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J ANUARY, 1886.

Skillful cultivation should be the aim of every one who raises plants and crops. To make gardening and farming profitable, it is necessary to have something in return for every stroke that is made, and for every dollar invested. Even when only a few house plants are cared for, we expect to see growth and bloom in repay for our care, if not, our interest in them would soon be lost. We devote an acre of land to a certain crop; it costs for the season the interest for a year on the investment made for it, beside the expense of preparation, manuring, cultivating, harvesting, marketing, \&c. Our crop is but half what it might be, or what good cultivation has proved might be obtained. The time and expense of preparation, of sowing and of cultivation have been as much as for a full crop, and the cost of harvesting and other expenses but little less; but a part of the land was too wet, and the planting could not be done early, as it should have been, and on the same account the manure that was applied, though there was not half enough of that, could only produce partial effects, and so, from these combined causes, we get lack for our season's work, perliaps, the expenses and a little more. The interest and expenses were fifty collars on the acre, and our returns, all told, amounted to sixty dollars, giving a profit of ten dollars. At this
rate per acre on the whole place, with what it provides for the table beside, with great economy, one may, perhaps, live along for a while, and the land is growing poorer, and the value of the first investment is lowered-the place is running down. But at a little more expense in preparation, perhaps ten clollars on the acre, enough to ensure the best result, making the whole sixty instead of fifty dollars, as before, and the crop is twice as great, and perhaps farther enhanced in value by its superior quality. All of this success, then, is profit-sixty dollars, or more, instead of ten-an amount that makes prosperity and success, instead of failure.
We will notice, briefly, five points essential to good results for all farm and garden crops.
The first is, a soil of proper humidity. A soil can naturally hold a certain amount of moisture; soils vary in this respect, according to their composition, clayey soils being able to contain more than sandy ones, if the facilities for drainage are perfect for both. A soil constantly saturated with water is fatal to most, or all, cultivated plants. Even those which thrive with an abundant supply of water require that it should pass away and not stand about the roots. As the roots of most plants run from two to four feet deep, and some to still greater
depths, it is evident that where the water stands for any great length of time, or does not freely pass away, at a depth of four feet from the surface its presence is an injury to the cultivated crops. Some lands are naturally sufficiently dry, but the greater area of all cultivated lands requires artificial drainage to make them capable of producing the best crops. In the cultivation of plants in pots we mingle sand and loam together in such a manner as to form a soil that will drain more or less readily, according to the demands
this point, we are all well aware, is essential ; but the fact is not always kept in. mind that the application of manure is in great part a failure unless the soil is in a proper state of humidity-the condition we have considered in the preceding paragraph. Again, as much plant food should exist in the soil, ready for use, as the plants can profitably appropriate; what this amount is, the most desirable composition of it, and the best method in each particular case can only be approximately determined, and the highest skill


VIEW IN WINTER OF SUBURBAN GARDEN, NEW ORLEANS.
of the plants to occupy it. Artificial drainage, and mostly under-drainage, is what is demanded very generally as the first step toward profitable tillage. In some arid regions in this country a condition of soil exists exactly opposite, and there irrigation is required to give the soil a proper humidity.

The second point is fertility of soil. By thisterm is meant the plant nutriment that is ready to be immediately converted into plant tissues. A poor soil is very deficient in such nutriment, while a rich one has it in abundance. The full amount required for each crop should exist in the soil, or be supplied to it at the proper time for its use. Attention to
is evinced by the manner in which tne cultivator manages this part of his business. There is greater loss usually by ant under supply than over supply of manure, and fewer acres and richer lands. would solve the question of profit in cultivation in rery many cases.

The proper preparation of the soil to fit it for a crop involves a variety of processes, the most important of which are the loosening of the soil by plowing or digging, and the comminution or pulverizing of it to allow the roots easily torun through it and to take up their nutriment from it. Subsoil plowing is a most. necessary operation whenever the subsoil is heavy and retentive. Vegetables.
and fruits, as much as the grain crops, require deep working of the soil, A moderately heavy soil that has been underdrained and subsoiled, and then carefully worked, is capable of producing the heaviest crops. A deep, rich soil is wonderfully favorable to a bank account. All the processes in the preparation of a piece of land for a crop require good tools, and in their purchase the aim should be to get the best. A good tool will quickly pay for itself, but a poor one is very expensive. A man must be well off who can afford to use poor tools. While a good plow will do betier work than a poor one, it also enables the team to do more of it. Tools and implements should not only be of the best kinds, but they should be carefully kept in order, and be clean and bright, and be stored in a proper place where they can always be found when wanted, without running across lots to find them where they were thrown when last used.

The proper seeding or planting of land is a topic worthy of the most careful consideration by every planter. It relates to the selection of the best varieties of plants, either as plants, roots, tubers or seeds. What is the best variety of any crop, from fruit trees to Potatoes, for any particular locality depends upon circumstances which each person who uses them must decide for himself; these circumstances, in this country, are such as latitude and longitude, altitude or elevation, local climate, distance to market and character of market, and mode of transportation thither, peculiarity of soil, and many others which pertain to the special crop and locality. As a general and safe rule, one should be governed by the experience of the past ; those varieties of plants that others similarly situated have been most successful with will be best for a beginner to select. For instance, one who would plant fruit trees should get what information he can in regard to it of his neighbors, and if they have found certain varieties to be best suited to their locality, he should profit by their experience. If, however, he cannot have such experience, he must experiment for himself. Now, this is true in relation to nearly all kinds of crops, and when one has found a profitable variety he should hold to it as to a tried friend.

In regard to the new varieties of all
kinds of plants that are constantly appearing, a conservative attitude should be maintained; but it would not be wise to neglect trying new varieties in a light way, merely for experiment, for in that case, there could be no progress. New varieties of seeds and plants are constantly put on the market, and the most of them, in a few years at longest, pass into oblivion. A few only that are superior survive, and these cannot be universally adopted; they are superior in some localities, not in others. Hold old, valuable varieties, and rely upon them for your large planting until you have fully proved a new variety to be better. In the purchase of stock, seeds or plants, experience must also guide ; a dealer who has acquired a good reputation will not easily part with it, and in purchasing, a sense of security, or confidence, that the varieties are true to name is of great value.

The after cultivation of a crop is of great importance; the cultivation required by crops during the season of growth is almost as varied as the kinds of plants employed, each has some peculiarity demanding a variation in treatment. To keep the soil of growing crops free from weeds is a first principle and applicable to all plants; but fortunately it happens that this result usually is secured without the bestowal of special labor. The stirring of the soil that is necessary to allow the free passage of air and water to the roots of plants, necessary for their growth, kills the weeds; if occasionally a stirring of the soil is needed, primarily for the destruction of weeds, or to prevent their growth, the growing plants are also benefited by the extra cultivation, But the after cultivation of a crop includes all those various operations that different plants require in their successive stages of growth, their gathering, and cleaning, and storing or preparing for market ; with fruit it also includes the methods of pruning and training, and with all crops the destruction of the insects that prey upon them, or the methods of security against them. For a knowledge of all these processes it is necessary for all to avail themselves largely of the experience of others, as it is recorded in books and periodicals relating to these subjects. The successful gardener or farmer must be a reading
man, he must acquaint himself with and adopt all the best practices as they are made known through the press from time to time, or he will be quickly left behind by his brighter neighbors. The best farming and gardening is now done with
active brains as much as with active muscles.
These thoughts have been penned merely as suggestive to thought ; each of the topics may be elaborated into an extended essay.

## GERANIUM SIR HARRY.

We would bring to the notice of those of our readers who are not acquainted with it a variety of Geranium of peculiar merit, and deserving their special attention ; this is Sir Harry, a seedling of Gen-
variety for bedding are unsurpassed. We can also speak well of it as a winter bloomer, as it flowers very freely during the cold season. It gives life and brightness to the greenhouse and the window


VIEW IN A NEW ORLEANS GARDEN.
eral Grant, a plant that has been more employed for bedding since it originated than any other variety of scarlet Geranium. Sir Harry was raised on our own grounds a few years since from seed saved from General Grant. The same vigor of growth and the free-blooming habit of the parent are equally exhibited by Sir Harry. The flower trusses are unusually numerous, very large, massive and full, even to crowding, with the brilliant carmine or carmine-scarlet flowers. The heads of bloom are held well up above the foliage, so that every bit of color shows. The trusses of bloom remain in perfect form much longer on account of their compactness. The merits of this
garden during the dull months. The individual flowers are not as large and symmetrical as those of some varieties, it being impossible on account of their being packed so closely; but from this peculiarity, as already noticed, the clus--ters retain their form a long time.

The views in New Orleans gardens, presented on this and a preceding page, have been prepared from photographs, and reveal the semi-tropical character of the vegetation of that locality. The massive Live Oak, with its drapery of gray moss, and the Palms in the other scene, are strange forms to Northern eyes, but are picturesque and attractive.

## CORRESPONDENCE.

## A CHEAP GREENHOUSE.

Several years ago, the cramped position which often became necessary in attending to the culture of plants in a cold-frame, suggested the idea that something might be constructed at a comparatively small expense which would not only relieve the necessity of much creeping on hands and knees, but might also be made serviceable during a large portion of the year as either a greenhouse or hot-house. Acting upon this suggestion, the result was a structure seven and a half by ten feet, internally, the sides being composed of cedar posts, boarded inside and outside with common boards, the space between being filled with sawdust. The front was two feet above ground, while the rear was as high as the length of the posts would allow, the sides forming a regular slope from the rear to the front. The lower part of the roof was composed of ordinary three by six feet hot-bed sash, and the upper was made double, of common boards, battened on top, leaving a space between the upper and lower boards of ten inches, which was also filled with sawdust. In one corner, at the rear, a wooden chimney, four inches square, was inserted, and about midway between the sides was placed a trap-door, for ventilating purposes. Finally, double doors of rough boards, battened, were placed at the rear end of one of the sides.

A pit two feet deep was next dug on the inside, of such a size as to leave a space undisturbed, three and one-half feet on each side, and three feet along the rear. On the two sides, rough benches three and one-half feet wide were constructed; the one running the entire length of the side, and the other extending from the front to the doorway, being partitioned off from the latter to prevent cold draughts, from the doorway, striking the plants. The boards covering the benches were laid on loosely, so that they might be removed at pleasure.

The purpose of the pit was to afford standing and working room, and to form
a place wherein to set a coal-oil stove. The use of the stove was, at first, not at all satisfactory, the coal-oil odor being unbearably offensive, notwithstanding the wicks were untrimmed by scissors, the loose, charred parts being remored by mea.ss of a soft brush, and every part of the stove being kept scrupulously clean. There was incompiete combustion, and it was due to some defect in the construction of the stove, (an Adams and Westlake, ) having two four-inch burners. In justice to these manufacturers, it should be stated that this fault does not pertain to all their stoves of similar size and pattern. But, in the end, this unpleasant feature proved to be a bent fit, for it led to a device for the removal of the odor, so beneficial in other ways that its application to either odoriferous or oderless oil-stoves is desirable. This device consisted of a small, sheetiron drum placed upon the stove, and connected near the top with ordinary three-inch water-pipe, such as is used to conduct water from the roofs of buildings. The first joint of this pipe was a short one, and made to fit very loosely, so that it could be easily disconnected from the drum by shoving back into the next joint, when it became necessary to lift off the drum for the purpose of cleaning the wicks and stove. This pipe was then led through the bottom of a long, narrow box, placed in front of the rear bench, and kept filled with damp sand, to be used when bottom-heat was required. The pipe was then carried along the rear wall, and next, upwards, until it terminated an inch or two below the open bottom of the wooden chimney; were it carried directly out through the roof, the draught would be strong enough to extinguish the flame in the stove. There should be sufficient length of pipe to absorb all the heat from the stove, and if made to run backwards and forwards, this end will be better attained. If a little of the coal-oil odor does not occasionally escape into the room, it may be
advisable to make it do so, for the mealy bug will not thrive where it is present, and the odor, in small quantities, is not injurious to the plants.

By placing shelving at available places, a large additional amount of plant space can be obtained. In the building described, there are, to-day, over one hundred plants, quite a number of them being specimen plants, in eight-inch pots, and but very few in pots as small as fourinch. Yet they are, by no means, crowded, and are in a very flourishing condition, all of them being hot-house plants. With an outside night temperature of not less than $15^{\circ}$, an inside temperature of from $50^{\circ}$ to $60^{\circ}$ can be easily maintained at an expenditure of one gallon of oil for each twenty-four hours. Should this temperature of $15^{\circ}$ be accompanied by strong winds, or should it lower to zero, some blanketing with old carpets or straw matting, over the lower part of the sashes will be required. How much, will depend largely upon the manner in which the glazing has been done. On sunny days the consumption of oil will be greatly lessened.

The great value of such a structure,
however, is for late fall and early spring use. It is best to transfer the plants on some warm day in December, as warm as can be expected at that season, to winter quarters in the conservatory or living-rooms, and make use of the building for a different purpose. Having made this transfer, remove the boards which form the top of the benches, spade up the ground underneath, and put in low plants which require winter protection, covering them, as the cold increases, with straw; but, as the room will be required for warmer work in February or March, discretion must be exercised as to the nature of the plants. They should be either such as will be desirable to force into early growth, or that can, in late winter or early spring, be safely transferred for a few weeks to the cellar. Last winter, mine was filled with the summer layers of perpetual Carnations, and tender Roses. This winter, I propose to fill it with Anemones, Ranunculus, etc., all in pots, to be transferred to the cellar in February or March, and again to the open ground, turning them out of the pots as soon as the weather will permit.
G.

