two feet apart.

**Borage, (*Borago officinalis*).** Fr. *Bourrach*.—Ger. *Boretsch*.—A hardy annual, used as a pot herb, and for bee pasturage. The leaves immersed in water, give it an agreeable taste and flavor. Sow in April, and thin to eight inches apart. In some places this becomes a troublesome weed.

**Caraway, (*Carum carui*).** Fr. *Carvi*.—Ger. *Kummel*.—Cultivated for its seeds which are used in confectionery, cakes, etc., and the leaves are sometimes used in soups. If sown in August, the plants will give a fair crop of seed the next season. Plant in drills, and thin to six inches apart.

**Catnip, (*Nepeta cataria*).** Fr. *Nepeta*.—Ger. *Katzenkraut*.—A hardy perennial, well known as a valuable mild nervine for infants. The plant should be pulled up by the roots when in full flower, and dried in the shade. The seed may be sown in drills twenty inches apart, either in fall or spring.

**Coriander, (*Coriandrum sativum*).** Fr. *Coriandre*.—Ger. *Koriander*.—A hardy annual, cultivated for its seeds which have an agreeable taste, and are used in confectionery and to disguise the taste of medicines. Sow early in the spring, and gather on a dry day, bruising the stems and leaves as little as possible, as when injured they have a disagreeable odor, which they impart to the seed.

**Dandelion, (*Taraxacum dens-leonis*).** Fr. *Pissenlit*.—Ger. *Lowenzahn*.—Improved Thick Leaved.—Those who only know the Dandelion as the persistent weed of our roadsides and lawns, know no more of its real value than one who has only seen the poisonous wild parsnip or carrot, knows of the value of these vegetables. *The improved variety makes one of the earliest and best greens in cultivation.* For this purpose sow early in the spring, on very warm, rich soil, in drills eighteen inches apart; thin the young plants to five inches in the row, and cultivate well, and they will be fit for cutting the next spring. It is also grown extensively for its roots; for this purpose, sow in September, and cultivate well during the fall and the following season, and the roots will be fit to dig in October.

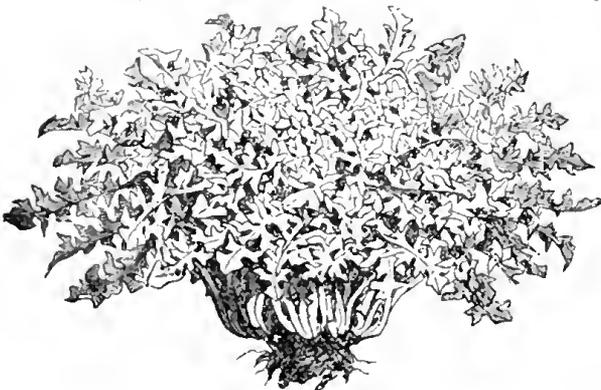
**Dill, (*Anethum graveolens*).** Fr. *Aneth*.—Ger. *Dill*.—An annual, cultivated for its seeds which have an aromatic odor, and a warm, pungent taste. They are good for flatulence and colic in infants, and are sometimes added to pickled cucumbers to lighten the flavor. Sow early in spring, and keep clear of weeds.

**Horehound, (*Marrubium vulgare*).** Fr. *Mar-rube*.—Ger. *Andorn*.—A perennial herb, with a strong, aromatic smell, and a bitter, pungent taste. It is a tonic, and enters largely into the composition of cough syrups and lozenges. Will thrive in any soil, but is stronger if grown on light, poor land.

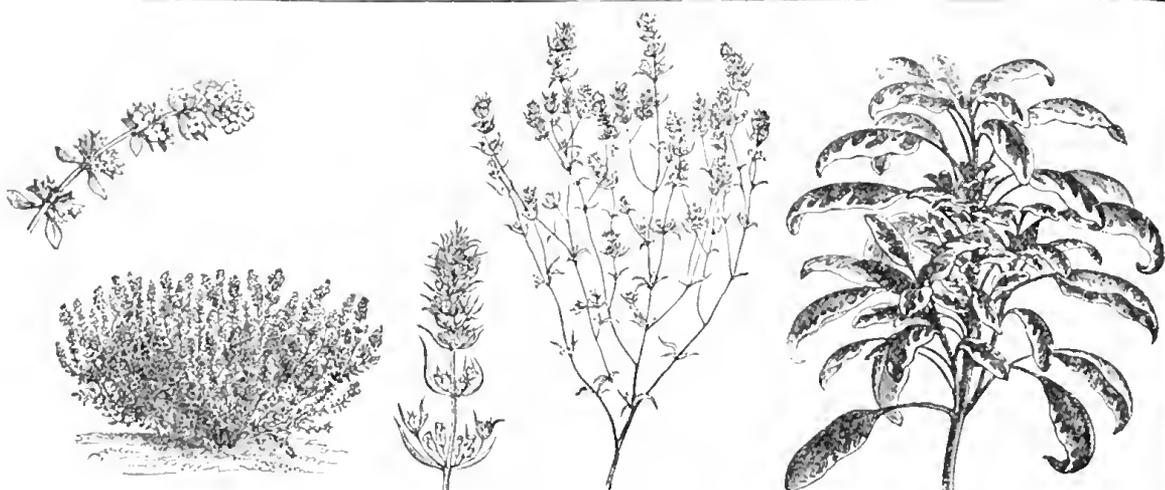
**Hyssop, (*Hyssopus officinalis*).** Fr. *Hyssope*.—Ger. *Isop*.—A hardy perennial with an aromatic flavor, and warm, pungent taste. It is a stimulant and expectorant, and is used in asthma and chronic catarrh. The flowering summits and leaves are the parts used. It likes a dry, sandy soil, and the plants should be thinned to eighteen inches apart.

**Lavender, (*Lavendula vera*).** Fr. *Lavande*.—Ger. *Wohlriechende spicke*.—A hardy perennial. Its long spikes are used for the distillation of lavender water, or are dried and used to perfume linen. The flowers should be picked before fading, and dried quickly.

**Rosemary, (*Rosemarinus officinalis*).** Fr. *Rosmarin*.—Ger. *Kosmarin*.—A hardy perennial with fragrant odor, and a warm, aromatic, bitter taste. May be easily raised from seed, but does not reach



Improved Thick Leaved Dandelion.



Thyme.

Summer Savory.

Sage.

a size fit for use until the second season. The dried leaves deteriorate rapidly by keeping.

**Rue**, (*Ruta graveolens*). Fr. *Rue*.—Ger. *Raute*.—A hardy perennial with a peculiar smell. The leaves are bitter, and so acrid as to blister the skin. It is a stimulant and anti-spasmodic, but must be used with great caution, as its use sometimes results in serious injury. It must not be suffered to run to seed, and does best on poor soil.

**Saffron**, (*Carthamus tinctorius*). Fr. *Saffran*.—Ger. *Saffran*.—A hardy annual from Egypt, but which has become naturalized in many parts of the country. Cultivated for its flowers, which are used in dyeing and to make the cosmetic powder called *rouge*, also, to adulterate the valuable European saffron, which is the flower of the *Crocus sativus*, and has strong medicinal properties. Sow early, and gather the leaves before fading, drying them in the shade.

**Sage**, (*Salvia officinalis*). Fr. *Sauge*.—Ger. *Salbei*.—A hardy perennial, possessing some medicinal properties, but cultivated principally for use as a condiment, it being used more extensively than any other herb for flavoring and dressing. Sow early in spring, on very rich ground, cultivate often, and thin the plants to sixteen inches apart. Cut the leaves and tender shoots just as the plant is coming into flower, and dry quickly in the shade. The plants will survive the winter, and may be divided, and will give a second crop of superior quality to the first.

**Sweet Basil**, (*Ocimum basilicum*). Fr. *Basilic*.—Ger. *Basilikum*.—A hardy annual from the East Indies. The seeds and stems are used in flavoring soups and sauces, and have the flavor of cloves.

**Sweet Fennel**, (*Anethum foeniculum*). Fr. *Fenouil*.—Ger. *Fenchel*.—A hardy perennial. The leaves are largely used in Europe in soups, fish sauces, garnishes and salads, the seed being sometimes used in confectionery. Sow and cultivate like Anise.

**Sweet Marjoram**, (*Origanum marjoram*). Fr. *Marjolaine*.—Ger. *Marjoram*.—A perennial plant, but not hardy enough to endure the winter at the north. The

young, tender tops are used green for flavoring, or they may be dried for winter use. Sow in drills, as early as possible, and thin out the plants to ten inches.

**Summer Savory**, (*Satureja hortensis*). Fr. *Sarriette annuelle*.—Ger. *Bohnenkraut*.—A hardy annual, the dried stems, leaves and flowers of which are extensively used for flavoring, particularly in dressings and soups. Culture the same as that of Sweet Marjoram.

**Tansy**, (*Tanacetum vulgare*). Fr. *Tanaisie*.—Ger. *Wurmkraut*.—A hardy, perennial plant from Europe, but growing wild in many parts of the country. The leaves, when green, have a peculiar aromatic odor which they lose in drying. Cultivated for its medicinal properties, which are those common to bitter herbs.

**Tarragon**, (*Artemisia dracunculus*). Fr. *Estragon*.—Used in salads to correct the coldness of the other herbs. Its leaves are excellent when pickled. Poor, dry soil is essential to produce it in perfection.

To make Tarragon Vinegar, the Tarragon should be gathered before it blossoms; remove the larger stalks, using only the small and tender ones with the leaves; pull the leaves and stalks in pieces, bruising or rubbing them with your hands. If you have bottles in which chow-chow came put the Tarragon into them, and cover the leaves and stalks with vinegar. After it has stood for nine or ten weeks drain and strain, and put into small bottles ready for use in meat sauces, soups, etc.

**Thyme**, (*Thymus vulgaris*). Fr. *Thym*.—Ger. *Thymian*.—This herb is a perennial, and is both a medicinal and culinary plant. The young leaves and tops are used for soups, dressing and sauce, and a tea is made of the leaves, which is a great remedy in nervous headache. Sow as early as the ground will permit.

**Wormwood**, (*Artemisia absinthium*). Fr. *Armoise*.—Ger. *Wermuth*.—A perennial plant of strong and fragrant odor, and aromatic, but intensely bitter taste. The leaves are used as a tonic and vermifuge, and also for fresh bruises. Is raised from seed, and propagated by cuttings or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant.

## FRUIT TREE SEEDS.

**Apple**.—Apple seeds do not produce the same varieties, but generally give a hardy, though inferior sort, and upon these seedlings are grafted or budded the finer varieties. The seed may be planted in the fall, in rows two feet apart, or they may be planted in early spring, but in that case the seed must first be mixed with damp sand and frozen, after which care must be taken that

they do not become dry before planting. As soon as the plants are up, they should be well cultivated, and every effort made to secure a vigorous growth the first season, and as soon as large enough, may be budded in the summer or grafted in the spring.

**Cherry, mazzard.**—This is the stock used for standard trees. Success is much more certain if the seed is planted in the fall, as it is very difficult to keep it in good condition through winter. The general culture should be the same as for the apple, except that budding should be employed instead of grafting.

**Cherry, mahaleb.**—Used as stocks when dwarf trees are wanted. Culture same as the above.

**Pear.**—Success will depend very largely upon having a *deep rich, moist soil*, as this is essential to vigorous growth. Plant and cultivate like the apple, and bud when large enough. Every effort should be made to secure a rapid and vigorous growth from the first.

**Peach.**—Plant three inches deep in nursery rows three feet apart, in the fall, or if delayed until spring, crack the pits and plant the kernels only. They should be large enough to bud the first season, and may be profitably set in orchards two years from planting.

**Quince.**—Quinces generally produce the same variety from seed, but occasionally vary. The general culture, and requirements of soil are the same as for the pear, except that they are not budded.

## Forest Tree and Hedge Seeds.

Few investments made by our farmers will return a larger profit in the course of a few years than the planting of land now uncultivated, or cultivated at a loss, to forest trees. The time is coming, not only surely, but rapidly, when a few acres covered with our best forest trees will constitute a handsome fortune. Forests are needed, not only for supplying us with timber, but for protection against winds and hurricanes. Grain fields and orchards are destroyed or parched by dry winds which were never known before the protecting forests were destroyed. The terrible cyclones so frequent in our Western States, and the beds of little streams in the East now long dried up, should admonish all who have a thought beyond the present, to the planting of forest trees.

### EVERGREEN TREE SEEDS.

The seeds of evergreen trees should be kept till time of sowing in a dry, cool situation. As early in spring as the ground can be worked, the seeds should be sown thinly in beds of fine, sandy loam, raised about four inches above the general surface. The seeds can be raked in, or if very small, they may lie upon the surface and then be rolled in or patted with the back of the spade to firm the earth around the seeds. Then water very sparingly, and with a fine rose, as the young plants are very apt to damp off; and need to be shaded from the hot sun and drying winds. A good shade can be made of laths nailed two inches apart to a light frame. This should be supported about eight inches above the seed bed in such a way as to be easily removed to allow cultivation and weeding. Keep the young plants well weeded, and allow them to remain one or two years before transplanting where they are to remain.

**American Arborvitæ.** (*Thuja occidentalis*).—Grows to a small size, seldom over thirty feet high. Grows well under cultivation, and is one of the best for a hedge as a screen and wind break. If planted in exposed places, along the country roads, would prove effectual in preventing snow drifts. Its wood, which has an agreeable odor and is easily split, is very durable. It is best grown from seeds, which should be sown and the seedlings

transplanted as directed above. They should be carefully watered when transplanted, and if a dry summer ensues, watering should be continued until the plants are well rooted.

**Silver Fir.** (*Abies pechinata*).—An important timber tree, and grows to a large size. While the timber is softer and less durable than pine, it is not liable to warp or shrink, and is valuable for shingles, cabinet work, boat building, etc. When young, the trees are tender and easily injured by frost, but as it grows larger, it is entirely hardy.

**Hemlock.** (*Tsuga Canadensis*).—One of the most beautiful of our native evergreen trees. Of graceful habit with light, elegant and delicate foliage. The timber is well known; coarse but strong. It is valuable for planks, bridge building, roof boards, etc., as it endures exposure to the weather for a long period. The bark is used to an immense extent for tanning leather. It requires a light, dry soil, and should never be planted on a stiff clay which will make the tree tender and liable to winter kill, though it is entirely hardy hundreds of miles north of our latitude. Planted singly or among deciduous trees, it is one of the most desirable varieties for ornamental planting.

**Scotch Pine.** (*Pinus sylvestris*).—Very hardy, and growing surely and rapidly on nearly every variety of soil, forming a beautiful tree, and invaluable as a wind break. Prof. C. S. Sargent says: "It is the most valuable tree farmers can plant for screens and wind breaks about their fields and buildings."

**White, or Weymouth Pine.** (*Pinus Strobus*).—The most majestic and valuable of all our native pines, and has furnished immense quantities of the white pine lumber so well known throughout the country. It thrives best in a light sand with clay subsoil, and prefers plains and broad river valleys to higher lands. Except on high limestone soils, it should be planted largely where pine lumber is wanted.

**Norway Spruce.** (*Abies excelsa*).—Well known as one of our most beautiful evergreen trees. It is hardy, of rapid growth, and forms a dense, close screen, or hedge. About 20,000 seeds to the pound.

### DECIDUOUS TREE SEEDS.

With the seeds of deciduous trees, only a little care is required in sowing at the proper season to insure success. Those with hard shells like the locusts and hawthorn should be planted in the fall or placed in boxes with sand and exposed to frost before planting, otherwise they may lie in the ground from one to three years without sprouting. If too late in spring to expose them to the action of frost, pour boiling water over the seeds and let it stand till cool, when a portion of the seeds will have swollen; pick these out and scald the rest again, continuing until all have swollen.

The seeds of the other deciduous trees on our list should be planted from the middle of April to the middle of May, in drills about two feet apart, and covered to the proper depth; about twice the diameter of the seed.

**White Ash.** (*Fraxinus Americana*).—Requires a moist, deep soil, on which it will grow very rapidly. It deserves especial attention from those who wish to grow trees for timber, because its wood is very light, strong, elastic and durable, and is without an equal for making fork and rake handles and many other agricultural implements, besides being largely employed in carriage building, cooperage, and ornamental carpenter work. Succeeds best from seeds, which should be planted where the trees are to stand, like corn, but not over an inch in depth. When grown singly it is very ornamental, forming a large, round head.

**European Ash.** (*Fraxinus excelsior*).—Succeeds best in rather a warm climate; thrives upon the plains

in deep soils, but does poorly on stiff clay or light sandy soils. Its timber is valuable in carriage making and manufactures.

**White Birch** (*Betula alba*).—Valuable for ornamental planting, and a favorite wood for shoe pegs, spools, bobbins and similar small articles. The birch prefers a cool, humid climate, and is readily propagated from seed. Seeds thrive best on new ground. They scarcely admit of any covering but if simply pressed into the ground with the feet they will grow. When one year old transplant into nursery rows. When two or three feet high, set out the young trees where they are to remain.

**Hardy Catalpa** (*Catalpa speciosa*).—Quite distinct from and much hardier than, the common catalpa. Scarcely a tree on our list can be so strongly recommended as this for planting on the vast treeless prairies of our Western States. It is of very quick growth, has proven itself hardy as far north as Dakota, and is one of the most durable timbers known, lasting in many well authenticated instances nearly or quite a century.

Catalpa seeds can be sown dry on a still day but the better way is to wet the seeds for a few hours before planting, and mix them with a little sifted soil to prevent their sticking together. They will germinate more promptly for the soaking they have received, and will not be so likely to be blown away while being sown. Sow in April or May, in well prepared loamy soil, in rows four feet apart, sowing seed thickly in the rows, covering half an inch deep and firming the soil well over the seeds. Thick sowing is desirable, as a dozen little plants together can force their way through the surface easier than singly, and if they are too thick they can be thinned and transplanted on a damp day as easily as cabbage plants. Cultivate well during the summer, keeping them free from weeds. In the fall or following spring, the seedlings can be transplanted where they are to remain. Four feet apart each way is the proper distance, and they should be cultivated about like corn for two seasons. There are from 16,000 to 20,000 seeds to the pound.

As an ornamental tree, the catalpa appears to the best advantage planted in small groves.

**Hawthorn** (*Crataegus oxyacantha*).—Seldom grows over twenty feet high and makes an excellent hedge. Seed should usually be sown in the fall, or frozen before planting, as recommended above. Sometimes they remain in the ground two years before they germinate.

**European Larch** (*Larix Kuropana*).—Grows to a large size, and makes excellent timber. Planted on lands of very little value for ordinary farming, it improves instead of impoverishing them, as the annual crop of leaves deposit more nutriment than the tree takes up; besides the yield of timber in a series of years would prove a very profitable investment. Seeds should be sown in a half-shady situation.

**European Linden** (*Tilia Europaea*).—A great favorite for ornamental planting in Europe. Its wood is very white, light, not liable to crack, and much prized for cabinet work and the panels of carriages. It should be planted by all bee keepers, as no flower of its size yields better honey or in greater abundance.

**Honey Locust** (*Gleditsia triacanthos*).—On account of its rapidity of growth and durability of the timber, we regard this as one of the most valuable of our native trees. It is not so liable to injury by the borer as the common locust, and does not sprout from the root to a greater extent than do most of our forest trees. Without the preparation recommended above, the seeds may lie from one to three years in the ground without sprouting. Take up and heel in or cover the

plants in the fall, and set out the next spring. After the first season, they are perfectly hardy. One pound contains about 2,300 seeds.

**Yellow Locust** (*Kobinia pseudo-acacia*).—This tree grows so rapidly that railroad ties may be cut ten years from the planting of the seed, while the durability of its timber is well known, fence posts of it having stood for sixty years. Culture same as the above. One ounce contains about 1,300 seeds.

**White Mulberry** (*Morus alba*).—Desirable for feeding silk worms. Grows readily and rapidly from seeds, which should not be covered too deep, as they are quite small. It delights in a warm, dry soil, and will succeed in almost any place that will produce a good corn crop.

**Russian Mulberry**.—Introduced into this country by the Mennonites, and by them extensively planted for silk worm culture. Of rapid growth, resembling the apple tree in habit, with a greyish bark and drooping branches. It is very easily cultivated, and kept in dwarf form makes a fine hedge and wind break. It bears very young, and it is said, every year. The fruit is similar to the blackberry, varying in flavor from sub-acid to sweet. In cold regions especially, this should prove a very valuable variety for its timber, shade and fruit. It is said to reproduce itself exactly from seed, and as our seed is direct from the Mennonite colony, it can be depended on as true and reliable.

**Osage Orange** (*Maclura aurantiaca*).—**How to PLANT, CULTIVATE AND MAKE A HEDGE.**—The Osage Orange is a native of Texas, but can be grown and cultivated advantageously in most parts of the United States. The ground should be thoroughly pulverized, by either plowing or spading, before the seed is planted. The surest way is to sprout the seed before planting, as it is very slow to germinate when put into the ground without being sprouted, sometimes taking a whole season to come up. To sprout the seed, put into a vessel and cover with warm (*not hot*) water. Keep the vessel in a warm place, and change the water once a day. Let the seed soak about five or six days, after which pour off the water and cover the vessel with a cloth. Keep in a warm room and stir the seed occasionally. In about one week more they will begin to sprout, and are ready for planting. A pound of seed, if properly managed, will produce five thousand (5,000) plants. The seed should be sown in April or May, with twelve good seeds to the foot, in drills twenty inches apart. They should be kept free from weeds, as the young plants are very tender and delicate until they are from three to five inches high. They can be set out in permanent hedges the following spring, in rows, placing them six inches apart in the row, but should be cut back to within an inch of the ground before they are set out; and to make a thick hedge, it will be necessary to cut back the first three years' growth, leaving only about eight inches of the season's growth. This system must be pursued every season until the hedge is of the desired height and form. Under proper treatment, a good hedge that will turn all kinds of stock, can be grown from seed in from three to four years.

## CLOVER SEEDS.

There are no plants so valuable for fertilizers as the Clovers. They have the faculty of absorbing nitrogen from the air, and also of rendering available much of the inert plant food of the soil. Their long, powerful tap roots penetrate to a great depth, loosen the soil, admit air, and by their decay add immensely to the fertility of the soil. The seed may be sown in fall or spring; which is the best season will depend upon local climate, and method of culture, but in the majority of



Alsike, or Swedish,

will grow where the common clover will fail. Sow at the rate of about eight pounds per acre. Sixty pounds per bushel.

**Medium Red, or June** (*Trifolium pratense*).—This is by far the most important of all varieties for the practical purposes of agriculture. Sow in spring or fall; and when no other grasses are used, at the rate of eight to ten pounds per acre, more being required on old, stiff soils, than on new and lighter ones. Sixty pounds per bushel.

**Alsike, or Swedish** (*Trifolium hybridum*).—This valuable variety is fast gaining great popularity. It is the most hardy of all the clovers; perennial. On rich, moist soils it yields an enormous quantity of hay or pasture, and may be cut several times in a season, but its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom, and greatly increases the yield of hay, and cattle prefer it to any other forage. The heads are globular, very sweet and fragrant, and much liked by bees, who obtain a large amount of honey from them. Sow in spring or fall, at the rate of six pounds per acre, where used alone. Sixty pounds per bushel.



Crimson Trefoil.

**Crimson Trefoil, or Scarlet Italian** (*Trifolium incarnatum*).—This is an annual variety, in common use in Italy and the south of France for feeding green. The yield in fodder is immense, and after cutting, it at once commences growing again and continues until severe cold, freezing weather. It grows about one foot

cases, in the Eastern, Middle and Western States, the best results will come from sowing in the spring, and it is often sown on the late snows of April. In any case, it should be evenly distributed on a mellow, well prepared soil. Plaster will increase the growth remarkably, and should be sown broadcast the season following the seeding.

**Mammoth, or Large Red** (*Trifolium pratense*)

—It grows five or six feet high, but its stalks are so coarse and large that stock will eat only the leaves, but by its judicious use, lands which have been exhausted can be reclaimed, as it

high; the roots are nearly black; leaves long; blossoms long, pointed, and of a very deep red, or carmine color. Makes good hay. Sow in April or May, eight pounds of seed per acre.



White Dutch.

**White Dutch** (*Trifolium repens*).—A small, creeping, spreading, perennial variety, valuable for pasture and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. In conjunction with blue grass, it forms the most nutritious food for sheep or cows. Sow in spring, at the rate of six pounds per acre; or when used with other grasses, half that amount will be sufficient.

**Lucerne, or Alfalfa** (*Medicago sativa*).—Where this succeeds it is the most valuable of all the clovers. It is more difficult to establish the first year, requiring a fine, mellow soil, but will then produce a profitable crop from five to twelve years. It yields a prodigious amount of green fodder for cattle, and should be cut when first commencing to bloom, when it pushes out fresh shoots, and the after growth is something wonderful. In the driest and most sultry weather, when every blade of grass withers, Lucerne is as fresh and green as in spring, because the roots go down to the moisture in the ground. Although such a prodigious yielder, it does not exhaust the soil, but rather improves it. It should not be sown on compact, clay soils, even with a light subsoil.

One of our customers writes us from Utah as follows: "I have had years of experience, both here and in California. We always sow broadcast, twenty-five pounds per acre; the thicker it is sown the finer your hay will be. If it is planted thin, it stools out and the stalks are thick and not relished by stock. It requires no hoeing whatever when sown as above. We cut four crops a year, and its yield is enormous. The fall is the best time for sowing here, as it will stand the winter and do much better the following season than when sown in the spring. The above is my experience for fifteen years."

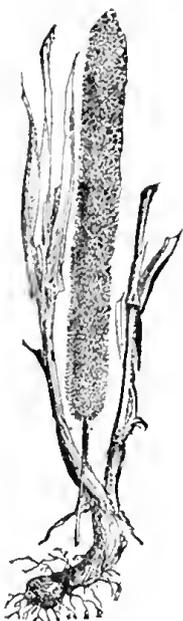
In some sections it is sown in the spring, in drills, twelve inches apart, and hoed until it covers the surface. This process requires about eight pounds of seed per acre.

**Bokhara** (*Melilotus alba*) *Sweet Clover*.—This is exceedingly valuable as pasturage for bees. It is occasionally found growing wild by the roadside, in company with the more common sweet clover (*Melilotus officinalis*), and may be distinguished from it by its white flowers and less coarse and more leafy stems.

## GRASS SEEDS.

**Timothy** (*Phleum pratense*).—This is the most valuable of all the grasses for hay, especially at the north. Thrives best on moist, loamy soils of medium tenacity.

It should be cut just when the blossom falls. Sow early in spring or fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses. Forty-five pounds per bushel.



Timothy.



Red Top.

**Orchard Grass, or Cock's Foot (*Dactylis glomerata*).**—One of the most valuable grasses, on account of its quick growth and valuable aftermath. It is ready for grazing in spring two weeks sooner than most grasses, and when fed off is again ready for grazing in a week, and will continue green when other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. It has a tendency to grow in tufts, and so does better if sown with clovers, and as it ripens at the same time, the mixed hay is of the best quality. For grazing, it has no equal, and should be used more than it is. When sown alone, two bushels are required per acre; if sown with clover, half that amount. It is perennial, and will last for years, but its habit of growth unfits it for lawns. Fourteen pounds per bushel.

**Red Top (*Agrostis vulgaris*).**—In some sections this is called RHODE ISLAND BENT GRASS. In Pennsylvania and States farther south, it is known as HERD'S GRASS, a name applied in New England and New York to timothy. It is a good, permanent grass, standing our climate well, and makes a good pasture when fed close. Is valuable for low, wet meadows, producing a large return in good hay. When sown alone, two bushels per acre are required, sown in spring or fall. Fourteen pounds per bushel.

**Fowl Meadow, or False Red Top (*Poa Serotina*).**—It yields well when sown on low, moist land, and will not suffer if not cut at the exact time. It can be mowed almost any time from July to October. When three feet high it falls down, or lodges, and after a little time every joint puts forth new branches. The stalk is always sweet and tender, and cattle and sheep are fond of it. It thrives best when mixed with other grasses. Though resembling red top in some respects, it is distinct, and we think superior in every respect. Requires about the same amount of seed per acre as red top, sown in spring or fall. Twelve pounds per bushel.

**Kentucky Blue Grass (*Poa pratensis*).**—This is known in some sections as GREEN MEADOW GRASS, and

JUNE GRASS, but should not be confounded with *Poa compressa*, called by some JUNE GRASS, or WIRE GRASS. This species produces the most nourishing food for cattle of any, and till a late period in winter, and at the south abundant food throughout the winter. In conjunction with white clover, it forms the finest and closest of lawns; for this purpose, an extra quantity of seed should be used, say four bushels of blue grass and six pounds of white clover per acre. If sown by itself, two bushels will be required, sown early in the spring, or in October or November. Fourteen pounds per bushel.

**Perennial Rye Grass (*Lolium perenne*).**—A very valuable variety for permanent pasture; very nutritious, and stock are very fond of it. Succeeds best on moderately moist land, for which it is peculiarly adapted. Large quantities are raised in England and nearly all of Europe. It is also largely used for lawns, in conjunction with other grasses. One and a half to two bushels per acre, in the spring. Twenty pounds per bushel.

**Wood Meadow Grass (*Poa nemoralis*).**—Grows from one and a half to two feet high; has a perennial creeping root, and an erect, slender, smooth stem. Its chief value is in that it will produce a good crop of hay in moist, shady situations, where it frequently grows quite tall. Cattle are fond of it; it is succulent and nutritious, and is perhaps the best variety for sowing in orchards, under trees, and shaded situations, either for hay or pasturage, and for parks and pleasure grounds. About fourteen pounds per bushel. Two bushels per acre.



Kentucky Blue Grass.

Sweet Vernal Grass.

**Sweet Vernal Grass (*Anthoxanthum odoratum*).**—One of the earliest of grasses in spring, as well as the latest in autumn, and about the only grass that is fragrant. As a pasture grass, mixed with other species, it is valuable on account of its earliness, and mixed with blue grass and white clover, it is an invaluable adjunct for lawns, presenting a beautiful appearance, and exhaling a delightful fragrance when in blossom. Should form a part of the mixed grasses in every lawn and door yard. About ten pounds per bushel.

**Common Millet (*Panicum miliaceum*).**—Requires a dry, light, rich soil, and grows two and a half to four feet high, with a fine bulk of stalks and leaves, and is excellent for forage. For hay, sow broadcast one-half

bushel per acre, from May first to August first. For grain, sow in drills, one peck to the acre, and not later than June 20th. Fifty pounds per bushel.

**German, or Golden Millet.**—An improved variety, medium early, growing three to five feet high. The heads are closely condensed, though the spikes are very numerous. The seeds are contained in rough, bristly sheaths, and are round, golden yellow, and beautiful in appearance.

From close observation during the past few years, the fact has been established beyond doubt, that seed of the German, or Golden Millet grown in southern latitudes will produce a much larger yield of hay than from seed grown in northern or western sections of the country, and for that reason is far better for farmers to sow. We have a good stock of southern grown seed, and knowing its value, confidently recommend it. Bear in mind that to the farmer, southern grown seed is worth double that of northern or western grown. Northern and western grown seed is degenerated and hybridized with other millets.



**JOHNSON GRASS,**  
(*Sorghum Halapense*.)

*Sorghum halapense*.—This is one of the most valuable forage plants of recent introduction, and is already very popular in the Southern States. It is perennial, a rapid grower, very nutritious, being eagerly devoured by all kinds of stock; comes early in the spring, grows until the frosts cut it down in the fall; stands the drought better than any grass, having long, cane-like roots which penetrate the soil for moisture; superior both as a grazing and hay grass; has abundance of roots which decay, thereby enriching the ground rather than exhausting it as Timothy does; belonging to the Sorghum family, it contains much saccharine, which is an important factor in the food of stock. It will grow on any land where corn will grow. On lands that will produce a bale of cotton to the acre, four to six tons of hay can be cut per annum, cutting three and four times. Heavy fertilizing would produce greater results. The best results follow sowing the seed in August and September, enabling the seed to get a good root by fall, and forming a better turf the following season. Sow with clean seed, broadcast, at the rate of one bushel to the acre, and cover with a light brush, or sow just before a heavy rain. Three good crops the following season will be the result if the season is favorable. Sowing in the spring does well, but the crop would not be as heavy the first year. The seed we offer is of this season's crop and has been well re-cleaned. One bushel will sow an acre.

**Hungarian Grass** (*Panicum Germanicum*).—This is a species of millet, growing less rank, with smaller stalks, often yielding two or three tons of hay per acre. It is very popular and valuable with those who are clearing timber lands. Like the millet, it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow and cultivate like millet. Forty-eight pounds per acre.