## A TORTOISE BEETLE.

A beetle known to entomologists as Cassida aurichalcea, is, in some seasons, very destructive to the Morning Glory, perforating the leaves, and thereby checking their growth. A short history of it may interest the readers of your


BEETLE-MAG-
NIFIED. rest. This singular beetle has the power of changing its color within the space of a few minutes, from a dull yellow to the brilliancy of polished gold, and while thus attired, is a beautiful object to look upon. The wing covers, the parts which show the change of color, are lined with an orangecolored substance, of the consistency of paint which seems to be filled with little vessels, and these are considered the source of the remarkable change in color that takes place, but just how it is
accomplished is not well understood. A number of years ago, a lady came to me, somewhat excited, and said she had just found, on the Morning Glory, the most splendid insect she had ever gazed upon. Why, she says it is like a drop of polished gold. I immediately suspected what she had, and was in hopes it would retain its brilliant hue until she saw it again ; but alas! such was not to be. She carefully opened the box, looked in, and then quickly looked up at me, the very picture of blank astonishment. She gazed into the box again to assure herself that she was not dreaming. Could it be possible that the magnificent object she had placed in the box only a short time before had gone, and a dingy yellow one had taken its place. She might have exclaimed Sic transit gloria mundi, but she did not. I finally explained the peculiarity of the insect, and then appeared conspicuous, by this forcible illustration, the truth of the old maxim-"All is not gold that glitters."

Robert Bunker.

## ROSES.

I have these beautiful flowers so closeTy associated with many pleasant recollections of my childhood, that I cannot tell whether I love them most for this reason, or for their own sweet selves. Sometimes, when I look at the lovely Perpetual Roses of the present day, memory brings back bright June days of years ago, when I gathered my lap full of the glowing velvet Roses, and drank in their fragrance with all the intoxication of a lotus-eater. There was one Rose, of a climbing variety, which completely covered a Crape Myrtle bush, forming a perfect little bower. Another of the same kind had been pruned to a single stem, and fastened to a stake, making a veritable Rose-tree. The top
tween the old home and the new. I do not know the botanical names of these old-fashioned favorites, but among the modern collections of ever-blooming Roses, I am always glad to see the fresh, pink blossoms of the Hermosa, because it so often filled the dear hands that now gather the flowers of Paradise.

Several years ago, I bought a collection of ever-blooming Roses, and selected for my garden a spot formerly used for a Strawberry-bed. The vines had been plowed under a year before, and when I took possession, the ground was mellow and full of well-decayed regetable matter. After the beds were laid off, I had a hole about two feet deep dug for each Rose. These holes were filled half full

spread out like a huge umbrella, and in June, it was loaded down with long wreaths of variegated Roses, making a charming little play-house. Another had forced its way through a luxuriant yellow Honeysuckle, crowning the top with a wreath of crimson blossoms. Then, there was the huge Cabbage-Rose, pink "burr" Rose, hardy white Microphylla, and the tiny Alpine Rose, which was covered with buds three-fourths of the year. But of them all, I think my mother loved best the pale pink Teas, that seemed to grow more beautiful as the frosts of autumn came on. She had brought nearly all of them from her far away home when she married, so the flowers formed a connecting link be-
of compost from the horse-stable, which was well dug in. The earth was then filled in till the holes were almost full, and I carefully planted and watered the young plants. They began to bloom almost immediately, and by fall, had become large, strong plants. They lived through quite a cold winter without protection, and bloomed finely the next year. A friend who had bought Roses at the same time, said to me, "You must water yours; they are so much larger than mine." I never did, however, after they were first planted, and think the difference was due to the soil, which seemed to suit them exactly. Since then I have bought Roses almost every year, and have tried quite a number of varie-
ties. They require a great deal of sun, and should be enriched only with old manure, as the fresh is liable to burn them up. Last spring I planted sixteen or eighteen varieties; two of them, Niphetos and Duke of Connaught, died, but the others grew very well. At this time,-January-a few of the most tender varieties, such as Marechal Niel, Etoile de Lyon, etc., are growing in the pit, but the rest were left in the beds, with a slight protection of Cedar boughs. The ground about them was mulched with litter from the stable. This serves the double purpose of protecting the roots from the cold, and enriching the beds.

Now, about varieties. I will place at the head of the list the Marechal Niel, which I think is one of the most beautiful of the ever-blooming Roses, not excepting the new varieties of four times the price. It is a deep golden yellow, of very large size, and is admired by every one. It is quite tender, and does not bloom as constantly as some others, but it pays for all the care given it when it does bloom. The Etoile de Lyon is
also a lovely yellow Rose. Both the above are very double, and the buds. keep fresh a long while. The Safrano has all the lovely tints of a sea shell, and is a constant bloomer. It is not very double, and the buds open rapidly, but they can be tied with a fine thread, and put in the midst of leaves. Coquettede Lyon is a pretty yellow Rose, and an excellent bloomer. Valle de Chamounix should be in every collection. Malmaison is a lovely flesh tint, and is a Rosethat one never tires of. Bella and Lamarque are beautiful white Roses. Mad. Margottin is a very large, compact Rose, crimson at the center, and shading to deep yellow on the outer leaves; it is. quite hardy. I should like to mention many more, but this letter is already so long that I am afraid it will find its way to the waste basket instead of the pagesthe Magazine. Young Roses are sometimes very much troubled by insects. A thorough washing with soap-suds or a sprinkling with soot-tea is beneficial, and, as the plants grow larger, they are less apt to be injured.
V. V.

## THE GLOBE ARTICHOKE.

The Artichoke, Cynara Scolymus, is a garden vegetable that, as yet, is very seldom seen in our markets, but of late it appears to be attracting the attention of our amateur cultivators, and many inquiries are made respecting its cultivation. Now, I admit that it is my opinion that no one enjoys the different vegetables more than I do, but I consider Artichokes to be very poor eating, not worth the trouble of preparing them for the table. But as our tastes all differ, I do not think that I have any right to condemn the Artichoke or discourage its cultivation simply because I do not like it. It is of easy culture, doing best when grown in a deep, loamy soil, one that has been thoroughly enriched with well decayed manure, and if possible, give a dressing of wood ashes with a sprinkling of salt, and harrow it in thoroughly.

As the Artichoke is a perennial plant, a bed, after being once established, will last for many years, if properly cared for and protected during the wintel season, by covering with six inches of leaves or coarse, littery manure. The seed should be sown as early in the spring as possi-
ble, in drills about one foot apart, and' the young plants should be well cultivated until they are strong enough to

handle-say five or six inches in height, when they can be transplanted into permanent beds prepared as above advised. They should be placed in rows about
three feet apart, the plants standing about two feet distant in the row. Planting is best done just after rain, care being taken to firm the soil well about the plants, but if the ground is dry they should be freely watered until growth commences. The plantation will only give a partial crop the first season, the second furnishing the largest and best, and where the Artichoke is in demand, I think that it is an excellent plan to make a planting every second season, and this can be done by carefully removing the suckers from the old roots in April or May, and treating them as advised for spring sown plants. Of the several varieties described in the catalogues of our seedsmen, I consider the Green Globe to
be the best for general use; this has large, nearly round buds, and very thick and fleshy, deep green scales. An ounce

## KEEPING FRUIT.

The best fruit preserves are made by boiling down the juice without any addition till it thickens. The natural gum and sugar present in most fruits only needs concentration to form either syrup or jelly, but the practice has been so long to use sugar for a more rapid process at the expense of flavor, that the earlier and better method is all but forgotten. The first confections and conserves of fruit ever known were made in this manner, in the rich valleys of Persia and northern India, a process doubtless learned from Dates, Grapes, Figs, and Nectarines curing themselves on the bough in favorable seasons, drying in their own sugar crystalizing round the stem. The Grape juice thickening on the sides of the wine press in the sun would teach some one more intelligent than his fellows to try evaporating the juice on slabs of stone, and the honey so made was delicious enough to fix the process in favor. For, the classic scripture of the Syriac land flowing with milk and honey, meant not merely the giant combs of wild bees in the clefts of the rock, but that delicate nectar which distils from
free-hearted ripe fruits, as one may see it in a hot summer, in the dead-ripe Damsons and sweet Grapes of our home gardens, when "The Plums are globes of honeyed wine."

In those lands of the sun, that neighbor, our lost Eden, in the gardens of the Levant, the plain of Damascus, where the Roses and Jasmines flavor fruits near them with their attars, in the vales of Herat and Cashmere, this sun-distilled honey exudes from every pore of plant or tree. The nectar of flowers, the manna on the Ash branches, the sweet dews on the Oak leaf, the sugared bloom of wild berries, and the full hearts of Grape and Mulberry which bleed on the unwary passing under their branchessuch was the food first provided for men. In such happy ways nature taught them to follow her processes for themselves, and possess them of her resources. The hastier methods of civilization are not all gain. What they save in time and effort they more than lose in flavor, and through withdrawing industry from the hands of the many for the profit of the few. This period of steam spindles,
electric movement, complicated machinery, and haste will prove but an episode. I arger and simpler methods will be preferred in course of experience, and many ancient arts resume their place in the world's daily use.

In fruit, especially, from planting to preserving it, we find the work is not well done on a large scale. Hundredacre orchards are pronounced a loss by owners, and in good seasons the fruit that would feed a county goes to decay under the boughs. It is hard to care for so many trees and keep them in healthy condition. Fruit growing is a business for small farmers, or households where the attention of the family can be given to a few acres of choice fruit. No work pays so steadily, or is more delightful in itself, than that of the small Newport places deroted to raising early salads, a few fine Roses for holidays; bronze turkeys, capons, dessert Apples and Peaches.
Keeping fruit or any provision depends on three things. It must be sound to begin. A speck of decay or acid change will develop ferment in a kettle of fruit. Second, the jars or cans must be air-tight. The object of steaming the fruit is to expel the air and arrest the change in the juice, which would naturally proceed to ferment. Air penetrates in finer ways than we can discern, and needs much less than the crevice of a hair or a pin's point to enter and spoil the contents. Glass that is free from cracks or air bubbles, well-glazed stoneware free from flaws, yellow ware, or strong, dark earthen jars will keep the fruit from the air, provided it is sealed with wax, putty, or bladder, soaked and left to shrink on the mouth of the jars. Cans with screw tops and rubber rings are apt to have slight defects which prevent perfect sealing, and cannot be depended on without wax.
Third, the jars must be kept in a dry,
dark, cold place, very little above freezing. A shelf in a furnace-warmed cellar, or store-room opening from a kitchen, is not the place to preserve fruit. It may be put up in the best manner, and yet spoil through keeping in the light, or where it is not cool. Glass cans should be wrapped in paper, buried in sand or sawdust, or kept in a dark closet. Packed with plenty of chaff, oats, dry sand or sawdust, or dry, sifted ashes, most preserves will stand freezing weather without injury, but each can needs at least six inches of non-conducting material about it on all sides for protection. A pit on one side of the cellar, dug below the reach of frost, and lined with boards, with straw or ashes between them and its walls, will keep preserves from heat or freezing. A pit dug in the cellar, four feet below the level of its floor, well drained and lined as above, will prove the best place for keeping small quantities of preserves, enough for a single family. Jellies need a dry place for keeping, and are not so particular about temperature, though it is best to keep them cool. Jams, jellies, and marmalade put up in wooden boxes and firkins stand changes better than those in glass or stone. If wooden ware is properly soaked in scalding weak lye over night, rinsed and dried out of doors, then oiled inside with clean cotton-seed oil or melted suet, it is excellent for keeping preserves. The oil prevents the juice from soaking into the wood, or drawing out its sap, which might make the contents taste unpleasantly. A thin coating of oil or fat is sufficient. Remember, sound fruit, air-tight cans or jars, cool, dry, dark storing only will keep well. Whether much or little sugar is used, or fruit cooked or not, is little matter, if these points are observed.

Susan Power.

## ONIONS.

Having been engaged in the business of Onion culture some twelve years, I think I can, perhaps, give some points in that line, which will be of interest. Onions can be raised on almost any kind of soil. The best is a black, sandy loam; a fine, gravelly soil will produce good results; a light, yellow loam will answer for an early crop; and a wet,
clayey soil will do very well for a late one. A liberal coating of manure should be given the land. Stable manure, with the straw well shaken out, is the best; and next to that, manure from the hogpen. Rock-weed, spread on in the fall, is very good, though when it is used, I would recommend a top-dressing of guano. Dry sea-weed, cross-plowed in,
in the fall, also answers a good purpose. I would recommend deep plowing at all times, never less than ten or twelve inches. Harrow well both ways, then rake with wooden hand-rakes, such as are used in haying, with the handles

All seed should be sown as soon as the ground is in fit condition-that is, when the soil is dry or mealy, not wet, soggy, or frozen. The time will vary according to locality, from the first of April to the first of May. After planting,

shortened, and the teeth shortened one and a half inches. The quantity of seed used should depend on the producing qualities of the soil. For a late crop on strong, healthy land, I should use six pounds per acre ; on old land, well worn,
if the land is light and dry, roll with hand-roller. I think the use of the roller enables one to begin hoeing sooner, as the plants can be seen almost as soon as they start. The machine I use for planting is a local one, which I have not yei

eight pounds; for an early crop on new land, four to five pounds per acre will be all that is necessary, and on old land, six to eight pounds.
seen in market. It plants two rows at a time, twelve inches apart, marks the third row, covers the seed, and rolls the ground; it is pushed by hand. One man
can plant one and a half acres a day. I commence hoeing as soon as the Onions begin to show in the row, and hoe at least three or four times during the season. I use the hoe in preference to weeding, as the latter tramples the ground so much, and wastes a great many Onions.

Of the many kinds of Onion seed sown, I consider the Red Globe best, both in regard to productiveness, and keeping qualities. Next to that comes the Yellow Danvers. I have planted three kinds of red Onion seed at the same date, and they matured as follows : Early Cracker Red, August 5th to irth; Wethersfield Red, August 2oth; Red Globe, August 3oth to September 6th.

Potato Onions are easy to raise, and bring a good return for the outlay.

May, on three-fourths of an acre of land, measured by surveying. On this piece of ground I raised six hundred bushels of Onions, and the same year, on the same land, I raised five hundred bushelsof Carrots, and took a premium on the crop at our Queens County Fair.

Begin to harvest the Onions when the tops grow yellow and fall. I pull by hand, never using a rake, as they curebetter by being carefully handled. Put three rows in one, with the bottoms outward; let them remain in rows till thetops are thoroughly dried, or in a crackly condition, which will take from one totwo weeks. If, however, they are wanted for shipment, top as soon as possible after pulling. Use a knife for topping, cutting about three inches from the On-


WETHERSFIELD RED.

Philadelphia sets also do well, though it is rather more work to plant them than Potato Onions, as they are smaller. Small red sets from Early Red Onions ripen about a week earlier than the first ones from seed.

One man can take care of about three acres of land, if he attends to his business. My brother and myself had seven acres of land on Long Island, in 1861-2, which yielded three thousand, two hundred $(3,200)$ bushels of the best Onions I ever saw.

For a second crop on land where early Onions are planted, I would recommend Carrots. I have had great success in that line. I planted Carrots at second hoeing of Onions, on the 1oth of
ion. The Onions must be thoroughly dried before housing for the winter. They keep well in bins made of slats, about five feet deep and four feet wide. Do not put more than one hundred and fifty or two hundred bushels in a bin, and put them all in the same day, as the addition of a second lot causes a second sweating, and induces decay. Keep as. cool as possible, giving ventilation every pleasant day, when it does not freeze outside. Freezing does not spoil them, however, if they are kept in that condition and not disturbed until spring. In conclusion, I would say that Onions, if strictly attended to, pay for the outlay better than Corn, Potatoes, or hay.
A. Waldron, Bristol, R. I.

If one wants showy plants, they must have branches on them. To begin with, I make a compost bed every spring. The foundation is all that can be raked from the yard, and all that has accumulated on the top of my old bed, and about four loads of leaves; on that, a load of good cow manure, unrotted; then cover with a small load of Blue Grass sods, cut from good, new soil, about four inches thick, put on with the grass side down. During the summer, have all the slop and wash-water thrown on the pile. In August I have it cut down and turned over, thus thoroughly mixing the compost, and the soot from cleaning the wood stove, and some ashes mixed in as it is being turned; then cover the heap with loose boards and leave it until next spring. All the rubbish from the garden, Corn stalks, Peas, Cabbage, Potato vines, Pea vines, Canna stalks, etc., are then thrown together, on the old spot, and I begin a new bed, to be completed next year. The soil of the present one is made ready to use next fall, by putting it into the stove oven and heating it so hot that I cannot hold my hand in it, then sifting and mixing four quarts of soil to one of good, sharp sand. I have not been troubled with little flies or worms in pots, since I lave scalded all the earth I use; but if I should find from the detritus in the saucer that an earth-worm was in the pot, I should slip the plant out, and would probably find it on the side or at the bottom of the ball of earth. If not, on wash day I would set the pot in a tub of cool suds, not quite to the rim, and as the suds soaked into the earth, the worm would come to the surface. The pot should stand in suds nearly to the top; if this did not answer, I would make some lime-water by slaking a piece of good, fresh lime with enough boiling water that, when the lime was dissolved and slaked, it should be like cream ; then turn in cold water and let it settle until clear. Draw off the clear part, and set the plant in it until it is thoroughly saturated; turn the limewater on the earth also, let the pot stand in it for fifteen or twenty minutes; it, like the suds, is a good fertilizer, and, probably, once will be sufficient; but, if not, after a week, give it a second, and even third plunge ; but if the first is thorough,
the second and third will seldom be required. One need not fear that limewater used in this way will injure plants.
Now for plants: Geraniums and Begonias give more blossoms, and are less liable to be troubled with insects than all the others. I use my old plants in this way: in February, I take off what slips I can spare, put them in the smallest pots, set them up on the highest brackets, in the center of my windows. By the middle of June, all these slips are in three-inch pots, and on the north side of the house, on a bench that is up from the ground ten inches; no worms will get into the pots. I let them grow in these pots until the middle of August, picking off every bud that starts, shaping by pruning off the low branches, and pinching out the center if they go to running up too tall without branching. I use the same soil from the beginning. I start them in one and a half-inch pots, shift them into three-inch pots; if they are wet properly before changing, the earth will not be disturbed.
In August, I repot into four-inch pots, putting charcoal into the bottom of the pot for drainage, and as a fertilizer; then I let the blossom buds grow, and, unless a very rank growing variety, I let them remain in the pots for the winter. I leave them out of doors until I am afraid of frost, then bring them in and fertilize with Bowker's Food for Flowers, and use this fertilizer regularly once a month until I get ready to put them out again in the spring. If the plants require it, I put them into five-inch pots in February, but not if I can avoid it by watering them every day; this is for the first year. I have Geraniums three years old, and a friend has one seven years old, and no one could ask for better bloomers. I cut, in February, what slips I can spare and not spoil my plants. In May I cut back every branch, and, if a very free growing variety, where I cut slips in February I can cut again in May: and as the blossoms depend on the number of branches, so, cut back severely in the spring, let them grow moderately, with just water enough to keep them healthy, pinch off all buds, and the middle of August, repot; if they are already in five-inch pots, put them into six-inch pots, picking off the old charcoal and
putting new in the bottom of the pot, also taking off all the old earth you can get off without disturbing the roots too much, preparing compost as I have stated, and when taking them into the house, fertilizing every month.

Geraniums must not have too much heat; $70^{\circ}$ should be the extreme, and Mrs. James Vick, Naomi, Emile Girardin, will do much better if the thermometer is not abore $65^{\circ}$ in the day, and $45^{\circ}$ or $50^{\circ}$ at night. I had a Remarkable that, New Year's day, I cut fifteen large trusses from, and there was no time all winter that it was out of bloom; so with Emile Girardin; last month I could have cut eighteen trusses at once. Guillion Mangilli I now count six trusses on, one as large as a coffee-cup, and yet, I have been cutting it back for a month. I expect to make slins from these branches the last of this month, and then put it out to prepare for next winter. My Remarkable was three years old, and became so large that but two plants could stand at the window with it, except some small ones that filled the space between the large plants and the glass. I have made a bedder of it this year. Sylphide is another very superior bloomer, a dwarf, but one of the best. Mad. Grandgeorge, is a very delicate pinkish-mauve. It also holds its delicate color in the yard. As a bedder, La Héroine is the superior of all the double white Geraniums. I have tested all the different double ones, and Le Niagara is next best for winter blooming; they are both good. Hazel Kirke, Edmund About, M. Pas-
teur, J. B. Varonne, Pres. Leon Simonand Député Berbet, can all be relied upon for good winter bloomers. All I have mentioned are sure, and the old plants of two and three years are better for show, and give stronger slips. The New Life and Mrs. James Vick are the only single Geraniums I cultivate, except the Foliage Geranium ; of these, for Bronze, I have Bismarck; it does better for color than any others. Mountain of Snow, Magician, Variegated Rose, Improved Cloth of Gold, and Happy Thought, can be grown nicely on the south side of an east window; or the east side of a south window; but all of the Bronzes want the lower shelf, and the center of a south window. No Geranium will blossom without sun. From the middle of November to the middle of February there is scarcely any sunlight in an east or west window; in the spring, an east window gives the strongest sunlight. In the winter the south windows are the ones that give the sun, as it is lower in the horizon, while in spring it is so high that the rays strike into the window but a short distance.

The Rubra Begonia is the cream of all the Begonias for window culture. Mine more than covers a pane of glass eighteen by thirty-six; the pot stands on a bracket below the upper sash, and the plant fills that side of the upper sash; I think it has not less than thirty nice trusses of blossoms on it at a time. I also have the Monthly Pelargonium, Fred. Dorner, and like it very much.
S. L.

## MUSHROOM GROWING.-PRIZE ESSAY.

It has often been a matter of surprise to me that the Mushroom is not raised more generally and extensively in this country than it is. I know there are a few places where it is grown for market, and made very profitable, but these places are not one-twentieth part as numerous as they ought to be. I know of no good reason why the Mushroom should not be grown in large quantities and with a large profit on the capital invested, in the vicinity of any large town or city. I think that the main reason why it is not cultivated more extensively is that most people have an idea that there are certain mysterious and
intricate processes to be gone through which are too deep and difficult for the comprehension of common mortals ; now, the sooner this idea is dispelled, the better for all concerned. And I will here make the assertion that there is no more difficulty in growing Mushrooms in large quantities, for market, than there is in growing Potatoes, or any other vegetables, that is, if the directions I am about to give are adhered to.

Mushroom growing on a large scale cannot very well be carried on at a long distance from a large town or city, because fresh horse manure, which is one of the principal materials, can only be
lad in quantity where a large number of horses are kept. The most suitable place, if the rent is not too high, would be a cellar or basement under a public hall, or manufacturing establishment; if this cannot be had, any building where a temperature of from $45^{\circ}$ to $60^{\circ}$ can be maintained during winter will answer the purpose. I am supposing that the person who is about to start intends to make a business of it, so I will give directions for fitting up the space in a permanent manner. The most convenient width for the beds, when there is a walk on each side, is six feet, and as long as the house will allow; a building thirty feet wide would give room for three beds, each six feet wide, with a walk three feet wide between and around them; and to economize space, two beds may be made, one above the other, arranged in the following manner: take good, sound, three by four scantling, in lengths to reach from the floor to the joists; nail these upright, in straight rows, six feet apart, and four feet bétween the uprights in the rows; next, take pine boards, one inch thick, place these edgewise on the floor, and nail to the uprights; this gives a bed six feet wide and twelve inches deep on the floor; next, take good, sound boards one inch thick, and six inches wide, and six feet long, and nail these edgewise on the uprights, with the upper edges four feet from the floor; on these lay one inch boards close together, to form a floor for the upper bed, and nail these boards down to the cross pieces. Then take boards twelve inches wide and one inch thick, and nail them edgewise to the upright, to form sides for the upper beds, and then you will have your beds ready for the material in which the Mushrooms are to be grown.

The material to fill in the beds is from droppings; take fresh horse droppings from the stables, in as large a quantity as can be procured, to which add an equal weight of fresh loam from a pasture field; old soil that has been worked or manured must not, on any account, be used. Let the loam and droppings be well mixed together from day to day, as they are received, or, if enough can be procured at one time, all the better. Place the heap in some out-building, where it cannot get the least wet. If it
is not all procured at once, turn the heap over every day, to prevent too violent heating, until enough is on hand to fill the bed, or beds. Now, all is ready for filling the beds, which should be done as follows; take from the heap of manure and soil prepared as above directed, enough to form a thin layer over the bottom of the bed or beds; pound this down quite firmly with a mallet or square block of wood, then another layer beaten down like the first, and this must be repeated until you have a depth of eight inches, neither more nor less; if it is deeper than eight inches, it sometimes reaches too high a degree of fer-

agaricus campestris.
mentation, but less than eight inches is not quite enough. Having done this, plunge a thermometer into the bed, which, in about two days, will heat enough to run the mercury up to more than $100^{\circ}$ Fahrenheit; wait until this goes down to about $90^{\circ}$, then take a sharp stick and make holes in the bed about a foot apart each way, and about half as deep as the bed; into each of these holes put a piece of spawn about an inch and a half square, cover the holes up again so that the surface of the bed will be level and firm as it was before the spawn was put in.

Nothing is now to be done for about twelve days, when the spawn will have "run" through the whole bed. Next, spread over the whole surface of the bed a layer two inches thick of fine, fresh
loam, pressed down moderately firm and quite level, cover the bed with about four inches of nice, clean hay or straw; now there is nothing to do but to keep a proper degree of heat, which should be as near $60^{\circ}$ as possible all the time; but it must on no account be allowed to go below $45^{\circ}$ at any time, or else the beds will get cold too soon, and the crop be too late to be profitable. If the air of the house or cellar is not very dry, no water will be required; but the beds must be examined occasionally, and if the surface is dry, give a light watering from a fine, rose watering-pot, with the water heated to about $100^{\circ}$.

With the above treatment commencing in November, the first crop will be ready in January. The Mushrooms don't all come up at once, so the gathering of the crop will last about three weeks. After the first crop is all gathered, spread about half an inch of fresh loam over the bed, beat down firm and level, and gently water with warm water when it becomes dry, and cover up as before, with hay or straw, and another crop, frequently better than the first, will be gathered in February. Mushroom spawn of good quality can be obtained from any good seedsmen.

## B. Fletcher.

## SOME GOOD HOUSE PLANTS.

One of the best plants for the house is the Achania,-A. malvaviscus of the catalogues. It is a good plant for house culture, for four reasons : first, it will do well where many other plants would die. Second, it is almost always in bloom. Third, it is subject to the attack of no insects. Fourth, it is of the very easiest culture; anyone can grow it. It is always a pleasing plant, for it has profuse foliage, of a rich green, the leaf much like that of the Abutilon in shape; so much the Achania and the Abutilon resemble each other, not only in shape of flowers and foliage but in habit of growth, that most persons consider it a species of the latter. The flowers of the Achania are a brilliant scarlet, which contrast well with the foliage. It is, really, an ever-blooming plant, though it flowers more profusely at some seasons of the year than at others. Every branch will generally have on it one or more flowers and several buds. The flowers bear a close resemblance, in shape, to those of the Abutilon after they have begun to fade and close their petals. Because the Achania never expands its petals, many persons imagine that something is the matter with the plant. The leaves have on them little specks of white, which many mistake for insects; these little, sand-like particles are always to be found there, and no one need worry about them. To grow the plant in good shape it should be made to branch near the bottom; this it can be made to do by cutting it back well when young. If but one or two branches
start, cut them back, and persevere in this treatment until you have several branches started. It is a very tractable plant, though, like the Abutilon, it is inclined to grow tall if given its own way. It soon becomes a compact, bushy shrub, with proper treatment, and will give much better satisfaction than most house plants. It likes best a rich soil, in which a good deal of sand has been mixed; give enough water to keep the earth moist, but never wet.
Another good house plant is the Agapanthus umbellatus. It has leaves something like those of the Amaryllis, but longer, and in greater profusion. These are produced from the crown of the plant; they are gracefully curved, and a good specimen is very ornamental when not in bloom. The roots are large and fleshy, and require a large pot. The flower-stems often grow to a height of four feet; the flowers are borne in clusters; I have counted over sixty in one cluster. They are shaped like a Lily, and are from one to two inches in length, of a beautiful lavender-blue in color. There will often be twenty flowers expanded in one cluster at a time, and as they remain for days, and new flowers are constantly opening, the effect is very pleasing. It is a very easily managed plant, requiring a good soil, plenty of water, and plenty of room; beyond this no especial care is needed. It is an evergreen, and should not be dried off at any time, as one might think who has grown the Amaryllis, and notes its general resemblance to that plant. E. E. R.