**Extra Fine Mixed Lawn Grass** (*Central Park Mixture*).—The essentials for a fine lawn are proper drainage, a careful preparation of the soil, which should be made as fine and light on the surface as possible,

thorough rolling, and a selection of the seeds of such grasses as will present a luxuriant verdure from early spring till late in autumn; and then frequent mowings with a lawn mower. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sorts is required for a perfect, carpet-like lawn. We have given much thought and made many experiments to secure the best mixture, and think our Central Park Mixture is the best possible mixture for permanent lawns, resisting the severe droughts of our climate better than any other. It may be planted early in spring or fall, and should be sown at the rate of from sixty to to eighty pounds to the acre, much more being required than for hay or pasturage. If sown in the spring, sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain which, if the surface has just been raked, will cover the seed sufficiently. If the expected rain does not come cover by rolling with a light roller. If sown in the fall, sow before the autumn rains have ceased, and before very cold weather give the young grass a light dressing of manure. One pound of this mixture is sufficient to sow a space 30 x 20 feet, or 600 square feet. Kentucky Blue Grass in conjunction with White Clover forms one of the finest and closest of lawns. For this purpose use three or four bushels of Blue Grass, and about six pounds of White Clover per acre.

## MISCELLANEOUS FARM SEEDS.

### MICHIGAN WINTER WHEAT.

A Select List of the Best Varieties Only.—Change Your Seed Wheat and Profit Thereby.

It is often said that farmers, more than any other class of men, allow the profits which should come from their labor to slip through their fingers, and we think there is no way in which they suffer more in this respect than in want of attention to their seed grain. The different varieties of wheat are so similar in the appearance of the berry that it is assumed that there is little difference in other respects, while the truth is, there is scarcely a plant in cultivation in which the varieties are more distinct and seem more especially adapted to certain conditions of climate and soil than are those of winter wheat. This is clearly shown by the results of experiments and tests which have been conducted for the past five years at the various experimental stations. For instance, at the Missouri Agricultural College, thirty-eight varieties were planted under precisely similar circumstances, each year for three years, and as a result they found that while the average yield of all the varieties for the three crops, including one very good and one very poor season, was 29½ bushels to the acre, the average yield of the variety which did the best was 38 bushels, and of that which did the poorest 22½ bushels per acre. Similar experiments at the Ohio Experimental Station gave the average yield 29 bushels, that of the best nearly 33 bushels, and that of the poorest 27 bushels; and similar results have been obtained at several other experimental stations.

Not only this, but these experiments show that while one variety will do the best on one soil, on another it may be greatly inferior to some other sort. We know of two farmers living within five miles of each other but with different soils, who each sowed equal quantities of four different kinds of wheat, keeping a careful record

of the yield, and repeated the test for four years; when one found that the Clawson had out-yielded all the others by an average of four bushels per acre, while the other found that on his farm the Diehl out-yielded not only the Clawson but the other varieties by nearly three bushels per acre.

From these and many other observations we feel confident that on at least one-fourth of the farms of this country where winter wheat is sowed, a change in the

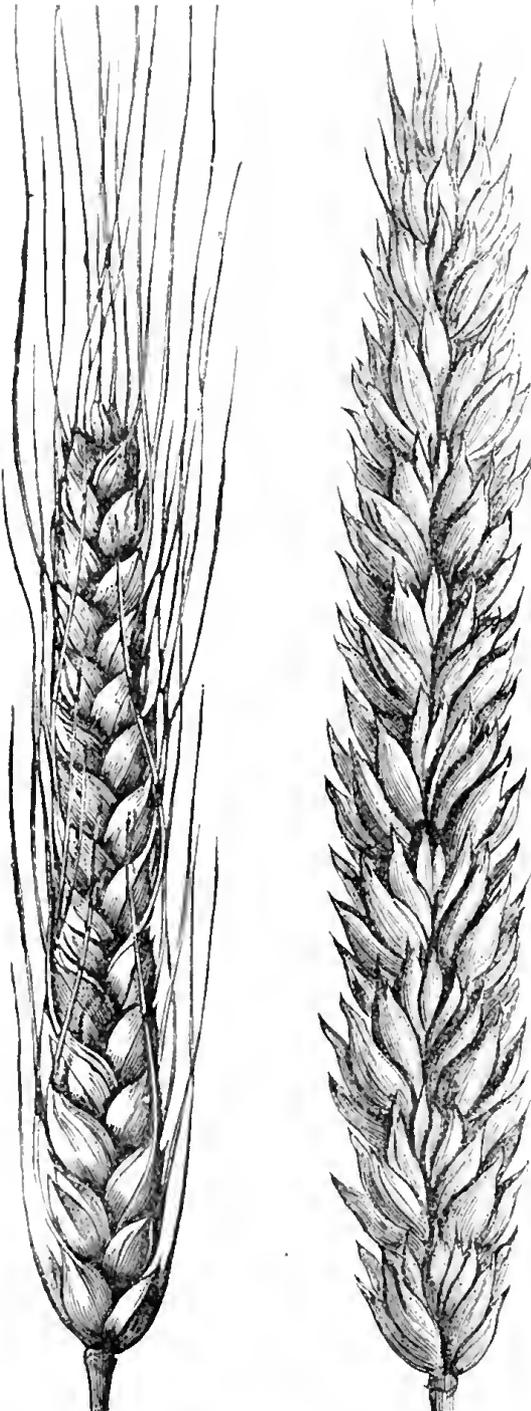
variety used would increase not only the yield but also the certainty of the crop. In order to do our part in this good work, we have for the past four years traveled many miles in order to examine carefully, *in the field*, the newer sorts of wheat and compare them with older kinds. We have also visited many of the experimental stations and have tested the different sorts on our trial grounds, and as a result have selected the following as offering in connection with the universally grown Clawson, a list, some one of which is especially adapted to nearly every soil and climate where winter wheat can be grown at all. We earnestly recommend every wheat grower to test these varieties on his own farm.

**Michigan Bronze** (*Mediterranean Hybrid, or Diehl Mediterranean*). We visited a field of this variety grown by the originator in 1882, and were so pleased with it that we were tempted to purchase the entire stock, but finally decided that in spite of evident hardiness and productiveness, we would not assume the responsibility of introducing until we had seen it more thoroughly tested under a variety of conditions. In the summer of 1883 we visited many fields of it and saw it under a great variety of conditions of soil and culture, and uniformly it seemed hardier, yielded better, and the grain was of better quality than any sort with which it was compared. On our own grounds and those of the "Rural New Yorker" it was tested by the side of over forty different varieties, and found the most desirable of all. Every farmer who had grown it was anxious to secure seed, and that season we placed it in the hands of several hundred growers, and waited somewhat anxiously to see what the report of 1884 would be. We have heard from many of those who planted it last season, and it has received universal praise as the hardiest and best wheat they know of. We can with confidence then, recommend this variety as not only the hardiest in cultivation, but the most productive, and of the best milling quality, and we strongly urge every farmer to secure some for this season's planting, as it is certain that it will command an extra price for seed grain for some years.

It is a cross between the old Diehl and the Red Mediterranean, having the fine flouring quality and bearded head of the latter, with the productiveness, hardiness, and close compact head of the former. It is a vigorous grower, well adapted to light soils, stands four feet high, and is of good stooling habit. The straw is rather large at the base, but small and stiff below the head, and turns red or bronze at maturity. The leaves are large and very dark green, heads slightly bearded, short but very compact and squarely filled out at both ends, containing about sixteen breasts of from three to four kernels each. The berry is of a bright amber color, of medium size and very handsome. Millers universally pronounce it the best milling wheat known, excelling in this respect the old Red Mediterranean.

**Valley.**—On very rich soils and for those who prefer a little later wheat with a longer and more showy head, the Valley will prove one of the best sorts. It originated in Ohio, and although it has not been extensively advertised, is one of the most promising of the newer varieties, and under favorable circumstances, will give enormous yields, but needs rich ground and good cultivation. It stands from four to four and a half feet high. The straw is of medium size, standing up and stooling out well. The heads are bearded, long and loose, and of a peculiar rough or ragged appearance, and contain from sixteen to twenty breasts of three or four kernels each. The berry is amber, long and hard.

**Martin's Amber.**—Some farmers will not plant a bearded wheat no matter what its other qualities are, and for such and those who demand a large handsome



Michigan Bronze.

Martin's Amber.

berry, we would recommend this new variety which originated in the eastern part of Pennsylvania, in 1878. It is of hybrid origin, one of its parents being the old Mediterranean, the other unknown. While young the plants lie spread out over the ground, affording a good protection to their own roots. It stools out remarkably well, requiring only about three-fourths of a bushel of seed per acre. The straw is tall and very stiff, standing up better than most varieties. The leaves are of medium size, dark green and very free from rust. It has a large, bald, smooth, well filled out head, containing from sixteen to eighteen breasts, and is rather late in ripening. The berry is of a light amber color, good size and very plump and handsome; has a very thin hull, makes but little bran, and yields a large return of flour of the very best quality. The Landreth wheat is very similar to it not identical with this sort.

**Democrat.**—Under some circumstances, an extra early wheat is desirable, and for such cases we have the Democrat, which originated in Pennsylvania by the selection of a single head in a field of fall wheat. It is now becoming very popular in Canada, where it is said to resist the midge effectually. It is very early, ripening at least one week earlier than the Clawson. The heads are bearded and compact, with white chaff; the berry is of a very light amber color, and much superior to Clawson in milling qualities.

**Fultz.**—Although not as showy in the field as Clawson, the Fultz will generally yield quite as much grain, and it is of much better milling quality. It usually exceeds the expectation of yield, while the Clawson is generally falls below it. It is well known and much esteemed in Pennsylvania and Ohio, and is becoming popular elsewhere, being frequently introduced under other names. The straw stands from four to five feet high, and is rather small but very stiff, standing up well. The leaves are large, of a dark green color, and free from rust. It has smooth, medium sized, compact heads, containing from sixteen to eighteen breasts of two and three kernels each. The berry is of a dull amber color, medium size and long.

### SPRING WHEAT.

**French Imperial.**—This wheat has proven itself a most desirable variety. It possesses, in a greater degree than almost any other kind, the quality of filling out plump, hard, extra No. 1 wheat, weighing the last two seasons, 62 to 64 lbs. per measured bushel, even in localities where nearly all other varieties filled poorly. It is well adapted to rather poor soils, or soils of only ordinary richness, producing on such lands good crops of No. 1 hard wheat. The kernel is very large and plump, and of excellent milling quality. The wheat is vigorous and strong in its growth.

**Barley, common.**—Barley succeeds best on lands more sandy and lighter than those adapted to wheat. It is sown in the spring, and can be grown farther north than any other grain. Unless intended for seed, it should be cut before fully ripe, as it is then heavier, of better quality and less liable to shell. The land should always be rolled immediately after sowing; or perhaps a better method is to roll the ground when the plants are one or two inches high. The quantity of seed sown per acre is about two and a half bushels, sown broadcast. The weight per bushel is forty-eight pounds, though it is almost always sold by the 100 pounds. The product is from forty to sixty bushels per acre, according to cultivation.

**Barley, Mansury.**—A six rowed barley, with long, heavy, well filled heads, containing large, plump grains. Straw bright, very strong, and is not apt to lodge, even

on the richest lands. Ripens a week to ten days later than common six rowed barley, or about the same time as two rowed barley. Yields from 40 to 60 bushels per acre, and is superior for malting.

**Barley, Naked, or Hulless.**—This is a peculiar grain, and not generally known. The corolla is not attached to the grain, and it thus resembles wheat. It is a splendid grain for all purposes for which barley is used, and will make excellent bread when bolted and ground like wheat, while the yield is much greater than wheat, and fully equal to common barley. Nothing can surpass this grain for grinding into meal for stock, as it produces from forty to sixty bushels of solid grain per acre, and is a very certain crop.

**Rye, Winter.**—The time for sowing is from the middle of August to last of September. One plowing is given, and the seed sown broadcast, at the rate of one and a half bushels per acre, and dragged in. Harrowing and rolling in the spring are recommended. If cut before fully ripe, the grain makes better flour and more in quantity. If intended for seed, it should be fully ripe. Some sow rye among standing corn, hoeing it in leaving the ground level as possible, and after the corn is removed, rolling the ground. It succeeds best on sandy soils.

**Buckwheat, common.**—Buckwheat should be sown about the 20th of June, broadcast, at the rate of from one to three pecks per acre. The average yield is from twenty-five to thirty bushels per acre. It should be threshed as soon as dry, on the ground or barn floor. If allowed to stand in mass, it quickly gathers moisture.

**Buckwheat, Silver Hull.**—This improved variety is much better than the old sort. It is in bloom longer, matures sooner, and yields double the quantity per acre. The husk is thinner, the corners less prominent, and the grain of a beautiful light grey color. The flour is said to be better and more nutritious.

**Field Peas (*Pisum sativum*).**—The varieties of field peas have never been very numerous, nor are they much increasing. The kinds mostly used are the Golden Vine, Crown, Blue Prussiau, Common White, Common Blue and Creeper. Field peas, in general, may be sown broadcast or in drills, after the manner of field beans, about three bushels per acre.

**Spring Vetches, or Tares (*Vicia sativa*).**—A species of the pea, grown extensively in England, and to a considerable extent in Canada, for stock, but not much used in the States. Culture same as field peas, two bushels per acre.

**Flax (*Linum usitatissimum*).**—Sow late enough in the spring to avoid frost, and early enough to secure the early rains. A fair average quantity of seed to be sown on an acre is one-half bushel, when cultivated for seed; if for the fibre, a larger quantity should be sown. Cut before quite ripe, and, if the weather be dry, let it lie in the swath a few hours, when it should be raked, bound and secured from the weather; thresh early in the fall and in dry weather.

**Hemp (*Cannabis sativa*).**—If raised for manufacturing, must be sown broadcast, at the rate of one-half bushel to the acre; if for seed, should be planted in hills four feet apart, and the plants thinned out to three or four most vigorous stems in each hill.

### BIRD SEEDS.

- Canary Seed (*Phalaris canariensis*).
- Hemp Seed (*Cannabis sativa*).
- Maw (*Papaver rhæas*).
- Millet Seed (*Panicum miliaceum*).
- Rape Seed (*Brassica napus*).
- Lettuce Seed (*Lactuca sativa*).

# A SELECT DESCRIPTIVE LIST

OF CHOICE IMPORTED

## Flower Seeds

WITH

### BRIEF HINTS ON SOWING AND CULTIVATING.

Many, who do not meet with the success they had expected, in the culture of a general list of Flowers attribute the difficulty solely to the seed, overlooking the important fact that nearly the entire range of Flower Seeds require careful and particular treatment and the further fact that the treatment and conditions which with one variety will produce the most satisfactory results may utterly blight another.

To ensure success the conditions and requirements of the several species as to soil, moisture, heat, light, etc., should be studied and then observed in culture. We feel sure that the pleasure resulting from a large and varied collection of Flowers will amply compensate for the time and care given to the subject.

**Selection of Varieties.**—Success in flower culture depends quite largely upon a judicious selection of varieties. Every sort we offer is, under certain conditions, attractive and desirable, but some of them, while exceedingly beautiful under favorable circumstances, will be most unsatisfactory and little better than weeds under others; we therefore urge our friends to study carefully the following pages before ordering, that they may select the sorts best suited to their wants.

**The Soil.**—Another great object to be considered is the soil into which flower seeds are to be sown. The soil best adapted to flowering plants generally, is a light, friable loam, containing a sufficient amount of sand to render it porous. A great many varieties will *live* in almost any kind of soil, except it be extremely dry, calcareous, or of a stiff, heavy character; still, to give them a fair chance for development, some little pains should be taken in adding to the soil, as much as possible, what may be wanting in it. Most flowers are better if produced on plants of most vigorous growth, so the greater portion of the garden should be prepared by deep digging, thorough pulverization, and liberal enriching with large quantities of *well rotted* manure. On the other hand, some sorts do best on very poor soil, so a portion of the garden should be left without enriching at all. As the process of germination is shorter or longer in the different kinds of seeds, the patience of the cultivator is often sorely tried with seeds of a slowly germinating character; the patience of a devoted florist, however, is never exhausted in these manipulations, and the certainty of his final success repays him fully for the trouble.

**Duration and Hardiness.**—For the purpose of giving general cultural directions, flowering plants may be divided into several classes based upon their duration and hardiness; but it is evident that such a division could only be correct for a certain latitude and for certain conditions, and while the classification we have followed applies generally to the Central and Northern States yet some which are classed as half hardy may be tender at the north or in unfavorable exposures and quite hardy at the South, or in exceptionally favorable situations.

**Hardy Annuals** include those plants which complete their growth the first season and then die, and which being natives of the same latitude, or if native of a warmer climate, develop so rapidly that if the seed is sown in the open ground the plants will come to perfect maturity before they are liable to be killed by frost.

**CULTURE.**—Carefully study the descriptions and cultural directions of the variety and select suitable soil and note the distance apart the plants need to be for perfect development. Then make the ground very mellow, free from lumps and smooth, and provide a board about one-half inch thick, and two or three feet long, and about three inches wide. Press the *edge* of this board into the soil so as to make a groove as deep as the seed is to be planted, remembering that more seeds of this class are lost through too deep planting than from any other cause and that, generally, seeds should not be covered to a depth greater than two or three times their diameter. Scatter the seed along the groove allowing from four to five of the larger to fifteen or twenty of the smaller seeds to the space each plant is to occupy. Cover by pinching the earth together over the seed, turn the board flatwise and *press the soil down firmly* and evenly. Mark each end of the row with a small stick and repeat at a suitable distance. By this method the seed is covered to a uniform depth and the young plants being in rows are more easily seen and less liable to be pulled up as weeds, while a little care in thinning will prevent any appearance of stiffness.

**Half Hardy Annuals** include such annual plants as, from being natives of warmer climates or of slow development, need to be forwarded in the spring by means of artificial heat either in green houses, hot-beds, or the dwelling house in order to come to perfection.

**CULTURE.**—Notice in the description of the varieties the soil best suited to the sort. Fill shallow boxes to within one-half inch of the top with light friable earth whose composition is suited to the wants of the particular plant, and which should be in such a condition of moisture that when pressed together in the hand it will form a ball which will retain its shape, but which will fall into fine earth again upon being pinched or struck. Press this down evenly and firmly making the surface as smooth as possible and then form grooves with a short thin board

in the same way as directed for hardy annuals, taking great pains that they are not too deep. Drop in the seed and cover with earth which should be pressed evenly and firmly over the seed. Now water thoroughly, but carefully, so as not to wash out the seed, and keep in a warm place in full light but not where the sun will shine directly upon them so as to dry off the surface too rapidly and necessitate too frequent watering. Watch them carefully, watering as seldom as possible but keeping the soil *always moist and never wet*. As soon as the plants *begin* to appear place in full sunlight and give plenty of air, taking great care that the plants never suffer from a want of sufficient water or from an excess of it. When the plants have made three or four leaves, or begin to crowd each other, remove to other boxes or pots and set in the open ground as soon as danger of frost is over. Most of the varieties of both hardy and half-hardy annuals mature so rapidly that better results will be obtained if several sowings at different dates are made, thus securing a succession of bloom.

**Tender, or Green House Annuals** are such as being natives of hot climates not only require a longer season, but also need to be protected from the cold winds and rains which are so frequent in our climate and so cannot be set out of doors except during the hot months.

**CULTURE.**—This is much the same as that for half-hardy annuals except that the seeds are often so fine that they cannot safely be covered with earth, but are simply pressed into the soil and the utmost pains must be taken that they do not become too dry, nor are over-watered. A single hour of bright sunshine will often so dry the surface as to kill the seeds which are just starting, and on the other hand a slight excess of water will cause them to rot, and it is to mistakes or neglect in watering that nine-tenths of the failures with this class of seeds are due.

**Hardy Biennials and Perennials** are such plants as do not bloom, or blossom imperfectly, the first season but live through the winter with little or no protection, and come into full bloom the second season after which the biennials die while the perennials continue to live and bloom from year to year. This class includes many of our finest flowering plants but are often neglected because not blooming the first year from seed, but this long waiting for bloom may in many cases be avoided by treating the seeds as half-hardy annuals and starting them sufficiently early to form large, strong plants by the time they can be set out in the spring. When this is not done they may be sown in beds as directed for hardy annuals and the plants set out at suitable distances in the fall.

**Half-Hardy and Tender Perennials** are such as must be kept over winter in the cellar or green house. The seeds may be treated like half-hardy or tender annuals.

Nine-tenths of the failures in flower culture come from improper treatment of the seeds and young plants, and we urge every purchaser of our seeds to study carefully the cultural directions printed on each package and keep in mind the following golden rules for sowing flower seeds:

Make the surface as fine and smooth as possible.

Do not plant any of the seeds when the ground is at all wet.

Cover each lot of seed to a uniform depth which should never be more than three or four times the diameter of the seed.

Press the soil firmly over the seed.

Plant in rows so that the young plants can be easily seen, and pull up all weeds which spring up between the rows the day they appear, but do not pull plants out of the row until you are sure they are weeds.

WE offer the following liberal inducements to Clubs, or those wishing to purchase Flower Seeds in quantity. These low rates apply only to Seeds in Packets, but the Seeds will be sent by mail post-paid.

Send us \$1.00, and select **PACKETS** to the value of, **\$1.15**

“	2.00,	“	“	“	“	2.35
“	3.00,	“	“	“	“	3.60
“	4.00,	“	“	“	“	4.85
“	5.00,	“	“	“	“	6.15
“	10.00,	“	“	“	“	12.50
“	20.00,	“	“	“	“	26.00

All Flower Seeds sent free by mail on receipt of price.

The figures at the right opposite each variety denote the price, in cents, per packet.

**ABOBRA.**

A rapid growing and very beautiful climbing gourd. Foliage delicate and of a very dark green; fruit oval and bright scarlet, forming a striking contrast with the glossy foliage. Half-hardy perennial. Start in hot-bed. Abobra, *viridifolia* ..... 10

**ABRONIA.**



Abronia.

- Abronia, *umbellata*, delicate lilac, white center..... 10
- “ *arenaria*, waxy yellow; fragrant..... 10
- “ mixed, above mixed ..... 10

**ABUTILON.**

Very popular, perennial, green-house shrub, with bell shaped, drooping flowers, which are borne in profusion nearly the entire year. Well adapted to house culture, and desirable for bedding out in the summer. There are several varieties, the flowers of which vary from pure white and yellow to deep orange and crimson, streaked with yellow. Can be propagated by cuttings, in sand, under glass, during summer. If seeds are sown before April, under glass, plants will bloom the first season. For winter flowering, sow in August or September.

- Abutilon, finest mixed..... 25

**ACROCLINIUM—(Everlasting).**



Acroclinium.

Very pretty, half-hardy annual, with rose and white daisy-like flowers. These are “Immortelles,” which bloom in August and September, and are fine for winter bouquets and wreaths. The flowers should be gathered for drying when partially opened. They grow about

one foot high, and should be planted four inches apart. Charming trailer, with verberna-like flowers. Very fragrant, and a long time in bloom. The seeds are enclosed in a husky covering, which remove before planting, and transplant to one foot apart. Half-hardy annual. Start under glass. Cover very lightly.

- one foot high, and should be planted four inches apart.
- Acroclinium *album*, pure white..... 5
- “ *roseum*, light rose; good for mixing..... 5
- “ *roseum*, double..... 25
- “ mixed..... 5

**ADLUMIA—(Climbing Fumitory).**



Adlumia, *Cirrhusa*.

A most beautiful and graceful climber, thriving in a sheltered situation. It is sometimes known as Mountain Fringe, Wood Fringe, and Alleghany Vine. The beautiful pink and white flowers are produced in abundance during the three summer months. It is biennial, and makes but little growth the first season. Sow the seed in April, and the following autumn transplant to the place where they are to blossom. Hardy biennial climber; fifteen feet high.

- Adlumia, *cirrhusa*, white and pink..... 10

**ADONIS FLOWER.**

Known as Pheasant's Eye. The flowers are very brilliant but not very freely produced. The foliage is pretty, delicate and many parted. Hardy annual; one foot high.

- Adonis, *autumnalis*, dark blood red..... 5

**AGAPANTHUS—(African Lily).**

The Agapanthus is a tuberous rooted plant, with recurved leaves. The handsome blue flowers are produced at the top of the flower stems, which grow about three feet high, often bearing from twenty to thirty flowers. The seed produces small tubers which will require two season's growth to become of sufficient size to flower. Plant in sandy loam in green-house, and transplant to open ground when weather is warm. Secure the tubers from extreme cold.

- Agapanthus, *umbellatus*..... 15

**AGERATUM.**

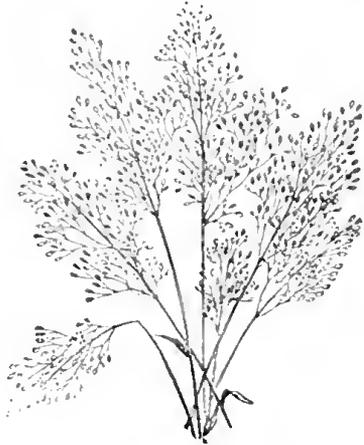
A valuable plant, on account of the length of time it remains in bloom, and for contrast of color with the more brilliant varieties. It blooms constantly all summer in the garden, and if removed to the green-house, all winter. Desirable for cut flowers for bouquets. Colors light blue and pure white. Start the seeds under glass, and transplant. Hardy annual.

- Ageratum, *Mexicanum*, light blue..... 5
- “ *Imperial Dwarf White*..... 5
- “ *Tom Thumb*, dwarf blue, *distinct variety*; desirable for edging..... 5
- “ *Lasseauxi*, *rose colored*..... 10
- “ *conspicuum*, valuable for winter; white..... 5
- “ mixed, seeds of the above varieties mixed..... 5

**AGROSTEMMA.**

Perfectly hardy plants, producing pretty, pink-like blossoms on long, slender stems. Very useful for cutting for bouquets, and pretty in masses, in beds. The annual variety is known as Rose of Heaven; the perennial as Rose Campion. About one and a half feet high.

- Agrostemma, coranaria, crimson; perennial..... 5
- " cœli rosa, rose, white center; annual..... 5



Agrostis, pulchella.

**AGROSTIS—(Ornamental Grass.)**

A hardy, ornamental grass, much used in connection with everlastings, for winter bouquets. Grows easily in any common garden soil. Hardy annual; about one and a half feet high.

- Agrostis, nebulosa, fine and delicate..... 10
- " pulchella, exceedingly graceful ..... 10



Alonsoa.

seeds of the above varieties mixed..... 5

**ALONSOA.**

The flowers are remarkably brilliant, and are scarcely equalled among the crimson and scarlet flowers. Properly green-house plants, but bloom finely in open ground when treated as tender annuals. Grow from one and a half to two feet high. Plants removed to green-house in autumn, will bloom all winter.

- Alonsoa, grandiflora, deep scarlet..... 5
- Alonsoa, Warzewiczii, bright crimson. 5
- Alonsoa, mixed, .....

**ALYSSUM.**

Alyssum, sweet (maritimum). A desirable hardy annual, flowering from early spring till killed by frost, and all winter in the green-house if sown in August. Flowers pure white, in racemes, and of a peculiar delicate fragrance. Most effective in masses, with plants one foot apart. Useful in all kinds of small bouquets. Grows one foot high .....

- " golden (saxatile). Flowers brilliant golden yellow, completely hiding the foliage. Plants about one foot high; desirable for rock work, and quite showy in masses. Hardy perennial. 5



Alyssum, Saxatile.

**AMARANTHUS.**

Valuable for its variety of handsome foliage, whether grown in the conservatory or garden. The colors will be more brilliant if planted in moderately rich soil. It is a tender annual and should not be planted before May 15th in the north.



Amaranthus, melancholicus ruber.

- Amaranthus, melancholicus ruber, beautiful blood red foliage. Hardy annual; two and a half feet high, ..... 5
- " tricolor, leaves yellow, red and green; well known as "Joseph's Coat." Very showy in beds alone. Hardy annual; two feet high... 5
- " bicolor obiensis, dark purple foliage, edged at the terminals with bright crimson. Four feet high ..... 10
- " salicifolius, two and a half to three feet high, pyramidal in form, branching close to the ground. Leaves beautifully undulated, varying from green to bronze, and later to a bright orange-red color, forming magnificent, bright colored plumes..... 10
- " Henderi, beautiful drooping foliage, richly colored in many shades... .. 10

**AMMOBIUM—(Everlasting).**

One of the hardiest of everlastings, and desirable for the garden, but more valuable for forming winter bouquets in connection with grasses and other everlastings. Grows two feet high. The flowers are rather small, pure white, and should be gathered before fully opened, to preserve for winter. Hardy annual. Start under glass.

- Ammobium, alatum..... 5

**ANAGALLIS.**

Interesting plants of easy culture, and remarkable for the beauty of their flowers. Even the wild variety,

known as Pimpernel, or Poor Man's Weather Glass, is exceedingly pretty. They are well adapted to rock work or borders. Planted under glass and transplanted into light rich soil, in a sunny situation, they will cover the ground all summer with a profusion of bright, rich colored flowers. Half-hardy annual; about six inches high.

Anagallis, mixed.....10

**ANCHUSA.**

Peculiarly adapted to shady situations, succeeding where many plants would fail for want of sunshine. Two or three feet high.

Anchusa, italica, intense blue flowers freely produced; fine for bees. Hardy perennial... 5

**ANEMONE. —(Wind Flower.)**

Among the earliest and brightest of our spring flowers. The colors run through various shades of scarlet, purple, blue, white and striped, with various colored eyes. Succeeds well in rich, light loam, in a sunny situation. Can be sown any time from April to August. Keep free from weeds. Hardy perennial; six inches high.

Anemone, coronaria.....10

**ANTIRRHINUM.** —(See Snapdragon).

**AQUILEGIA.** —(See Columbine).

**ARABIS.**

Among the earliest blooming plants, and very useful for rock work, edgings, &c. Culture same as for Anemone. Hardy perennial; nine inches high.

Arabis, alpina, pure white.....10

**ARDISIA.**

A shrubby green-house plant, producing scarlet berries which remain on the plant a long time, giving it a very showy appearance. Fine for conservatory or drawing room. Tender perennial; one and a half feet high.

Ardisia, crenulata.....25

**ARGEMONE.**

Free blooming plants, sometimes called Prickly Poppy. The flowers are large, brilliant, and resemble the single poppy. The leaves are armed with slender prickles, and marked with white stripes, and are rather pretty. Hardy annual; two feet high.



Argemone.

- Argemone, grandiflora, white; large..... 5
- " Mexicana, bright yellow..... 5
- " Hunnemanni, carmine and yellow..... 5
- " mixed, all best colors..... 5

**ARISTOLOCHIA—(Dutchman's Pipe).**

A beautiful and rapid climber, with heart shaped leaves and singular, siphon-shaped, rich purple flowers.

As a covering for verandas, it is very effective. Start under glass; cover thinly. Hardy perennial; thirty feet high.

Aristolochia, siphon.....10

**ARMERIA.—(Thrift, or Sea Pink).**

These plants, though dwarf, are very handsome, and well adapted for ornamenting rock work, and are very valuable for edging walks. May also be grown in pots in sandy loam. Start under glass. Hardy perennial; six inches high.

Armeria, maritima, pink..... 5

**ASPERULA.**

A profuse blooming annual of dwarf habit, only attaining a height of twelve inches. Flowers sweet scented, produced in clusters and of a delicate lavender blue color. Very beautiful in bouquets, and entirely hardy.

Asperula, azurea setosa..... 5

**ASTER.**

No family of plants bears such distinct marks of progress as the Aster, and none are more eagerly sought. An almost endless variety, always reliable, it is not strange that they should become a necessity. The seed may be sown during the months of March and April under a frame or in the green-house, and transplanted in May. However, as the Aster is essentially a fall flower and the later blossoms are the finest, it is better to sow the seed in a frame, thinly, early in May, and transplant when strong enough, setting the plants out from six inches to one and a half feet apart according to the size and habit of the variety. The Aster requires considerable water, and liquid manure may be applied, occasionally, with good results. The large flowering varieties should be supported with stakes.

For the convenience of our customers we have arranged the Asters according to height, commencing with the dwarf and ending with the tall Asters.

Aster, Shakespeare mixed, a dwarf Aster, of wondrous beauty. The plants form a compact bush of ten or twelve inches in diameter, and six inches high. Flowers extra double, and well imbricated. Extremely full blooming, and keeps in flower till frost comes. All colors mixed.....20

" new dwarf Bouquet, mixed, (Boltz), about eight inches high, very constant in height and habit of plant, which is a valuable quality. Extremely pretty, and flowers freely. Splendid mixed.....10



Chrysanthemum Flowered Aster.