## FOREIGN NOTES.

## MIGNONETTE.

I take it for granted that every one who loves flowers would wish to extend the season in which the fragrance of Mignonette may be enjoyed, and I am sure that were it more generally known how easy it is to have it in bloom in winter, few windows would be without it. It is merely a matter of sowing some seed at the proper time, and sheltering the plants from cold and damp, and Mignonette but little inferior to that grown in the summer season may be had in winter. Put a good-sized crock in the bottom of a four and a hall inch pot, with a pinch of soot therein to keep worms out; fill the pot with good fine soil to within half an inch of the rim, make the surface firm and water moderately. Sow the seed thinly and place it in a shady position till it germinates, after which time the young plants should get all the air and sun they can. The last week in August and the first week in September form the seasons for sowing for winter bloom, and it is as well to sow two or three pots at intervals, as the character of the autumn will determine the time of the plants coming into flower. When very fine the August sowings are apt to come into flower by the beginning of the winter, and when rather under the average in this respect, as regards warmth, the later sowings do not come into flower till the season is well advanced. Five plants will be enough to each pot, and when they are four inches or so in height, four slender stakes should be inserted round the pot and a piece of fine raffia passed from one to the other, which will keep the growing shoots in place. From the time they begin to grow freely, attend well to the watering, for if they suffer from want of moisture at the root, the lower leaves are sure to turn yellow, and Mignonette loses half its beauty when not well clothed with healthy foliage to the rim of the pot. At the same time, some care is needful not to make the soil sour by watering when unnecessary. A cool room is the place for Mignonette in winter, as it dislikes warmth and much confinement. An
enemy which attacks Mignonette, and soon ruins good plants if left alone, is a green caterpillar, so much the color of the foliage that a sharp eye is required to detect it. If not discovered, one will almost destroy a pot of Mignonette in a single night. When the plants are housed it is quite small, and only comes to full size during the winter, and, concealing itself on the undersides of the leaves, it is not seen unless sought for there.

## Gardening Illustrated.

## CLEMATIS AND TROPAOLUM.

Tropæolum Canariense, intertwined with Clematis Jackmanni and trained up to a wall, has a very striking and pleasing effect. A few days since, in walking through a village in this immediate neighborhoood, my attention was attracted by some creepers growing up a wall. On getting nearer, I found them to be Tropæolum Canariense and Clematis Jackmanni. The deep, intense violet-purple of Jackmanni seemed to bring out the beauty of the Tropæolum. They are of the simplest culture. Clematis Jackmanni, being hardy, will last for a number of years. The Tropæolums are readily increased by seed, which should be sown early in order to get strong plants.

## M. Saul, in Gardeners' Chronicle.

## MUSHROOMS IN MEADOWS.

The way my boy does it is to dig out a hole large enough to hold a bushel of horse droppings. He treads this in firm, lays three or four pieces of spawn on the top, places the turf-which has been cut three inches thick-over it, beats the turf down again, and gathers the Mushrooms in due course.
J. D. E., in Gardening Illustrated.

## MUSHROOM BEDS.

A neighborly farmer made up two Mushroom beds some time ago ; one was composed of manure from the stables, the other of manure from the cow-sheds. They are both now bearing, and the one is as good as the other.
I. Muir, in The Garden.

## WATERING CHRYSANTHEMUMS.

In my experience, and it is somewhat extensive, two cardinal mistakes are made by inexperienced growers in watering these plants. The first is not giving them sufficient liquid support at the right time in summer when the pots are filled with roots, the sun bright, and air dry. At that time they may be watered twice or even thrice a day, and yet not be satisfied if the soil is permitted to shrink from the pots before water is given. Good growers never allow such a mistake as that, and they keep the roots moist without saturating the soil with less water than is needed when the shrinkage alluded to is thoughtlessly allowed, The next mistake consists in giving the plants too much water after they are housed in the autumn. I have heard gardeners say Chrysanthemums cannot have too much water then, and it is given, often strong liquid manure, every day; in fact, in years gone by I had to carry on that practice, and I now know that I ruined my plants "by order."

I have just been in two gardens. In one of them Chrysanthemums are so fine that the blooms are almost certain to win high honors at some of the great shows; in the other there will be few if any flowers of it for exhibiting. In the former case not a drop of water was given to a plant until the pot was rapped and the soil tested. The soil in many pots passed by the waterer "looked dry," but he knew it contained sufficient moisture for the plant that day, and to have given it when not wanted would have done harm and not good. Though the huge plants, clothed to the ground with splendid foliage and showing great fat expanding buds, are only in eight-inch pots, it is al-
most certain that they are not waterec more than twice or thrice a week-that is, those watered to-day will not need a further supply for two or three days, according to the condition of the varieties and the weather ; indeed, one plant that accidentally got too wet would not require, nor receive, a drop more water for a week.
In the other garden no such care was exercised. The young man said he gave them "good stuff" every day. It was a "single-handed" place, and in many such gardens Chrysanthemums are remarkably well grown. In this I am bound to say they were simply being ruined. In some of the pots the soil was saturated and poisoned with liquid manure too strong by half. I am quite positive that some of the small plants in large pots would be better without a drop of water for a week, even if the weather were bright, while if dull the soil would remain wet for a fortnight. The plants had lost most of their foliage, and though the soil was quite wet, much too wet, the leaves remaining were flagging with the sun-a certain indication of the roots being injured by too much water and too strong doses of nitrate of soda. Journal of Horticulture.

## CLEMATIS DAVID:ANA.

The Gardeners' Chronicle illustrates and describes this plant. It was introduced from Northern China. It is an erect herbaceous plant; the flowers are of a rich blue color, with a powerful perfume, as in C. Flammula, and so far seems to have produced stamens only. The plant dies down in winter, but the stock is quite hardy, so that we have in it a notable addition to our collection of hardy herbaceous plants.


## PLEASANT GOSSIP.

## TREATMENT OF PLANTS.

Please tell me the proper treatment of Eranthemum Hendersoni. Also, Eucharis Amazonica and the Montbretia, and how old they must be before they bloom? The plants are new to me, and I am anxious to save them.

I have a tiny white Rose, very double, about the size of a silver quarter dollar, named Goubault ; can you tell me to what class it belongs, and if it is hardy?

I also have a Fern, Lygodium scandens, which I have had all summer; it is potted in leaf mold and sand, kept in the shade, and moist, looks green, but makes no growth. What is the trouble?
E. M. B., Casselton, Dak.

Our inquirer is unfortunate in having the plants mentioned for house plants. The better way would be not to waste time with them, unless, indeed, E. M. B. is an unusually skillful cultivator. The Eranthemum and the Eucharis are both what are called warm house or stove plants-that is, requiring a hot house. The Montbretia, which by this time is dormant, can have its bulbs preserved in a moderately warm, dry room. By the latter part of March it will be time to pot them again, which should be in fine, rich mold, placing one bulb in a five-inch pot. Give but little water until growth commences, and then more freely as the plants advance. After blooming in summer shorten the supply of water, and allow the bulbs to ripen.
Goubault is a Tea Rose; it is not hardy.
Lygodium scandens makes an annual growth; it starts early in spring, and by the first of July it is finished.

## MAGAZINE AND GUIDE.

Our old subscribers may be a little surprised to receive this number and the Floral Guide under the same cover. It has been done for convenience of sending. We are now sure that every Magazine subscriber has a copy of the Guide. And our customers, who usually have the Guide sent to them, now have also a copy of the Magazine. They can see what the Magazine is, and we hope to have their names as regular subscribers. When the January number of the MagazINE is needed for binding, at the close of
the year, it can be easily detached from the Guide.

Every subscriber to the Magazine will be entitled to the Plate of Roses and Pansies, as elsewhere announced.

All of our old subscribers, we hope, will act as agents and form clubs, and secure for themselves the Portfolio of Rare and Beautiful Flowers.

Any one of our subscribers can consider himself an agent to form a Club for the Magazine. See announcement in full elsewhere in this number.

## TRANSPLANTING PARSLEY.

The practice of allowing Parsley to remain where the seed was sown without the plants being even thinned out is a great mistake. It may be very well, perhaps if the young plants are thinned out a suitable distance apart as soon as they are large enough. But then it is far preferable to transplant the young plants as soon as they are of a suitable size. The plants for this purpose should be from seed sown in March, and if they are put out early in June in good ground, in rows one foot apart each way, they wili make fine handsome plants by the autumn, and furnish a capital supply of fine Parsley all the winter. We treat our stock in this way, and we always obtain leaves beautifully curled considerably larger than a man's hand.

## the grape rot in france.

According to Revue Horticole, the Black Rot, the same that is so destructive to our native grapes in some sections, has appeared in the vineyards of Central France. This is the first appearance of the malady in Europe, but it is feared not the last.

## THREE GOOD PEARS.

Please name for me three varieties of Pears for my private garden.
H. W., Sandusky, $O$.

Beurre Giffard for summer, and Belle Lucrative, Seckel and Sheldon for later varieties, will be found satisfactory.

SCREW PINES.
As a foliage plant for warm greenhouses the Screw Pine, Pandanus, in its several forms, occupies a conspicuous place. One of the finest of all is the variegated variety, of which an engraving is here shown. The form of the plant, as will be seen, is extremely graceful, and the white margins bring out the green central portions of the leaves in strong relief. It is a plant of easy culture as long as it has the necessary heat-seventy

## EUROPEAN NOTES.

If an American wishes to plunge at once into the midst of an undreamed of world, let him take a steamer directly to Antwerp. The sail of sixty miles up the River Scheldt will form a fitting introduction to the novelties, centuries old, awaiting him. The first glimpse of the dikes on each bank recalls our childhood's stories of the sturdy Hollanders who have wrested their homes from the sea, and we feel that what was once a myth to


PANDANUS JAVANICUS VARIEGATUS.
to eighty degrees. Good turfy loam, with a sixth part of sand added, is a proper soil, and in it a handsome specimen plant can be raised in about a year. A small plant in a medium-sized pot, shifted at mid-winter or early spring into a larger size, will commence to grow quickly, and attention being given to repotting when needed, it will develop rapidly. When shifting the plant from a smaller to a larger sized pot, it is well to set the plant a little deeper each time, in order to keep the foliage close to the soil. A moderate amount of water only is needed, and the plant should have full benefit of the light.

A New Night-blooming Cereus.-A new seedling variety of Cereus, named Vulcan, has originated in Germany, from C. grandiflora. The flowers are darker colored and larger than the last-often eighteen inches in diameter.
our imagination has now become a reality. Yet it was difficult to realize that the close-shaven green mound running unbrokenly along the river's edge was all the work of human hands, although the red roofs of the houses peering up above the embankment told us that such must be the case.

In Belgium, at least along the Scheldt, it would seem as if the people had had but a single pattern for each class of objects. The houses are all alike, ranging, perhaps, a little in size, with steep, red-tinted roofs, which lend the only bit of picturesqueness to the flat landscape, except possibly the great four-winged mill-wheels. These are so ponderous and wide-spreading that it seems as if they might fly away with the small building just visible behind, were it not for the slowness of the movement, which would make escape difficult. Not only does the same pattern serve for buildings, but
even the trees dare not assert any individuality. We were more at a loss to know whether nature was thus considerate of her people's tastes or whether the precision was due to the people themselves. However that may be, as far as the eye could reach there were symmetrical rows of trees, on both sides, in which each tree was formed exactly like its neighbor. The branches began at the same distance from the ground, and all limbs took on the same slope. It reminded one of the trees in the Noah's Ark toys, which are supposed to serve as object lessons in history for little people. Yet it was not alone the rows of trees, in which one had not dared to die, that were so accurate in growing: the same precision reigned in the forests, if one can apply that name to those wooded spaces. There were large areas covered with a kind of fir, where each tree stood a trifle over a foot from any other tree. Just room enough was left to allow a person to squeeze between them. Not a thing was to be seen in the trunks below the lawful line, nor was a particle of undergrowth to be discovered. We were told that these were hunting grounds; but how any poor animal would find a leaf to hide under is a mystery.
Soon, however, we saw a phantom city through the haze, and we forgot the wealth of precision behind us while we watched the cathedral towers of Antwerp take shape in the mist. It was beautiful, but every one knows that cathedrals are wonderful, and that impressions created by centuries in stone are indescribable ; accordingly, the guide-book sights will be studiously avoided, and Antwerp be spoken of as it looks in its every day dress.
Still, even this human interest unites the past and the present, for it seems as if some forgotten century must have been dropped down into our present one. The people all look so old, not grey and wrinkled, but subdued and mature. Even the children impress one as bearing marks of some pre-existent state. In the fish market, the little girls, sitting behind their tables and baskets of fish, knitting so fast that the needles made a blur before one's eyes, looked as if they had long ago become accustomed to the world and its seriousness; while the boys, pushing their carts slowly along, did not
in the least remind us of what we Americans recognize as the "small boy."
The peasants absorbed our attention entirely. Indeed any one dressed in modern attire was quite beneath our notice. Nothing contented us but the pointed wooden shoes, the young women with great baskets on their bare heads, and old women with unimaginable white lace caps, which had a large oval leaf of lace hanging down before each cheek.
Early in the morning the peasants come into the open market-place with their vegetable wagons and milk carts. These are usually drawn by dogs. Many of those less prosperous than others have one dog harnessed under the cart, while a girl or boy pushes it from behind. Some have two or three dogs hitched up in front, and occasionally a very pretentious turn-out will be drawn by five dogs.
In a side street we passed a cart on the walk before which were hitched two dogs. The owner was absent, so we thought we would make friends with the great, beautiful creatures. IVe approached cautiously, meaning to pat and stroke their heads; but they did not seem to distinguish the difference between good intentions and evil ones, for they looked around toward their wares in the cart, and exhibited more anxiety than appreciation. The people, too, near by, looked somewhat disturbed, so we refrained from any further expression of "the milk of human kindness," and went on our way.

Dog-carts, however, are not the only equipages. There are the wagons with round, canvass-covered tops, in whose dark depths one can see, as in a frame, the bare-headed peasant woman with a memorable baby a year or two old in the seat beside her. This establishment is drawn by a donkey, very small and very meek, and forming a most ludicrous contrast to the huge draught horses near by. Amid all her boasting, let not America boast of her draught horses. Perhaps the pictures we all have seen of these enormous animals have seemed to some of us an exaggeration; but, be assured, they are not. Nowhere in Germany or Switzerland have we seen such magnificent, massive creatures as were common in the streets of Antwerp. To add to the impression, their collars were immense, often extending more than a foot in length above the neck. With their pon-
derous feet, smooth, glossy coats, and wavy manes, these horses were the handsomest embodiment of strength that could be imagined.

The ride through Belgium on the way to Cologne again renewed our acquaintance with precision. But not that alone impressed us. At first we said that more was wasted on one farm in America than in the whole of Belgium. And very soon we declared that more was wasted in one American kitchen than in the whole kingdom of Leopold II. Every foot of ground is cared for as few gardens in the New World are cared for. There is no room wasted by fences, only occasionally a narrow hedge marks a boundary. Slight depressions as drains divide one piece of land from another, while, in the late fall and winter, large areas lie wholly under water, and no lines are distinguishable. We learned that these lands are the most valuable, since here the grass grows earliest in spring-so early that a third crop is cut in October. Women mow the grass with a small scythe, and we realized how carefully every blade was hoarded when we saw one girl fish out a handfull that had fallen in a pool of water. The strips of land, few of which are large enough to be called fields, are as closely shaven as our city lawns, while it is one of the rarest sights to see a tree standing alone. The trees are either along the roads or in the spaces set apart for a forest. One wonders in seeing the hard, clean roads, if the leaves have not dared to fall, and presently a heap of leaves, which have been carefully swept together, will come into view.
It is beautiful to see a whole country under garden cultivation, but a moment's thought reveals a pitiful side as well, for it not only gives an evidence of thrift, but it speaks aloud of the drudgery of hundreds of lives. It reminds one of the Arabic slave trade among the African negroes, when one cow equaled in value ten men. H. M. S., Zürich, Switzerland.

A Favorite. - That charming little book, Language of Flowers, by Uncle Charlie, has been in so great demand that several thousand copies have been sent out, and it is now re-issued. Flowers in song, sentiment and story are fully treated. An interesting book for 40 cents.

CALIFORNIA FAIRS, ETC.
Since writing you I have attended two fairs-one the County Fair at Downey, fifteen miles north, and the other, a District Fair, at Los Angeles. Some things I was greatly pleased with, but in others was much disappointed. The show of flowers was very poor at both; in this land of flowers I did expect to see something worth looking at. The exhibition of Grapes was wonderful. Such clusters of beautiful fruit was entirely beyond my expections. The show of Apples was very fine indeed; but I could recognize but very few of my old favorites, they differ so in shape, and especially in color. The Baldwin shows here but very faint streaks of red; the same can be said of the Spitzenberg. The most popular Winter Apples here are the White Winter Pearmain, the Newtown Pippin, and the Nickajack; my favorite is the Newtown Pippin; it is of good size, good flavor, and very crisp-the latter a quality that almost all California Apples lack. Downey, where the County Fair was held, is the great center of Walnut growing. These are shipped by the car-load, and this township grows and sells more than all the rest of Southern California. The show of Raisins from Orange, a place some twenty miles northeast of this, was exceedingly fine. One firm there had forty acres covered with racks, as a drying ground. They made nearly ioo,000 boxes of Raisins this year, and as fine as I ever saw imported. Vegetables of immense size, viz: Water Melon, 94 lbs.; Squash, 68 lbs.; Corn, 18 feet 6 in. high ; I saw Pear trees, I year from bud, I2 feet high. The stock was fine, some Jerseys and Holsteins as good as New York State could furnish. So much for the fairs.

We had our first rain last night (November 16th), two inches. This means plowing, seeding, and planting at once. They are putting in hundreds of acres of Barley all around me. The seeder is attached to a six-horse gang plow. The grain falls on the old stubble and is covered about four inches with the plows. The wild geese come for their share, and make the plains look like snow-banks. I shot one last week and another to-day; hard work to get within range. Now that the rains have come, we will have lots of duck, as well as mushrooms. By the
way, my Clianthus is now six feet high and eight feet across; such a sight!Sam. P. Wakelee, Los Angeles Co., Cal.

## BIRD-ENEMIES.

From an out-of-door paper by John Burroughs, in the December Century, we quote the following

The great bugaboo of the birds is the owl. The owl snatches them from off their roosts at night, and gobbles up their eggs and young in their nests. He is a veritable ogre to them, and his presence fills them with consternation and alarm.

One season, to protect my early Cherries, I placed a large stuffed owl amid the branches of the tree. Such a racket as there instantly began about my grounds is not pleasant to think upon! The orioles and robins fairly "shrieked out their affright." The new's instantly spread in every direction, and apparently every bird in town came to see that owl in the Cherry tree, and every bird took a Cherry, so that I lost more fruit than if I had left the owl indoors. With craning necks and horrified looks the birds would alight upon the branches, and between their screams would snatch off a Cherry, as if the act was some relief to their outraged feelings.

## NEW RED-LEAVED SPIR ÆA.

A Belgium horticultural establishment sent out this fall for the first time a pur-plish-leaved variety of Hoteia Japonica, or Spiræa Japonica, as it more frequently is called.

The leaves and stalks are described as of a reddish purple color, the flowers the same as those of the original species, but borne more profusely.

If this plant will hold its color in the sun it will prove a valuable addition to the hardy herbaceous border.

## TURNIP AND ONION.

Having tried the New White Egg Turnip and Giant Rocca Onion, I would recommend them as admirably adapted to this locality and middle Georgia.

The New White Egg is the best variety I have ever seen for spring sowing, producing quite early roots of good size and shape. The flavor, too, is excellent, being sweet and mild, not at all bitter.

Giant Rocca Onion Seed will, with ordinary attention, make fine bulbs the first season. No doubt, if sown in fall, the bulbs would be very large in the spring, but I have never tried this plan.
E. B. H.

## RAISING SMILAX FROM SEED.

The seeds of the Smilax-Mirsyphyllum -are convenient in size, and although the plants do not very soon make their appearance after the seeds are put in the ground, they will be pretty sure to come up after a while.

The young vines do not make much growth the first season, but they are very little trouble, not requiring careful treatment or close attention.

The second season the rines grow surprisingly and make a fine show. The little blooms, with their delicious fragrance, appear in the latter part of the winter, and the possessor revels in the beauty and sweetness produced from the seed sown so long ago.

Every winter-garden and greenhouse should have its Smilax vines. E. B. H.

## LONDON EXPOSITION.

The great American Exhibition of Arts, Inventions, Manufactures, Products and Resources of the United States of America, will open at Earl's Court, Kensington, London, England, on the first day of May next. The collection that will be brought together at that time will form a great display of American industries.

The Vice-President of the Exhibition is Colonel Henry Sturgis Russell, of 95 Milk street, Boston, Massachusetts; and any information desired in relation to exhibiting can be obtained by addressing him, as above.

## A WAIF.

This spray of seeded grass, yellow and dry; Plucked in the golden summer, months ago, Still in my vase the pristine grace doth show, With which it bore its freightage airily; When sunbeams, slanting from the wintry sky, Find out this waif, and touch it with a glow Like summer's glory, I who see it so, And count its shining germs, in wonder cry"This was the least the teeming season brought; The slightest thread of growth, and yet how fair! With what prolific potency enfraught!
O, soul of mine, what fruit then shouldst thou bear, If all thy life were by its laws outwrought, And of God's fullness hath its perfect share?"
M. E. Bennett.

## FUCHSIA PHENOMENAL.

Another year's trial of this variety confirms its beauty and excellence. The plant is a strong, robust grower, one of the best in this respect of all the double varieties, and very free blooming. The tube and sepals of the flower are a bright carmine, corolla a bright violet, shading to purple. The flower is larger


FUCHSIA PHENOMENAL.

## MAN-OF-THE-EARTH.

"What is the flower called Man-of-theearth, as mentioned in Miss Thayer's. Wild Flowers of Colorado?" inquired one of our readers, some time since. As at that time we had not seen or even heard of the volume mentioned, we could not refer to that. So, taking all the information which our inquirer gave to us, and putting this and that together, we arrived at the conclusion that the "Man-of-the-earth" was Ipomœa leptophylla, although its odd name we had never before heard. Since receiving from the publishers a copy of this elegant specimen of book making, and there seeing the colored plate of the flower and foliage, and reading what Miss Thaier has to say about it, there is no doubt of the correctness of our first impression. The following is Miss Thayer's description as she found the plants at Colorado Springs:
" While some of our party had gone to the Iron Spring, I made a sketch of this Ipomœa, or Man-of-the-earth. I had often heard of this peculiar plant, and had a great desire to see it. I had my curiosity satisfied, for by digging down a few inches I found the root that so resembles a man's head. It is quite as large, although unlike it in some respects, this being quite full and solid. The blossom is much like the Morning Glory, but more firm ; the leaves are small and slender, and the stems, you will see, are very delicate. They go into the earth only a short distance, when
than that of any other sort. It is a most satisfactory kind to grow and train for specimen plants, as its freegrowing character allows of a large and handsomely shaped plant being reared, which, when in bloom, with its great crop of immense flowers, is a magnificent sight-one worthy of any florist's or amateur's ambition. It is probable that nature has gone nearly or quite to its limit in the production of this flower, and it will, for a long time, at least, occupy the leading place for large size among the double Fuchsias.
they become attached to the immense root I have just described. I wish I could give you a sketch of this root, it is such a curiosity, and so unlike any other root I have ever seen. They try to preserve it by drying, but it loses its shape, and when dry is not more than half the original size."
The flowers are quite like the common Morning Glory in shape, and in color are a bright rose. The plant is a perennial Convolvulus, or Ipomœa, and according to Dr. Gray, the root is "immense, weighing from ten to one hundred
pounds." We have received some seeds of this plant, and shall try to discover its merits in the garden. The volume referred to, by Emma Homan Thayer, is a quarto, with twenty-four handsome colored plates of the wild flowers of Colorado, and that State can certainly boast of beautiful flowers. The plates have much artistic merit, and the remarks of the author, though not a botanist, are correct and appropriate, but brief. The book is an elegant one, and a credit to artist and author and publisher.

## OTHER WORLDS.

The peculiar ccndition of the Moon is considered in Ball's "Story of the Heavens," and the reasons given that the Moon has no water and no atmosphere, and consequently no life. As to life, the writer says: " Man is a creature adapted for life in circumstances which are very narrowly limited. A few degrees of temperature, more or less; a slight variation in the composition of air; the peculiar suitability of food, make all the difference between health and sickness, and between life and death. Looking beyond the Moon, into the length and breadth of the universe, we find countless celestial globes, with every conceivable variety of temperature and of constitution. Amid this vast number of worlds with which space teems, are there any inhabited by human beings? To this great question science can make no response, save this : we cannot tell. Yet it is impossible to resist a conjecture. We find our earth teeming with life in every part. We find life under the most varied conditions that can be conceived. We have life under the burning heat of the tropics ; we have life in the everlasting frost at the poles. We have life in caves where not a ray of light ever penetrates. We have life in the depths of the ocean, at the pressure of tons on the square inch. Whatever be the external circumstances, some form of life can generally be found to which those circumstances are congenial.

It is not at all likely that among the million spheres of the universe there is a single one exactly like our earth; like it in the possession of air and water, like it in size and composition. It does not seem probable that a man could live for one hour on any body in the universe except the earth, or that an Oak-tree
could live in any other sphere for a single season. Men can dwell on the earth and Oak trees can thrive there, because the constitution of the man and the Oak are specially adapted to the particular circumstances of the earth.

Could we obtain a closer view of some of the celestial bodies, we should probably find that they, too, teem with life, but with life specially adapted to the environment.
Life in forms strange and weird; life far stranger to us than Columbus found it to be in the New World when he first landed there. Life, it may be, stranger than ever Dante described or Doré drew. Intelligence may yet have a home among these spheres no less than on the earth."

## MANURES.

A very excellent paper on Manures especially for the garden and orchard was read, last season, before the Massachusetts Horticultural Society by Professor G. C. Caldwell, of Cornell Unirersity. The following are the main points, as he reviewed them :
r. That if the elements needed for the food of the gardener's or horticulturist's crops cannot be obtained in sufficient quantity from stable manure, or other animal waste, they can be procured in the trade, in unlimited quantity ; and in every degree of a vailability depending on different grades of solubility: and in the greatest variety of mixtures, so as to suit any whim or fancy of crop or crop-grower.
2. That profitable crop-growing can be carried on, for many years at least, with these commercial fertilizers alone.
3. That the most evident distinction between stable manure and commercial fertilizers, and the distinction upon which we should, therefore, naturally base an explanation of the greater reliability of the former, is its large proportion of vegetable matter, or humus-forming material, of which commercial fertilizers contain practically none.
4. That soils contain, in a difficultly soluble condition, and therefore not easily fed upon by the crops, large supplies of all the needed elements of plant food.
5. That humus, through its decay in the soil, furnishes carbonic acid, among other solvent agents; and this carbonic acid appears to play an important part in
the nourishment of crops by bringing the native, insoluble stock of plant food within their easy reach.
7. That even if we add water-soluble plant food to the soil, it becomes largely insoluble before the crop can feed upon it, or needs it ; therefore soluble plant food added to the soil in commercial fertilizers needs also the help of the humus, finally, for its solution.
7. That plant food in most animal and vegetable residues used as manures costs much less than in commercial manures.
8. That, in spite of the disadvantages which, under some conditions, attend the use of commercial fertilizers, they are nevertheless a very important and necessary help in crop growing.
9. That in using these fertilizers the wisest course appears to be to make one's own mixtures of the raw materials, as well for securing a hetter manure as for economy in first cost.