Aster, mixed dwarf chrysanthemum, a dwarf variety, growing only about ten inches high; is also late, and valuable for succession. The flowers are very large, three or four inches in diameter, and freely produced. A single plant is a bouquet of itself. *All colors mixed*.....15

" mixed dwarf Pyramidal Bouquet, a magnificent dwarf variety, about one foot high. When well grown, a single plant forms a complete bouquet of pyramidal shape, and covers



Dwarf Pyramidal Bouquet Aster.

itself with blossoms, often numbering 150 to 200 flowers, and entirely hiding the foliage. Fine for edging and small beds. *A fine range of colors mixed*.....10

" **Diamond**, a novelty of the highest merit, especially recommended by the floral committee of the London Horticultural Society. Plants eighteen inches high, with very large flowers of the greatest perfection; constant in habit and color. *All colors mixed*.....25

" mixed rose flowered, flowers large, brilliant, very double, and regularly imbricated; they are oval in form, and somewhat resemble a double rose. Plants are one and a half feet high. *All colors mixed. One of the very best sorts* .....15

" **Imbricated Pompon**, mixed, the flowers are of very perfect form, so double as to appear a sphere, and densely imbricated. Plants are of pyramidal growth, and about one and a half feet high. *All colors mixed*.....10

" mixed German Quilled, very double, of oval form; the petals have the appearance of quills or tubes; the outer ring is sometimes slightly reflexed, so as to form a sort of guard petal. The mixture includes all colors. Flowers large, brilliant, and freely produced. One and a half to two feet high ..... 5

" **Truffaut's peony flowered, Perfection**, the highest and most perfect type of this class. Seed saved from the most perfect of Mr. Truffaut's magnificent strain. One and a half feet high.

" **Truffaut's peony flowered, Perfection, Snow white** .....15

" **Truffaut's peony flowered, Perfection, Light blue** .....15

" **Truffaut's peony flowered, Perfection, Crimson** .....15

" **Truffaut's peony flowered, Perfection, mixed**, includes a very large and fine range of colors .....15



Truffaut's Peony Flowered, Perfection Aster.

Aster, mixed peony flowered, the flowers of this variety are remarkable for their perfect form and immense size, being four or five inches in diameter, oval in shape, not showing an open center till the last stages of growth, on account of the many closely set reflexed petals. The colors run through a large number of shades. Two feet high.....10

" mixed **Victoria**, one of the most beautiful Asters in cultivation. Flowers very large, glob-



Victoria Aster.

ular in form, and beautifully imbricated. Plants of pyramidal growth, about two feet high, and a single plant will often produce ten or twenty perfect flowers.

" **Victoria**, white, turning to azure blue..... 15

" " peach blossom.....15

" " violet .....15

" " mixed, including all colors.....15

" **Cocardeau, or Crown**, mixed, a very handsome variety, producing large flowers, the centers being pure white, surrounded with many bright colors; about two feet high.....10

" **Reid's Improved Quilled**, mixed, remarkable for the globular form of its singular flowers. The single petals consist of tubes or quills, and the outer courses are blossom petals, which are slightly reflexed. Plants are one and a half to two feet high, and there are a number of distinct colors mixed.....10

- " Goliath, Mont Rose, *splendid variety*, with flowers a charming *peach color*. The blossoms are freely produced, of enormous size, and most perfect form. Plants of robust, branching habit .....20
- " Goliath, Mont Blanc, similar to the Mont Rose, but having enormous white flowers....20
- " Goliath, new crimson, *an entirely new variety*; very brilliant and conspicuous. Its extremely large blossoms are valuable for florists.....25
- " Porcupine, or Hedgehog, mixed, the distinguishing feature of this variety is the quills or sharply pointed petals. The flowers are very curious in appearance, and quite showy. Plants grow about two feet high. *A fine range of colors*.....10
- " Giant Emperor, snow white, flowers very double, of enormous size, and good form. Good for bouquets; two feet ... ..10
- " mixed Washington, a remarkably large variety, exceeding all the other varieties in size, frequently measuring five to six inches across the blossom; of robust growth, and most perfect in form and color. The mixture includes a number of very delicate and beautiful colors. A valuable acquisition .....20

**AURICULA—(Primula).**



Auricula.

in pots, in hot-bed, and transplanted one foot apart. Tender perennial.

**Auricula, Alpine**, a native of the Alpine regions of Switzerland, improved by cultivation, and the most hardy variety. ....15

- " finest prize, collection of the best sorts, embracing all choice known varieties; selfs, grey, white and green edged.....20

**AZALEA.**

Spring flowering shrubs, universally admired for their beautiful flowers, which are invariably produced in great profusion. The flowers are of all conceivable colors, and for brilliancy, are unsurpassed. Need hot-house culture. Plant in April, in cold-frame; prick out the seedlings the year following, in beds, four inches apart, to remain till they flower. It is well to cover the plants in the fall, with straw or mulch, as the late frosts sometimes destroy the young, early shoots.

**Azalea, indica**, *finest mixed*. Green-house, ever-green shrubs; flowers very beautiful. ....25

- " **pontica**, *finest varieties*. Hardy, deciduous shrubs, producing flowers of surpassing beauty, and all conceivable colors.....25

**BACHELOR'S BUTTON.**

A perfectly hardy border plant, succeeding finely in any common garden soil, but the flowers are more brilliant if grown in gravelly ground. Under cultivation,



Bachelor's Button.

it is really a handsome flower, sporting into varieties of white, purple, pink, parti-colored, &c. Hardy annual; two to three feet high.

**Centaura, cyanus**, single mixed ..... 5

**BALLOON VINI—(Cardiospermum)**

Remarkable for its inflated membranous capsules, and sometimes called Love-in-a-Puff. The flowers are insignificant, but the plant is a rapid and graceful climber. Sow in open ground, from 1st to 15th of May, and give plant support to run upon. Tender annual; six feet high.

**Cardiospermum, halicacabum**, white; from India. 10

**BALSAM.**

The Balsam has been so much improved by cultivation as to be scarcely recognized. The blossoms are double, though some semi-double and single ones will be pretty certain to appear, and such plants should be removed. The flowers will be improved by planting in a hot-bed, and transplanting when two leaves have formed, one to two feet apart. Pinch off a portion of the shoots, which will increase the size of the flower and vigor of the plant.

**Balsam, double Solferino**, satiny white, streaked and spotted with crimson and lilac. *Very choice*.....20



Double Camellia flowered Balsam.

- Balsam, double camellia, as double as a camellia, which they resemble; white, blotched with various colors .....10
- " mixed double rose, the peculiarity of this variety is its perfectly double, rose-like blossoms of almost every shade of color .....10
- " double dark red, (*atrosanguinea plenissima*) a very double, dark red variety, highly recommended. ....10
- " double pure white, well adapted for florists, for bouquets; nearly every flower is perfectly double, and pure white ... ..20
- " mixed double dwarf, grows only about one foot high, *Twelve best colors mixed* .....10
- " mixed double tall, grows about two feet high, and embraces *twelve of the best colors* ..... 5

**BARTONIA.**

A very pretty flowering plant of the Gentian family, producing a profusion of fine, bright metallic yellow blossoms about two and a half inches across. The leaves are thistle-like, and dark green, covered with down. It succeeds best when planted in a hot-bed and transplanted into rich, moist ground, but suffers from dry weather. Tender annual; about one foot high.

*Bartonia, aurea*, golden yellow..... 5



*Baptisia, Australis.*

**BAPTISIA—(False Indigo).**

A very ornamental border plant, producing bright blue, pea-shaped flowers, borne on spikes six inches long. Hardy herbaceous perennial; three feet high.

*Baptisia, Australis*, blue.....10

**BEGONIA—(Tuberous Rooted).**

The tuberous rooted Begonias are resplendent with their beautiful flowers during the whole of the summer. Being as hardy as many of the plants used for bedding out, they constitute a valuable adjunct to them. The simplicity of their culture places them within the reach of almost every one. They require the same treatment as tender annuals. Sow in heat, in February, pot the young seedlings off as soon as large enough, and repot when necessary. In three or four months the plants begin to display their splendid and continuous bloom.

*Begonia seeds are so very small as to be scarcely perceptible to the naked eye, besides being exceeding costly, therefore a very large quantity of seed cannot be afforded to a single packet, but by actual count, more are sent than in many large seeded varieties.*

*Begonia, robusta perfecta*, double blooming novelty; splendid new variety, remarkable for its robust and compact habit; succulent, dark



*Begonia.*

green foliage, and large, double flowers, of brilliant cinnabar scarlet.....50

*Begonia, Sedeni*, flower buds on the point of opening, measure an inch and a half in length, and the developed flowers are over three inches in diameter, in clusters of five to ten, of a beautiful, rich carmine; one of the finest single blooming sorts .....25

" *new varieties mixed*, a very choice collection of the many new sorts, embracing those which are remarkable both for foliage and flowers; *very choice* .....25

**BELVIDERE—(Summer Cypress).**

An ornamental, cypress-like plant, with inconspicuous, green flowers, nearly hidden by the foliage. It is well adapted for growing in cemeteries. Hardy annual; *Belvidere, (Chenopodium scoparium)*..... 5

**BIGNONIA—(Trumpet Vine).**



*Bignonia.*

A well known and much admired hardy, deciduous climber, perhaps the most showy of all the flowering climbers. The brilliant scarlet, trumpet shaped flowers almost cover the vine. One of the best climbers for covering a wall, side of house or veranda. Sow in the autumn or early in spring. Hardy perennial; 30 feet high.

*Bignonia, radicans*, .....10

**BOCCONIA.**

Magnificent, stately, half-hardy, evergreen shrubs, with ornamental foliage; well adapted for lawns, either single or in groups. They will require some protection through the winter, by straw or mulch. Easily cultivated in loamy soil, and increased from seed, and cuttings in sand, in gentle heat, under glass.

*Bocconia, Japonica*, from Japan; quite hardy; from four to six feet high; splendid foliage, and clusters of pure white flowers; one of the finest.....10

" *frutescens*, the well known shrubby Celandine, having such beautiful foliage, and white and yellow blossoms; grows six feet high; from West Indies.....15

**BRACHYCOME—(Swan River Daisy).**

A dwarf growing plant flowering the greater part of the season. Very effective in edgings, beds, or rustic

baskets. Requires light, rich soil. Half-hardy annual; one-half foot high.

- Brachycome, iberidifolia, blue.....10
- " alba-flora, white.....10
- " mixed, seeds of the above varieties mixed.....10

**BRIZA**—(Ornamental Grass).

Very useful ornamental grass, much sought for in forming winter bouquets and wreaths; one foot high.

- Briza, maxima, large; attractive..... 5
- " gracilis, slender; dwarf..... 5

**BROWALLIA.**

Handsome, profuse blooming plants, covered with pretty blue and white blossoms throughout the whole summer. Sow in hot-bed and transplant to border in June, one foot apart. The plants are quite minute when they first come up, and should be protected from the hot sun, or they will be destroyed. Half-hardy annual; one and a half feet high.



Browallia.

- Browallia, elata, Roezlii, this variety makes a compact plant eighteen inches high, and produces pure white and blue flowers of twice the size of the older sorts .....15
- " elata, fine mixed.....10

**BRYONOPSIS.**

An ornamental climber of the gourd family, bearing green fruits, which change in color as the season advances, to bright scarlet striped with white. Very handsome, and of rapid growth. Tender annual climber; ten feet high.

- Bryonopsis, laciniosa erythrocarpa..... 5

**CACALIA**—(See Tassel Flower).

**CALANDRINIA.**

Fine, dwarf plants for growing in masses, having fleshy leaves and succulent stems like the portulaca, and producing an abundance of blossoms, which, when fully expanded, make a beautiful appearance, and suitable for edgings, rockeries, and clumps: in bloom a long time. The seed should be sown in hot-bed, early in spring, and planted out in June, in rich, sandy loam, in masses. Tender annual, but perennial if protected in winter; one-half to one foot high.

- Calandrinia, grandiflora, rosy lilac..... 5
- " umbellata, crimson..... 5

**CALAMPELIS.**

A beautiful, tender climber from Chili, with delicate foliage, and bright orange blossoms in racemes, freely produced late in the season. The plants should be started early in hot-bed, and potted when five leaves

have formed, and planted out in June. Tender perennial, fifteen feet high.

- Calampelis, (*Keckremocarpus*), scaber. . . . .10

**CALCEOLARIA.**



Calampelis, Scaber.

A favorite and universally admired genus, remarkable for their large, beautifully spotted blossoms, which are very showy, and from which an almost countless number of hybrids have been raised. They are perennial, are grown in pots in the conservatory, green-house, and garden; but few flowers are held in greater esteem. They prefer a turfy loam, a mixture of peat and sand, or a rich open

garden mold, and are propagated from seed or cuttings. Some of them are herbaceous perennials, others shrubby evergreens.

Calceolaria, hybrida grandiflora, flowers of immense size; seed saved from finest specimens.

- Very choice.....25
- " hybrida tigrina, flowers of the largest dimensions; beautifully maculated or spotted. Seed saved from choicest collection .....25
- " rugosa, bedding variety; shrubby; grown in and out of doors. Mixed seed, saved from the finest shrubby sorts only.....25
- " hybrida pumila compacta tigrina, a new very dwarf variety, only ten inches high, and of compact growth. Flowers of fine form and beautiful color; desirable for contrast with taller sorts.....25
- " finest hybrids mixed, seed saved only from the most perfect flowers, embracing many of recent introduction; all desirable... ..25



Calceolaria.

**CALENDULA**—(See Marigold).

**CALLA.**

An old and very desirable plant, either as an aquatic or for the ornamentation of the drawing room and conservatory. Thrives in any light, rich soil when plentifully watered. The seeds, which should be sown in

green-house in early spring, produce small bulbs in the fall, which should be re-potted in rich soil. The production of large plants from seed takes some time, but the beautiful creamy white flowers are an ample reward for the care and patience bestowed. Half-hardy perennial.

Calla, *æthiopica*.....25

**CALLIOPSIS, or COREOPSIS.**

A very showy border plant, producing flowers in nearly every shade of yellow, orange, crimson, red, and brown. If the seed pods are removed as soon as they appear, the plant will remain in bloom much longer. Sow where they are to remain, and thin to two feet apart. Hardy annual; two feet high.

Calliopsis, fine mixed.....5

**CALLIRHOE.**

A pretty plant, resembling the scarlet Linum, producing an abundance of rich violet-purple blossoms, each blossom having a white eye. The leaves are sub-digitate, and the plant begins to flower when six inches high, and continues to yield a succession of its attract-



Callirhoe.

ive blossoms till frost. Succeeds better when planted in hot-bed and transplanted two feet apart. Hardy annual; one to two feet high.

Callirhoe, *involutrata*, trailing; purplish crimson. 5  
 " *pedata*, purple, white eye..... 5  
 " " *nana*, dwarf; one foot..... 5

**CAMELLIA.**

All species of Camellias are universally admired on account of their beautiful, rose-like flowers, and elegant dark green, shining, laurel-like leaves. They are hardy green-house shrubs of easy culture, requiring only to be protected from frost. The best soil for them is an equal quantity of good, sandy loam and peat. They are propagated by inarching, cuttings, grafting, and from seed, the latter being the only method of obtaining new varieties. When the plants are not growing, they should receive but little water, and when growing freely, can scarcely receive too much. A regular succession of flowers may be obtained from autumn till July, if attention be given to removing the potted and growing plants from a warm to a cooler atmosphere. When the growth is completed and flower buds formed, a cool, sheltered situation is best for they will be seriously injured if exposed to the rays of the sun.

Camellia, *Japonica*, fine double mixed, seed saved from the finest double varieties, and will undoubtedly produce some very valuable kinds, of various colors.....25

**CANARY BIRD FLOWER.**

(*Tropæolum canariense.*)

A beautiful climber, the charming little canary colored blossoms bearing a fancied resemblance to a bird with its wings half expanded. The plant has a fine luxuriant, rambling character, and if the seeds are planted by the side of an arbor or trellis, to run upon, it will run twenty feet high, and blossom from July till frost comes. The flowers will be more numerous and brilliant in light, moderately rich soil. Tender annual; twenty feet high.

Canary Bird Flower.....10

**CANDYTUFT.**

Universally known and cultivated, and considered indispensable for cutting. All the varieties look best in beds or masses. Seed sown in the autumn produces flowers early in spring; when sown in April, flowers from July to September, and some of the sorts till frost comes. All the varieties are hardy, and easy to cultivate. Single plants transplanted look well, and bloom profusely. Hardy annual; one foot high.



Candytuft, purple.

Candytuft, purple..... 5  
 " white..... 5  
 " Rocket, white..... 5  
 " fragrant, white..... 5  
 " new crimson, fine..... 5  
 " fine mixed..... 5  
 " new carmine, of dwarf, compact habit. The plant presents one perfect mass of vivid and rich bloom.....10  
 " perennial (*Sempervirens*).....10

**CANTERBURY BELL, — (Campanula Medium).**

Handsome, hardy biennial, of stately growth, rich color, and profuse bloom. Succeeds best in light, rich soil, and should be transplanted two feet apart. Their large, bell shaped flowers are freely produced throughout the summer, and are strikingly effective.



Canterbury Bell.

Canterbury Bell, double white.....	10
" " " blue .....	10
" " " mixed, blue and white.....	10
" " " single, mixed.....	5
" " " calycanthema, mixed, one of the newer sorts; flowers large, of fine form, white, lilac, rose and purple. Hardy perennial	10

**CANNA.**

Stately and highly ornamental plant, desirable not only for the beauty of its spikes of flowers, but for its elegant foliage. The leaves are a rich, deep green, three feet long and six inches wide, very handsome as they unfold themselves. Start the plants in hot-bed in pots, and transplant in June, and blossoms will appear in July or August. Soak the seed thoroughly before planting, and keep in a warm spot. The roots can be kept in the green-house from year to year, and then it becomes perennial. Tender annual in open ground; four to six feet high.

Canna, Indica (Indian Shot), scarlet blossoms.....	10
" gaboniensis, yellow flowers; fine.....	15
" nigricans, orange blossoms .....	15
" Warszewiczii, bright red flowers; striped foliage; very beautiful; four varieties mixed.....	10

**CARDIOSPERMUM**—(See Balloon Vine).  
**CARNATION and PICOTEE**—(*Dianthus Caryophyllus*).



No flower can surpass in delicacy of marking, form, or delicious fragrance, the rich hued Carnation. It has always been one of the most esteemed of the florist's collection, and there is no flower more desirable for the garden. The seed will not produce all double flowers, though a good percentage will be double, and of all shades and colors, many being very fragrant. Sow under glass in green-house or hot-bed, and

Extra Fine Double Picotee, when of sufficient size, transplant two feet apart each way. New and choice varieties are obtained from seed. Half-hardy perennial; one and a half feet high.

Carnation, fine double selves, one color.....	15
" fine double striped.....	20
" double dwarf, early flowered .....	20
" " perpetual flowered, seed saved from choicest double flowers.....	25
" choicest white ground.....	50
" " Italian .....	50
" " German.....	50
" double Grenadin, a splendid variety for florists; very early, charming double scarlet flowers. Exceedingly valuable for making bouquets, as the color is so brilliant as to render it very conspicuous.....	25
" extra fine mixed double Picotee.....	25
" extra choice double mixed, seed saved from the choicest French, German, Italian, and English stocks. A large proportion of this seed will produce double flowers, and will be appreciated by the florist.....	25
" double mixed, good seed producing many double flowers of all shades and colors, many being very fragrant.....	10

**CASTOR BEAN**—(*Ricinus*).

Tall majestic plants for lawns, with leaves of glossy green, brown, or bronzed metallic hue, and long spikes of prickly capsules of scarlet and green. An elegant plant for a lawn, and of very quick growth in rich soil. Plant in hot-bed, and transplant when three leaves have formed, or plant where they are required. Tender annual; eight to ten feet high.



Castor Bean.

<i>Ricinus, sanguineus</i> , splendid red fruit in clusters; blood red stalks.....	10
" tricolor, leaves spotted.....	10
" giganteus, leaves of large size, richly veined and marbled; ten feet high.....	10
" communis major (Palma Christi), the common Castor Oil Bean .....	5
" mixed.....	10

**CATANANCHE.**

A plant from the south of Europe. The flowers are white with a violet center, and blue with purple center, quite double, somewhat resembling a pink, and extremely showy. It will blossom more freely in light, well drained soil; will begin to bloom in July or August from seed sown in April. Hardy perennial; one and a half to two feet high.

Catananche, <i>cœrulea</i> , blue, purple center.....	5
" bicolor, white, violet center.....	5
" mixed.....	5

**CATCHFLY**—(*Silene*).

An easy growing, free flowering plant, producing dense umbels of white, red and rose pink-like blossoms. The plant is covered with a glutinous moisture, from which flies cannot disengage themselves, hence the name Catchfly. After having been once grown, the seed will sow itself in the ground. Hardy annual; one foot high.

<i>Silene, armeria, alba</i> , white.....	5
" " " <i>rubra</i> , red.....	5
" " " <i>rosea</i> , rose .....	5
" " " mixed.....	5

**CEDRONELLA.**

A beautiful, hardy, herbaceous, perennial plant, having fragrant leaves, and producing long spikes of salvia shaped, crimson blossoms, which remain a long time. Three feet high.

<i>Cedronella, cana</i> .....	10
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**CELASTRUS**—(Climbing Bitter-Sweet).

Hardy, deciduous climber, producing yellow blossoms early in the season, and later, ripened fruit, which is

very ornamental, and remains on the vines nearly all winter. Grows about twenty feet high.

*Celastrus, scandens* . . . . . 10

**CELOSIA.**

Magnificent plants for green-house or conservatory decoration, producing elegant, plume shaped spikes of flowers; look well in vases out of doors in summer. Sow in good, rich soil, and transplant at proper period. Half-hardy annuals; one to three feet high.

- Celosia, argentea*, long spikes of silvery white, shaded with flesh color; splendid . . . . . 10
- " new crimson feathered, crimson spikes; beautiful . . . . . 10
- " *pyramidalis plumosa*, beautiful, long plumes; pyramidal in form, of red, yellow, violet, &c.; very striking . . . . . 10
- " *Huttonii*, bushy habit, pyramidal form, profusely branched, each leading branch being tipped with a small spike of bright crimson flowers. The upper side of the leaf is a deep claret color, while the under side is a bright crimson shade . . . . . 15
- " *cristata*, (see Coxcomb).

**CENTAUREA—(Dusty Miller).**

An exceedingly interesting genus of plants, embracing annuals, biennials and perennials. Some of the varieties are magnificent foliage plants, indispensable for borders and edges of beds; while others are noted for their beautiful flowers. Sow under glass, covering the seed lightly; transplant in May. All the kinds named below are worthy careful cultivation.



*Centaurea, Gymnocarpa.*

- Centaurea, gymnocarpa*, silvery gray foliage; drooping habit; very graceful . . . . . 15
- " *candidissima*, fine, ornamental plant of great beauty. Silvery white, deeply cut foliage. Half-hardy perennial . . . . . 25
- " *Clementei*, foliage white, deeply cut, and altogether very beautiful. Half-hardy perennial . 25
- " *Americana*, hardy annual from Arkansas, two feet in height, and of strong, robust growth; flowers purplish red; very pretty . . . . . 5
- " *cyanus*, (see Bachelor's Button).
- " *moschata atropurpurea*, (see Sweet Sultan).

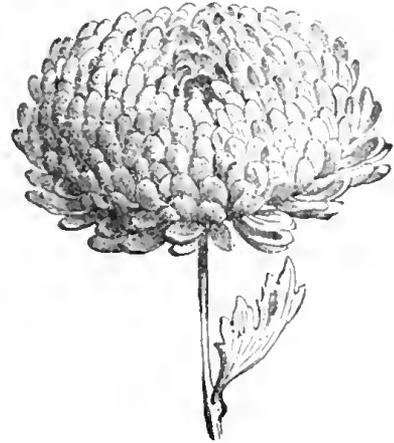
**CHAMÆROPS—(see Palm).**

**CHEIRANTHUS—(see Wall Flower).**

**CHRYSANTHEMUM.**

The following are the old garden varieties, producing flowers, white, yellow and variegated, single and double. They flower in autumn, and are desirable as they are brilliant and striking. The single sorts are quite as handsome as the double. Hardy annual; one and a half to two feet high.

*Chrysanthemum, frutescens, Marguerite, or Paris Daisy.*—This variety, under the name of Marguerite, has obtained great popularity among eastern florists. The pretty, star shaped, white flowers are freely produced, and the plant will grow under almost any circumstances. . . . . 10



*Chrysanthemum, Indicum, fl. pl*

- Chrysanthemum, coronarium, double white* . . . . . 5
- " *coronarium, double yellow* . . . . . 5
- " *Burridgianum, crimson, white center; single* . . . 5
- " *coronarium, mixed* . . . . . 5
- ⚠ *The following varieties are for pot culture, for blooming in the house in winter, and for florists for cutting for bouquets,*
- Chrysanthemum, Indicum, fl. pl., half-hardy perennial, very double; mixed colors* . . . . . 25
- " *Japonicum, fl. pl., new, Japanese variety.* Flowers of very peculiar form, and much beauty, combining numerous shades of color. Very interesting. Half-hardy perennial . . . 25

**CINERARIA.**

Green-house perennials, which can be planted out in summer. They thrive best in a mixture of loam and peat, and young cuttings root freely under glass. One to three feet high.



*Cineraria, maritima candidissima.*

- Cineraria, maritima candidissima*, extremely handsome, silvery white foliage; very ornamental as a decorative pot plant, or for bedding purposes . . . . . 10



Cineraria, hybrida.

- Cineraria, hybrida, very dwarf, dwarf variety, growing *only four inches high*. Plants globular in shape, and blossom profusely in many colors; *very desirable* ..... 25
- " *hybrida, flore pleno*, the flowers are perfectly and evenly double, being entirely made up of ligulate florets, as in double Jacobæa. The colors run through all the shades peculiar to Cinerarias ..... 50
- " *hybrida, choicest mixed*, from the best named varieties. Flowers from this seed have obtained *many first-class prizes*. *Extra choice* 25

**CLARKIA.**

The flowers are very pretty, and of many colors, double and single. It is better to sow the seed in September, and the plants will be large enough by spring to make good bloom. Hardy annual; one and a half feet high.



Clarkia, elegans, fl. pl.

- Clarkia, pulchella, flore pleno, double, beautiful, rich magenta color..... 5

- Clarkia, pulchella integripetala, rosy crimson.... 5  
 " elegans, flore pleno, double; rosy purple... 5  
 " mixed, best and finest varieties..... 5

**CLEMATIS.**

Well known and universally admired climbers, some of the varieties being remarkable for the beauty and fragrance of their blossoms. Fine for covering arbors, verandas, &c., as they cling readily to almost any object. Most of the kinds are hardy, herbaceous perennials, but some little protection in northern latitudes, through winter, is advised. Will do well in any good garden soil.



Clematis.

- Clematis, pitcheri, *new*: elegant habit, neat foliage, and exceedingly pretty, bright red blossoms; hardy climber... 25
- " *Virginiana (Virgin's Bower)*, a rapid climber, with white blossoms, growing twenty feet in a single season; is hardy, dying down in winter, but starting up again in the spring. It is equally remarkable when in fruit, the long feathery tails of the fruit separating like tufts of wool..... 10
- " *Verticillata*, produces beautiful blue flowers from June to September, on long peduncles from the axis of the leaves; rather bell-shaped and nodding. Grows eight to ten feet in a season. 10
- " *Flammula*, a luxuriant climber with clusters of small, white, fragrant flowers in August and September. Sometimes called Sweet Virgin's Bower..... 10

**CLIANTHUS.**

Curious, green-house shrubs, with singularly beautiful foliage, and magnificent clusters of long drooping flowers, somewhat resembling a parrot's beak. About three feet high, and succeeds best in loam, peat and sand



Clianthus, Dampieri.

mixed; does well planted in a border of the conservatory, or will flourish against a south wall, if protected from cold and frost. Does not bear transplanting. *Among the most magnificent blooming plants in cultivation.*

- Clianthus, Dampieri, bright scarlet blossoms..... 20

**CLINTONIA.**

Charming little trailing plants, suitable for baskets, pots, or rock work. The flowers are somewhat like the Lobelia, blue, purple and spotted, about half an inch

in diameter. The seed is exceedingly small, and should be sown with great care, covering very slightly with earth, and shading from the rays of the sun, till firmly established. Tender annual; six inches high.



Clintonia.

first, but rapidly changing to a beautiful, deep violet-blue. Seeds should be started in hot-bed, or by a warm window in the house, with the edge down, in rather dry soil, as they are apt to rot in open ground. A well

- Clintonia, elegans, light blue 5
- Clintonia, pulchella, blue, yellow and white. 10
- Clintonia pulchella atropurpurea, violet-purple, center yellow, margined with white. 10
- Clintonia, fine mixed. 10

**COBÆA.**

A fine, rapid growing climber, with handsome foliage and large, bell shaped flowers, green at



Cobæa.

established plant will run fifty feet in a season, covering a large veranda with handsome foliage and beautiful flowers. Tender perennial.

- Cobæa, scandens. 10

**COCKSCOMB—(Celosia).**



Cockscomb.

Highly ornamental plants, producing crested heads of flowers, somewhat resembling a cock's comb. There are many colors and shapes, but the scarlet and crimson ones are the most brilliant and rich. The oftener they are transplanted or shifted, the larger and more beautiful they grow. Start under glass or

in the house and transplant, setting the plants out three feet apart. Tender annual, one to three feet high.

- Celosia, cristata, mixed tall, twelve of the most splendid tall varieties mixed. 10
- " cristata, dwarf crimson, brilliant. 10
- " " " rose, deep rose. 10
- " " " yellow, fine. 10
- " " " mixed. 10
- " new Japan, (Celosia Japonica), the comb is finely cut, delicate as lace, and wonderfully brilliant. 10
- " new variegated, variegated in branch, leaf, and comb; very handsome. 10
- " Glasgow Prize, a very fine, semi-dwarf variety; with large, brilliant crimson comb, and handsome, dark foliage. 15
- " Japonica cristata nana, (new dwarf crested Cockscomb). The striking features of this singular variety are its perfectly symmetrical growth, the leaves covering the entire stem with dark bronze red, which, in contrast with white leaved plants, produces a most striking effect. It is one of the most valuable plants we know of when used largely as a border plant. The color of the comb is an intensely brilliant shining, armine, rendering it very conspicuous, even among most brilliant colored flowers, like scarlet geraniums, roses, carnations, etc. The three to five little combs form themselves on separate side stems in a perfectly symmetrical manner around the plant, keeping about eight inches lower than the head, and in no way interfering with the gracefulness of the leaves. The most characteristic feature is the leaflets which grow on the neck of the comb, and form a beautiful circle or collar around each comb, as true in the small as the large flower, all standing out perfectly horizontal. 20

**COLEUS.**

Probably there is no other kind of ornamental foliage plant so well known and universally admired as the Coleus. The leaves are of all shapes, shades and colors, and nearly all have a rich, velvety appearance of extraordinary beauty. No yard should be without these



Coleus.

decorative plants. They should be planted in a greenhouse or a warm situation in-doors in a temperature of 70°, and can be bedded out as soon as danger of frost is over. They will continue to grow and thrive till cut down by frost in autumn. Slips should be taken from the finest, which will grow finely all winter, if potted and placed in green-house or conservatory.

- Coleus, mixed, twenty-five best named sorts. 25
- " new hybrids mixed. 25

**COLUMBINE**—(*Aquilegia*).

The old single varieties of Columbine have been known and admired for centuries under the name of Honeysuckle.

The new double sorts are very beautiful, and embrace a great variety of colors and forms. They are nearly all hardy, and seeds can be sown in open ground in spring or autumn; and they can also be increased by dividing the roots. Hardy perennial; two feet high.



Columbine, double.

*Aquilegia, alba plena*, double white. . . . . 10

- Aquilegia, caryophylloides*, white, nicely striped with reddish crimson; a beautiful double variety. . . . . 10
- " *Skinneri*, crimson, scarlet and orange. . . . . 10
- " *vervaecæna fol. variegatis*, one of the few striking variegated plants, reproduced with certainty from seed. Double, rose colored blossoms; exceedingly beautiful. . . . . 15
- " mixed double, *best and finest colors*. . . . . 10

**COMMELINA**—(*Day Flower*).

The splendid white and blue flowers of this plant cannot be excelled, and its profusion of blossoms renders it worthy of cultivation. The roots can be taken up and kept in the cellar, like Dahlias, and replanted in spring, and will produce larger and more blossoms. Plant in any good garden soil, and thin to six inches apart. Tender perennial; one and a half to two and a half feet high.

- Commelina, cœlestis*, sky blue. . . . . 5
- " *alba*, white. . . . . 5
- " mixed. . . . . 5

**CONVOLVULUS.**

A magnificent class of trailing annuals, some of which produce flowers of wondrous beauty. Useful for verandas, lattice, &c., and grows freely in any good garden soil.



*Convolvulus, mauritanicus.*

- Convolvulus, aureus superbus*, very large, golden yellow flowers; grows six feet high. . . . . 15
- " *mauritanicus*, hardy, trailing plant, about one foot high, and produces an abundance of rich, satiny, lavender blossoms. Especially adapted to rock work or baskets. . . . . 10
- " Major. (See Morning Glory).

**CONVOLVULUS MINOR.**  
(*Dwarf Morning Glory*).

Dwarf plants, of trailing, branching habit, each plant occupying a space of two feet. At mid-day it is com-

pletely covered with a mass of most brilliant, many colored blossoms, which remain open till evening, in dry weather. The colors are pure white, blue, passing into white, yellow, red, purple, &c. Will do well in any common garden soil. Thin to three feet apart each way. Half-hardy annual; one foot high.



*Convolvulus Minor, striata.*

- Convolvulus Minor, tricolor*, bright blue, shaded to pure white, next to the golden center. . . . . 5
- " *Minor, alba*, pure white. . . . . 5
- " " *striata*, finely striped. . . . . 5
- " " mixed. . . . . 5
- " " *flore pleno*, a new, double variety. . . . . 10
- " " *unicaulis*, a single, upright stem without a branch and a compact head of flower buds in great profusion, which expand into blossoms of immense size, of very rich, purplish blue color, and continues in bloom the whole season. . . . . 10

**COIX**—(See Job's Tears).

**CRUCIANELLA.**

A pretty little plant, growing one foot high, and producing clusters of star shaped, pink flowers. Fine for rock work, vases, etc. Start under glass. Hardy perennial.

*Crucianella, stylosa*. . . . . 5



**CUCURBITA.**  
(See Gourds).

**CUPHEA.**

A favorite bedding plant with green-house meq; familiarly known as Cigar Plant, on account of the fancied resemblance to a lighted cigar. The colors are fiery red and crimson brown. Planted on gentle heat and transplanted to the garden, it will continue to blossom all summer, and on the approach of frost may be removed to the green-house or conservatory, and will continue to bloom all winter. Tender perennial; one and a half feet high.



*Cuphea.*

- Cuphea, platycentra* (*Cigar, or Firecracker Plant*), scarlet, white and purple. . . . . 10
- Cuphea, silenoides*, dark crimson brown. . . . . 10
- Cuphea, Zimpani*, violet red. . . . . 10
- Cuphea, mixed*. . . . . 10



*Cyclamen.*

**CYCLAMEN.**

Well known and universally admired bulbous rooted plants, producing exceedingly handsome red and white flowers. The seed

should be sown in spring, and by autumn will produce a bulb, which if potted and placed in conservatory or green-house, will blossom the following spring. Propagated only from seed.

Cyclamen, persicum, mixed, green-house variety of great beauty and many colors..... 25  
 " James' Prize varieties, saved from Mr. James' choice collection; very fragrant. .... 50

**CYPRESS VINE.**  
*(Ipomœa Quamoclit.)*



Cypress Vine.

A most beautiful climber, with delicate, dark green, feathery foliage, and an abundance of bright, star-shaped, rose, scarlet and white blossoms, which, in the bright sunshine, present a mass of beauty. Planted by the side of veranda, tree or stakes, and trained properly, there is nothing prettier. The seed will germinate more freely if warm water be

poored on the ground after planting. Tender annual; fifteen feet high.

Cypress Vine, scarlet ..... 5  
 " " rose ..... 5  
 " " white ..... 5  
 " " mixed ..... 5

**DAHLIA.**



Dahlia.

This exceedingly beautiful genus comprises an almost endless number of varieties, all more or less showy in the flower garden in the autumn, when most other flowers have faded. They are all of easy cultivation, growing freely in almost any soil, from seed sown in spring. The seed can be sown in shallow pans, any time from March to July, and the seedlings transplanted to small pots. As soon as they are strong enough (but

not until danger of frost is over) plant out, one foot apart. These plants will make tubers which should be taken up in the fall and kept through the winter in a dry place, away from frost, and planted out in the spring, when they will blossom the following autumn. New varieties are constantly being produced from seed, some of them of exquisite beauty.

Dahlia, finest double, mixed, seed saved from choicest double flowers ..... 15  
 " finest single, mixed, new; very desirable... 15

**DAISY (Bellis).**

Charming little plants for edgings and borders. The flowers are quilled and flat petaled, white, pink, red, and variegated. Not all will come double from seed, and the single ones should be pulled out. Sow early in hot-bed, and when large enough, transplant to a rich,

cool, partially shaded situation. Set the plants six inches apart. Roots can be divided any time. Flowers are most abundant in spring. Tender perennial; six inches high.

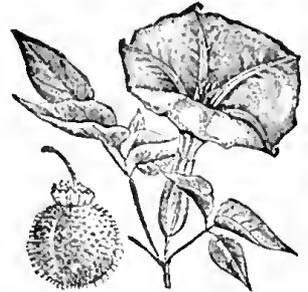


Daisy, Double.

Daisy, double white..... 15  
 " " red, a novelty, of high merit, recently introduced under the name of "Longfellow." Comes true from seed. Flowers very large and double .. 25  
 " double mixed, choice..... 15

**DATURA.**

Large, branching plants, producing handsome, double and single, trumpet-shaped blossoms, yellow, white, lilac and blue, and of exquisite fragrance. Some of the flowers are equal in beauty to our choicest lilies. Sow in hot-bed, and transplant to three or four feet apart each way. The blossoms open during the night, remain open one day, and then perish. Roots can be kept all winter in cellars. Tender perennials; three feet high.



Datura, Wrightii.

Datura, Wrightii, pure white at the center, passing into lilac and blue at the border; very fragrant 5  
 " chlorantha fl. pl., magnificent, large, double, yellow blossoms, richly scented.... 5  
 " fastuosa, alba, fl. pl., flowers double; pure white ..... 5  
 " mixed, seeds of the above varieties mixed.... 5

**DELPHINIUM**—(See Larkspur)

**DIANTHUS**—(See Pink).

**DIANTHUS BARBATUS**—(S.) Sweet William

**DIANTHUS CARVOPHYLLUS**—(See Carnation).

**DIGITALIS**—(See Foxglove).

**DOLICHOS** (See Hyacinth Bean).

**HELICHRYSUM** (See Helichrysum)

**ERAGROSTIS**—(See Love Grass).

**ERIANTHUS RAVENNÆ.**

A very desirable ornamental grass, equal to Pampas Grass in appearance and habit of growth, and superior to it for general culture, as it is entirely hardy, and blooms more abundantly. When plants are two or

three years old, the flower stalks are often ten feet in height, surmounted by beautiful silvery plumes. Sow early in spring, in green-house or hot-bed, and transplant when weather becomes warm.

*Erianthus, ravennae* ..... 10

**ERICA**—(Cape Heath).

A genus of shrubby plants of much interest and beauty. Most of the species are without odor, but this lack is compensated for by elegance, as well in their foliage as in their flowers. The flowers, in beauty of form, delicacy of aspect and variety of tint, can scarcely be surpassed. To succeed well, the seed should be sown in hot-bed, or better still in green-house or conservatory. Cover very lightly. Half-hardy perennial.

*Erica, capensis* mixed varieties ..... 25

**ESCHSCHOLTZIA.**

Finely cut leaves of a glaucous color, and blossoms about two inches in diameter, of many brilliant and showy colors. A bed of *Eschscholtzia* in the sunshine makes a blaze of color. As the stalks and branches are delicate, they will do better if supported by small sticks. Sow where the plants are wanted to bloom, as they do not bear transplanting. Thin to six inches apart. Half-hardy perennial; one foot high.



*Eschscholtzia.*

*Eschscholtzia, mandarin*, a very beautiful variety. The outer side of the petals is brilliant scarlet, the inner side rich orange. .... 15

- " *Californica*, bright yellow ..... 5
- " *crocea alba*, creamy white ..... 5
- " " *striata*, beautifully striped..... 5
- " mixed ..... 5

**EULALIA JAPONICA.**

A most magnificent ornamental grass from Japan, growing five to six feet high, and exceedingly graceful. A single plant often makes thirty to forty elegant, recurved flower spikes of light violet color, resembling ostrich plumes. Beautiful for vases in the winter. Transplant from hot-bed to ten feet apart.

*Eulalia Japonica*, light violet; beautiful..... 20

**EUPHORBIA.**



*Euphorbia.*

with white; very showy. Sometimes known as Mountain of Snow ..... 5

A large family, widely differing in their habits, many varieties being unworthy of cultivation. We have selected the most useful and beautiful variety for border and pot culture.

*Euphorbia, variegata*, hardy annual; foliage beautifully veined and margined

**EUTOCA.**

Foliage dull green, covered with hairs; blossoms blue striped, three-quarters of an inch across, produced in terminal racemes. Excellent for cutting, because a branch placed in water will bloom many days, and the blue is intense in color. Succeeds best in warm, sandy soil, not over rich. Sow in open ground early in spring, and thin to one foot apart. Hardy annual; one foot high.



*Eutoca.*

*Eutoca, viscida*, blue ..... 5

- " " *alba striata*, striped..... 5
- " " mixed ..... 5

**FEATHER GRASS**—(*Stipa*).

Hardy biennial, ornamental grass of much beauty, used in the formation of winter bouquets. Seed should be started in hot-bed, as they germinate slowly.

*Stipa, pennata* (Feather Grass), delicate and pretty. 10

**FERNS.**

Flowerless plants, too well known to need description.

Many of the varieties are exquisitely beautiful. There are so many sorts, varying so widely in habit, that to give explicit directions for the culture of each would require a volume of itself. As a general rule, they should be kept in a warm, humid atmosphere, and watered abundantly. The soil best adapted to their growth is a turfy, fibrous peat, mixed with sand and leaf mold, and underlaid with pieces of broken crock. Many of the most beautiful sorts are propagated from seed only. Their exceeding grace and beauty will well repay all care bestowed upon them.



Fern—*Aspidium Angulare.*



Fern—*Scotopendrium Officinatum.*

*Ferns, fine mixed*, an almost endless variety..... 25

*Ferns, fifty finest species mixed*, very beautiful. 25

*We do not offer the different varieties of ferns, separate, but our packet of fifty species mixed will contain all the newest and most desirable kinds.*

**FEVERFEW**—(See *Matricaria* and *Pyrethrum*).

**FORGET-ME-NOT**—(*Myosotis*).

The Forget-Me-Not is an old favorite plant, bearing clusters of star-shaped, delicate blue flowers with white and yellow eyes. It flourishes best in a moist, shady, situation, and it is in constant bloom nearly the whole season. If the seed be sown in autumn, it will succeed best, and flower early in spring. Hardy perennial; six inches high



Forget-me-not.

- Myosotis, palustris*, blue flowers, with white and yellow eyes. .... 10
- " *Alpestris nana cœrulea*, plant of dwarf compact habit, flowers bright blue; very fine; four to six inches high. .... 10
- " *dissitiflora*, very deep blue; early blooming; a welcome addition to this class of spring bedding plants, so much in requisition ... 15

**FOUR O'CLOCK**—(*Marvel of Peru*).

Old fashioned, but none the less beautiful on that account. The plants are large, and require four feet space; make a pretty hedge. Some of the varieties have beautifully variegated leaves. The flowers are funnel shaped, white, red and striped, very fragrant, and open about four o'clock in the afternoon, remain open all night, and generally perish before noon the next day. The French call it *Belle de Nuit*, "Beauty of Night." Will grow in any common garden soil, from seed sown in open ground. Hardy annual; two feet high.



Four O'Clock.

- Four O'Clock, gold striped ..... 5
- " red ..... 5
- " scarlet ..... 5

- Four O'Clock, silver striped ..... 5
- " white ..... 5
- " yellow ..... 5
- " variegated foliage ..... 5
- " sweet scented ..... 5
- " mixed ..... 5

**FOXGLOVE**—(*Digitalis*).

Ornamental plants of much beauty, producing dense spikes of flowers on stems three to five feet high. The blossoms are thimble-shaped, purple, white and spotted, and very striking. Seed can be sown in spring or autumn, and large roots can be divided. Blossom the second season. Hardy biennial; three feet high.



Foxglove.

- Digitalis, Ivery's new spotted*, great improvement on the old sort; an endless variety of colors; robust, strong and hardy ..... 10
- Digitalis, splendid mixed* ..... 5

**FRAGARIA**—(*Chinese Strawberry*).

Pretty, hardy, herbaceous creeper from India, with beautiful yellow blossoms, and bright red fruit, like small strawberries. Elegant for rock work or hanging baskets. Propagated from seed and runners. Seed should be sown very early in the house, and plants transplanted. Perfectly hardy.



Fragaria.

- Fragaria, indica* 10

**FRENCH HONEYSUCKLE**—(*Hedysarum*).

Very handsome, free flowering plants, producing racemes of beautiful, pea-like flowers; particularly adapted for borders or rock work. Sow in open border in spring. Hardy perennial; four feet high.

- Hedysarum, coronarium*, brilliant scarlet ..... 5
- " *coronarium, fl. alba, true*; white ..... 5



Hedysarum.

**FUCHSIA.**

Well known, half-hardy, perennial, deciduous shrubs, worthy a place in every garden. The varieties are now numbered by hundreds, and some are exceedingly beautiful. They are as easily grown from seed as cuttings, and from seed many improved varieties are obtained. Sow in March, in shallow pots, simply pressing the seed into the soil; prick out in crocks four inches in diameter, when of convenient size, where they can continue to grow till they bloom. As soon as they have flowered, select such as have good points, and change into larger pots. When frost appears protect the plants.



Fuchsia.

- Fuchsia, double, finest mixed, from the finest specimens . . . . . 25
- Fuchsia, double, white corollas, very beautiful, 25

**GAILLARDIA.**

Showy and universally admired perennials, flowering the first year, and among the gayest ornaments of summer flowering beds.

- Gaillardia, *picta nana*, one foot high; flowers creamy yellow . . . . . 5
- " *picta Lorenziana*, one of the most striking and valuable of the annual novelties introduced of late years. For general decorative purposes, as well as for bouquets, it is invaluable, its gay colored flowers being abundantly produced, and without intermission, from July until frost sets in. In a strict botanical sense, it is not double, but it is so entirely different from the old single Gaillardia, that the blooms would scarcely be recognized as belonging to the same species. The colors offered (in mixture) are sulphur and golden yellow, orange, claret and amaranth, and are produced quite as freely as any of the older sorts 25
- " *Richardsoni, grandiflora hybrida*, the largest and most beautiful flowers of the species; blossoms orange colored. . . . . 10

**GERANIUM—(Pelargonium).**

Probably the Geranium is better known and more universally admired than any other plant grown. The constant succession and durability of bloom till frost comes, the brilliancy of the scarlet and other colors, and the exquisite markings of the leaves of some of the varieties, render them very desirable for pot culture and bedding. No garden seems complete without a bed of them, and in every collection of conservatory or parlor plants we are sure to find the Geranium. *Propagation by seed is the only sure way to obtain superior varieties.* Sow in March, in gentle heat, in well drained pots. Water moderately, and as soon as the third leaf appears, pot singly in two inch crocks, exchanging for larger ones as the plants require. As soon as the weather will permit, plunge the pots in open border, and on approach of frost, remove to cover. They will blossom the succeeding spring. The following are all very choice varieties, and seed sparingly.

- Geranium (Pelargonium) *diadematum*, splendid variety . . . . . 50

- Geranium (Pelargonium) *Odier*, five petals blotched . . . . . 50
- " (Pelargonium) *fancy*, splendid mixed . . . . . 25
- " *double*, finest double varieties mixed . . . . . 50
- " *Zonale*, scarlet, mixed sorts. . . . . 25
- " " *white*, all white leaved varieties mixed 25
- " " *golden and bronze; magnificent.* . . . . 25
- " *apple scented, very fragrant* . . . . . 25

**GILIA.**

Hardy annual, one to two feet high; grows in almost any situation, in beds or in rockery. Delicate in leaf and flower.

- Gilia, *capitata*, dense, globular heads of clustered blossoms of azure blue. Two feet high. . . . . 5
- " *tricolor*, flowers blue, with yellow and purple center. Sow in masses. One foot high. . . . . 5

**GLADIOLUS.**

Magnificent plants, with sword like leaves, and long spikes of flowers, of every conceivable color and shade. The varieties are now numbered almost by thousands, each year bringing forth new and choice selections which have been produced from seed, which is the only method of obtaining new varieties.



Gladiolus.

The plant and flower are from a bulb, which requires two or three years to produce from seed of sufficient size to flower well. The bulbs should be taken up on approach of winter, and kept from freezing till warm weather in spring, and then planted out in groups and borders.

- Gladiolus, finest mixed, from fifty choice named varieties . . . . . 25
- For Bulbs, see Spring Bulbs, in this Catalogue.

**GLAUCIUM—(Horned Poppy).**

One of the most ornamental of silver leaved plants. The leaves are recurved, elegantly indented, and silvery. Flowers bell shaped, orange. Hardy perennial; one and one-half feet high.

- Gladium, *corniculatum*. . . . . 10

**GLOBE AMARANTH—(Gomphrena).**

A desirable everlasting, valued for its handsome, globular heads of flowers, which, if cut when well matured, will retain their beauty for years. Seeds germinate slowly. Start in hot-bed, or soak in warm water to soften the woolly husk. Tender annual; two feet high.

- Gomphrena, *globosa*, purple . . . . . 5
- " " white . . . . . 5
- " " flesh colored . . . . . 5
- " " orange. . . . . 5
- " " striped . . . . . 5
- " " mixed . . . . . 5

**GLOXINIA.**

Stove perennial plants, producing rich and beautifully colored flowers. They deserve extensive cultivation,



Gloxinia.

and thrive best in an equal mixture of peat, loam and sand. Sow in March, on the surface, in a warm, moist atmosphere. When the second leaf appears, transplant into shallow pots to grow through summer. Allow them to rest through autumn, and keep in same pots through winter, giving little water. In

spring, repot and water freely; will blossom second season. *The first three following varieties have peculiar leaves, being large, thick, light green, and recurved in such a manner as to entirely hide the pot. From the center of the plant are produced very large flowers of the most brilliant colors and finest form.*

- Gloxinia, hybrida crassifolia grandiflora erecta 25
- " " " " horizontalis 25
- " " " " pendula.....25
- " " " " mixed, all choice sorts.....25

**GNAPHALIUM—(Everlasting).**

An interesting class of immortelles, with rather homely foliage, but beautiful clusters of bright golden blossoms, which, if plucked when on the point of opening, and dried in the shade, will retain their beauty for years. Good for forming winter bouquets, in conjunction with other everlastings and grasses. Tender annual; one and a half feet high.

- Gnaphalium, foetidum.....10
- " leontopodium (Edelweiss), this is the true Edelweiss found on the Alps and so highly esteemed by travelers in Switzerland. Flowers star shaped, pure white, and downy in texture. Perennial.....15



Godetia.

**GODETIA.**

Beautiful garden plants, of easy cultivation in any good garden soil, and remarkable for the delicacy of

their very fine, large blossoms. Hardy annual; one to one and a half feet high.

- Godetia, rubicunda splendens, a very showy variety. Rosy lilac flowers, with purple stain in the center..... 5
- " rosa alba, (Tom Thumb), delicately blotched blossoms, white at the outer portion, and rose at the base of the petals. .... 5
- " Lady Albemarle, intense carmine-crimson, compact habit; very beautiful. .... 10

**GOURDS.**

A tribe of climbers with curiously shaped fruit, in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps, &c. The foliage is quite ornamental, and the markings of some of the fruit quite extraordinary. Do not plant the seed till all danger of frost is over, and select rich yellow ground. Tender annual climbers; ten to twenty feet high.



Gourd, Pear Shaped (Ringed).

- Gourd, orange, the well known Mock Orange. .... 5
- " Japanese Nest Egg, white; fac-simile of an egg; do not crack and are not injured by heat or cold. Very ornamental climbers..... 10
- " apple shaped, yellow; beautifully striped,.... 10
- " pear shaped, yellow and green, striped with cream color. .... 10



Gourd, Siphon or Dipper.

- Gourd, pear shaped, ringed (*piriformis annulata*), exceedingly beautiful fruit, with rings running round it; green ends ..... 10



Gourd, Hercules' Club.

- Gourd, bottle, handsome and useful.....10
- " Corsican, elegant fruit and rapid climber..... 10
- " siphon, or Dipper, long, slim handles, useful for dippers..... 10
- " powder horn, in the form of a powder horn. .10
- " Hercules' Club, the longest of all the varieties.10
- " mixed, ornamental..... 10

**GRAMMANTHES.**

A charming little succulent plant, producing an abundance of bright scarlet and orange-yellow blossoms in the shape of a star. It is especially adapted for rock work, hanging baskets, edgings, &c. The segments of the corolla have the appearance of the letter V on them. Give it a warm, sunny situation, and good, rich soil. Tender annual; six inches high.

Grammanthes, gentianoides, rich orange-scarlet .15

**GUNNERA.**

A curious, herbaceous perennial, growing best in rich mold kept moist. It is increased by seed and by division of roots. Has curious, cone shaped blossoms. Green-house plant.

Gunnera, scabra, large, rhubarb-like leaves, and purple blossoms. One and a half feet high; curious.....15

**GYNERIUM**—(See Pampas Grass).

**GYPSOPHILA.**

Delicate, free flowering little plants, covered with a profusion of little star shaped, white blossoms. Well adapted for hanging baskets and edgings, and valuable for making bouquets. Blossom first season, and continue to blossom several years. Make handsome specimens dried.

Gypsophila, elegans, white and pink flowers; hardy perennial; one foot high ..... 5  
 " muralis, pink flowers; hardy annual; six inches.10

**HEDYSARUM**—(See French Honeysuckle).

**HELIANTHUS**—(See Sun Flower).

**HELICHRYSUM.**

Large, full, double flowers of various colors, from bright yellow to scarlet, shaded and tipped. Peculiarly desirable as dried specimens; and exceedingly handsome bouquets may be formed of them for winter, if blossoms be gathered when on the point of expanding. Sow early in spring, in any good garden soil, and thin the plants to one foot apart each way. Hardy annual; six inches to two feet high.

Helichrysum, bracteatum, (Golden Eternal Flower), bright yellow..... 5  
 " nanum atrosanguineum, deep crimson.....10  
 " compositum album, flowers white .....10



Helichrysum.

- Helichrysum, monstrosum fl. pl., mixed, eight varieties of largest double flowers, mixed..10
- " nanum fl. pl., mixed, five dwarf growing double flowering varieties mixed..... 10
- " minimum fl. pl., mixed, four varieties of beautiful little miniature double flowers; fine..10
- " mixed..... 5

**HELIOTROPE.**

Highly valued for the fragrance of their flowers, and duration of bloom, and are to be met with in most gardens. They succeed in any rich, light soil, and cuttings of the shrubby kinds, taken off while young, strike readily. Start under glass. Half-hardy perennial; one foot high.



Heliotrope.

- Heliotropium, Anna Turrell, violet-blue.....10
- " Rois des Noirs, black; splendid..... 10
- " Triomphe de Liege, deep blue; fine.....10
- " dark varieties mixed, very choice .....10

**HELIPTERUM**—(Everlasting).

A very desirable and distinct dwarf everlasting, with small foliage, and large globular clusters of bright golden, and pure white, star like flowers. Is excellent for forming winter bouquets, for which purpose the flowers should be gathered when on the point of opening, and dried in the shade; they will open while drying, and will retain their brilliancy for years. Hardy annual; one foot high.

- Helipterum, Sandfordii, golden ..... 15
- " anthemoides, pure white.....15
- " mixed ..... 15

**HIBISCUS.**

A branching plant of the easiest culture, with rather pretty foliage, and large blossoms, which are exceedingly showy, continues to bloom from June till October. The seed should be planted early and the plants thinned to one foot apart each way.

- Hibiscus Africanus, cream colored blossoms, purple in the center. Hardy annual; two feet high 5
- " coccineus, large, brilliant scarlet blossoms; very showy; green-house plant; three feet high...10
- " mutabilis, albus fl. pl., a double white variety; very choice.....25

**HOLLYHOCK.**

The Hollyhock in its present state of perfection, is very unlike its parent of olden time; it now ranks with



Hollyhock.

the dahlia, aster, camellia, &c. For a back ground to a flower garden, perhaps no plant is so useful. The flowers are as double as a rose, of many shades of color, from deep yellow, red, purple, to pure white. Plant the seed in June or July, in open ground, and in the autumn, when the plants have made five leaves, transplant to permanent position three feet apart. They should be protected during the winter. The following summer they will bloom. Each plant should be supported by a stake. Hardy perennial; five feet high.

position three feet apart. They should be protected during the winter. The following summer they will bloom. Each plant should be supported by a stake. Hardy perennial; five feet high.

- Hollyhock, double, pure white.....15
- " " " black.....15
- " " " lemon yellow.....15
- " " " rose.....10
- " " " choice mixed.....15
- " " " mixed.....5
- " Chater's finest mixed, twelve double varieties of the greatest perfection mixed.....15

**HONESTY, or SATIN FLOWER. (Lunaria).**

Early free flowering plants, interesting for the silver



Ice Plant.

like tissue of the seed pods in their matured state. The flower is purple, not very conspicuous. The seed pods are fine for skeletonizing and working in with other everlasting flowers for winter bouquets. Blossoms the second year from seed, and then dies. Start under glass. Hardy biennial; two feet high.

- Honesty. (Lunaria, biennis)..... 5

**HORDEUM—(Ornamental Grass).**

A beautiful, ornamental grass for forming winter bouquets. It somewhat resembles our domestic barley, having heavy, bearded heads. It is very hardy, and will grow in any common soil.

- Hordeum, jubatum, exceeding ornamental; two feet high..... 10

**HUMEA.**

A remarkable, handsome plant for decorative purposes. Leaves very fragrant when slightly rubbed. Succeeds best in light, rich soil. Half-hardy biennial; six feet high.

- Humea, elegans, red; from New South Wales... 10

**HYACINTH BEAN—(Dolichos).**

Splendid climber, with abundant clustered spikes of purple and white flowers, which are followed by exceedingly ornamental seed pods; of rapid growth, often running twenty feet in a season. Plant where they are to remain, after the weather has become warm, and cultivate like common beans, only give support for the vines to run upon. Tender annual; ten to twenty feet high.

- Dolichos lablab, purpurea, purple.....10
- " " " alba, white.....10
- " " " mixed, the above mixed.....10
- " giganteus, tall growing variety, with large, purple flowers; fourteen feet; very fine.... 10

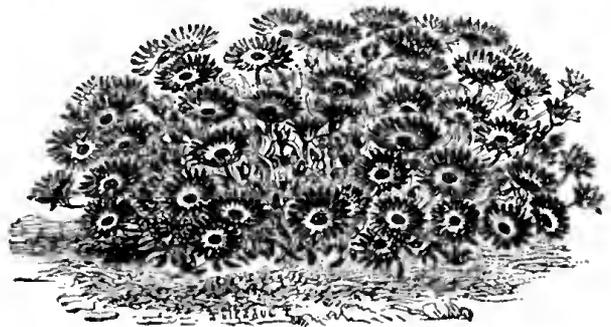
**IBERIS—(See Candytuft)**

**ICE PLANT—(Mesembryanthemum)**

Mesembryanthemum, crystallinum (Ice Plant), handsome and curious plant for hanging baskets, rock work, vases and edgings. The leaves and stems are succulent and fleshy, and appear as though covered with ice crystals, and look like rock candy. The whole plant is peculiarly brilliant in the sunshine. The flower is white, and not conspicuous. Succeeds best in dry, sandy loam, and in a warm situation. Can be grown in pots or open border, the former having preference. Tender annual trailer; six inches high. .... 5

- " cardifolium variegatum, the leaves are blotched with light yellow and cream colored spots. Fine for hanging baskets or dwarf masses. Hardy annual; six inches high..... 10
- " tricolor (Dew Plant), pink with purple center..... 5

**INDIAN SHOT—(See Canna Indica).**



Dew Plant.

**IPOMEA.**

Beautiful climbers, and exceedingly attractive mixed with other climbers. The flowers are of a variety of shapes and sizes, and of an endless number of colors, many being wondrously brilliant, and of graceful form. They are alike good for green-house, for pots and baskets, and for trellis, stumps, arbors, &c. They require heat in starting, and some of the varieties will not succeed out of



Ipomea, bona nox.

the green-house. Tender annual; five to ten feet high.

- Ipomea, coccinea (Star Ipomea), fine scarlet..... 5
- " bona nox (Good Night), pure white..... 10
- " limbata, elegantly blotched and margined with white..... 10
- " limbata hybrida, great variety of colors; fine..... 10
- " " elegantissima, large flowers, in form of a five pointed star, with intense purple center, and pure white margin..... 10
- " rubra cœrulea, immense flowers of bright celestial blue; stove or green-house climber... 10
- " fine mixed..... 10

**IPOMEA QUAMOCLIT** (See Cypress Vine)

**IPOMOPSIS**—(See Tree Cypress).

**JACOBÆA**  
**Senecio.**

Remarkably pretty, free growing, profuse flowering plants, almost unsurpassed for brilliancy and beauty. Grow freely from seed, and are easily propagated from cuttings, not one in fifty failing. *The double are the only ones worth cultivating.* Hardy annuals in open border, biennial in green-house. Sow in loam mixed with leaf mold. One



Jacobæa, double.

- foot high.
- Jacobæa, double crimson, extra fine..... 10
- " double white, elegant..... 10
- " double dwarf blue, constant in height, pure in color, and double to the center..... 10
- " mixed, above varieties mixed..... 10

**JASMINE.**

Hardy, deciduous, ornamental shrubs, growing three feet high, and producing beautiful yellow flowers, which are very fragrant, and much admired. The seeds require bottom heat to start.

Jasminum, fruticans, yellow; fragrant..... 10

**JOB'S TEARS—(Coix).**

Curious, ornamental grass from East Indies, with broad, corn-like leaves, and seeds of a light slate color, wonderfully lustrous. Valuable for the formation of



Job's Tears.

winter bouquets, in connection with everlasting flowers, and strings of handsome beads are formed from the seeds. Plant in open ground, in hills three feet apart, four or five seeds in a hill, and cover half an inch deep. Hardy annual; three feet high.

Coix, lachryma (Job's Tears)..... 5

**JOSEPH'S COAT**—(See Amaranthus Tricolor).

**KAULFUSSIA.**

Beautiful, free blooming little plants of dwarf and compact growth, somewhat resembling the single asters. Flowers are light blue, pure white, and the most intense violet-purple of any annual in cultivation—the richest color imaginable. A good plant for mixed beds and borders. Hardy annual; six inches high.

Kaulfussia, fine mixed..... 5



Kaulfussia.

**LANTANA.**

These plants are rapid growers, forming small, hardy shrubs; and producing their pink, yellow, orange, white, constantly changing heads of flowers in great abundance. They have an agreeable, aromatic perfume. Start under glass. Any loamy soil suits them, and they are readily increased by cuttings, in sand, in heat.

Lantana, finest French hybrids mixed, all colors..... 10

" alba magna, pure white; one foot..... 15

" Imperatrice Eugenie, rosy lilac; two feet... 10

**LARKSPUR—(Delphinium).**

The Larkspur is one of the handsomest and most useful of plants, and for large gardens is invaluable. The leaves are much divided, flowers in terminal spikes. The brilliancy of some of the colors is un-



Lantana.



Larkspur, Double Dwarf Rocket.

(Bee Larkspur), has hairy petals in the center, and a fancied resemblance to a bee. Hardy perennial; five feet high. . . . . 5  
 Delphinium, grandiflorum album, large, double white flowers. Hardy perennial; four feet high. . . . . 10  
 " formosum, rich blue and white. Hardy perennial; three feet high. . . . . 5



Larkspur, Formosum.