## TOMATOES FOR THANKSGIVING.

Not canned either, but fresh from the rines, and in latitude $43^{\circ}$. I had half a dozen to-day with our Thanksgiving din-ner-have had them yearly, and one season had them as late as Christmas, but on that occasion the Tomatoes were not much to brag about. Possibly many of your readers can tell the same story, but as I have never seen the subject alluded to in the pages of the Magazine, I shall, with your permission, tell the "how."
As late as possible before frost I dig up some of the strongest vines full of green Tomatoes and hang them up by the roots in a frost-proof cellar. The fruit will gradually ripen, and you can have a few every Sunday. They do not color so
deeply, nor taste so strongly as those grown in the open air, the color being a pale pink, and the tomatoes tasting cool, sweet, and juicy. After this date, especially if there is any humidity in the cellar, those that are left on the vines begin to get soft and pulpy and soon decay.
I formerly hung them up with the roots exposed; but this season I enveloped them in paper flour sacks, which was an improvement, as being more cleanly. The foregoing is a very simple experiment, and will prolong the enjoyment of fresh garden sauce for several weeks.
R. Calvert, La Crosse, Wis.

## CHRYSANTHEMUM SHOWS.

The Chrysanthemum shows in New York City in November, held by the American Institute and the New York Horticultural Society, were both fine displays. A large number of the handsomest varieties of the different classes of Chrysanthemums were on the stands, and received enthusiastic admiration. The popular taste for these beautiful autumn and early winter flowers is increasing and spreading, and it is well that it should be so, for, in this climate especially, there is no other plant that can take its place for that particular season; and then, the wonderful variety of forms the plant assumes in its cultivated state, and its hardiness and the ease of its cultivation are all strong claims to popular attention. A great deal of skill can be developed in cultivating properly the Chrysanthemum, and few of our readers know how much. A Chrysanthemum Show in November in connection with many of the horticultural societies at the North would produce good effects in many ways.

## OUR YOUNG PEOPLE.

## FROSTWORK.

> And myriad tender trailing vines With many a graceful turn.
> And here are humble Daisies, too, Some shelt'ring leaf beneath. And Lilies festooned, here and there. Above some snow-white wreath.
> And many another flower I trace, So like the ones that live When spring and summer time are here, Their bloom and grace to give.
> What is the frostwork telling us? That, in this world of ours, Lo, all along life's devious road, Are ever-blooming flowers;
> That, when life's chilling snows abide, In hours of dark despair,
> Some good commingles with the ill, If we'll but trace it there.

Lidia Dais Thomson.

## A NEW YEAR'S CONTRAST.

There was nothing new about the dingy house that morning where the barefooted Cobbe children lived, except the year ; that was new, for everybody said so. Eren the baby-sister had snowed down two winters before, so she wasn't new. (It was rery funny for four boys to have a little sister!) Nor the fact of the father's broken back wasn't new, for he'd lain on the bed-room bed for nearly nine months. Nothing at all new but the year !

So, Matthew, Mark, Luke and John peered through the frosty panes that morning, while wriggling themselves into their trousers with hitches and jumps from one bare foot to the other-peered out to see if the world really looked any newer than when they went to bed the night before. And sure enough it did.

So there was some sense after all in calling this the New Year, for there was something very new indeed outside, and a great deal of it, too-something very soft, and white as-snow; and that's what it was. Matthew looked down at his red feet and puffed out his breath with a little noise that sounded like "Whew!" and then ran to the stove to help his mother kindle a fire under the kettle of potatoes. Mark stamped his feet till they hurt, and
then weat to a wolf's skin stretched on the floor and buried them in the hair.

Luke and John, at another window, danced up and down while disputing over the possession of the real estate pictured out on little quarter-section panes of glass-both claiming the castles, all turrets and spires, and neither one wanting the landed property with its glittering forests.
" Who cares for trees ! " said John, "we can see them any day. I seen the castles first, an' so they're mine."
" No you didn't see 'em first," retorted Luke, not in the most apostolic spirit, "I was lookin' at 'em when I was punchin' this yer nail in to hitch my s'pender on."
" O, you wasn't neither. If you won't let me have 'em, I'll breathe on 'em an' melt 'em all out"
" Whip away then! I wish I had a pair o' shoes, an' I'd put 'em on an' I'd kick somebody."

At this Matthew and Mark laughed so loud as to waken baby Dorcas, while the mother could not help smiling, well knowing that the young apostles' quarrels never amounted to anything serious, and that an occasional scuffle only served to warm them up.

But in the bed-room a voice moaned out, "It's for printed pictures their starvin' an' don't know it."

On an exclusive street of the city lived the wealthy Mrs. Rhino in stately elegance. Every appointment of her palatial home suggested luxury. The costliest furs and fabrics kept warm her dainty person, and choice perfumes, used freely, helped her to breathe the common air of life. Indeed, since the time when she had assumed her late husband's city charities, her acute sensibilities had received such shocks that perfumes and fans had become her constant companions.

Not that she ever came in personal contact with distressing phases in life, but the reports to which she sometimes had to listen were excruciating to her feelings, and her smelling-salts and fan were then in constant requisition. Her boys, in their own apartments, led happy lives with a common-sense teacher and governess, who winked at the somersaults, the roof climbing, and various escapades that would have set the mother frantic.

On New Year's Eve, after Mrs. Rhino's hostler had carefully stabled her fat bays, he sought that lady's presence, saying: " It's yersilf, ma'am, has the rapute of a charitable lady, an' it's not often you'd find a case aqual to yer ability. But I've a tale now to till ye! A while since I had the horses to a smithy in the suburbs to get 'em rough shod, an' there, nixt dure, in a bit of a yard, was four barefutted childers in a row on the fince, watchin' the horses, wid the forty rid toes of 'em stickin atween the boords, an'-"
"Nonsense! four children never had forty toes."
"Your pardon, ma'am. Your own two childers has aich of 'em tin toes, if they've got their balongin's, an' that's twinty, an' two twinties makes-"
"There, that'll do. I wouldn't have believed it-how disgusting! Go on with your story."
"Well, I made talk wid the spalpeens while I was delayin', an' I axed 'em where did they all slape in that box of a fouse, an' they sayed they slaped in the fireplace, ma'm."
"In the fire-place!"
"An' whin the cold druv'em in-dures,
as soon it did, ma'am, I asked the smithy-man wur it so, an' he sayed it wur."
"For mercy's sake!" And Mrs. Rhino fanned violently. "Do they put out the fire and put the children in the ashes?"
"Can't tell ye, ma'am; belike they roost on the andirons, wid a boord stritched across. But that's not all, ma'am ; the fayther of 'em is layin', these nine months, wid a broken back."
"Pat, you'll kill me! go away," screamed Mrs. Rhino.
"I thought you'd not like me to kape this to mesilf."
"Of course not. But you chose a very bad time to tell it"-and she sniffed at her jewelled vinagrette-" on New Year's. Eve. I sha'n't sleep a wink to-night, and won't be fit to see callers to-morrow."
"I'd be sorry to spoil your rest ma'am; but it's pleasant drames they'll be havin' in the fire-place, I know; an' broken backs always brings sound slapin'."
"None of your irony, Pat; now go. But see here-I want you to doubleblanket those horses this very night; and give them warm water to drink while this weather lasts. It takes less feed tokeep them in flesh when they're kept warm and comfortable."
"Yes, ma'am."
The New Year came in with a morning that seemed like a fresh creature from the hand of God, as in one sense it was. The city streets lay white and fair-eren the slums and by-places looking purified as if by magic, while the snowy mantle thus spread over all alike, seemed meant for a silent benediction of peace and purity wiping out the stains of the past, that all erring lives might begin anew with the New Year.

All day the vehicles were coming and going in front of Mrs. Rhino's mansion. That lady felt that the recital of Pat's story to her friends fully justified the pathos of tone and demeanor so becoming to her, and by the assiduous use of her newest fan she was supported through many repetitions of the mental torture she had suffered from Pat's untimely narrative.

Thus she unwittingly advertised the family to a class of wealthy people, among whom were some who quietly resolved to investigate the matter for
themselves. Among these was a young man who had been a ward of Mrs. Rhino's, and whose youth had now developed into a manhood of sturdy morality. He thoroughly understood Mrs. Rhino's foibles, and was quietly amused by them, while he respected her for her worthy husband's sake. She was really quite fond of him; and, reposing the greatest confidence in his integrity, had sometimes made him her emissary in her charity-work.

So, when he called the next day, she said: " I'm glad you've come, for I want to send you to that wretched place I'm so distressed about."
"I've already been to that Cobbe house, if that's where you mean."
"Oh! Do they live in a cob-house this dreadful weather?" And she hitched an inch nearer to the register.
"And I found others there before me," he continued, "and had already met one party coming away."
"And were these boys barefooted ?"
"Yes, and the baby-girl, too."
"Dreadful! Do they really sleep in the fire-place ?"
"They do; though it's not used as a fire-place now, for they have a cookstove."
"O, dear, where is my fan? And is the father's back-is any thing the matter with the father?"
"Yes, his back is broken and the lower part of his body paralyzed."
"O, horrors! What makes people let such dreadful things happen to themselves?" And she clutched her vinagrette (which was attached to her chain now, to keep it from always getting lost.)
"And Mr. Cobbe-"
"Mr. Cobbe! Then it's not a cob house. Hubert, I warn you not to play on my feelings, unless you expect to answer for consequences."
" O , the house is of hewed logs, modernized with weather-boarding, and of course very warm. Then they have several wolfskins lying around-relics of Mr. Cobbe's hunting days in the far West, where he found his wife. He says his Welsh mother's Bible and his gun were all he owned when he married her, and that he's prospered ever since."
" Prospered! Then why did he come here to break his back?"
" His brother, the blacksmith, sent for him to join in the shop-work."
"Brother, is he! Then why don't he supply those children with a bed ?"
"Listen. That fire-place is half as wide as this room. The wall above it is removed so as to leave an alcove, which is snugly plastered, and holds a bed long enough for the boys to lie on 'crosswise' comfortably."
" How very sensational you are to-day! If there's any more to tell, go on. How do they live?"
"The man was a drummer-boy in the late war, and gets a monthly pension. The woman is strong, and both prefer to live coarse and plain to being subjects of charity. When questioned about her children, she said:
'Them young ones never had their feet kivered, an' so they wont take cold in 'em no more'n they will in their hands an' faces. Look at the big reins in them feet!-made big a purpose to carry lots o' warm blood to 'em, when it aint crowded back with your tight-fittin'shoes. A lady come in here one day an' trigged up little John's feet, an' as soon as she was gone he tuk the things an' hid 'em; they made 'im awkerd gittin' around, and bothered 'im so he couldn't half play ; so I give 'em to a neighbor's boy that would scream if snow touched his feet. Any way, pap thinks their Bible names will a'most keep the chaps warm. I aint got so much faith; but I know that when they need toggery for their feet they'll git it, without you city highflyers intrudin' yourselves to bring it. We aint paupers yet ; when we air we'll let you know.'"
"What a cooler!" exclaimed Mrs. Rhino, "after all my worry. So there was nothing for you to do?"
"Not much; we noticed little scraps of newspaper pictures stuck on the wall, and that led to the discovery that the boys are wild for pictures; and we're going to send them a lot of illustrated papers, etc., that we're done with."
"And don't forget to call here ; I'll send half a bushel, or such a matter," said Mrs Rhino. And then, in an undertone: "And so there are fifty little toes in that house-astonishing! How they do count'up."
"What?"
"O, nothing. I was only thinking aloud." Maria Barrett Butler.


## THE YOUNG GARDENERS.

Henry Moulton and his sister Carrie had passed more hours of their young lives in the large home garden than elsewhere, in their native village of Greenfield; and as both father and mother took a great deal of pride in their garden, and their plants and trees were a source of much pleasure to them, these children shared their interest.

They had played on the lawn and trundled hoop through the walks, had gathered flowers to their heart's content ; they had rested in the shade of the trees, and kept house together in the summerhouse with dolls and dishes, and as they grew the garden offered them other amusements, in the way of raising plants from seeds in their own little plots, which had been given up to them for their own gardens.

It is not strange, therefore, that Henry, who was now thirteen, and Carrie only a year younger, should be planning together for spring work.

Henry had done so well the past year that the table was supplied every day with Celery of his own raising, and proud enough he was of it, for he had not taken any hours from school for this purpose, nor deprived himself, more than he was willing, from the society of his playmates. And Carrie's success in the flower garden had quite equaled Henry's with his Celery ; for, three or four years she had been sowing seeds and raising pretty annuals. She was very fond of Balsams, and last


TREE WITH MARKS SHOWING WHERE TO PRUNE. spring had determined to see how fine plants she could have of them; for she had read that the plants could be made very large and strong, so they would bear an immense number of flowers. We cannot now tell what course she took to raise these plants, but in August you could have seen at least a dozen little miniature trees of Balsams, loaded on every branch with large, beautiful double flowers, and these little trees stood eighteen or twenty inches high, and as broad across at the baseperfect pyramids of leaves and flowers.