Delphinium, consolida candelabrum fl. pl., a new type of annual larkspur, growing in the form of a branched candlestick; flowers double and of various colors. *Very showy*. . . . . 10  
 " nudicaule, a splendid novelty, eighteen inches high, with *scarlet* flowers; fine for rockeries, flower borders or pot culture; hardy biennial. 10  
 " Dwarf Stock flowered (consolida robustum fl. pl.), *ten brightest colors mixed*. Long spikes of perfectly double blossoms in all colors. Hardy annual; one foot high. . . . . 5  
 " Tall Stock flowered (consolida fl. pl.), *eight brightest and best colors mixed*. Spikes of double flowers eighteen inches long *very beautiful*. Hardy annual; two feet high. . . . . 5  
 " Imperiale fl. pl., (Double Emperor Larkspur), one and a half feet high, compact and profusely blooming, almost every plant having 100 close, erect spikes of perfectly double flowers, which, in a dried state, are fine for winter bouquets. Mixed colors. . . . . 10

**LATHYRUS LATIFOLIUS**—(See Peas).

**LATHYRUS ODORATUS**—(See Sweet Peas).

**LEPTOSIPHON.**

A charming little plant, with delicate foliage and cheerful, star shaped flowers; pure white, with yellow anthers. Make beautiful low edgings for borders or walks. They do not bear our hot, scorching summers well, and the seed had better be sown late in the autumn or very early in spring, and, if possible, in a sheltered situation. Hardy annual; six inches high.  
 Leptosiphon, androsaceus, mixed colors. . . . . 5  
 " aureus, beautiful orange color; hardy annual one-half foot. . . . . 5

**LILY OF THE VALLEY**—(Convellaria).

The Lily of the Valley is a sweet little plant, thriving in any common soil; it will do well in any shaded situation, where few other plants will thrive; can be multiplied by dividing the roots, or by seed. Hardy perennial.  
 Convellaria, majalis, white, sweet scented blossoms; one foot. . . . . 10

**LIMNANTHES.**

A native of California; quite hardy; of prostrate habit, stems ten or twelve inches long, crowned with numerous fragrant flowers, each about an inch across. A large portion of the flower is yellow, the extremities of the petals only being white. Blooms from



Linum, grandiflorum.

June to August. Sow the seed in spring, and give each plant two feet of room. Hardy annual; three inches high. *Limnanthes*, Douglasi. . . . . 5

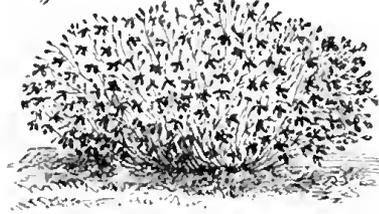
**LINARIA (Kensilworth Ivy).**

A pretty, trailing plant for covering rock work, and very useful for hanging baskets. Hardy perennial. *Linaria, cymbalaria*. . . . . 15

**LINUM.**

A beautiful and effective genus of plants, of slender and delicate growth, and a profusion of bright flowers. *Linum, grandiflorum rubrum* (Scarlet Flax), from Algiers. Hardy annual. . . . . 5  
 " *coccineum, deep crimson*: one of the handsomest annuals ever introduced; in brilliancy of color surpassed by none . . . . . 5

**LOBELIA.**



Lobelia, erinus.

under glass, and transplant or sow in open ground in May. *Lobelia, erinus* (Blue King), intense dark blue, with a white spot; dark colored foliage. Showy and valuable for bedding purposes. Half-hardy perennial . . . . . 10  
 " *erinus* (Queen of Whites), pure white flowers, not tinted with the slightest shade of any color. Blooms until destroyed by frost; tender perennial. . . . . 10  
 " *erinus* (Crystal Palace), magnificent variety, with large blue and white flowers . . . . . 10  
 " *cardinalis* (Queen Victoria), scarlet, new; scarlet flowering variety, with the darkest leaves, and very constant. Hardy annual. . . 15  
 " *cardinalis* (Cardinal Flower), a magnificent native variety, with spikes of brilliant scarlet flowers. Will flourish in any common soil. Seeds need to be well started with heat. Hardy perennial; two feet. . . . . 10  
 " *gracilis*, very fine for baskets, vases, &c., trailing gracefully, and blooming profusely. Half-hardy annual . . . . . 10

**LONDON PRIDE—(See *Lychnis Chalcedonicum*).**

**LOPHOSPERMUM.**

Beautiful evergreen climbers, with purple and violet blossoms. Require green-house or cold frame in winter; will run up fences or verandas in summer. Propagated by preserving the fleshy roots in dry earth in winter. Seed should be sown in hot-bed in March or April. *Lophospermum, scandens*, flowers violet-purple; ten feet. . . . . 10

**LOVE GRASS—(*Eragrostis*).**

A very pretty species of ornamental grass, growing one foot high; splendid for winter bouquets; hardy annual.

*Eragrostis, elegans*, beautiful, dancing sparklets. . . 5

**LOVE GROVE—(*Nemophila*).**

This popular plant is to be found in almost every garden, and has secured a place in the heart of every lover of flowers. Of dwarf, spreading habit, it is well adapted for border or pot culture. The flowers are exquisitely colored, blotched and spotted; they are quite apt to sport into an endless variety of shades, from black and blue to lighter colors. Sow in spring, and thin to one foot apart. Hardy annual; six inches high. *Nemophila, mixed*, several colors. . . . . 5



Love Grove.

**LOVE-IN-A-MIST—(*Nigella*).**

This singular plant is known as Lady-in-the-Green, and Devil-in-a-Bush, because the blossoms are partly concealed by the abundance of finely cut foliage. The plant and flower are both handsome, require but little care, and are worthy a place in the flower garden. Sow the seed in spring, and thin to one foot apart. Hardy annual.



Love-in-a-Mist.

*Nigella, Damascena fl. pl.*, double, blue blossoms; one and a half to two feet high. . . . . 5  
 " *Damascena nana fl. pl.*, double, white and blue blossoms; one foot high. . . . . 5

**LUPIN—(*Lupinus*).**

Very conspicuous plants, with spikes of pea-shaped blossoms of various colors. The taller varieties look well as a back-ground to other low growing annuals, and the dwarf look best in masses. Sow the seed where

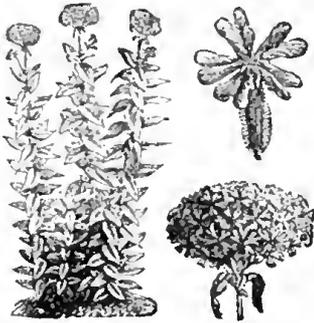


Lupinus.

the plants are required, early in spring, and thin to one and a half feet apart. Hardy annual; one to three feet high.

- Lupinus, Hartwegi, a beautiful species with delicate foliage, and blue blossoms. . . . . 5
- " Cruikshanki, blossoms white, shaded with yellow, blue and purple . . . . . 5

**LYCHNIS.**



There are few plants that produce such brilliant blossoms. The flowers are produced in clusters, and are constantly coming out all summer. Sow the seed in spring, in rich, loamy soil, under glass; plant them in the ground when they are to bloom, in May, one foot apart. Flowers the second season.

Lychnis, Chalcedonica.

- Hardy perennials; one to three feet high.
- Lychnis chalcedonica (London Pride), bright scarlet; two feet. . . . . 5
- " Haageana (Benary), elegant, large, scarlet blossoms with jagged petals. Perennial, but will blossom first year; one foot. . . . . 10
- " Sieboldii, produces large, white flowers; two feet high. . . . . 15
- " Haageana grandiflora gigantea, a very large flowering variety, about three feet high. The flowers are scarlet, much larger than any of the preceding; perennial, but will blossom first season . . . . . 10

**LYTHRUM.**

A showy, perennial plant of easy culture, growing in any good garden soil, and producing long, numerous spikes of bright rose flowers during the season. If seed be planted in autumn, the plants will flower the following season. Hardy perennial; two feet high.

- Lythrum, roseum superbum. . . . . 5

**MARIGOLD.**

The Marigold has been an inhabitant of the flower garden from time immemorial, and where a rich display of bloom is desired, is almost indispensable. The African varieties are tall, growing usually two feet or more, while the French are more dwarf, of most perfect form and gorgeous beauty; all are desirable. Half-hardy annuals, in bloom till frost comes.



Marigold, French Dwarf.

- Marigold, Meteor, a splendid new variety with very large, beautifully imbricated, extremely double, striped blossoms; deep orange on almost white ground. The stripes are very regular, and the flower striking. Covered with blossoms from May till autumn. Comes true from seed. . . . . 10
- " African, orange quilled, a very double variety, with quilled petals; very showy. . . . . 5
- " African, mixed, selected from the finest double flowers; very beautiful. . . . . 5
- " French, Tagetes signata pumila, bright yellow flowers; elegant habit. Finest varieties mixed. . . . . 5
- " French, new gold striped, magnificent stripes of brown on deep gold; very double. . . . . 5
- " Cape, Calendula poncei fl. pl., double white; fine . . . . . 5
- " Cape, Calendula pluvialis, flowers single, white, brown underneath. . . . . 5

**MARVEL OF PERU—(Mirabilis)—**  
(See Four O'Clock).

**MARTYNIA.**

Extremely handsome, large flowering, half-hardy annual, deserving of the most extensive cultivation. Should be started in greenhouse or conservatory, and transplanted singly into borders.



Martynia, Fragrans.

- Martynia, formosa, (fragrans), foliage thick, soft and velvety. Flowers delicate rose lilac, blotched and shaded with bright crimson. Needs plenty of room; very fragrant. . . . . 5
- Martynia, proboscidea, a curious plant, on account of its singularly curious seed vessels, which are much esteemed when young, for pickles. 5

**MATHIOLA—(See Stocks)**

**MATRICARIA—(Feverfew).**



Matricaria, double.

Sow from December to April, in shallow boxes, in a temperature of sixty degrees. As soon as the young plants can be handled, transplant singly into small pots or shallow boxes, where they may remain until the time of planting out in the open ground in May.

**Matricaria, capensis, fl. pl. (Double Feverfew),**  
pure white, double flowers; very beautiful;  
desirable for bedding

**MAURANDIA.**

Graceful climber for green-house, parlor, baskets, or out-door purposes. Set out in the border with a little frame to which to attach their tendrils, they will be loaded all the season with rich purple, white and rose, foxglove-shaped blossoms. The seed should be started in hot-bed or green-house, as without artificial heat,



Maurandia.

they will scarcely flower the first season. They must be removed to a warm place on the approach of cold weather in autumn. Tender perennial climber; six feet high.

Maurandia, Barclayana, purple, rose, white and violet...  
mixed, choicest kinds mixed...

**MESEMBRYANTHEMUM**—(See Ice Plant).

**MIGNONETTE.**



Mignonette, sweet.

A garden should be without it. If sown at intervals during the spring and early summer, it will be in bloom till killed by the frost. Seeds sown in autumn, will bloom early in spring. Hardy annual; perennial if protected; one foot high.

A well known hardy annual, producing dense, semi-globular heads of exceedingly fragrant flowers, borne on spikes from three to six inches long. Is in bloom nearly the whole season, and the perfume is so fragrant that the whole atmosphere around is perfumed. No

- Mignonette, Golden Queen, a new variety. The flowers are golden yellow, and powerfully fragrant ..... 15
- " Diamond, a new and very valuable variety, producing pure white flowers. .... 15
- " Victoria, a very valuable new variety, producing dark red blossoms; very attractive. .... 15
- " reseda odorata grandiflora, large flowered. The common Sweet Mignonette. .... 5
- " crimson flowered Giant, of robust habit, with very large spikes of handsome, crimson flowers of exquisite fragrance; a free and perpetual bloomer. .... 10
- " Parson's white flowering Giant, flowers almost pure white, of great fragrance, borne on spikes six inches to a foot in length. May be grown as a tree or dwarf, and is especially valuable for the latter mode of culture. .... 10
- " Dwarf Compact, a distinct and very desirable variety. It forms a dense, semi-globular bush about ten inches high and eighteen inches in diameter. Highly recommended for pot culture or market purposes. .... 10
- " Tall Pyramidal, this variety has woody stems and vigorous branches, which are clothed with dark green leaves and club-like spikes of flowers ten inches long, of a fine red tinge. .... 10
- " Pyramidal Bouquet, this forms a dense, short pyramid of free growth, the numerous branches being terminated by large spikes of intense red flowers, as many as 300 of them being produced on one full grown specimen. This variety is recommended for pot culture, and for the open border. .... 10

**MIMOSA**—(See Sensitive Plant).

**MIMULUS.**

Strikingly handsome flowers of easiest cultivation. Perennial in the green-house, annual in the open air. Start under glass.

Mimulus, moschatus (Musk Plant), cultivated on account of the musky odor of the plant. Needs rich soil and plenty of moisture. May be cultivated to an upright plant, though usually trailing

Mimulus, punctatus (Monkey Flower), large, beautifully spotted blossoms; blooms first year.

Mimulus, inimitable double, splendid variety, with beautiful, double tubed flowers; very interesting.



Mimulus.

**MOLUCELLA.**

Molucca Balm, or Shell Flower is a very curious plant. Within the calyx a button shaped bud appears, which unfolds into a shell shaped flower of a white and purple color. It is a strong annual, growing two or three feet in height with but few leaves, but such numerous branches that its width is often as great as its height. Sow in hot-beds in spring, and about the end of May transplant into dry, warm border, where it will flower freely.

Molucella, lævis.

**MOMORDICA.**

A curious, annual climber, with yellow blossoms and foliage similar to the Canary Bird Flower. The fruit is

the chief curiosity, is egg and pear shaped, and covered with warty excrescences, and when ripe, bursts suddenly open, scattering its seed, and showing a brilliant carmine interior. Fine for trellises, fences, stumps, &c.

- Momordica, balsamina (Balsam Apple),..... 5
- " charantia (Balsam Pear),..... 5

**MORNING GLORY—(Convolvulus Major).**



Morning Glory.

from white to dark blue, red, and striped. Hardy annual; ten feet high.

- Convolvulus Major, striped..... 5
- " " blue..... 5
- " " crimson..... 5
- " " white..... 5
- " " purple..... 5
- " " mixed..... 5

(See also Convolvulus.)

**MONKEY FLOWER—(See Mimulus).**

**MOURNING BRIDE—(Scabions.)**



Mourning Bride.

long stems work easily, and their striking colors, as well as fragrance, are desirable. Plant in hot-bed, and transplant one and a half feet apart. Tender perennial; one to two feet high.

- Scabiosa, atropurpurea, deep purple..... 5
- " candidissima, pure white..... 5
- " mixed..... 5

**MYOSOTIS—(See Forget-Me-Not).**

**MUSK PLANT—(See Mimulus)**

Handsome, showy climber of easy culture, and suitable for covering arbors, windows, trellises, old stumps, &c. It is so perfectly hardy as to grow in almost any soil. Without care, will soon cover any unsightly place if support be given for the vines. The flowers are most brilliant in the morning, and run through many shades,

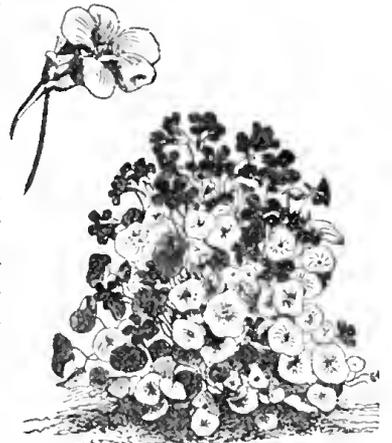
**NASTURTIUM, TALL. (Tropaeolum Lobbianum).**

The Lobbianum differs materially from the common running Nasturtium, and is admirably adapted for greenhouse or conservatory decoration in winter. It is a very rapid grower and strikes freely from cuttings, but seeds sparingly. The colors are very brilliant, and of many shades, from scarlet to black. Fine for covering arbors, trellis, and rustic work. Hardy annual; ten to twenty feet high.

- Tropaeolum Lobbianum, Couleur de Bismarck, brown..... 15
- " Lobbianum, Geant des Batailles, carmine... 15
- " " Roi des Noirs, black... 15
- " " Von Moltke, bright, bluish rose... 15
- " " Lucifer, splendid, very dark scarlet..... 15
- " Lobbianum, mixed..... 10
- " tall mixed, the common tall varieties..... 5

**NASTURTIUM, DWARF. (Tropaeolum Minor).**

A bed of Dwarf Nasturtiums in the yard is very brilliant and attractive, and they bloom all the season. The flowers are more brilliant if the soil be not over rich. Give each plant a foot of room. Hardy annual; one foot high.



Nasturtium, Dwarf.

- Nasturtium, dwarf, Crystal Palace Gem, sulphur, spotted maroon.... 5
- Nasturtium, dwarf, scarlet .. 5
- " " King Theodore, very dark.. 5
- " " Beauty, orange and vermilion, 5
- " " yellow..... 5
- " " Pearl, white..... 5
- " " rose..... 5
- " " Ring of Tom Thumbs..... 5
- " " Golden King of Tom Thumbs, brilliant gold color..... 5
- " " Spotted King, yellow, spotted chocolate..... 5
- " " mixed..... 5

**NEMOPHILA—(See Love Grove).**

**NIEREMBERGIA.**

Charming little plants, well adapted for edgings, baskets, &c. The seed should be sown in greenhouse, or in pans in the house, and set out in open ground, after danger of frost is over.

- Nierembergia, gracilis, a fine bedding plant; white with purple eye; slender and graceful..... 10

**NIGELLA—(See Love-in-a-Mist).**

**NOLANA.**

Beautiful, trailing plants, with prostrate stems, much branched; almost equal to the Portulaca for growing in masses, and unsurpassed for rock work, pots, baskets, or vases, as the branches hang pendulous over the edge of vase or basket. The blossoms are convolvulus shaped,

brilliant, freely produced, of various colors. Sow in open ground, in light, sandy soil, early in spring; plenty of sun, and a dry situation are essential. Hardy trailing annual; six inches high.

- Nolana, atriplicifolia, blue, white and yellow..... 5
- " mixed..... 5

**NYCTERINIA.**

Charming little plants, well adapted for rockeries and baskets. The flowers are borne on large heads, are of various colors, star shaped, and during the evening are very fragrant. Produces richer, larger, and more blossoms in light soil. Start in hot-bed, and transplant six inches apart. They will blossom very early in spring, and remain in bloom the whole season. Tender perennial; six inches high.



Nycteria.

Nycteria, capensis, white, yellow center..... 10

- " mixed..... 10

**NYMPHÆA—(Water Lily).**

Hardy; aquatic plants, bearing exceedingly beautiful fragrant, white blossoms, which appear as if floating on the water. They are very much admired, and becoming more and more popular every year. Are increased by sowing the seed, or by dividing the roots or tubers. They grow readily in ponds or streams of shallow water having muddy bottoms, and can be grown in aquaria, tubs or tanks, in the house, if there be sufficient mud at the bottom, and the seeds or roots be kept continually covered with water.



Nymphaea.

CULTIVATION—In Tubs.—Take a strong barrel, free from tar, oil or salt, saw it in two, fill this one-third full with fine, black, garden soil, or meadow mud, if handy; plant the seed in this mixture, covering them one inch deep, add water gently so as not to disturb the seed, until the tub is full. This is all the care needed, always keep the tub full of water. Set this on a brick or board platform in any place you desire. The tubs, with their contents, should be placed in a cellar during the winter, kept from frost, and not allowed to entirely dry up.

For Aquariums.—Put in five inches of fine, black loam, cover the seed one inch deep in this, and sift on enough fine sand to entirely cover the loam.

- Nymphaea, odorata, white; fragrant..... 20

**ŒNOTHERA—(See Primrose).**

**OLEANDER—(Nerium).**

This well known shrub, originally a native of India, is of easy culture, and flowers freely the greater part of the year. In warm, moist climates, it requires no protection, and attains the proportions of a good sized tree. The flowers have a salver shaped corolla, with a crown of torn appendages in the center, are of a beautiful shade of pinkish red. They can be produced successfully in the house if the atmosphere is kept moist and warm. Sow seeds in gentle heat in February or March, in light, rich soil, which must be kept moist. When young plants are three or four inches high, repot in rich soil. The temperature in which plants are grown should not fall below 35°. The young shoots made one season should bloom the next

- Nerium, oleander..... 10

**OXALIS.**

Very pretty, herbaceous plants with rich, rose colored blossoms. They thrive well in a mixture of loam and sand; they should not be watered after they have done flowering, until they begin to grow afresh. They are desirable for green-house decoration, rock work or baskets out of doors. The plants can be wintered successfully in cold frame if they are kept dry and the frost excluded. Sow seeds in gentle heat early in spring, and when well started, transplant where they are to flower. Half-hardy perennial.

- Oxalis, rosea, rose colored..... 10
- " floribunda, alba, white..... 10

**PÆONY.**

New varieties of these justly popular flowers are obtained from seed, and some are sure to repay the little care required. If the seed be sown in a cold frame in autumn, the plants will be large enough to transplant the following spring, and a year later will begin to bloom. Pæony, herbacea (Chinensis), from a splendid collection of finest double sorts of all colors..... 25

**PALM—(Chamærops).**

The Palm is perhaps one of the most ornamental plants in the green-house, and those varieties that are hardy enough to bear planting out in the lawn during warm weather, are sure to command attention. The seeds are imported, and must of course have the aid of green-house or conservatory to make them germinate. Seeds are frequently four months in germinating.

Chamærops (humilis Dwarf Fan Palm), the most hardy sort, and in Scotland has stood out several winters with but slight protection. It is also the most dwarf of its species, seldom attaining over eight or ten feet in height..... 15

" excelsa (Hempen Palm of China), is a green-house variety in our climate. As a lawn plant in our Southern States, nothing could be more conspicuously attractive. A well grown specimen will attain the height of twenty-five or thirty feet..... 25

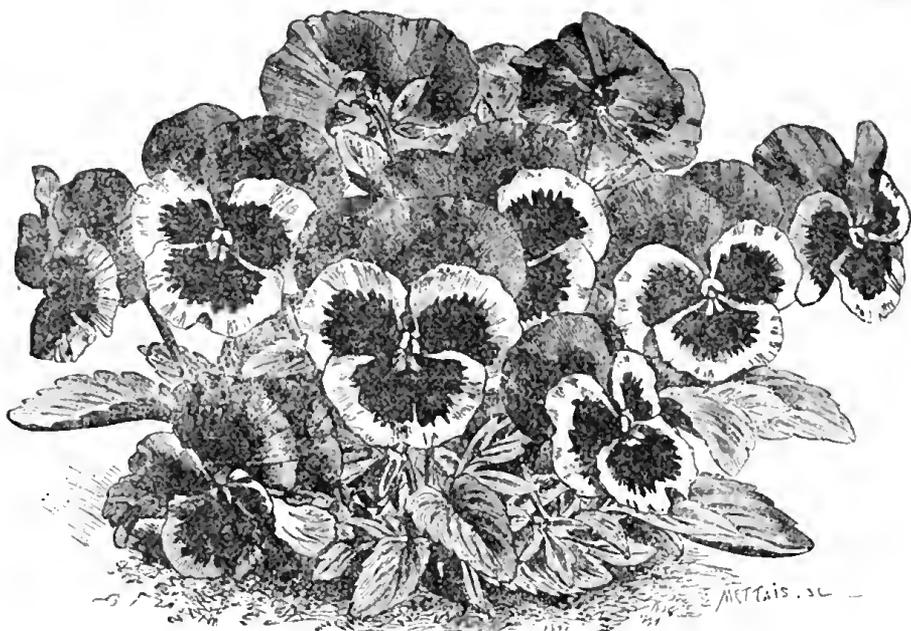
**PAMPAS GRASS—(Gynerium).**

Magnificent, ornamental grass, producing numerous flower stems, surmounted by plumes of silvery inflorescence. Half-hardy perennial, from South America; ten feet high. Start in heat.

- Gynerium, argenteum..... 10

**PANSY.**

These lovely flowers are favorites with all, not only for the brilliancy and variety of their colors, but for the durability of their bloom. Seed may be sown in open ground in spring or summer, or in hot-bed early in spring. Young plants produce the largest and best



Pansy, Large Flowering.

flowers. The plants should always occupy a cool, partially shaded situation, and the ground cannot be too rich; coolness and moisture are necessary. Transplant when an inch high. Seed sown in July will blossom late in autumn; if sown in October, will bloom the following spring. Hardy biennial; four inches high.

In Germany where the culture of the Pansy is carried to the utmost perfection, the following method is observed:

A fresh bed of rich vegetable mold is selected every year, worked deeply and thoroughly manured; liquid manure also being applied occasionally during the season. The bed is well soaked the day previous to sowing and the seed is kept evenly moist and well shaded during the germinating period (eighteen to twenty days).

Later the plants are transplanted to a similar bed, where they grow well into winter, producing an abundance of large flowers.

*The following varieties we have imported from the best English, German and French florists, and recommend them with confidence. They are saved from the choicest and finest flowers, and comprise all shades of color, from pure white to King of the Blacks.*

Pansy, copper colored.....	15
" Emperor William, indigo, dark center.....	15
" King of the Blacks, coal black.....	15
" large stained, large, and extra fine.....	15
" Odier each petal blotched.....	15
" pure yellow.....	15
" variegated and striped, fine.....	15
" white, pure.....	15
" purple, white edged.....	15
" sky blue.....	15
" fawn colored.....	15
" gold margined.....	15
" marbled.....	15
" mahogany colored.....	15
" violet, white edged.....	15
" purple and yellow.....	15
" Prince Bismarck, golden bronze, marbled; remarkably beautiful.....	25
" Lord Beaconsfield, a novelty of 1881, introduced by the celebrated florist, Mr. Benary,	

of Germany. The ground color is purple-violet, shading off in top petals only to a whitish blue, a peculiarity which lends to the whole flower an unusually bright appearance. The flowers are of immense size, and it is altogether very desirable..... 25

Pansy, Snow Queen, or Snow Flake, new: <i>flowers of a delicate pure white; very pretty</i>	25
" extra choice mixed, from choicest named flowers.....	15
" fine mixed, good quality.....	10
" mixed.....	5
" collection of nine best varieties.....	1.00

**PASSION FLOWER.**

A most interesting and well known order of climbers, bearing singularly beautiful flowers. They are the pride of South America and West Indies, where the woods are filled with the species, which climb about from tree to tree, bearing flowers of striking beauty. We have selected two varieties which seem best adapted to our climate, being more hardy than many other sorts.

**Passiflora, cærulea**, hardy, deciduous climber, with blue and white flowers of remarkable beauty. It is hardy enough to withstand our winters, if the roots are protected with straw, leaves or mulch..... 10

**Disemma coccinea**, magnificent green-house climber, with brilliant scarlet blossoms in the form of a double coronet or crown. Is rather tender, but can be planted out after danger of frost is over; must be sheltered or protected from frost in autumn or winter..... 20

**PEAS—(Lathyrus).**

A perennial climber, producing a long succession of white, rose, and purple blossoms, in clusters of eight or ten each. Suitable for trellises, arbors, etc. Young plants flower the second year freely, but the third and fourth year they produce an abundance of foliage and bloom. They die down every year and start again in the spring. Hardy perennial; ten feet high.

Lathyrus. latifolius, rose.....	10
" " white.....	15
" " mixed perennial.....	15
" odoratus (see Sweet Pea).	

**PENNISETUM.**  
(Ornamental Grass).

A species of hardy grass, useful only for the formation of winter bouquets. The heads are barbed and feathery, and present a beautiful appearance when mixed with Gomphrenas and other immortelles. Is perfectly hardy, and will grow in any common soil.

*Pennisetum, longistylum*, hardy, perennial, ornamental grass; two feet high. . . . . 5

**PENTSTEMON.**

These handsome, herbaceous plants are deservedly growing in favor for bedding purposes. The flowers are bell shaped, in racemes or spikes, and are constantly produced during the whole season. No one who has ever seen their beauty will willingly do without them. They are hardy perennials, and will live out of doors with a little protection. The seed should be sown in open border, covered very lightly, and the plants transplanted when four inches high.

- Pentstemon, Hartwegi*, one of the freest blooming kinds, and highly recommended, flowers brilliant scarlet, and very striking. Two feet high to
- " *Murrayanus*, one of the best; a single spike has been known to produce upwards of fifty blossoms; flowers rich, shining scarlet; three feet high . . . . . 10
- " choice named varieties, seed saved from collection of newest varieties, and cannot fail to give great satisfaction . . . . . 10

**PERILLA.**



Perilla.

Ornamental foliage plants similar to Coleus. Fine for bedding with silver leaved plants. Foliage metallic bronze; nothing else like it. Same culture as for Coleus. Half-hardy annual.

*Perilla, nankinensis atropurpurea laciniata*. . . . . 5

**PETUNIA.**

Petunias are unsurpassed, if indeed equalled for massing in beds. Their richness of color, duration of bloom, and easy culture, will always render them popular. They will do well sown in open border in spring, or earlier in cold-frame or hot-bed, and transplanted eighteen inches apart. By the latter process, they will come into bloom much earlier, though they do perfectly well sown in open ground. Be careful not to cover the small seeds too deeply; they like a sandy loam. Tender perennial; one and a half feet high.

- Petunia, nectaginiflora*, pure white . . . . . 5
- " *hybrida, Countess of Esmere*, deep rose, white throat. . . . . 10



*Petunia, hybrida grandiflora Superbissima.*

- Petunia, hybrida*, finest striped and blotched, saved from magnificent collection of striped and blotched varieties . . . . . 10
  - " " *atropurpurea*, dark red. . . . . 5
  - " *hybrida compacta elegantissima, new*: dwarf compact; free blooming. 15
  - " " *fine mixed*. . . . . 5
- LARGE FLOWERING SECTION.
- Petunia, hybrida grandiflora*, fine, green edged varieties, beautiful . . . . . 20
  - " " *grandiflora superbissima, novelty*: splendid, large throat. 25
  - " large flowered mixed, saved from largest flowers . . . . . 10
  - " *hybrida grandiflora, choicest mixed*: seed saved from show flowers . . . . . 15



*Petunia, finest striped and blotched.*

FRINGED SECTION.

- Petunia, hybrida new fringed varieties*, desirable novelty. . . . . 20
- DOUBLE FLOWERING SECTION.
- Petunia, double mixed*, finest varieties carefully fecundated with best double flowers. Sure to produce a good percentage of double flowering plants . . . . . 20
  - " *hybrida robusta, fl. pl., new*, dwarf, of robust growth, forming a compact, upright, branched bush about ten inches in height and fourteen inches in width, with double, sometimes even *double fringed* flowers in all

shades of colors existing in petunias. An extremely handsome, valuable sort for market culture. ....25

**Petunia, extra double fringed, many colors; beautifully fringed, a good percentage double; new**.....50

**PHLOX DRUMMONDII.**

Remarkable for the brilliancy and abundance of their large, terminal flowers, completely hiding the foliage. The blossoms are of many colors, from pure white to deepest purple, eyed and striped. For masses of separate colors and for cutting for bouquets, they are unsurpassed. The seed can be planted in open ground in autumn or spring, or plants may be started in hot-bed and transplanted. Give good, rich ground, and set plants six inches apart each way. Hardy annual; one foot high.



Phlox Drummondii.

- Phlox Drummondii, alba, pure white.....10
- " " scarlet, black center. ....10
- " " rosea, deep rose.....10
- " " Black Warrior, fine.....10
- " " Leopoldii, red, white eye . . .10
- " " alba oculata (superba), white, purple eye . . . . .10
- " " blue varieties, with white eye 10
- " Drummondii, brilliant, new; brilliant rose with dark red center, very effective..... 10
- " Drummondii, grandiflora, choice mixed, scarcely inferior in size and texture to the perennial sorts. One of the finest of recent introductions.....10
- " Drummondii, grandiflora splendens, extra choice mixed, this very fine variety has proved itself to be the gem of the new large flowering race of P. Drummondii. The flowers are large, handsomely rounded, and of great substance; the color vivid crimson, with a pure white disc; the habit of growth free and robust 10
- " Drummondii, fine mixed, many fine varieties 5
- " Drummondii, " Graf Gero" mixed, a new strain of fine, compact growth; excellent for pot culture.....25

**PHLOX PERENNIAL.**

The varieties of Perennial Phlox are among the choicest of our flowers for bedding and border plants. They are perfectly hardy, and need no protection; will flourish in any soil, succeeding better, however, in deep, rich, rather moist ground.

**Phlox Perennial, mixed, seeds saved from the newest splendid sorts**.....12

**PINK—(Dianthus).**



Pink, Double China.

(Double China Pink), this species is a biennial of dwarf habit; flowers the first year, but the bloom is stronger the second. The colors are very rich, and in large beds you can hardly find two alike. Seeds saved from double flowers will produce double ones. .... 5



Pink, Pheasant Eyed.

- Dianthus, Plumarius (Pheasant Eyed Pink), white or pink, with dark eye. The flowers deeply fringed or feathered; very fragrant. Hardy perennial..... 5
- " Plumarius Scoticus fl. pl. (Double Florist's Pink), saved exclusively from Mr. Turner's very best varieties of show pinks; extra. . . 50
- " Chinensis Heddewigii fl. pl. (Heddewig's Pink), flowers very large and double, having a diameter of nearly three inches; of various shades of brilliant colors, almost unsurpassed. An elegant acquisition. Half-hardy biennial.10
- " Chinensis laciniatus fl. pl. (Double Japan Pink), to be properly appreciated, these should be seen, as it is impossible otherwise to convey any idea of their beauty. Rich in hue, very double, deeply fringed petals—only lacking fragrance to make them perfect. Half-hardy biennial..... 10
- " Heddewigii diadematus (Double Diadem Pink), this is of denser growth than the Heddewigii, and of dwarfer habit. Very regular, densely double, and of all tints, from crim-



Pink, Scoticus fl. pl.

son-purple to deep black-purple. It has often a velvet like, radiant fire, impossible to reproduce . . . . . 10

**Pink, Chinensis imperialis fl. pl. Double Imperial Pink),** a superb, double variety from China. 10

The following two varieties are selections from the finest formed varieties of *Dianthus Heddewigii*, and are remarkably fine.



Pink, Eastern Queen.

**Dianthus, Heddewigii, Eastern Queen,** beautifully marbled; the broad bands of rich mauve upon the paler surface of the petals are very striking and pretty. . . . . 25

" **Heddewigii, Crimson Belle,** rich, vivid, crimson like color; flowers of extraordinary size and substance, evenly and finely lacinated. Both the above varieties come perfectly true from seed. . . . . 25

" **barbatus** (see Sweet William).

" **caryophyllus** (see Carnation).

**POPPY—(Papaver).**

Old fashioned flowers, but very popular. There are a few species of great beauty, which are an ornament to any garden. The following four varieties will be found to be magnificent, worth more than all the rest. Hardy perennials, blooming first year from seed, if sown early; will not bear transplanting well.

**Papaver, bracteatum pulcherrimum,** superb. large, double, orange-crimson flowers. . . . . 5



Poppy, Umbrosum.

**Papaver, Orientale,** large, gorgeous, orange-scarlet blossoms; bottom of petals black; beautiful. . . 5

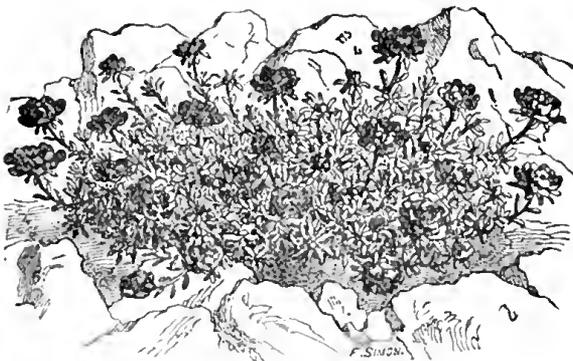
" **umbrosum,** rich vermilion, with a shining black spot on each petal; one of the most showy of all the varieties. . . . . 10

" **Carnation,** brilliant, large, showy, double flowers of various colors; two feet high. . . . . 5

The last variety, under the name of **Papaver somniferum**, is the sort used extensively for the extraction of opium.

**PORTULACA.**

There are scarcely any flowers in cultivation that make such a dazzling display of beauty as a bed of many hued, brilliant colored *Portulacas*. They are in bloom from about the first of July till killed by frost in autumn. Plant under glass or in open ground after it has become warm, in a light, sandy soil, and in a dry situation. After the plants appear, withhold water; and if the bed have a full exposure to the sun, the ground will be covered with the plants, and the effect will be beautiful. Tender annual; nine inches high.



Portulaca, double.

- Portulaca, alba,** pure white. . . . . 5
- " **aurca,** deep golden. . . . . 5
- " **striata,** striped yellow. . . . . 5
- " **caryophylloides,** carnation striped. . . . . 5
- " **fine mixed,** many beautiful kinds. . . . . 5

**DOUBLE VARIETIES.**

The double varieties of this plant are most beautiful. The blossoms are about one and a half inches across, perfectly double, and of many colors. Not all the plants

will be double, but the single ones can be pulled out. They will stand any amount of dry weather.

Portulaca, double, white.....	20
" " orange.....	20
" " scarlet.....	20
" " rose striped.....	20
" " sulphur.....	20
" " mixed.....	15

**PRIMROSE, EVENING.**  
(*Oenothera*).

The (*Oenothera*, or Evening Primrose produces large, showy blossoms, which are fully expanded only towards and during evening. The blossoms are three to four inches across, usually yellow or white, and very freely and constantly produced. They all do better if seed be started in hot-bed, and the plants transplanted.

- Oenothera, acaulis alba*, of prostrate habit, the leaves lying on the ground; produces an abundance of large flowers about three inches across, of most wonderful beauty, being transparent, and of the color and lustre of mother of pearl. Hardy perennial; six inches high...10
- " *Lamarckiana*, superb spikes of large, bright yellow blossoms, about four inches across. As many as 400 buds and blossoms have been counted on a single spike, and they are constantly produced from early spring till late in autumn. Hardy perennial; four feet high... 5
- " *gigantea*, the stem grows very tall, changing at about two-thirds its height into an immense flower spike of bright yellow. Notwithstanding its shrubby appearance, it is an annual, and may be grown as easily as the other kinds. 10

**PRIMULA, SINENSIS.**  
(*Chinese Primrose*).



Primula.

These are perhaps the most desirable of all house blooming plants. They are in almost constant bloom all winter, and if the plants be transferred to the border, they will bloom nearly all summer. Though perennial, new plants flower more freely, and seed should be sown every year. Give them a long time for growth before flowering, and do not force the young plants, but simply protect them

from frost and damp, cutting winds. Sow the seed in shallow boxes drained with charcoal, filled to the depth of two inches with sand and finely sifted garden soil. Sow seed thinly, and cover about one-sixteenth of an inch. If covered too deeply, or if the seed be wet and allowed to dry again, they will not germinate. When the plants show growth, transplant singly into small pots, and later into three and four inch pots. They thrive best in a cool, dry place with plenty of light, but protected from the sun. They do not require much water, except for a few days after repotting. Tender perennial; six to nine inches high.

- Primula, sinensis, fimbriata, new scarlet, distinct and striking..... 25
- " sinensis fimbriata, rose, rose varieties mixed. 25
- " " " Village Maid, pure white 25



Primula, fern leaved.

- Primula, sinensis fimbriata, alba maxima, flowers large, of great substance, finely fringed, pure white; *extra*.....50
- " sinensis fimbriata, James' Prize, dark carmine. ....50
- " sinensis fimbriata punctata elegantissima, the darkest primula known; flowers velvety crimson, admirably fringed and regularly spotted on the edge with white. ....50
- " sinensis fimbriata filicifolia, choicest fern leaved mixed, dark carmine and pure white 25
- " sinensis fimbriata, choicest mixed, from Mr. James' choicest strain of best fringed varieties; confidently recommended to give the greatest satisfaction; all colors mixed ..... 25



Primula flower, double.

**DOUBLE VARIETIES.**

The following four varieties can be relied upon to come true from seed. They are very choice, and highly recommended for florists.

- Primula, sinensis fimbriata, double crimson... 50
- " " " white ..... 50
- " " " red..... 50
- " " " mixed..... 50
- " Japonica, mixed, the Queen of Primroses; noble in foliage and bearing. The beautiful, fine, large, various colored flowers stand in whorls, pyramidically arranged on stout flower stems, which are over one foot high... 25

**PYRETHRUM—(Feverfew.)**

(Also see *Matricaria*.)

Very useful, and universally admired bedding plants, deserving a place in every garden. Sow from December to April, in shallow boxes, in a temperature of 60°. As soon as the young plants can be handled, transplant singly into small pots or shallow boxes, where they may remain until the time of planting out into the open ground in May.

- Pyrethrum parthenifolium aureum (Golden Feather), beautiful, gold leaved bedding plant, retaining its ornamental character until late in autumn. One of the finest recent acquisitions for geometrical designs; flower white... 10

**Pyrethrum roseum** (*Insect Powder Plant*), Practical entomologists have long been looking for some effective, safe and cheap insecticide, and now tell us they have found it in the *Persian Insect Powder*. This is the dried and powdered flowers of the *Pyrethrum Roseum*, and is certain death to Plant Lice, Flies, Cabbage Worms, and nearly every form of insect life. It is harmless to man, but when diluted with ten times its bulk of flour, kills every cabbage worm or other insect it touches. Hitherto the high cost of the powder and the difficulty of securing a *pure* and *fresh* article has prevented its coming into general use, but experiments made by Prof. Riley, of the United States Entomological Commission and others, showed that it can be grown successfully in all of the Southern and many of the Northern States.

**CULTURE.**—Sow in boxes of prepared soil, as early as the season will permit, and transplant to sixteen inches apart whenever the plants are large enough. The young seedlings are small and of slow growth, but the older plants hardy and vigorous. The largest crop of flowers is produced the second season. They should be gathered when in full bloom, dried carefully, and stored in paper bags. Before using, the flowers should be powdered as fine as possible. *Per pkt. 10c., oz. \$1.00.*

**QUAKING GRASS**—(See Briza).

**RHODANTHE**—(Everlasting).



Rhodanthe.

Of all the many varieties of everlastings, we think the Rhodanthe the finest and most beautiful. The flowers are of various colors, pure silvery white with yellow disc, rosy crimson and bright purple, rose suffused with white, &c. For winter bouquets, the blossoms should be gathered before they are fully expanded, and if dried in the shade, they will retain their

brilliancy for years. The leaves are heart-shaped and lustrous, and the calyx long, scaly and shining. The seeds should be started in hot-bed, and the plants transplanted to a warm situation, one foot apart. Tender annual; one foot high.

- Rhodanthe, *Manglesi*, rich rosé color, suffused with white ..... 10
- “ *Manglesi* double, a novelty and a curiosity; produces 10 to 15 per cent of double blossoms. 25
- “ *maculata*, rosy crimson, bright purple or white with golden center, surrounded by a velvety band ..... 10
- “ *maculata alba*, pure white, with yellow disc; elegant ..... 10
- “ mixed ..... 10

**RICINUS**—(See Castor Bean).

**ROCKET.**

The Sweet Rocket produces clusters of flowers which are very fragrant during the evening. The seed readily germinates in the open ground with very little care. Hardy perennial; one and a half feet high.

- Rocket, Sweet, purple ..... 5
- “ “ white ..... 5

**ROSE CAMPION**—(See *Agrostemma Coronaria*).

**ROSE OF HEAVEN**—(See *Agrostemma Celi-rosa*).

**SALPIGLOSSIS.**

Very showy bedding or border-plants, with richly colored, erect, funnel shaped flowers. The colors are beautifully marbled and pencilled, purple, scarlet, crimson, yellow, buff, blue, and almost black. They are biennial in green-house, but annual in open ground. Start seed in hot-bed, and transplant one foot apart into a mixture of loam and sand, with well rotted horse manure at the bottom. Bloom from August to October. Tender annual; one and a half to two feet high.



Salpiglossis.

- Salpiglossis, new black, a new variety; recommended for its distinct character as a black blossom ..... 15
- “ fine mixed, colors beautifully marbled; purple, scarlet, crimson, yellow and blue. .... 10



Salvia, Splendens Compacta.

**SALVIA.**

The *Salvia*, or Flowering Sage, is a very ornamental plant, flowering in spikes of fiery red, crimson and blue, and continues in blossom, in open ground till frost, when the plants can be removed to the green-house and will continue in bloom a long time. Start the plants in hot-bed, and transplant into light, rich soil, about one foot apart. Tender annual; one to five feet high.

- Salvia, splendens compacta*, the finest *salvia* grown, being literally covered with blossoms; grows well from cuttings.....15
- " *Roemeriana*, deep crimson; beautiful; one foot.10
- " *patens*, one of the brightest and purest of all blue flowered plants, and holds a pre-eminent position..... 20

**SANVITALIA.**

Very pretty, dwarf, trailing plants, excellent for rock work, borders or edging of beds. It is so completely covered with flowers as to nearly hide the foliage. The flowers are double, and of a brilliant golden yellow, resembling a miniature double zinnia in form. Single varieties are not worth cultivating. Sow where required, in open ground, in spring, and thin to six inches apart; the plants will then cover the ground. Hardy annual; six inches high.

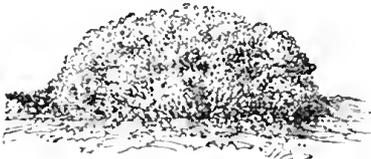
- Sanvitalia, Procumbens*, fl. pl. .... 10

**SCABIOUS**—(See Mourning Bride).

**SCARLET FLAX**—(See Linum).

**SEDUM.**

A species of low, succulent plants, some of which are remarkably pretty; grow readily upon stones, rocks, walls and roofs of houses; are admirably adapted for the center of hanging baskets.



Sedum.

- Sedum, cæruleum*, the common blue sedum, frequently known as Blue Stonecrop. Hardy annual; six inches high..... 10

**SENSITIVE PLANT**—(*Mimosa*).



Sensitive Plant.

and if the upper branches be touched and droop, touching the lower ones, the whole plant will appear as if wilted and dying. Start in hot-beds, or pots, and trans-

plant into a warm situation, six inches apart. Tender annual; two feet high.

- Mimosa, pudica*..... 5

**SMILAX.**

No climbing plant in cultivation surpasses this for graceful beauty of its foliage. In cut flowers, and for wreaths, etc., it is indispensable to florists. Its hard texture enables it to be kept several days after being cut, without wilting. Nothing is finer for clothing statuettes, vases, etc. Soak the seed in warm water twelve hours, and plant in pots, in hot-bed or green-house, in February, and keep in a warm, moist place. One plant in a two-inch pot is enough. After they have completed their growth, and the foliage begins to turn yellow, turn the pots on their sides and withhold water till August, when the little bulb which has formed, can



Smilax.

be repotted in good, rich earth, and watered freely, and it will grow all winter. The seed germinates very slowly. Tender perennial climber; ten feet high.

- Smilax, Myrsiphyllum asparagoides*.....15

**SNAPDRAGON**—(*Antirrhinum*).

The Snapdragon is an old favorite border plant, with dark and glossy leaves, and large, curiously shaped flowers with finely marked throats. They have been much improved by careful selection, and now are really magnificent flowers. They blossom the first season from seed sown in spring, but the blossoms will be much stronger the second season. Succeeds best in dry, loamy soil. Tender perennial; two feet high.



Snapdragon.

- Antirrhinum majus album*, pure white ..... 5
- " *majus brilliant*, crimson, white throat..... 5
- " " *Delila*, white throat..... 5
- " fine mixed, all the best colors. .... 5

**SOLANUM.**

A class of beautiful ornamental, fruit bearing plants. They are useful for conservatory decoration, and present a beautiful appearance in the drawing room. Most of the varieties are half-hardy perennial shrubs, and can be planted out when danger of frost is over. The foliage is beautiful, but the fruit is the chief attraction, being very beautiful in appearance, but not edible.

- Solanum, pseudo capsicum*, covered with a profusion of miniature, pepper shaped, scarlet fruit 10
- " *hybridum compactum*, large orange-scarlet berries, produced abundantly. Elegant for house or green-house decoration during winter 15



Stock, Brompton.



Stock, Emperor or Perpetual.



Sunflower, double.

**STATICE.**

The species of Statice, or Sea Lavender, ought to be in every garden, on account of its lovely little flowers so freely produced. Sow in sand, loam or peat, in the house, and transplant into the garden when warm. Is perfectly hardy.

**Statice, Tatarica**, hardy, herbaceous perennial from Russia, producing an abundance of pink flowers. One and a half feet high..... 25

**STIPA**—(See Feather Grass).

**STOCK.**

The Stock has for many years been a general favorite, but of late years the Germans have grown them in such perfection that they are considered almost indispensable where a fine display is wanted. The seed is



Stock, double German Ten Weeks.

grown with such great care that a very large proportion of double flowers are produced from the seed, and of great fragrance and beauty. To have them in bloom early, start in hot-bed, and transplant when small into pots, and turn out in June to open border. The seed may also be planted in the open ground. Hardy annual; one foot high.

**Stock, double German, Ten Weeks, fifteen separate colors mixed; fine..... 10**

**" dwarf German, Ten Weeks, pure white, large flowering..... 15**

**INTERMEDIATE OR AUTUMNAL.**

The Intermediate Stocks, if sown at the same time as the "Ten Weeks," will succeed them in bloom, thus affording continuous bloom until late in the fall. If

sown in pots, late in the summer, they will bloom the following spring.

**Stock, Intermediate, white..... 15**  
**" " scarlet..... 15**

**BROMPTON AND EMPEROR.**

These Stocks should have the same treatment as the Intermediate. They cannot endure our winters unless protected.

**Stock, Brompton**, blooms well in winter; flowers very fragrant. Half-hardy biennial; one and a half feet high. *Six best colors mixed..... 10*

**" Emperor, or Perpetual**, this beautiful and splendid variety of stock will bloom several years if protected from the frost; and if planted in pots early in spring, in green-house, will bloom the first autumn. The pots should be kept in a dry, cool place during winter, after blooming. The magnificent spikes of bloom are very rich and attractive, and for individual specimens are unequalled. Tender perennial; one and a half feet high. *Twelve most beautiful colors mixed..... 15*

**SUMMER CYPRESS**—(See Belvidere).

**SUNFLOWER**—(Helianthus).

Adapted by its stately growth for a background to a lawn, or a screen to hide unsightly places. It is also raised as an absorbent of miasma in damp or ill drained situations, thus preventing fevers. The flowers are really quite attractive. Plant the seed in spring, where desired, and thin to four feet apart in rows. Hardy annual; five feet high.

**Sunflower, double (Helianthus Californicus fl. pl.), very double..... 5**

**" Large Russian**, a very tall growing single variety, often fifteen to twenty feet high; the stalks are sometimes used for fuel..... 5

**SWAN RIVER DAISY.**

(See Brachycome).

**SWEET PEAS.**

**(Lathyrus Odoratus).**

Showy, free flowering climber, and deservedly one of the most popular annuals that enrich the flower garden. The flowers are very freely produced, white, red, crimson, purple, black and striped, and quite fragrant. Plant four inches deep, very early in spring—the earlier the better. Hoe the earth towards the vines without ridging, and give support to the vine to run upon. Hardy annual; six feet high.



Sweet Peas.

Sweet Peas, purple.....	5
" " scarlet.....	5
" " striped.....	5
" " Painted Lady.....	5
" " invincible scarlet.....	5
" " " black.....	5
" " " white.....	5
" " mixed.....	5

**SWEET SULTAN—(Centaurea).**

Handsome border plant of easy culture, bearing very fragrant, double, deep purple blossoms from July to October. They produce a striking effect in mixed borders, and are extremely useful for forming bouquets of cut flowers in connection with other colored flowers. Plant where required, in spring, and thin to six inches apart. Hardy annual; two feet high.

*Centaurea, moschata atropurpurea*, double purple 5

**SWEET WILLIAM.  
(Dianthus Barbatus).**

A bed of the finer varieties sports into an endless variety of colors, and presents a beautiful sight. For display in the garden, the Sweet William is unsurpassed. The seed can be planted very early in spring, in open ground, and will blossom the following autumn; or it can be sown in August, and will make fine blooming plants for spring. The plants will bloom several years, but young plants bloom better, and seed should be sown every year. Hardy perennial; one and a half feet high.



Sweet William.

Dianthus, barbatus, pure white, <i>pure white</i> flowers.....	10
" barbatus, black, reddish, velvety black.....	10
" " fine mixed.....	5
" " mixed double, perfectly double, and great variety of colors.....	10

**TAGETES—(See Marigold).**

**TASSEL FLOWERS—(Cacalia).**

A showy plant of easy culture, producing beautiful, scarlet and golden yellow, tassel shaped blossoms, from July to October. It is sometimes known as Flora's Paint Brush. Looks best when grown in clusters. Succeeds best in a mixture of fresh loam and leaf mold. Sow early in spring, in open ground, in clusters. Hardy annual; one and a half feet high.

<i>Cacalia, coccinea</i> , scarlet.....	5
" aurea, golden yellow.....	5
" mixed.....	5



Tassel Flower.



Torenia.

**TORENIA.**

A very fine, new annual, with large, sky blue blossoms, with three large spots of dark indigo blue, and a yellow stain in the center. Sown from February till April, in pots, and kept under glass, it will flower from June to September. The prettiest annual for cultivation under glass, but will thrive well in open air during the warmer season of the year. In open air, the plants are dwarfer and more robust, flowering well till cold weather.

Torenia, Fournieri superbienis, the darkest spotted varieties ..... 10

**TREE CYPRESS—(Ipomopsis).**

A wonderfully handsome plant, with fine, feathery foliage, somewhat like that of the cypress vine, and long spikes of beautiful flowers. It is equally desirable for out-door or conservatory cultivation. Sow the seed in August, in a dry situation; if the ground be at all wet, the plants will decay. Half-hardy biennial; three feet high.

Ipomopsis, elegans, mixed..... 5

**TRITOMA.**



Tritoma.

An interesting half-hardy, summer and autumn blooming plant, producing magnificent spikes of rich, orange-red, flower tubes. Needs protection of dry litter if left in the ground during winter; may be taken up in the fall, potted and kept from frost. Seeds should be sown in hot-bed or green-house, early in spring; the bulb which

will be produced should not be watered too freely, nor forced till the succeeding spring, when it should be transplanted into rich, loamy soil.

Tritoma, uvaria grandiflora ..... 25

**TROPEOLUM LOBBIANUM**—(See Nasturtium Tall).

**TROPEOLUM MINOR**—(See Nasturtium Dwarf).

**TROPEOLUM PEREGRINUM**—(See Canary Bird Flower).

**VALERIAN—(Polemonium).**

An old, standard border plant, often called Jacob's Ladder, from its beautiful, pinnately cleft leaves. The flowers are lively blue, nodding at the end of upright stalks. It blooms in June, is of easy cultivation, perfectly hardy, and may be increased by dividing the roots. Sow early in spring, in open border, and thin to one foot apart. Hardy perennial; one and a half to two feet high.

Valerian, Greek (Polemonium cœruleum)..... 5

**VERBENA.**

No plant is more generally cultivated, or more eagerly sought after than the Verbena, and no plant excels it for masses in beds on the lawn. In the varieties may be found every color except yellow. The white is pure, the crimson and scarlet so vivid, and the purple so deep,

while the striped blossoms are so conspicuous, that they are very desirable. They flower perfectly well from seed sown in spring. If started in the house, in pots, in winter they will be in bloom sooner, but if sown in open ground in May, they will bloom in August. Each plant will require a space of four feet. Tender perennial trailer; one foot high.



Verbena.

- Verbena, Aubletia grandiflora, reddish purple... 5
- " Niveni, white; sweet scented.... 10
- " Venosa, rich purple..... 5
- " Montana, hardy, from Rocky Mountains; will stand our winters out of doors; rose, changing into lilac..... 15
- " hybrida scarlet, scarlet blossoms..... 15
- " " Defiance, seed may be relied upon to produce the true, deep scarlet color..... 20
- " hybrida, blue, all shades of blue..... 20
- " " Italian striped, beautiful..... 20
- " " Auriculiflora, various shades, all with distinct eye of white or rose..... 20
- " hybrida, maxima perfecta alba, produces large, pure white flowers of standard perfection; fine for florists..... 25
- " extra choice mixed, seed saved from all named flowers; very choice..... 20
- " fine mixed, embraces all colors..... 10
- " mixed..... 5



Vinca, rosea.

**VINCA.**

A genus of ornamental, free flowering green-house perennials, with glossy green foliage and beautiful circular flowers. If sown early under glass and transplanted in a warm situation, they will bloom in the summer and autumn, and may be potted for the house before frost. Two feet high.

- Vinca, alba, white, with red eye..... 10
- "    "    pura, pure white.....10
- "    "    rosca .....10

**VIOLA TRICOLOR—(See Pansy).**

**VIOLET—(Viola Odorata).**

The Violet should not be wanting in any garden, on account of its fragrance and early appearance. A single flower will perfume a whole room. Succeeds best in a shady, sheltered place, and can be easily increased by dividing the roots. The Violet is an emblem of faithfulness Hardy perennial; six inches high.



Violet.

- Violet, Sweet Scented English (Viola Odorata), flowers double and single; white; fragrant...10
- " white (Viola cornuta alba), large, white blossoms .....10
- " yellow (Viola lutea grandiflora)..... 10
- " Mauve Queen, mauve colored..... 10
- " Purple Queen, deep, fine purple..... 10

**VIRGINIA CREEPER—(Hedera)—(Ampelopsis Quinquefolia).**

The Virginia Creeper or American Woodbine, is hardy, very ornamental, of rapid growth, and the foliage is luxuriant and beautiful. It is often made to cover the walls of houses forty or fifty feet high, clinging by its tendrils. The flower is reddish green, not showy, but is succeeded by clusters of nearly black berries, at which time the tendrils and stalk turn to a rich crimson color. It is exceedingly ornamental and conspicuous in October, after the first frost.

- Virginia Creeper .....10

**VIRGINIA STOCK—(Malcomia).**

Hardy annuals, very useful for border or edging. A continual succession of blossoms may be kept up the whole season by sowing at intervals through the spring and summer. The flower and plant are quite as desirable as the candytuft; grows about nine inches high.

- Virginia Stock, red and white mixed.... 5

**WALL FLOWER—(Cheiranthus Cheiri).**

The large, massive spikes of the Wall Flower are very conspicuous in beds and borders, and are very useful in

making bouquets. They are deliciously fragrant, perfectly double, and combine many shades of color, the orange purple and chocolate predominating. Sow the seed early, in hot-bed, and while the plants are small, prick them out into pots, and sink the pots in the earth. On approach of cold weather remove the pots to the house, and they will bloom all winter. Tender perennial; one and a half feet high.



Wall Flower, double.

- Wall Flower, mixed double.....10
- " Early Brown, brownish red, fragrant flowers; large, thick spikes; early. Tender biennial.10
- " Tom Thumb, new Golden, a new variety, free flowering, dwarf and compact habit; highly recommended for spring bedding, for which it is invaluable.....15

**WHITLAVIA.**

A pretty plant with delicate, handsome foliage, producing a constant succession of bright blue, and pure white, bell shaped flowers, in drooping clusters, half an inch in length. In heavy, wet soils it does not succeed well, but in light, sandy loam, few flowers give more satisfaction. Sow the seed in open border early in spring. Hardy annual; one foot high.

- Whitlavia, grandiflora ..... 5



Whitlavia, grandiflora.

**WIGANDIA.**

Very ornamental plants with immense veined leaves, and stems covered with crimson hair. It grows rapidly, and should be formed into a bush. Its large leaves, and

clusters of lilac flowers which continue to open in succession for a long time lend the plant a tropical aspect, and make it one of the most valuable ornamental foliage plants for garden and lawn decoration. Seeds, if sown early in spring, in hot-bed, will produce large plants by middle of summer.  
 Wigandia, caracasana..... 25

**WISTARIA.**



Wistaria.

One of the most beautiful and rapid growing of hardy climbers, growing, when well established, in good soil, from fifteen to twenty-five feet in a season. Frequently blooms both in spring and fall; the pale blue, pea shaped flowers are borne in long, drooping clusters similar in size and shape to a bunch of grapes. It thrives best in a light, rich soil, and should be trained against a south wall or veranda. Seeds should be sown in mellow loam early in the spring; if a green-house or

hot-bed is available, start in winter, and when plants are a foot high, transplant into situations where they are to remain.

Wistaria, magnifica.....20

**XERANTHEMUM.**

Of neat, compact habit, free flowering, and of the easiest cultivation. The leaves are covered with a silvery down, and the flowers are pure white, deep purple and yellow, single and double. If gathered before fully opened, and dried in the shade, they will retain their beauty for years. They make fine winter bouquets alone or mixed with grasses. Sow in spring, and thin to one foot apart. Hardy annual; one foot high.

Xeranthemum, mixed.....10

**ZEA MAIZE—(Striped Japanese Corn).**

An ornamental foliage plant, of much beauty. It is a species of corn, with large foliage, the leaves being beau-



Zea Maize

tifully striped with white and green. Half-hardy annual, from Japan; six feet high.

Zea Japonica, fol. variegatis, striped foliage..... 5

**ZINNIA.**

A very showy plant, with large, double flowers, which when fully expanded, form hemispherical heads, become densely imbricated, and might easily be mistaken for

dwarf dahlias. The colors run through all the shades of carmine, lilac, scarlet, purple, crimson, yellow, to pure white. If any single blossoms appear, they should be at once pulled up. Sow the seed early in spring, in open ground and transplant



Zinnia.

to one and a half feet apart, in good, rich soil, or start under glass for early blooming. Half-hardy annual; one and a half feet high.

By careful selection and several years' cultivation, the European florists have obtained the following distinct varieties of this valuable plant. The seeds we offer can be entirely relied upon to reproduce the different colors, almost without sporting.

Zinnia, double	carmine.....	10
"	scarlet.....	10
"	purple.....	10
"	crimson.....	10
"	orange.....	10
"	lilac.....	10
"	deep scarlet.....	10
"	deep purple.....	10
"	alba plenissima, pure white.....	10
"	choice mixed, very fine.....	10
"	mixed.....	5
"	elegans plenissima, Emperor Francis Joseph, a new, extra double variety of superior quality; deep purple upon orange ground; beautiful.....	10
"	Haageana fl. pl., a perfectly double variety, of deep orange color, finely margined with bright golden yellow; beautifully imbricated, representing a depressed globular cone.....	10
"	Darwini, fl. pl., a distinct class of zinnias of most beautiful form and every conceivable shade of color. There are four classes known as <i>nana compacta</i> , <i>major</i> , <i>pyramidalis</i> and <i>vitata</i> , about twelve colors in each class. The seed we offer comprises a mixture of all the above classes.....	20



Double Zinnia.

# CHOICE FLOWER SEEDS IN BULK.

FOR DESCRIPTIONS SEE PRECEDING PAGES.

For such of our customers as make extensive sowings of flower seeds, and for florists who require larger quantities of Flower Seeds than are usually sold in packets, we offer some of the leading sorts by weight. This list embraces the most desirable kinds for bedding, edging and ornamental planting. Those who plant largely, will find this a very economical mode of securing their seed.

We send free by mail, at prices annexed, but no discount or premiums can be allowed on Flower Seeds by weight. Half ounces will not be supplied of such kinds as sell for less than 50 cents per oz.

	PER OZ.		PER OZ.
<i>Ageratum</i> , Mexicanum.....	60	<i>Lantana</i> , finest hybrids, mixed.....	1 00
<i>Alyssum</i> , sweet.....	50	<i>Larkspur</i> , double dwarf rocket, mixed.....	50
<i>Amaranthus</i> , melancholicus ruber.....	50	<i>Linum</i> , grandiflorum rubrum ( <i>Scarlet Flax</i> ).....	50
"    tricolor ( <i>Joseph's Coat</i> ).....	50	<i>Lobelia</i> , <i>erinus</i> , blue and white.....	2 00
<i>Antirrhinum</i> , fine mixed ( <i>Snape-dragon</i> ).....	1 00	<i>Marvel of Peru</i> ( <i>Four O'Clock</i> ), mixed.....	30
<i>Aquilegia</i> , fine mixed ( <i>Columbine</i> ).....	75	<i>Mignonette</i> sweet, large flowering...per lb., \$2.00.	20
<i>Aster</i> , mixed German quilled.....	1 00	"    tall pyramidal.....	30
"    Truffaut's Perfection, mixed.....	5 00	<i>Nasturtium</i> , dwarf, mixed.....	40
"    "    snow white.....	6 00	"    lobbianum, tall.....	40
<i>Balloon Vine</i> .....	50	<i>Pansy</i> , extra choice mixed, from named flowers.....	3 00
<i>Balsam</i> , double camellia, mixed.....	1 00	"    fine mixed, all colors.....	1 50
"    double white.....	1 25	<i>Petunia</i> , choice mixed.....	1 00
"    mixed double dwarf.....	75	<i>Phlox Drummondii</i> , choice-mixed.....	1 50
"    mixed double tall.....	60	"    "    fine mixed.....	75
<i>Canary Bird Flower</i> .....	1 00	<i>Poppy</i> , carnation, double, mixed.....	50
<i>Candytuft</i> , white, fragrant.....	40	<i>Portulacca</i> , fine mixed.....	50
"    white rocket.....	50	"    double, mixed.....	5 00
"    fine mixed.....	40	<i>Pyrethrum</i> , aureum ( <i>Golden Feather</i> ).....	1 50
<i>Canna</i> , Indica, mixed.....	50	"    roseum ( <i>Insect Powder Plant</i> ).....	1 00
<i>Canterbury Bell</i> , double, mixed.....	75	<i>Ricinus</i> ( <i>Castor Bean</i> ), mixed.....	30
<i>Celosia</i> , cristata ( <i>Cockscomb</i> ) dwarf, mixed.....	60	<i>Scabiosa</i> ( <i>Mourning Bride</i> ).....	60
"    "    tall,.....	50	<i>Sensitive Plant</i> , mimosa pudica.....	75
<i>Centaurea</i> , gymnocarpa, silvery foliage.....	2 50	<i>Smilax</i> .....	3 00
<i>Cineraria</i> , maritima candidissima ( <i>Dusty Miller</i> ).....	2 00	<i>Stock</i> , double German Ten Weeks, mixed.....	2 00
<i>Convolvulus</i> , major ( <i>Morning Glory</i> ).....	25	<i>Sun Flower</i> , double.....	40
"    minor, mixed ( <i>Dwarf Morning Glory</i> ).....	25	<i>Sweet Peas</i> , purple.....	20
<i>Cypress Vine</i> , scarlet.....	60	"    scarlet.....	20
"    white.....	60	"    striped.....	20
"    mixed.....	50	"    Painted Lady.....	20
<i>Dianthus</i> , chinensis fl. pl. ( <i>Double China Pink</i> ).....	75	"    invincible black.....	20
<i>Digitalis</i> ( <i>Foxglove</i> ), mixed.....	50	"    mixed.....per lb., \$1.00	10
<i>Euphorbia</i> , variegata.....	60	<i>Sweet William</i> , double mixed.....	1 50
<i>Forget-Me-Not</i> , myosotis palustris. <i>The true sort</i> .....	60	"    "    fine mixed.....	50
<i>Gilia</i> , tricolor.....	40	<i>Verbena</i> , extra choice mixed, splendid.....	3 00
"    capitata.....	40	"    "    fine mixed, all colors.....	1 50
<i>Gourd</i> , mixed ornamental.....	40	<i>Violet</i> , sweet scented.....	2 00
<i>Hollyhock</i> , Chater's finest double mixed.....	2 00	<i>Zinnia</i> , choice double, mixed.....	75
"    "    fine double mixed.....	1 00		

About September 1st next, we shall issue our Annual Catalogue of choice Dutch Bulbs and Seeds for fall planting. It will be sent free to all customers, without ordering it, and to others who apply for it.