Now, however, their minds were bent on something else, for his father had promised Henry a Cherry tree for his own, and he was to have full charge of it as soon as it was received; and Mrs. Moulton was to buy two Rose bushes for Carrie. What kind of Cherry to get, and what varieties of Roses, had been many times considered and made the subject of family discussion, until now it was settled that the Cherry tree was to be Coe's Transparent ; for Henry wanted the best kind for eating; and the Roses decided upon were Hybrid Perpetuals that were sufficiently hardy to stand the winterthese were to be General Jacqueminot, which they called General Jack for short, and Countess of Serenye ; the first was dark and handsome, fragrant and hardy; the last was a pleasing silvery Rose, hardy; and a free bloomer in autumn as well as in June, which latter is a most valuable trait. In due time the long-looked-for package arrived from the nurseryman, neatly wrapped in straw and the roots enveloped in moist Sphagnum or Pond Moss. They were as fresh as if just taken from the ground. The tree had a label fastened to it by a wire on which was plainly written Coe's Transparent, and the Rose bushes had similar labels with their names; so, hare were really the General and the Countess for Carrie.
After removing the moss from the roots of his tree, Henry noticed that the ends oi the roots were somewhat ragged and broken, and mentioned it to his father. Mr. Moulton explained that in taking up trees in the nursery, where they grow closely together, some of the roots are apt to be cut away with the spades, and before planting these ragged ends should be cut off making a smooth, clean cut, with a sharp knife. The reason given for this was that the bruised and broken bark of the roots would be apt to decay, and thus hinder the formation of new ronts. Henry took his knife from his pocket and showed a sharp blade, and started to cut the ends of the roots, putting his knife in the upper side of one of them. As he did so his father stopped him, saying, "Henry, cut from the under side of the root, not from the upper, then the cut surface will rest against the soil, and water cannot lodge
on it, even if the soil should be saturated, and every thing will be more favorable for the new, healthy roots to start out." Obeying this advice, Henry soon had the roots nicely trimmed.

By this time Carrie, who had listened to the conversation, and carefully looked over the roots of her Rose bushes and found some of them bruised and broken, had pruned them neatly and properly.
"Now," said Mr. Moulton, " since the tree has been moved, and a part of the roots has been cut away, the tree is not in a condition to support as much foliage as will naturally appear on it as soon as the buds burst and the leaves appear."
"What will happen to it ?" asked Henry:
"That will depend on circumstances," was the reply. "If the weather should suddenly become very warm immediately after planting, and the soil be dry, the leaves might come out before any little rootlets had formed to take up sap; and the leaves which have what are called 'breathing pores' on their under surfaces, through which their moisture is taken up by the air, would thus quickly part with all the sap in the tree, and it would wither and die."

Henry's fears were aroused, and he suggested that he could water about the tree. This, his father said, would be a remedy if sufficient water was given.
"In some cases," said Mr. Moulton, "the leaves come out and remain on the tree in health, but little or no growth is made."
"But I want my tree to grow," said Henry.
"Well, Henry," replied his father, " the surest course to take is to cut back the limbs, then there will be fewer leaves for the sap to support, and what growth there is will be at the ends of the branches."

This was an idea for Henry, and he was not slow to put in practice with that sharp knife.
"But how much must I cut back ?" was the next question.
"If you leave six or eight inches of each branch and cut the rest away, it will be about right."
"Here, then, goes," said he, as he dashed at it with a slashing cut.
"Cut to an outside bud, Henry, cut to an outside bud, and then the head of the tree will grow more open-make the cut from the inside outward, just above a bud on the outside."

Carrie, who had listened and watched, now wanted to know if she should cut back the stems of her Rose bushes.
"Yes," said her father, "that is the right thing to do; cut back each stem, leaving the stubs only three or four inches long."

And now the plants were ready for setting, which, with Mr. Moulton's directions, was quickly and well done.

We give our readers a sketch that Henry made of his tree with lines drawn across the limbs and roots, showing where he cut them back.

If our "Young People" would like to know any more about the "Young Gardeners," we may tell them at another time.

## EDITOR'S MISCELLANY.

## A NEW BOTANICAL WORK.

Botanists will be pleased to learn that Ivison, Blakeman, Taylor \& Co., of New Jork, have just issued the second volume of Gray's Standard Series of Botanies. The first volume, Structural Botany; written by Dr. Gray, was issued about two years since. The second volume, or Fhysiological Botany, now appears. The special preparation of this work has been the labor of George Lincolin Goodale, $\mathbf{A}$. M., M. D., Professor of Botany in Harvard Unisersity. It is an octavo volume of 560 pages. It is uniform in price, $\$ 2.30$ by mall, with the first volume. Volumes three and four are in preparation; the first of these is an Introduction to Cryptogamic Botany, by Professor William G. Farlow; and the last is The Satural Orders of Phanogamous Flants, which Dr. Gray is, himself, writing. When this series is complete, botanical students in this country will have a set of text books of the highest authority, offering them great facilities in their researches.

## PRESERVING FRUIT.

The article in this number on Keeping Fruit was originally written for our pages, but the opportunity to publish it has not occurred until the present month ; in the meantime it has appeared in type in Mrs. Powers' publication called Fruit, Pastes, Symus and Preserves, which should have a place in every housewife's library. It is published by Cupples, Upham \& Co., of Boston, Mass.

## THE WILD FLOWERS OF COLORADO.

From twenty-four original water color skei:hes, drawn from nature, with appropriate text, by Emma Homan Thayer. The plates chromo-lithographed in the highest style of the art. Bound in extra silk finished cloth, full gilt, beveled boards, and various colored inks, new style, $\$ 7.50$. Cassell and Company; 739 Broadway, New York.
By the same Company is issued Story of the Heavens. Price $\$ 5.00$.
 roll by, and while we hope that 1886 will bring us more sunshine and fewer clouds, we lovingly cling to the old year, dreading to say good bye to so kind a friend. During the spring and summer the cold, damp weather discouraged many in Western New York, and we were obliged to learn lessons of trust and patience, for there is a sort of affinity between clouds and weeds. "Thought seldom rises more naturally up to God than when it rises from bending over flowers," and we learn to look upward while anxiously waiting for bright days. Human perseverance must often take the place of sunshine, and because of that same untiring perseverance we certainly can offer our customers, this year, as good, if not better seeds than ever before. We frequently wonder if friends realize how much pleasure it gives us to receive orders from those who for years past have been accustomed to rely upon us for Flowers and Vegetables. Some have sent so regularly that we recognize the handwriting, and almost know their wants before reading the orders. When asked, last spring, why his name was missed from our books, a gentleman said: "The fact is, the quality of your seed is too good, and the quantity too liberal. I had plenty left for the second season ; I never get anything poor from Vick's." Of course, this is encouraging. It is pleasant to know our care is appreciated, and that the seeds last longer than the buyer expected. We intend to continne in the same old way, hoping our customers will always feel more than satisfied, although we had much rather supply fresh seed each spring.

Since issuing our last Floral Guide, we have heard that men were traveling from house to house in Massachusetts, Michigan, and Iowa, selling trees, small fruits, seeds, \&cc., representing themselves as our agents, charging, and in some cases collecting exorbitant prices for their goods. We wish to repeat that we have no agents, and to advise our friends not to purchase of such parties, but send orders, be they large or small, directly to our office. Flowers should be honestly sold, honestly planted, and honestly cared for. A wealthy
brewer once told us he "did not object to his employees getting cross when handling the beer barrels; they might kick and swear over them if they wished, but he would not have a gardener on his place who lost his temper while working among flowers;" certainly their influence is purifying and refining. In parks and public gardens exquisite beds of rare plants have for years delighted all who looked upon them, and now railroad companies are commencing to realize the importance of making their stations attractive. Weary travelers are refreshed and strengthened with the sight of a few bright blossoms. The Interior Decorator, of New York, says: "It would be quite appropriate and delightfully novel for manufacturers who have vacant space about their factories to lay out flower plots, which their workmen might see, at least, in passing to and from their daily labor." We advise people to surround themselves with flowers wherever they are. "Bring them into the churches, and, like music visible, they fill the
 pauses in the service, and who can come with purer face or life of sweeter obedienceto the laws of nature." Bring them into the homes; are not all made more patient and brighter by their presence? Let the weary mother try arranging a few Nasturtiums with their own pretty leaves for the dinner table; placing during the morning two or three Roses in the parlor, and some Sweet Peas in her own room. Ten minutes cannot be better spent, and the pleasure soon becomes a necessary tonic.

In the autumn all can have the brilliant Gladiolus; nothing can surpass their gorgeous coloring or require less care; we feast upon their beauty, and constantly wondcr if the variety is endless. These flowers are very showy for the yard, where they should be massed; planted in a straight row or mingled with other flowers causes them to appear stiff. "A thing of beauty is a joy forever," and we feel sure that every one who saw our Gladiolus field last autumn will remember it with real pleasure. "A sea of color!" "Flames made flowers!" and many other exclamations of delight showed the appreciation of those who visited the grounds. Last season the ladies decreed these blossoms exceedingly artistic for personal adornment. Dahlias, too, have proved very effective upon evening costumes. Old friends with new faces they seem, for each year rare varieties appear. The Pompons attract unusual attention, and are almost as beautiful as Roses.

To all customers, and those who design to become customers, we would say, please study the Floral Guide during the leisure of winter, and make plans for the future with care, looking for our new and good varieties, and sending your orders before the rush of our busy season.

## SPECIAI PREMIIUMIS-

Besides the liberal discounts given in seeds, we have have decided this year to give each person sending us $\$ 2.00$ or more for seeds the following extra premiums:
Four colored plates of flowers, same size and style as plates in this Floral Guide, and $\$ 2.25$ in. seeds, really $\$ 2.45$ for $\$ 2.00$ cash.
A beautiful colored plate of Roses and Pansies, size $111 / 2 \times 141 / 2$ (see description in back of Flural Guide), and seeds to the amount of $\$ 3.45$, making $\$ 3.80$ for $\$ 3.00$ cash.
Ten plates of flowers neatly bound, same size and style as plates in this Guide, or Vick's Illustrated Monthly Magazine six months and $\$ 6.00$ worth of seeds, equal to over $\$ 6.50$, for $\$ 5.00$ casil.
Vick's Illustrated Monthly Magazine one year, or Vick's Flower and Vegetable Garden, and $\$ 9.50$ in seeds, making $\$ 10.75$ for $\$ 8.00$ cash.
Folio of Rare and Beautiful Flowers (see description in back of Floral Guide), and seeds amounting to $\$ 12.50$, making really $\$ 14.50$, for $\$ 10.00$ cash.
Vick's Illustrated Monthly Magazine one year and Vick's Flower and Vegetable Garden and $\$ 20.00$ in seeds, being really $\$ 22.50$, for $\$ 15.00$ cash.
These premiums are only allowed on flower and vegetable seeds in packets and ounces.

## SUGGESTIONS TO ALL WHO BUY SEEDS.

ALL SEEDS AND BULBS FREE OF POSTAGE.<br>We will send Seeds, Bulbs and Plants, by mail, to any part of the United States, at the Prices Named in this Catalogue, Postage Paid.

The only exceptions to this rule are when heavy and bulky articles are ordered by the peck or bushel, or in cases especially noted. This arrangement enables those who live at the most distant parts of the country to obtain good Seeds as cheap as those who reside in our large cities. Such persons will be no longer compelled to buy poor Seeds or none, but can send their orders with the money, and in a few days the articles will arrive in good order at their post office, where they can be obtained without further cost, as every package will be paid through to destination.

As a general rule we will send Plants and Seeds in separate packages.

## FREE BY EXPRESS.

All orders weighing two pounds or over will be forwarded by Express, if possible. Our customers will oblige us very much by giving their nearest office and the name of the Company delivering goods. Heavy orders can be forwarded by stage from the Express office. So please be particular and send special directions when on a Stage route. All Stage charges will be prepaid when it is possible for us to do so. This applies to Seeds and Bulbs at Catalogue rates, and not on heavy seeds by the peck or bushel, nor on miscellaneous articles. Persons often order small packages sent C O. D., and the Express charges sometimes amount to more than the order. We can send goods and collect the money on delivery only when enough money is sent to prepay the Expressage, and thus protect us from loss, should the person not take the goods from the Express Co., as is sometimes the case. Those who want heary seeds in large quantities can get them very cheap by freight if they will order early. Many of our customers take advantage of this fact and more should do so.

## THE SAFE ARRIVAL OF PACKAGES GUARANTEED.

We guarantee the safe arrival of packages of Seeds, Bulbs and Plants in good condition in every case. If a package fails to reach a customer, we will send again as soon as informed of the fact; or if any part is injured or lost, we will replace it. We do not consider ourselves held by this guarantee unless complaints are made within three weeks after receipt of plants.

Sometimes it happens that orders never reach us. When customers fail to receive their Seeds, Bulbs or Plants in a reasonable time, they should inform us, and at the same time send a copy of their order, which can be filled at once, and save much delay.

## OUR CUSTOMERS IN CANADA.

There is a duty on Seeds sent from the United States to Canada. We will, in all cases when it is possible, pay the duties and postage on Seeds purchased at retail Catalogue prices, so that our customers will have no trouble or expense, excepting when the price is given delivered at an Express or Railroad Office here, such as Potatoes, and other heavy goods.

## FOREIGN COUNTRIES.

We have always paid both the United States and foreign postage on Seeds, Bulbs, and Plants, where it has been possible to do so. The last season our government decided that our line of goods should pay foreign letter postage, and be packed in $83 / 4$ ounce packages. Therefore, we are obliged to ask our customers in those countries to bear a part of this excessive postage, otherwise it would bring the amount we receive far below the actual cost of goods and postage, the letter postage to New Zealand, New South Wales, Queensland, and Victoria being ${ }_{2} 4$ cents per ounce, and to other foreign countries the rate of postage is 10 cents per ounce. We would, therefore, ask our friends, when sending orders for goods to be mailed to New Zealand, Queensland, New South Wales, or Victoria, to remit 24 cents extra for each ounce of seeds, \&c., ordered, and those of other foreign countries to add io cents to amount of remittance of each ounce of seeds, \&c., ordered.