# BULBS FOR SUMMER & AUTUMN BLOOMING.

The following bulbs will be sent by mail or express, charges prepaid, when ordered at single or dozen rates; at the 100 or 1,000 rate they will be sent by express or freight, the purchaser paying the charges. No less than 6 will be sent at the dozen rate; no less than 50 at the 100 rate, and no less than 500 at the 1,000 rate. Orders, with money, should be forwarded as early as possible, and they will be filled in rotation. The tender Bulbs, that are injured by frost, will not be sent until such danger is over in the spring.

## DAHLIA.



Dahlia,

The Dahlia has always been a favorite for autumn flowering. The flowers are so symmetrical and perfect and the range of brilliant colors so large and varied, that they will always be popular where display is wanted. The roots are tender, and easily injured by frost. They should be set out three feet apart, after all danger

of frost is over, and during winter, placed in a cool cellar, and not allowed to freeze. The plants should be supported by tying to stakes. Our collection of mixed dahlias, taken from over one hundred varieties, is the best ever offered to the public, comprising all the positive colors with their most striking shades. Ready for shipment about April 1st.

a stiff clay, require full sunlight, and are only liable to injury from rank manure. Plant the bulbs six to nine inches apart, the large ones four inches, and the small ones two inches deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm, and continue to plant at intervals of two weeks during the spring and early summer. In this way a succession of bloom may be had from midsummer until frost. In autumn, before freezing, they should be dug and dried, the earth and old roots removed, and then stored in a cool, dry place, secure from frost, until spring.

### Mixed Gladiolus.

This mixture must not be compared nor confounded with the common mixed sorts, often the refuse of cheap, unsalable kinds. It is composed only of named varieties of the best sorts, and represents over 150 kinds, among which is a good proportion of white, yellow, striped and blotched varieties. We feel certain that no one will be disappointed in purchasing this stock, and we recommend it with the greatest confidence.

DOZ. PER 100, PER 1000.

Choice mixed..... 75 3 50 30 00

### Named Gladiolus.

The following named varieties are selected with special reference to beauty of flower, range of color, and habit of plant. There is not one in the list that is not desirable, and every bulb has flowered the past season, and is known to be true to color and description. Ready for shipment about April 1st.

EACH. DOZ.

- Addison, fine, large flowers, dark amaranth with white lines..... 15 1 50
- Amalthee, pure white, large violet-red blotch, ground of the corolla velvety violet, the lower petals slightly tinged with lilac.... 20 2 00
- Angole, white, slightly flesh, light carmine blotches..... 15 1 50
- Brechtleyensis, rich, dark scarlet, very brilliant 10 1 00
- Ceres, pure white, flamed lilac, desirable..... 15 1 50
- Colvilli, The Bride, the finest white, early flowering variety, valuable for cut flowers.... 20 2 00
- Eugene Scribe, tender rose, blazed with carminate red, beautiful..... 15 1 50
- Felicien David, cherry, light carmine feathered, white blotch..... 15 1 50
- Isaac Buchanan, one of the best yellow sorts yet introduced..... 20 2 00
- John Bull, white, tinged with sulphur... 10 1 00
- LaCandeur, white, lightly striped with carmine violet, perfection... 20 2 00
- Lamarck, cherry colored, slightly tinted with orange, blazed with red, center very well lighted, very large, white stain..... 20 2 00
- Laura, orange red, flamed carmine, pure white blotch..... 10 1 00
- LePhare, brilliant and fiery red, very showy. 15 1 50
- LePoussin, light red, white blotch, handsome 15 1 50
- Madame Monneret, rose, white stripe and carmine blotch..... 10 1 00
- Madame de Vetry, French white, purple carmine blotch..... 20 2 00

of frost is over, and during winter, placed in a cool cellar, and not allowed to freeze. The plants should be supported by tying to stakes. Our collection of mixed dahlias, taken from over one hundred varieties, is the best ever offered to the public, comprising all the positive colors with their most striking shades. Ready for shipment about April 1st.

EACH. DOZ. 100

Extra choice mixed..... 25 2 00 12 00

## DIELYTRA—(Bleeding Heart).

Tuberous rooted plants, blooming in the spring, favorably known almost everywhere. They require only the ordinary culture of border plants. Roots planted in spring or autumn will flower freely. The roots should be divided every third year. The flowers are delicate pink color, very graceful, produced continuously from May till July. Ready for shipment about April 1st.

EACH. DOZ.

Dielytra, Spectabilis..... 25 2 50

## GLADIOLUS.



Gladiolus.

The Gladiolus may, perhaps, be placed at the head of summer flowering bulbs. The improvements in this flower have been marked and rapid, and the varieties now embrace nearly all shades of color, and some of them are marvels of beauty. The culture is very simple. They thrive in almost any good soil, except

	EACH.	DOZ.
<i>Marie Dumortier</i> , white slightly streaked with rose, violet purple blotch. ....	15	1 50
<i>Martha Washington</i> , pure light yellow, lower petals slightly tinged with rose; stately and be beautiful. ....	60	00
<i>Meteor</i> , brilliant dark red, large, pure white blotch. ....	15	1 50
<i>Meyerbeer</i> , brilliant scarlet, blazed with vermilion, very fine spike. ....	15	1 50
<i>Napoleon III</i> , bright scarlet, the center of the petals white striped, extra fine. ....	15	1 50
<i>Norma</i> , pure white, sometimes tinted with pale lilac. ....	25	2 50
<i>Penelope</i> , white, slightly tinged pink. ....	15	1 50
<i>Phoenix</i> , fine spike of large flowers, of a striking fire-red color, with a large, white stain. ....	25	2 50
<i>Princess of Wales</i> , white, flaked carmine. ....	10	1 00
<i>Romulus</i> , intense dark red, blotched pure white. ....	15	1 50
<i>Shakespeare</i> , white or bluish white, blazed with rosy carmine, large, rose colored stain. ....	40	4 00
<i>Sultana</i> , bright satin rose, flamed with carmine; purple-carmine blotch on white ground. Choice. ....	75	7 50
<i>Sylphide</i> , long spike with fine white flowers, blazed with carmine. ....	15	1 50
<i>Van Dyck</i> , crimson amaranth, striped with white. ....	15	1 50

**HYACINTHUS CANDICANS.**

Somewhat like the Yucca but not as large. It throws up a flower stem nearly four feet high bearing a profusion of pure white bell-shaped flowers. It is a most desirable addition to any garden, is hardy, but a little protection in winter is advisable.

	EACH.	DOZ.
<i>Hyacinthus candicans</i> . ....	15	1 50

**LILIUM.**

The Lily has been, with eminent propriety, styled the "Queen of Flowers," and truly no flower conveys so adequate an idea of queenly beauty, majestic grandeur, and faultless purity, as the Lily. Too much cannot be said in its praise, and we are glad to notice its increasing popularity from year to year. Nearly every variety will withstand the severity of our winters, and many are among the most hardy of our garden flowers. Their culture is simple, and with a little care failure is impossible. The bulbs should be planted in spring as soon as the frost is out of the ground until first of May—the earlier the better. Select a well drained spot, dig the soil deep, and make it fine, enriching it abundantly with very rotten cow manure and adding a liberal mixture of sand. Set the bulbs from three to five inches deep, according to size. During the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In spring the manure may be removed or dug in between the rows. Care should be taken that they have proper drainage, no water being allowed to stand around the roots. Once firmly established, they should not be disturbed oftener than once in five years. To produce *extra fine* specimens plant the bulbs in small pots (4-5 inches) early in spring and raise them in the green-house or house. We saw a *Lilium Auratum* last summer measuring nearly 10 inches across, one of the finest specimens we have ever seen. The culture was as follows: planted in a four-inch pot in April, soil half forest loam and half rotted sod, kept barely moist until the plant began to grow, then freely watered.

	EACH.	DOZ.
<i>Auratum</i> , new, golden Japan lily, large bulbs. ....	30	3 00
<i>Lancifolium, album</i> , white Japan lily. ....	50	5 00
" <i>roseum</i> , rose spotted Japan lily. ....	25	2 50
" <i>rubrum</i> , white and red spotted. ....	25	2 50
<i>Chalcedonicum</i> , brilliant scarlet, recurved blossoms. ....	90	9 00
<i>Longiflorum</i> , pure white, very fragrant. ....	20	2 00
<i>Tigrinum</i> (Tiger Lily), orange, spotted black. ....	15	1 50
" <i>flore pleno</i> (Double Tiger Lily), extra large bulbs, giving from 20 to 30 flowers. ....	25	2 50
<i>Jacobean</i> (Am. nyctalis Formosissima), deep scarlet. ....	20	2 00

**MADEIRA VINE.**

Tuberous rooted climber, with glossy, green leaves, and delightfully fragrant, white blossoms. Sometimes called "Mignonette Vine." It is of rapid growth, and from a few tubers, vines will be produced sufficient to cover one side of a cottage in a single season. The tubers are tender, and must be protected from frost during winter.

	EACH.	DOZ.
Madeira Vine, tubers. ....	10	75

**TRITOMA.**

Sometimes called "Red Hot Poker." It is really a fine plant, quite hardy, though requiring some protection through winter. The flowers are produced in large spikes of rich, orange-red tinted flower tubes. Plant two feet apart, and in November, cut the plants back near the ground, and cover the bulbs with dry litter, which remove in the spring.

	EACH.	DOZ.
<i>Tritoma uvaria</i> . ....	30	3 00

**TUBEROSE.**

Of all the summer flowering, bulbous plants, we think the Tuberose the most desirable. The flowers are waxy white double, and so fragrant as to perfume the whole atmosphere for some distance around. They are useful for forming button hole bouquets, in large bouquets, or as



Tuberose.

single specimens. Each bulb flowers but once, but the smaller bulbs can be set out for future flowering, when their growth is completed. A good way to grow tuberose, is to fill five inch pots half full of cow manure, and the remainder with good, rich earth, mixed with sand. Plant the bulbs in this in April, water moderately, and hasten growth by putting in a warm, light place. When weather has become warm, plunge the pots in the earth out of doors. They will usually flower before cold weather in autumn; if they do not, the pots can be brought in, and they will bloom in the house. The bulbs cannot be safely sent by mail before April 1.

**ALL FLOWERING BULBS.**

	EACH.	DOZ.	100.	1000.
<i>Double White</i> , tall. ....	10	75	3 50	30 00
<i>Pearl</i> , double dwarf white. ....	10	75	4 00	35 00

# Farm and Garden Implements

NEVER SO CHEAP BEFORE. NOTICE THE  
**REDUCED PRICES.**

OUR LIST IS COMPLETE. IT CONTAINS ALL THE BEST IMPLEMENTS OF ALL MAKERS, AND NOT A SINGLE UNDESIRABLE TOOL.

## MATTHEWS' GARDEN SEED DRILLS AND CULTIVATORS.

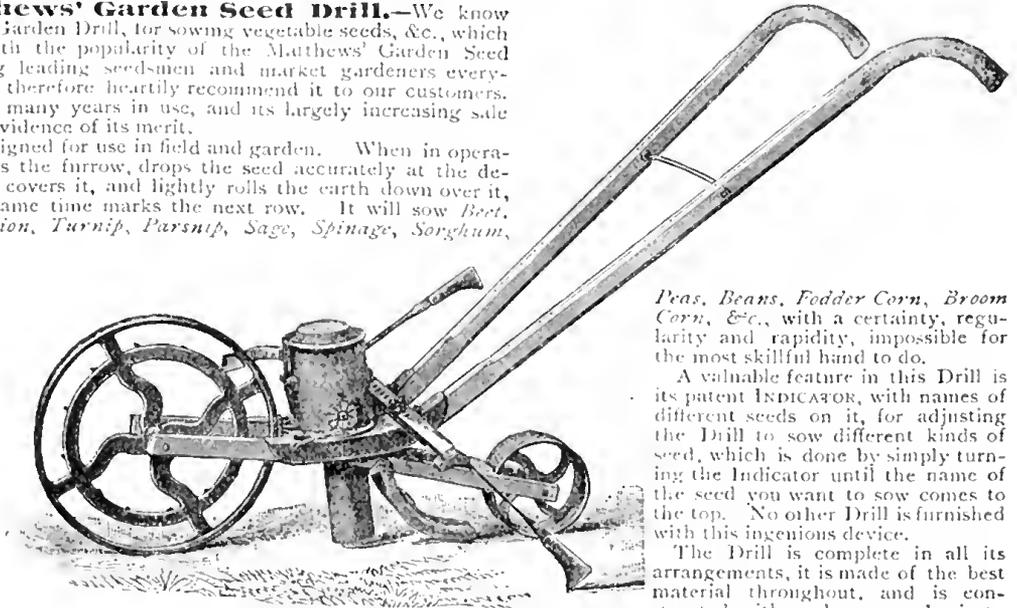
**Matthews' Garden Seed Drill.**—We know of no hand Garden Drill, for sowing vegetable seeds, &c., which has met with the popularity of the Matthews' Garden Seed Drill among leading seedsmen and market gardeners everywhere, and therefore heartily recommend it to our customers. It has been many years in use, and its largely increasing sale is the best evidence of its merit.

It is designed for use in field and garden. When in operation, it opens the furrow, drops the seed accurately at the desired depth, covers it, and lightly rolls the earth down over it, and at the same time marks the next row. It will sow *Beet, Carrot, Onion, Turnip, Parsnip, Sage, Spinage, Sorghum,*

*Peas, Beans, Fodder Corn, Broom Corn, &c.*, with a certainty, regularity and rapidity, impossible for the most skillful hand to do.

A valuable feature in this Drill is its patent INDICATOR, with names of different seeds on it, for adjusting the Drill to sow different kinds of seed, which is done by simply turning the Indicator until the name of the seed you want to sow comes to the top. No other Drill is furnished with this ingenious device.

The Drill is complete in all its arrangements, it is made of the best material throughout, and is constructed with such care and nicety of finish, that it will last many years,

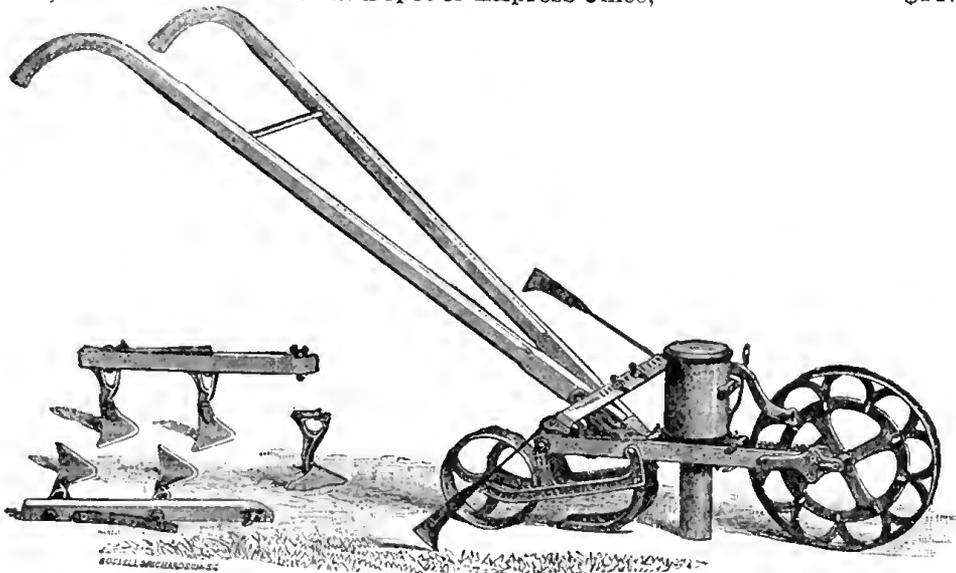


MATTHEWS' GARDEN SEED DRILL.

and do a vast amount of work without any repairs.

Price, Boxed and Delivered at Depot or Express Office,

\$11.00



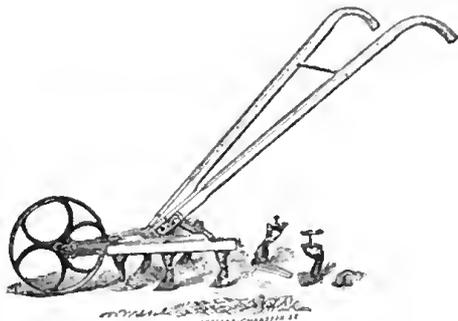
MATTHEWS' IMPROVED DRILL AND CULTIVATOR COMBINED.

**Matthews' Improved Drill and Cultivator Combined.**—The Matthews Drill and Cultivator Combined has been greatly changed and improved. It has a larger wheel with a wider flange to it, a new conductor and a new coverer, so that as a drill it now possesses all the features of the Matthews' Garden Seed

Drill of a smaller size. It has the same patent Indicator as that. The Cultivator attachment has also been greatly improved by providing it with a new set of teeth of an improved pattern, with **STEEL BLADES** of the best quality, so that as a Cultivator it is now similar to the Matthews Improved Hand Cultivator. Therefore, as now constructed, this machine cannot fail to prove very efficient for use, either as a Drill or a Cultivator, and will be found to be adapted to any kind of soil.

Price, Boxed and Delivered at Depot or Express Office, - - - \$13.00

We can furnish for the Matthews Improved Drill and Cultivator Combined, if desired, a pair of superior style *Hoes, with long, Steel Blades*, for use in exchange with the cultivator teeth, which are easily and quickly adjusted. Price per pair, complete, delivered at Depot or Express Office, \$1.50.



MATTHEWS' IMPROVED HAND CULTIVATOR.  
WITH TWO EXTRA HOES.

#### Matthews' Improved Hand Cultivator.—

The Matthews Hand Cultivator has been greatly changed and improved. It is now made with a larger wheel, and with a larger flange to it. It is also provided with a new set of teeth of an improved pattern, having **STEEL BLADES** of the best quality, and as now constructed will we think, prove greatly superior to what it was before, and be found to be perfectly adapted for use in any kind of soil.

It is thoroughly constructed throughout, very durable and easy to operate. A boy can do as much with it as six men with hoes. It spreads from six to fourteen inches, and will cut all the ground covered, even when spread to its greatest extent. The depth of cultivation may be accurately gauged by raising or lowering the wheel, which is quickly done.

Price, Boxed and Delivered at Depot or Express Office, - - - \$6.00

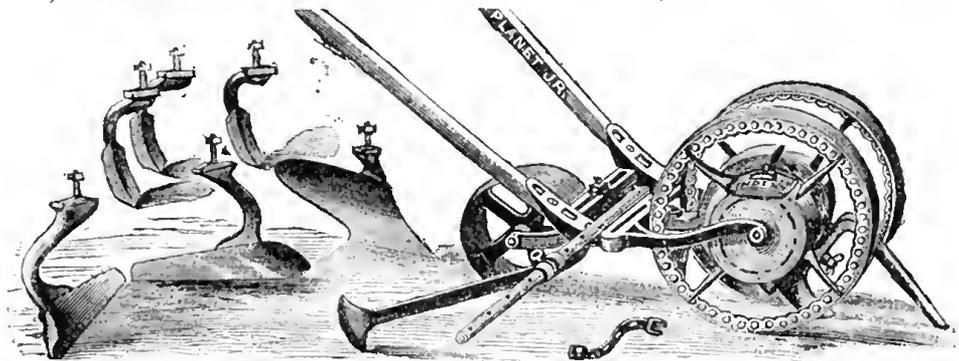
We can furnish for the Matthews Improved Hand Cultivator, if desired, a pair of superior style *Hoes, with long Steel Blades*, for use in exchange with the cultivator teeth, which are easily and quickly adjusted. Price per pair, complete, delivered at Depot or Express Office, \$1.50.

## THE "PLANET, JR." "FIREFLY" GARDEN DRILLS, WHEEL HOES AND WHEEL CULTIVATORS.

These machines well merit the general favor they have won, and with the recent improvements are even more perfect in their workings than formerly. *A complete, Descriptive Catalogue of these goods, illustrated with over 30 engravings*, showing the tools at work, and containing practical instruction in the cultivation of garden and field crops, invaluable to beginners, and useful to every tiller of the soil, will be mailed free on application to us.

**The Planet, Jr., No. 2 Drill.**—Holds  $2\frac{1}{2}$  quarts. It will sow with equal ease and accuracy, a single paper of seed or a full hopper, covering evenly at any exact depth, and will roll down and mark the next row perfectly, all at a single passage. It has no cams, levers, brushes, cogs, springs or shakers. It is *noiseless, automatic, self-cleaning, and always reliable*. It is remarkable for simplicity, strength and beauty, and for ease and perfection of work in the field, and no one having use for such a tool can afford to buy any without such advantages; it is the latest improved and best.

Price, Boxed and Delivered at Depot or Express Office, - - - \$10.00.



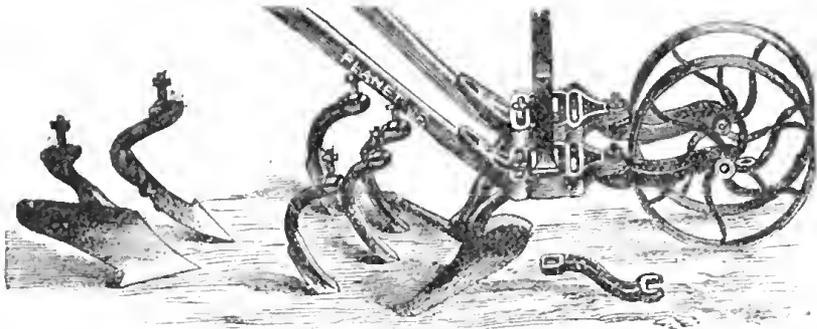
PLANET, JR. COMBINED DRILL, WHEEL HOE, WHEEL CULTIVATOR AND WHEEL PLOW.

**The Planet, Jr. Combined Drill, Wheel Hoe, Wheel Cultivator and Wheel Plow.**—Every reader of our catalogue having a vegetable garden, large or small, should own this delightful labor saving tool. As a *Drill*, it is exactly similar and equal to the No. 2 except in size. It holds one quart. As a *Plow*, it opens furrows, covers them, hills, plows to and from, &c. As a *Hoe*, it works safely and closely to and from both sides of the row at once, at the critical time when plants are small and weeds abundant, or between rows as plants become larger, working all rows from eight to sixteen inches wide, at one passage. As a *Cultivator*, it is admirably adapted to deep mellowing of the soil. The blades are tempered and polished steel.

It has a finely adjustable *Spring Brass Seed Reservoir*, an *Adjustable Plow between* the carrying and covering wheels, the *new, permanent Seed Index*, the *Cleaner and Marker*, all combining to make a perfect tool. It sows all garden seeds accurately at any desired thickness or depth, opening, dropping, covering, rolling down and marking the next row, all at one passage, in the most reliable and perfect manner. Each machine is sent out with all the tools shown in the cut, and by removing the roller and one bolt, it is ready to be used as a wheel hoe, a cultivator or a garden plow.

Price, Boxed and Delivered at Depot or Express Office, - - - \$12.00.

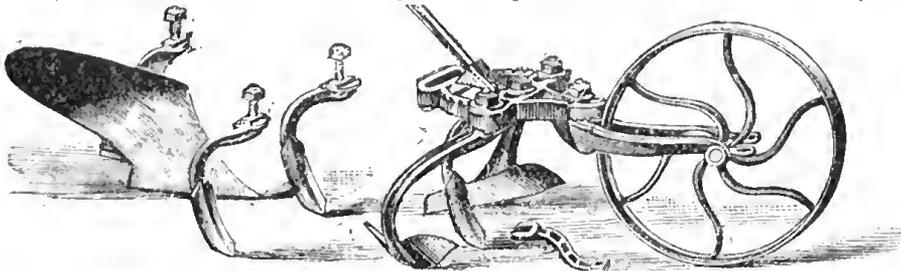
**The Planet, Jr. Double Wheel Hoe, Wheel Cultivator and Wheel Plow.**—Will do the work of from six to ten men with the common hoe among market garden and root crops, nursery stock, &c., and it is especially adapted to onion culture. It is light, firm, strong, quickly set and easily managed; each one is sent out with all the tools shown in the cut. All the blades are tempered and polished steel. The tool is light and graceful, made of the best material, and highly finished, and nothing can exceed the



PLANET, Jr. DOUBLE WHEEL HOE, WHEEL CULTIVATOR AND WHEEL PLOW.

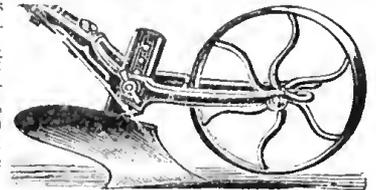
perfection and variety of work it performs, nor equal the enthusiasm of its many admirers. The wheels are adjustable in height, and can be set from seven to ten inches apart, or for working between rows as a single wheel hoe, at four inches apart.

Price, Boxed and Delivered at Depot or Express Office, - - - \$8.00.



FIRE FLY SINGLE WHEEL HOE, CULTIVATOR AND PLOW.

**The Fire Fly Single Wheel Hoe, Cultivator and Plow.**—This is a new claimant for public favor, and is sure to receive a large share of it, for it combines lightness and strength with the greatest adjustability, while its highly polished and tempered steel tools, makes gardening comparatively a pleasure. The tools are all made after the most perfect models, and are first, a pair of admirable hoes which can be set to work to or from the row, and to any desired depth; next, a set of three reversible cultivator teeth to be used singly, together or in conjunction with the hoes; third, a large and excellent garden plow. The handle is made of stiff iron, and the whole tool is light and strong, attractive in appearance, and capable of standing hard usage for years, while its low price is its final recommendation.



FIRE FLY WHEEL GARDEN PLOW.

Price, Boxed and Delivered at Depot or Express Office, \$4.50.

**The Fire Fly Wheel Garden Plow.**—Makes the care of a vegetable garden a pleasure, and to,000 families who could not find time to keep a garden, if attempting its cultivation with the ordinary hand hoe, can raise their own vegetables successfully with this tool.

Price, Delivered at Depot or Express Office, - - - \$3.00.

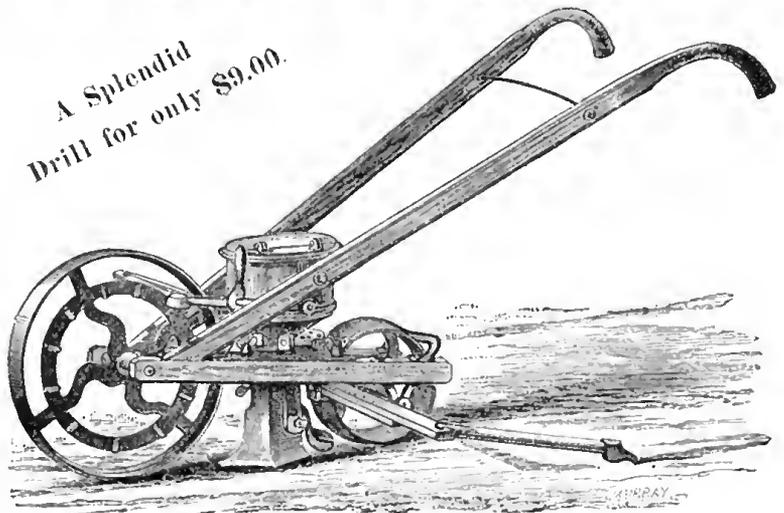
**THE NEW YORK SEED DRILL.**

**The New York Seed Drill** (*Matthews' Patent*).— This machine is the result of many years experience in the manufacture of such implements. It is very perfect in every respect, constructed of the best materials and in the most thorough manner. Some of its special advantages are, a marker, easily adjusted to any desired width; an adjustable plow, which opens a wide furrow, and a large seed box.

Superior in construction and practical in operation this machine is bound to give satisfaction. We are offering it, this season, at a reduced and very low price.

Price, Boxed and Delivered at Depot or Express Office, \$9.00.

*A Splendid Drill for only \$9.00.*



NEW YORK SEED DRILL.

## IMPROVED HORSE HOE AND CULTIVATOR COMBINED, WITH WHEEL.

This popular implement is made in the most thorough manner of the best materials, well finished, and while light and easy of draught, is very strong. It works equally well as a Horse Hoe or Cultivator. The frame and teeth are adjustable, and the teeth have reversible points. It has come into common use for general work, and is largely used in the culture of corn and cotton. It is invaluable for crops requiring to be hoed by hand, preceding the hoe and doing nearly all the work, or for crops that require hilling.

Price, complete (including wheel), Delivered at Depot or Express Office, - \$10.00

## ONION HOE.

To supply the demand for a tool exactly adapted to Onion culture, we have placed in stock the same hoe that we use on our own grounds. We have a large number in use, and consider them far superior to anything we have ever seen for the purpose. The blade is seven inches long and one and three-quarters broad, and can be used either to cut forward or backward. The hoe is light, easy to work with, and is constructed of the best steel. Price: Hoe (with handle) delivered at Express Office, 75 cents, the purchaser paying express charges. Hoe (without handle) by mail, postage paid, 75 cents.



EXCELSIOR WEEDING HOOK.

## EXCELSIOR WEEDING HOOK.

For weeding flower beds or vegetable gardens. It will work well among rows of seedlings, among ornamental plants, or in any place where freedom from weeds is desired. It removes the weeds with far greater rapidity than in the usual manner, without injury to the plants, and will pay for itself in one day's use. Price, 25 cents each, by mail, prepaid.



HASELTINE HAND WEEDER

## THE HASELTINE HAND WEEDER AND SCRAPER.

The latest and best hand weeder for use either in the flower or vegetable garden. For Onions and Strawberries it is simply indispensable. It is rapid, easy and thorough in its work. The blade is 3/4 inch wide, 1/8 inch thick, solid steel, oil tempered, and has five sharp edges. The cut is one-sixth full size. Price, postpaid, 50 cents.

## Philadelphia Broadcast Seed Sower.



For sowing *Wheat, Clover, Timothy, Oats, Barley, Rye, Buckwheat, Millet, Rice, Flaxseed, and all varieties of Grain and Grass Seeds.* ONE OF THE GREATEST LABOR-SAVING MACHINES INVENTED FOR AGRICULTURAL PURPOSES.

**Broadcasting.** - The Philadelphia has been TRIED AND PROVEN, not in one section only, but in nearly every State and Territory in the Union. In a few plain words we will mention some points of superiority: It is easily adjusted; the quantity sown per acre readily regulated; the ground requires no preparation excepting plowing; the seed is evenly distributed, and the breadth of cast is as great or greater than any other sower, and consequently it can do a greater amount of work in a given time. It sows readily four to six acres an hour. The principle of sowing is to follow closely the action of broadcasting by hand, casting the seed horizontally and within prescribed limits, not wildly distributing it in the air, as some sowers do; this means a saving of seed, and consequently of money.

With our machines, the following distances can be sown with uniformity: *Wheat, 25 feet; Barley, 25 feet; Clover, 20 feet; Timothy, 18 feet; Rye, 25 feet; Orchard Grass, 12 feet.*

**Broadcasting vs. Drilling.** - The following is the report of Mr. I. Carter, Superintendent of the Eastern Experimental Farm, Pa., on experiments made in seeding wheat:

	LBS. STRAW.	BUS. WHEAT PER ACRE.
1. Two bushels seed broadcast (harrowed).....	3,332	35.48
2. Two bushels drilled in .....	2,715	24.04

Difference in favor of Broadcasting..... 617 11.44

Seed Sowers can only be sent by express, the purchaser paying charges. Price, delivered at express office, \$5.50 each.

## LADIES' FLORAL TOOLS.

These Floral Sets are now so universally known that they need no description here. They have steadily increased in public favor ever since their introduction ten years ago, and have received the unqualified approval of all, we believe, of the leading florists of the country, and will be appreciated by every lady in the land who cultivates flowers. Sets of four pieces, price, per set, three-quarters polished, \$1.25, postpaid.

## WATERS' IMPROVED TREE PRUNER.

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	Pkt.	Oz.	2 Oz.	¼ lb.	Lb.
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Early Drumhead, <i>best French</i> .....	5	15	25	40	1 50
Early Large Schweinfurt.....	5	20	35	60	2 00
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Stone Mason Marblehead.....	5	25	40	75	2 50
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Marblehead Mammoth Drumhead.....	5	25	40	75	2 50
Quintal Drumhead, <i>true French</i> .....	5	15	25	40	1 50
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Savoy, Dwarf Elm.....	5	20	35	60	2 00
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Savoy, Improved American.....	5	25	40	75	2 50
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Earliest Short Horn, <i>for forcing</i> .....	5	15	25	40	1 25
Early Scarlet Horn.....	5	10	15	25	1 00
Early Half Long Scarlet, Stump Rooted.....	5	10	15	25	1 00
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Danvers.....	5	10	15	25	1 00
Long Orange, <i>improved</i> .....	5	10	15	25	1 00
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Large White Belgian.....	5	10	15	20	60
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Extra Early Paris.....	5	75	1 25	2 00	.....
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Large Algiers.....	5	1 25	2 50	4 50	.....
Late London.....	5	50	85	1 50	.....
Veitch's Autumn Giant.....	5	1 00	1 75	3 00	.....
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Dwarf White Solid.....	5	20	35	60	2 00
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Celery Seed, <i>for flavoring</i> .....	10	15	20	.....	50

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
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Large Rooted, or Coffee.....	5	10	15	25	1 00
<b>COLLARDS</b> —See page 22.					
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<b>CORN</b> —See pages 23, 24.					
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Crosby's Early.....	10	15	25	75	4 00
Russell's Early Prolific.....	10	15	25	75	4 00
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Stowell's Evergreen.....	10	15	25	75	4 00
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Dwarf Evergreen.....					Crop failed
Improved Evergreen.....					" "
<b>CORN SALAD, or Feticus, large seeded, large leaved</b> —See page 24.....	5	10	15	25	80
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True Water.....	10	40	75	1 25	4 00
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Early Cluster.....	5	10	15	25	90
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Early White Spine.....	5	10	15	25	90
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<b>EGG PLANT</b> —See pages 25, 26.					
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Black Pekin, <i>extra early, and very large</i> .....	5	60	1 00	1 75	6 00
D. M. F. & Co's Improved Purple, <i>extra large</i> .....	5	75	1 25	2 00	7 50
<b>ENDIVE</b> —See page 26.					
Green Curled.....	5	20	35	60	1 75
Broad Leaved Batavian.....	5	20	35	60	1 75
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<b>GOURD</b> —See page 26.					
Sugar Trough.....	10	30	55	1 00	3 00
Japanese Nest Egg.....	10	50	..	..	..
<i>Other varieties, see Flower Seeds, page 73.</i>					
<b>HORSE RADISH, Small Roots</b> —By mail, prepaid, each 10c; per doz. 50c... " " " By frt. or exp. not prepaid, per 100, \$1.00...					
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Extra Curled German Dwarf Green.....	5	15	25	40	1 25
German Dwarf Purple.....	5	15	25	40	1 25
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Early White Vienna.....	5	25	40	75	2 25
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Large Green.....	5	15	25	40	1 50
<b>LEEK</b> —See page 27.					
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Add 15 Cents per Pint, 30 Cents per Quart, for Postage, if Ordered Sent by Mail.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
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Black Seeded Simpson	5	15	25	40	1 25
Simpson's Early Curled	5	15	25	40	1 25
Early Boston Curled	5	15	25	40	1 25
Ferry's Early Prize Head	5	15	25	40	1 50
Hanson	5	15	25	40	1 25
Deacon Hine, or Ice	5	15	25	40	1 50
Early Curled Silesia	5	10	15	25	1 00
Frankfort Head	5	15	25	40	1 25
Large Drumhead, or Victoria Cabbage	5	10	15	25	1 00
Philadelphia Butter, or Early White Head	5	15	25	40	1 25
Brown Dutch	5	15	25	40	1 50
Green Fringed	5	15	25	40	1 50
White Paris Cos	5	15	25	40	1 50
<b>MARTYNIA</b> —See page 28.					
Pickling	5	30	55	1 00	3 00
<b>MELON, MUSK</b> —See pages 28-29.					
Jenny Lind	5	10	15	25	90
Surprise	5	10	15	25	90
Japan Coral Flesh	5	15	25	40	1 50
Skillman's Fine Netted	5	10	15	25	90
Small Green Nutmeg	5	10	15	25	90
Improved Large Green Nutmeg	5	10	15	25	1 00
Pine Apple	5	10	15	25	90
Bay View	5	10	15	25	90
Improved Cantaloupe, green fleshed	5	10	15	25	1 00
Casaba, or Green Persian	5	10	15	25	90
Long Yellow	5	10	15	25	90
<b>MELON, WATER</b> —See pages 29-30.					
Early Jersey	5	15	25	40	1 25
Phinney's Early	5	10	15	25	1 00
D. M. Ferry & Co's Peerless	5	15	25	40	1 25
Black Spanish	5	10	15	25	90
Gypsy, or Georgia Rattlesnake	5	10	15	25	1 00
Cuban Queen	5	10	15	25	1 00
Kolb's Gem, or American Champion	5	20	35	60	2 00
Scaly Bark	5	15	25	40	1 25
Icing, or Ice Rind	5	10	15	25	1 00
Mountain Sweet	5	10	15	25	80
Mountain Sprout	5	10	15	25	1 00
Orange, the flesh separates easily from the rind	5	10	15	25	1 00
Ice Cream, true white seeded	5	10	15	25	1 00
Citron, for preserving	5	15	25	40	1 25
<b>MUSHROOM SPAWN</b> —See page 30.					
English, by mail, prepaid		..	..	..	30
French, by express or mail, prepaid, 3-lb boxes, \$2.00 each.					
<b>MUSTARD</b> —See page 30.					
White English	5	10	15	20	45
Brown Italian	5	10	15	20	43
Southern Giant Curled	5	15	25	40	1 50
<b>NASTURTIUM</b> —See page 30.					
Tall Mixed	5	15	25	40	1 50
<b>OKRA</b> —See page 30.					
Dwarf White	5	10	15	25	75
<b>ONION</b> —See pages 31-33. All prime new stock, and mostly our own growth, on our own Seed Farms.					
Extra Early Red	5	15	25	40	1 25
Early Red Globe	5	15	25	40	1 25
Large Red Wethersfield	5	10	15	25	75
Large Red Wethersfield, Extra, our own growth	5	10	15	25	1 00
Yellow Danvers	5	10	15	25	75
Yellow Globe Danvers, Extra, our own growth	5	10	15	25	1 00
White Portugal (American Silverskin)	5	25	40	75	2 50
White Globe	5	20	35	60	2 00
El Paso, or Large Mexican	5	25	40	75	2 50
IMPORTED VARIETIES.					
Round White Silverskin for pickling	5	30	55	1 00	3 00
White Silverskin, excellent for producing early Onions for bunching for marke	5	15	25	40	1 50
Giant Rocca	5	20	35	60	2 00
Early Neapolitan Marzajola	5	20	35	60	2 00

**ONION**—Continued.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.	
Giant White Italian Tripoli.....	5	20	35	60	2 00	
New Queen, <i>true</i> .....	5	30	55	1 00	3 00	
BULBS.						
Yellow Bottom Sets.....	<i>Add 25 Cents per Quart for Postage</i> .....				25	about 5 00
Red Bottom Sets.....	"	"	"	"	25	4 50
White ".....	"	"	"	"	30	6 00
Top Onions.....	"	"	"	"	25	4 00

Above are approximate prices *per bushel*, subject to variations of the market, and our ability to procure stock.

The price *per quart* will hold good through the season, or as long as our stock lasts.

**PARSNIP**—See page 33.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Long White Dutch, or Sugar.....	5	10	15	20	60
Hollow Crown.....	5	10	15	20	60

**PARSLEY**—See pages 33-34.

Carter's Fern Leaved.....	5	10	15	25	1 00
Fine Triple Curled, or Myatt's Garnishing.....	5	10	15	25	75

**PEAS**—See pages 34, 36.—Our list of Peas embraces every desirable kind yet offered, and our stocks can be entirely depended upon by the most critical gardeners, as true to name, carefully screened and hand picked, and certain to give complete satisfaction.

EXTRA EARLY SORTS.

	Pkt.	Pt.	Qt.	4 Qt.	Bu.
Ferry's First and Best.....	10	20	30	1 00	5 50
D. M. F. & Co's Extra Early.....	10	15	25	75	4 75
Improved Early Daniel O'Rourke.....	10	15	25	75	4 75
Bliss' American Wonder, <i>true</i> .....	10	25	40	1 50	8 00
Kentish Invicta.....	10	15	25	75	5 00
Laxton's Alpha.....	10	15	25	75	5 00
Ferry's Extra Early Tom Thumb.....	10	20	30	1 00	6 00
Blue Peter, or Blue Tom Thumb.....	10	20	30	1 00	6 00

EARLY SORTS.

Premium Gem.....	10	20	30	1 00	5 50
Bliss' Everbearing—See Supplement.....	20	40	65	2 25	....
McLean's Little Gem.....	10	20	30	1 00	5 50
Extra Early Kent, <i>true</i> .....	10	15	25	75	4 50
Carter's Little Wonder.....	10	20	30	1 00	6 00
Dwarf Champion.....	10	15	25	75	5 00
McLean's Advancer.....	10	15	25	75	5 00
Bliss' Abundance—See Supplement.....	20	45	75	2 75	....

LATE SORTS.

Yorkshire Hero.....	10	15	25	75	4 50
Champion of England, <i>choice</i> .....	10	15	25	75	4 50
Large Blue Imperial, <i>choice</i> .....	10	15	25	75	4 00
Large White Marrowfat.....	10	15	20	60	2 75
Large Black Eye Marrowfat.....	10	15	20	60	2 75
Dwarf Sugar, Edible Pods, <i>grey seed</i> .....	10	30	45	1 50	9 00
Tall Sugar, Edible Pods, <i>grey seed</i> .....	10	30	45	1 50	9 00

FIELD SORTS.

Common White Field.....	about	15	20	40	1 25
Common Blue Field.....	"	15	20	40	1 50
Golden Vine, White Field.....	"	15	20	40	1 50
Early Crown, White Field.....	"	15	20	40	1 50
Blue Prussian, Field.....	"	15	20	40	2 00

Add 15 Cents per Pint, 30 Cents per Quart for Postage, if Ordered Sent by Mail.

**PEPPER**—See page 36.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Chili.....	5	30	55	1 00	3 00
Long Red Cayenne.....	5	25	40	75	2 50
Large Squash.....	5	25	40	75	2 50
Large Bell, or Bull Nose.....	5	25	40	75	2 50
Sweet Mountain.....	5	25	40	75	2 50
Monstrous or Grossum.....	5	30	55	1 00	3 00

**POTATOES**—See pages 36, 37.—Please notice that our barrel quotations contemplate 3 bushels of Potatoes. Beware of "Full-sized barrels" holding only 150 to 165 pounds of Potatoes.

	1 Lb.	2 Lb.	3 Lb.	¼ Bu.	½ Bu.	1 Bu.	3 Bu.
Early Mayflower.....	40	65	90	1 00	1 25	1 75	4 50
White Star.....	40	65	90	1 00	1 25	1 50	4 00
Early Beauty of Hebron.....	40	65	90	1 00	1 25	1 50	4 00

Prices quoted are subject to fluctuations of the market and our ability to obtain stock. We send by express or mail, *prepaid*, at lb. quotations. Quarter bushels and upwards sent by express or freight, the purchaser paying charges. We cannot become responsible for changes in weather, by which they may become injured en route. All orders for Potatoes must be accompanied with the money. They will be registered and filled in rotation, as soon as weather will permit in spring. Orders from the South will, however, be executed early enough for early spring planting.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
<b>PUMPKIN</b> —See page 37.					
Large Yellow.....(per bu., \$4.00) ..	5	10	15	20	40
Cushaw.....	5	10	15	25	1 00
Sweet, Cheese, or Kentucky Field.....(per bu., \$6.00) ..	5	10	15	20	60
<b>RADISH</b> —See pages 37-38.					
Early Long Scarlet, Short Top, <i>improved</i> .....	5	10	15	20	65
Wood's Early Frame.....	5	10	15	25	75
Early Round Deep Scarlet .....	5	10	15	25	75
Early Scarlet, Turnip Rooted .....	5	10	15	20	65
Early Scarlet Turnip, White Tipped .....	5	10	15	25	75
Early White, Turnip Rooted .....	5	10	15	20	65
Golden Globe, <i>best summer variety</i> .....	5	10	15	25	80
Grey Summer, Turnip Rooted .....	5	10	15	25	80
Early Scarlet, Olive Shaped.....	5	10	15	25	75
French Breakfast .....	5	10	15	25	80
Long White Naples .....	5	10	15	25	1 00
WINTER VARIETIES.					
Dayton .....	10	15	25	40	1 50
Scarlet China.....	5	10	15	25	1 00
Long Black Spanish.....	5	10	15	20	65
Large White Spanish.....	5	10	15	25	75
California Mammoth White China .....	5	20	35	60	2 00
<b>RAPE</b> —See page 38.					
Dwarf Essex, <i>for sowing</i> .....per bu., \$6.00 ..	..	..	..	15	40
<b>RHUBARB, or PIE PLANT</b> —See pages 38-39.					
Victoria .....	5	15	25	40	1 50
Giant.....	5	15	25	40	1 50
Linnaeus.....	5	15	25	40	1 50
Rhubarb Roots .. 25 cents each.....\$2.00 per doz ..	..	..	..	..	..
" " by mail, prepaid, 40 cents each .. 4 co " ..	..	..	..	..	..
<b>ROQUETTE</b> —See page 39					
.....	5	20	35	60	2 00
<b>SALSIFY, or VEGETABLE OYSTER</b> —See page 39.....					
.....	5	10	15	25	1 00
<b>SPINAGE</b> —See pages 39-40.					
Round Summer .....	5	10	15	20	40
Improved Thick Leaved.....	5	10	15	20	40
Savoy Leaved .....	5	10	15	20	40
Prickly Winter.....	5	10	15	20	40
Long Standing .....	5	10	15	20	40
<b>SQUASH</b> —See page 40.					
Early Yellow Bush Scallop .....	5	10	15	25	90
Early White Bush Scallop.....	5	10	15	25	90
Summer Crookneck.....	5	10	15	25	90
AUTUMN, OR SUMMER SORTS.					
Improved American Turban .....	5	15	25	40	1 25
Marblehead.....	5	15	25	40	1 25
Butman .....	5	15	25	40	1 25
Boston Marrow.....	5	10	15	25	1 00
Winter Crookneck.....	5	10	15	25	1 00
Hubbard, <i>true</i> .....	5	10	15	25	1 00
<b>SUGAR CANE</b> —See page 41.					
Early Amber.....\$4.00 per bu ..	..	..	..	15	40
Early Orange..... 4 00 " ..	..	..	..	15	40
<b>SUNFLOWER</b> —See page 41.					
Large Russian .....	5	10	15	20	50
<b>TOBACCO</b> —See page 41.					
Connecticut Seed Leaf.....	5	25	40	75	2 50
White Burley.....	5	40	75	1 25	4 00
Havana.....	5	50	85	1 50	5 00
Yellow Oronoco.....	5	40	75	1 25	4 00
Silky Pryor.....	5	40	75	1 25	4 00
<b>TOMATO</b> — See pages 41-42.					
Optimus, <i>The newest and best</i> .....	5 pkts. for \$1.00 ..	25	..	..	..
Livingston's Favorite.....	5	25	40	75	2 50
Livingston's Perfection.....	5	25	40	75	2 50
Essex Early Hybrid, <i>extra selected stock</i> .....	5	25	40	75	2 50
Hundred Day.....	5	25	40	75	2 50
Hubbard's Early Curled Leaf.....	5	20	35	60	2 00
Queen, <i>excellent for canning</i> .....	5	25	40	75	2 50

**TOMATO—Continued.**

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Early Conqueror .....	5	20	35	60	2 00
Canada Victor.....	5	20	35	60	2 00
Paragon.....	5	25	40	75	2 50
Acme.....	5	25	40	75	2 50
Hathaway's Excelsior.....	5	20	35	60	2 00
Trophy, <i>extra selected</i> .....	5	35	60	1 00	3 50
Large Red.....	5	20	35	60	2 00

**TURNIP—See pages 42-44.**

WHITE FLESHED SORTS.

Early Purple Top Munich, <i>very early</i> .....	5	10	15	25	80
White Egg .....	5	10	15	25	75
Early White Stone.....	5	10	15	20	50
Jersey Navet.....	5	10	15	25	75
Early White Flat Dutch.....	5	10	15	20	50
Early White Flat Dutch, Strap Leaved.....	5	10	15	20	60
D. M. Ferry & Co's Early Purple Top, Strap Leaved, <i>improved</i> .....	5	10	15	20	60
Cow Horn, or Long White.....	5	10	15	20	60
Improved Purple Top Mammoth.....	5	10	15	20	60
Large White Flat Norfolk.....	5	10	15	20	50
Large Red Top Flat Norfolk .....	5	10	15	20	50
Pomeranian White Globe.....	5	10	15	20	50
Purple Top White Globe.....	5	10	15	25	75
Sweet German.....	5	10	15	25	75
Seven Top .....	5	10	15	20	50

YELLOW FLESHED SORTS.

Early Yellow Montmagny.....	5	10	15	25	80
Large Amber Globe.....	5	10	15	20	60
Orange Jelly, or Robertson's Golden Ball.....	5	10	15	20	60
Purple Top Yellow Aberdeen.....	5	10	15	20	50

RUTA BAGAS, OR SWEDES.

Yellow Swede, or Ruta Baga.....	5	10	15	20	50
Carter's Imperial Purple Top Ruta Baga .....	5	10	15	20	50
D. M. Ferry & Co's Improved Purple Top Yellow Ruta Baga.....	5	10	15	20	60
Large Ovoid Purple Top Yellow Ruta Baga.....	5	10	15	20	60
Bangholm Swede.....	5	10	15	20	50
Sweet Russian, or White Ruta Baga.....	5	10	15	20	60

**SWEET HERBS—See pages 45-46.**

Anise.....	5	10	15	25	1 00
Balm.....	5	30	55	1 00	3 00
Basil, Sweet .....	5	20	35	60	2 00
Bene.....	5	20	35	60	2 00
Borage.....	5	15	25	40	1 50
Caraway, for sowing .....	5	10	15	25	75
Caraway, for flavoring.....	5	..	..	20	50
Catnip, <i>makes an excellent bee pasture</i> .....	5	40	75	1 25	4 00
Coriander, for sowing.....	5	10	15	25	75
Coriander, for flavoring .....	5	..	..	20	50
Dandelion, Improved Thick Leaved.....	5	70	1 25	2 00	7 00
Dill .....	5	10	15	25	1 00
Fennel, Sweet.....	5	10	15	25	1 00
Hoarhound.....	5	30	55	1 00	3 00
Hyssop.....	5	25	40	75	2 50
Lavender .....	5	20	35	60	2 00
Marjoram, Sweet.....	5	20	35	60	2 00
Rosemary .....	5	25	40	75	2 50
Rue.....	5	15	25	40	1 50
Saffron .....	5	15	25	40	1 50
Sage, Broad Leaf.....	5	15	25	40	1 50
Savory, Summer.....	5	15	25	40	1 50
Tansy.....	5	30	55	1 00	3 00
Tarragon.....	25	5 00	..	..	..
Thyme.....	5	40	75	1 25	4 00
Wormwood .....	5	30	55	1 00	3 00

**FRUIT TREE SEEDS—See pages 46-47.**

	Oz.	¼ Lb.	Lb.	Bu.
Apple Seeds.....	..	..	60	8 00
Cherry Stones, <i>mahaleb</i> .....	10	25	75	..
Cherry Stones, <i>mazzard</i> .....	..	..	40	..
Peach Stones, .....	..	..	40	1 50
Pear Seed.....	40	1 25	4 00	..
Plum Stones .....	..	..	40	..
Quince Seed.....	35	1 00	3 50	..

FOREST TREE AND HEDGE SEEDS—See pages 47-48.

Oz. 2 Oz. ¼ Lb. Lb

EVERGREEN.

Arbor Vitæ, American, ( <i>Thuja occidentalis</i> ) .....	50	85	1 50	5 00
Fir, Silver ( <i>Abies pectinata</i> ).....	15	25	40	1 50
Pine Scotch ( <i>Pinus Sylvestris</i> ).....	20	35	60	2 00
Pine, Weymouth, or White ( <i>Pinus Strobus</i> ).....	30	55	1 00	3 00
Spruce, Norway ( <i>Abies excelsa</i> ).....	10	15	25	1 00

DECIDUOUS.

Ash, White ( <i>Fraxinus Americana</i> ).....	15	25	40	1 50
Ash, European ( <i>Fraxinus excelsior</i> ).....	15	25	40	1 50
Birch, White ( <i>Betula alba</i> ).....	15	25	40	1 50
Catalpa, hardy ( <i>Catalpa speciosa</i> ).....	20	35	60	2 00
Hawthorn ( <i>Crataegus oxyacantha</i> ) .....	15	25	40	1 25
Larch ( <i>Larix Europea</i> ).....	15	25	40	1 50
Linden, European ( <i>Tilia Europea</i> ).....	15	25	40	1 50
Locust, Honey ( <i>Gleditschia triacanthos</i> ).....	10	15	25	75
Locust, Yellow ( <i>Kobinia pseudo-acacia</i> ) .....	10	15	20	60
Mulberry, White ( <i>Morus alba</i> ) .....	25	40	75	2 25
Mulberry, Russian .....	1 00	1 75	3 00	10 00
Osage Orange ( <i>Madrura aurantiaca</i> ) . . . per bu. of 33 lbs. not prepaid, \$6.00 .....	10	15	20	50

BIRD SEEDS— See page 53.

Canary.....	3 lbs. by mail, post paid,	75	30
Hemp.....	3 "	"	75 30
Rape.....	3 "	"	75 30
Maw.....			50
Millet .....	3 lbs. by mail, post paid,	75	30
Lettuce.....			60
Cuttle Bone.....			60
Mixed Bird Seed .....	3 lbs. by mail, post paid,	75	30

CLOVER SEEDS—See pages 48, 49.

Mammoth, or Large Red .....	per bushel, Market price....	..	..	..
Medium Red, or June .....	"	..	..	..
Alsike, or Swedish .....	per bushel of 60 lbs., \$16.00..	10	15	20 60
Bokhara, Sweet Clover, <i>Melilotus alba</i> .....	10	15	25	75
Crimson Trefoil, or Scarlet Italian.....	10	15	20	50
White Dutch.....	per bushel of 60 lbs., \$18 00..	10	15	20 60
Lucerne, or Alfalfa.....	" " " 16.00..	10	15	20 60

GRASS SEEDS—See pages 49-51.

Timothy .....	per lb. 25c.; per bu. Market price .....	..	..	..
Orchard Grass.....	per lb. 60c.; per bu. of 14 lbs.	3 00		
Red Top.....	" 35c.; "	14 "	1 00	
Fowl Meadow, or False Red Top .....	" 50c.; "	12 "	3 00	
Blue Grass, Kentucky, <i>extra clean</i> .....	" 40c.; "	14 "	1 50	
Blue Grass, Kentucky, <i>fancy clean</i> .....	" 40c.; "	14 "	1 75	
Johnson Grass.....	" 50c.; "	25 "	5 00	
Perennial Rye Grass. ....	" 40c.; "	20 "	2 00	
Wood Meadow Grass .....	" 75c.; "	14 "	5 00	
Sweet Vernal Grass, <i>the true perennial sort</i> .....	" 1 00; "			
Hungarian Grass.....	" 30c.; "	48 "	1 25	
Millet, common.....	" 30c.; "	50 "	1 25	
" German, <i>true, southern grown</i> .....	" 30c.; "	50 "	2 00	
Fine Mixed Lawn .....	" 50c.; "	20 "	4 00	
Extra Fine Mixed, <i>Central Park Mixture</i> .....	" 60c.; "	15 "	5 00	

MISCELLANEOUS FARM SEEDS—See pages 51-53.

Wheat, Martin's Amber.....	Winter, 3 lbs. by mail, post paid, \$1.00; per bu. of 60 lbs.	3 00
" Michigan Bronze, or Mediterranean Hybrid .....	" 3 " " 1.00; "	60 " 3 00
" Valley.....	" 3 " " 1.00; "	60 " 2 75
" Democrat .....	" 3 " " 1.00; "	60 " 2 75
" Fultz.....	" 3 " " 1.00; "	60 " 2 00
Wheat, French Imperial, Spring .....	3 " " 1.00; "	60 " 2 50
Barley, Mansury.....	3 " " 1.00; "	48 " 2 00
" common .....	3 " " 1.00; "	48 " 1 75
" Naked, or Halls.....	3 " " 1.00; "	48 " 3 00
Rye, Fall, or Winter. ....	3 " " 1.00; "	56 " 1 50
Buckwheat, common .....	3 " " 1.00; "	48 " 1 75
" Silver Hull. ....	3 " " 1.00; "	48 " 2 00
Flax Seed, for sowing .....	per lb. 35;	56 " 3 00
Hemp Seed, .....	" 35;	44 " 3 00
Spring Vetches, or Tares.....	" 35;	60 " 3 50
Wild Rice ( <i>Zizania aquatica</i> ). See page 39.....	" 75;	15 " 4 00

# Vegetable & Flower Collections.

For the convenience of many of our friends we have made the following selections of standard and desirable varieties of Vegetable and Flower Seeds which we offer on specially favorable terms.

We are able to offer these collections at the reduced terms, having put them up, ready to ship, before our busy season commenced.

**IN NO CASE CAN ANY SUBSTITUTION BE MADE.**

## Collection No. 1.

Consisting of twelve packets choice Vegetables, as follows: One paper each of Beet, Early Blood Turnip Improved; Cabbage, D. M. Ferry & Co.'s Premium Flat Dutch; Carrot, Long Orange Improved; Cucumber, Improved Long Green; Lettuce, Ferry's Early Prize Head; Onion, Large Red Wethersfield; Musk Melon, Improved Large Green Nutmeg; Water Melon, Ferry's Peerless; Radish, French Breakfast; Squash, Hubbard; Tomato, Livingston's Perfection; Turnip, D. M. Ferry & Co.'s Improved Purple Top Strap Leaved.

## Collection No. 2.

Affords a fine range of Vegetables for a family garden of moderate size. It consists of one packet each of the following sorts: Beans, German Wax Black Seeded, Beet, Extra Early Egyptian Blood Turnip; Cabbage, Early Jersey Wakefield; Cabbage, Fottler's Early Drumhead or Brunswick Short Stem; Carrot, Danvers; Celery, New Golden Heart; Cucumber, Improved Long Green, Cucumber, Boston Pickling; Egg Plant, D. M. Ferry & Co.'s Improved Large Purple; Lettuce, Ferry's Early Prize Head; Musk Melon, Improved Large Green Nutmeg; Water Melon, Mountain Sweet; Water Melon, D. M. Ferry & Co.'s Peerless; Onion, Large Red Wethersfield; Parsnip, Hollow Crown; Peas, Bliss' American Wonder; Pepper, Sweet Mountain; Radish, Early White Turnip Rooted; Squash, Early Yellow Bush Scallop; Tomato, Livingston's Favorite; Turnip, Early White Flat Dutch Strap Leaved; Turnip, Early Yellow Montmagny.

## Collection No. 3.

Will furnish a family of moderate size with a very complete assortment of Vegetables throughout the season. It contains the following: one pint Beans, Golden Wax; one pint Beans, Early Red Valentine; one packet Beet, Egyptian Blood Turnip; 1 oz. Beet, Early Blood Turnip Improved; one packet Cabbage, Early Winnigstadt; one packet Cabbage, Premium Flat Dutch; one packet Carrot, Early Half Long Scarlet Stump Rooted; one pint Corn, Early Minnesota; one pint Corn, Stowell's Evergreen; one oz. Cucumber, Early Short Green; one packet Cucumber, Long Green Improved; one packet Lettuce, Ferry's Prize Head; one oz. Musk Melon, Improved Large Green Nutmeg; one oz. Water Melon, Ferry's Peerless; one packet Water Melon, Phinney's Early; one packet Onion, Yellow Globe Danvers; one packet Onion, White Globe; one pint Peas, D. M. Ferry & Co.'s Extra Early; one pint Peas, Premium Gem; one pint Peas, Champion of England; one packet Radish, Early Long Scarlet Short Top Improved; one packet Radish, French Breakfast; one packet Squash, Early White Bush Scallop; one oz. Squash, Hubbard; one packet Tomato, Livingston's Favorite; one packet Turnip, Early Purple Top Strap Leaved Improved; one packet Turnip, Early Yellow Montmagny.

## Collection No. 4.

Consists of a very choice assortment of twelve Annual Flowers for small yards or gardens. They will afford a regular succession of bloom, as well as an abundance of cut flowers the whole season. They are selected with especial reference to making the finest display of bloom at the least expense, and they will succeed with only ordinary culture, and in almost any soil. It is composed of one packet each of the following: Alyssum, Sweet; Aster, Mixed German Quilled; Balsam, Double Solferino; Candytuft, Fine Mixed; Cockscomb, Mixed Tall; Larkspur, Double Dwarf Rocket; Marigold, Meteor; Mignonette, Sweet; Petunia, Large Flowered Mixed; Phlox Drummondii Extra Choice Mixed; Pink, Heddewig's Double; Portulaca, Fine Mixed.

## Collection No. 5.

Consists of six of the easiest grown and most popular climbers, useful alike for veranda and trellis, and for covering stumps and unsightly objects with a profusion of beautiful flowers, namely:—one packet each of Cypress Vine, Mixed; Hyacinth Bean, Mixed; Morning Glory, Mixed; Smilax; Sweet Peas, Mixed; Tropæolum Lobbianum, Mixed.

## Collection No. 6.

Consists of six of the most popular Foliage Plants, without which no flower garden is complete, namely: one packet each of Amaranthus Tricolor (Joseph's Coat); Canna Indica (Indian Shot); Castor Bean, Mixed; Centaurea Gymnocarpa; Ice Plant; Perilla.

## Collection No. 7.

Consists of nine choicest varieties of Pansies. These flowers are such universal favorites that they will command themselves to all. The varieties are Copper Colored; Emperor William; Gold Margined; King of the Blacks; Large Stained; Olier; Pure Yellow; Pure White; Variegated or Striped.

## Collection No. 8.

Consists of six of the most useful and beautiful of Everlasting Flowers, or Immortelles, so much sought after in the formation of winter bouquets. When dried in the shade, they retain their beauty for years. The varieties are: Acroclinium, Mixed; Anemobium Alatum; Globe Amaranth, Mixed; Helichrysum Monstrum, Double Mixed; Helipterum, Mixed; Rhodanthé, Mixed.

## Collection No. 9.

Consists of six of the choicest and most beautiful tender Perennials for pot culture in the parlor or green-house, and will be highly appreciated by the florist and amateur. The varieties are: Cineraria, Choicest Mixed; Cyclamen Persicum, Choicest Mixed; Gloxinia, Choicest Mixed; Heliotrope, Dark Varieties, Mixed; Primula Sinensis, Choicest Mixed; Verbena, Extra Choice Mixed.

## VEGETABLE COLLECTIONS.

Collection No. 1,	amounting to \$ .60	..... sent postpaid for \$ .50.
" 2,	" 1.20	..... " " 1.00.
" 3,	" 2.50	..... delivered at express office for 2.00.

## FLOWER SEED COLLECTIONS.

Collection No. 4,	Animals	..... amounting to \$ .90	..... sent postpaid for \$ .75.
" 5,	Climbers	.....	..... .50 .. " .40.
" 6,	Foliage Plants	.....	..... .50 .. " .40.
" 7,	Pansies	.....	..... 1.35 .. " 1.00.
" 8,	Everlastings	.....	..... .50 .. " .40.
" 9,	Tender Perennials,	.....	..... 1.30 .. " 1.00.

D. M. FERRY & CO.

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DETROIT, MICH.