## CORRECTION OF ERRORS.

We take the utmost care in filling orders, always striving to do a little more for our friends and patrons than justice and fair dealing require. In case an error is made, we desire to be informed of the fact, and promise to make such corrections as will be perfectly satisfactory.

## HOW TO SEND MONEY.

All Money may be sent at our Risk and Expense, if forwarded according to direction:, in either manner here stated. Please send money with the order.
rst. Post Office Money Orders, to be obtained at many Post Offices, but not at all, are perfectly safe, and will cost from 8 to 25 cents. This is the best way where practical.

2d. A Praft on New York can be obtained at any Bank for about 25 cents, and this is sure to come correctly.
3d. Existress Moncy Orders, to be obtained at all offices of the American or United States Express Companies.
4 th. Greenbacks, in amounts not less than Five Dollars ( $\$ 5.00$,) can be sent by Express, and these we are sure to get, and the cost is very little.
tth. REGISTERED LETTERS. - When money cannot be sent by either of the first four methods, it may be enclosed in a Registered Letter. The cost of registering is io cents.

R9\% The expense of forwarding money in either of the above ways we will pay, and the cost may be deducted from the amount forwarded.

6th. SUMS LESS THAN ONE DOLLAR may be forwarded by mail at our risk without registering.
When remittances are not made according to these directions, we disclaim all responsibility.
There is no safety in Postal Notes, and are sent at kISK OF SENDER.
DON'T FORGET YOUR NAME, POS'T OFFICE, OR STATE.
We send the Floral Guide free to all customers, to others we charge Ten Cents; but those who afterward order seeds may deduct the ten cents from the money forwarded. If any customer fails to receive a Guide, please send Postal Card, stating the fact with name and Post Office. Address,

JAMES VICK, SEEDSMAN, Rochester, N. Y.

## PREMIUMS AND PRESENTS.

The lovers of flowers in a neighborhood can club together and thus avail themselves of the Premiums we offer for large Clubs, as seen below. One or two persons, with a little enterprize, can change the character of a place in a few years by the introduction of Flowers. Those who desire our Floral Guide for this purpose shall be furnished free, so that they need not injure or lose their own copies.
Persons sending $\$ \mathrm{r}$ may select seeds amounting to $\$ \mathrm{~m}$. ro.

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$$
\text { and Pansies, size } 11^{1 / 2} \times 14^{1 / 2} \text { inches. }
$$

Persons sending \$4 may select seeds amounting to 4.70 .
6.co, and will receive free ro colored piates of flowers, size $6 \times 9$ inches, or Vick's Illustrated Monthly Magazine for six months.
Persons sending $\$ 8$ may select seeds amounting to $\$ 9.50$, and will receive free Vick's Illustrated Monthly Magazine one year, or Vick's Flower and Vegetable Garden.
Persions sending $\$$ ro may select seeds amounting to $\$ 22.50$, and will receive free our Folio of Rare and Beautifu 1 Flowers.
Persons sending $\$ 15$ may select seeds amounting to $\$ 20.00$, and will receive free Vick's Illustrated Monthly Magazine one year and Vick's Flower and Vegetable Garden.
For fuller description of these premiums see page 2 of Floral Guide.
It must be understood that this discount is allowed only on Flower and Vegetable Seeds by the packet and ounce, and not on seeds by the pound, nor on Bulbs or Plants ; nor can we pay this discount in Bulbs, or seeds by the pound. Otherwise, it would bring the price far below cost.

The seeds will be put up together and sent to one address, or in separate packages, and mailed to the address of each individual forming the club. In all cases the postage will be prepaid. The same deduction will, of course, be made to any person ordering for himself alone.

In addition to these Premiums and Presents, we forward in December, each year. to every customer, our Floral Gude, containing descriptions of about all Flowers and Vegetables worthy of cultevation. In sending Clubs, it is therefore necessary to give the names of the persons of which they are composed, with Post Offices, so that we may be enabled to forward them the GuIDe.

In August we publish a Catalogue containing a list of Bulbs for Autumn planting and for flowering in the house in winter: and also a list of house plants, which we forward to those of our customers who purchased Bulbs of us the previous Fall, and to any one who will send a Postal Card with name and Post office.

## COLLECTIONS OF FLOWER SEEDS.

We have put up separate collections of the choicest seeds in neat envelopes, and these are very desirable to those who may wish a complete assortment of any particular class of flowers.


Some prefer to leave the selection of varieties to us; and in cases where purchasers are entirely unacquainted with the different varieties of flowers, this may be the better plan. Those who are commencing the cultivation of flowers will find the collections named below suited to their wants.


No. I consists of about thirteen of the most hardy and popular Annuals; No. 2 about twenty varieties of hardy popular Annuals, and a few varieties that require a little more care in their culture; No. 3 is composed of about twenty varieties oi Annuals, and twelve of the best Biennials and Perennials; No. 4 contains about twenty-five varieties of Annuals, and about the same number of Perennials.

## COLLECTIONS OF VEGETABLE SEEDS.

Hundreds of our customers prefer leaving the selection of Vegetables to us, and at a season when, in consequence of the press of business, we cannot give the time needed for a judicious choice. We have, therefore, taken a leisure time to make careful selections, and will have them put up in readiness for those who may desire.

> No. i. Complete Collectiun of Vegetables for small family garden, . . . . . . . . . . . . $\$ 3$ oo
> No. 2. " " " " $"$ ". . . . ........ . 5 oo

The very liberal premiums offered to Clubs are included in the above Collections. The No. $1(\$ 3.00)$ Collection is composed as follows. The other is, of course, in larger quantities.

Asparagus; Beans, Dwarf or Snap, and Lima; Beets, early and late; Cabbage, early and late; Cauliflower; Carrot, Short-Horn: Celery; Corn, early and late Sweet; Cucumber; Egg Plant: Lettuce, Cabbage and Cos; Melon, Musk and Water; Onion, Wethersfield and Danvers; Parsley; Parsnip; Pepper; Peas, early and later; Radish, three sorts; Salsify; Squash, Summer and Winter; Spinach. Tomato; Turnip, White and Yellow; Herbs, Sage, Summer Savory, Broad-leaved Thyme.

In this Department, under the head of Annuals, we describe not only the true Annuals, that is, those flowers that bud, blossom and ripen their seed the first summer and then die, but some Bienvials and Perennials that flower the first season, and then live on for a year or more, like the Pansy, Dianthus and Antirrhinum. The Annuals are valuable treasures to both the amateur and professional gardener. There is no forgotten spot in the garden, none which early flowering bulbs or other spring flowers have left unoccupied, or where plants have unexpectedly failed, that need remain bare during the summer; no bed but can be made brilitiant with these favorites, for there is no situation or soil in which some of the Annuals will not flourish. Some members delight in shade, others in sunshine; some are pleased with a cool clay bed, like the Pansy; while others are never so comfortable as in a sandy soil and burning sun, like that little salamander, the Portulaca. Still others seem perfectly indifferent, and will grow and flower under almost any circumstances. The seed, too, is so cheap as to be within the reach of all, while a good collection of bedding plants would not come within the resources of many; and yet very few beds filled with expensive bedding plants look better than a good bed of our best Annuals, like Phlox, Petunia or Portulaca, and for a vase or basket several of our Annuals are unsurpassed.

To the Annuals, also, we are indebted mainly for our brightest and best flowers in the late summer and autumn months. They seem like nature's smiles, so simply do they spring up before us, and so wonderfully do they brighten our gardens and homes. Frail treasures; yet who can estimate the good they accomplish in one short summer? Is not our life as frail as theirs? and shall we not, while studying their habits, learn to make the most of each day's sunshine, remembering, also, that clouds and rain are as necessary in maturing the human character as in perfecting and making beautiful the buds and blossoms of our favorites. They seem to lose no moments, but rush forward as if knowing the cold winter was surely coming, and that they must improve each hour. Without the Phlox and Petunia and Portulaca and Aster and Stock, our autumn gardens would be poor indeed, and how we would miss the sweet fragrance of the Alyssum, Mignonette and Sweet Pea if any ill-luck should deprive us of their friendly faces. In this section we have a fine collection of Cimmbers, like the Morning Glory and Cobœa scandens, and also the Everlasting Flowers and most of the Ornamientai. Grasses. All these are described in their proper places, with appropriate headings, so that our readers will have no difficulty in finding what they desire, and can make no mistake as to their true character.


The A bronias are trailing plants, with prostrate brânches several feet in length, and bearing clusters of sweetscented flowers. The plants and flowers are very much like the Verbena. They are natives of California, where we have seen them growing abundantly. Our customers report the greatest success the second summer, from seed dropped from plants of the previous year.
Abronia umbellata, rosy lilac, white eye,
arenaria, jellow,

## ADONIS.



The two best Annual varieties of Adonis are Autumnalis and Æstivalis, sometimes called Pheasant's Eye and Flos Adonis. The foliage is fine and pretty, the fowers brilliant. They will do well in partial shade, and may be used with advantage in any retired corner of the garden. Twelve to eighteen inches in height.
Adonis æstivalis, summer flowering ; scarlet,
autumnalis, autumn flowering; blood red,


The Sweet Alyssum has pretty litile white flowers, useful in making up in all kinds of small bouquets ; and its fragrance, while sufficiently pronounced, is very delicate, reminding one of the peculiar aroma of the hay field. The Alyssum grows freely from seed, either under glass or in the open ground, and makes a pretty border. The Alyssum is one of the very best plants for a basket or pot, which the lovers of flowers in this section have learned, as it is to be seen in many windows during the winter season.
Alyssum, Sweet, hardy annual; flowers small and sweet. in clusters ; 6 inches, .
Wierczbeckii, hardy perennial; yellow; 1 foot,


A Mexican flower, of a brush-like appearance, desirable in the garden, and prized by florists because it bears a great many flowers, and keeps in bloom a long time, and is, therefore, desirable for bouquet making, for which purpose we have but few better flowers. It is well to start the seed under glass, and transplant. The Ageratums are pleasant house plants.
Ageratum conspicuum, white; 18 inches,. . . 5
Mexicanum, blue; ifoot, . . . . . . . . . 5
Mexicanum albiflorum, white flowered; 2 feet, 5
Mexicanum albiflorum nanum, 6 inches, . 5
Lasseauxii, compact plant ; flowers pink; 18 in . Io cœlestinum i Phalacræa) Tom Thumb, light
blue; 8 inches high, and of compact habit, . . 5

## ANAGALLIS.



The genus Anagallis is remarkable for the beauty of its Howers, and is very desirable for small beds, edgings, baskets, etc. The plants do not usually exceed six inches in height, and when set in beds, thickly, cover the ground with a constant profusion of flowers. Species of Anagallis are fom wild in all parts of the world, and from sceds sent to both Europe and America, florists have obtained many handsome varieties. Our wild Pimpernel, called Poor Man's Weather Glass, is one of the brightest of our little wild flowers.
Anagallis grandiflora superba, mixed colors, .

## AGROSTEMMA.



The annual $\Lambda$ grostemmas, or more properly Viscarias, are free bloomers, make desirable beds, and are useful for cutting. They have the best appearance when grown in masses, or as a border for tall plants like the Gladiolus. We have always had good success in sowing Agrostemmas in the bed where they are to bloom, thinning out the plants but little, and only in places where they were evidently too close. The flowers are something like single Pinks. Twelve inches in height. Agrostemma, New Scarlet, bright,

Cœli Rosa, deep rose color,
elegans picta, center dark crimson, white margin, cardinalis, bright red.
Mixed varieties, .
AMARANTHUS.


CAUDATUS.


SUNRISE.


TRICOLOR.

The Amaranth family embraces numerous plants, valuable for the beauty of their foliage, many of the varieties having handsomely formed and highly colored leaves, while others are remarkable for long, large, upright racemes and drooping panicles of small flowers, forming immense clusters, wonderfully effective for au-
tumn decoration. Seed may be sown in a warm border, for transplanting is easy, or they may be sown where plants are to bloom. Sometimes, especially in rich soils, the leaves lose their bright color. Our engravings show a few of the leading varieties.
Amaranthus salicifolius, a beautiful Amaranth,
both in habit and color; plant pyramidal, 3 feet, Sunrise, the most brilliant of the family. The top of plant brilliant crimson,

5
bicolor ruber, the lower half of the leaf a fiery
red, the upper half maroon,
tricolor, red, yellow and green foliage; 2 feet, melancholicus ruber, of compact habit, with striking dark red foliage; 18 inches,
caudatus, (Love Lies Bleeding, long drooping " chains" of flowers ; pretty for decorating, cruentus, (Prince's Feather,) flowers somewhat similar to A. caudatus, but in erect masses,

## ALONSOA.



The Alonsoa is a tender or half hardy annual. Young plants removed to the house or greenhouse in the autumn will continue to flower during the winter. The flowers are small, but of remarkably brilliant colors, in which respect they are excelled by very few of our richly colored flowers. It is best to sow seed under glass, and not remove to the garden until the weather is quite warm.
Alonsoa Warczwiczii, flowers small, bright scarlet, forming a very pretty spike; 38 inches high; set plants 8 or io inches apart,

5
grandifiora, large flowered; scarlet; 2 feet in height,


Asperula azurea setosa is a profuse blooming, hardy little annual, of dwarf habit, growing less than a foot in height, and bearing many clusters of small, light blue or lavender, sweet scented flowers. For making up in small bouquets the Asperula is all that can be desired. It is one of the pretty, neat little flowers which many admire on account of their delicate beauty, and others dislike as weedy and worthless because they make no brilliant show in the garden.
Asperula azurea setosa,


The Antirrhinum, perhaps better known by its old and popular name, Snapdragon, is one of the very best of our Perennials, blooms abundantly the first summer until after frost, and if not too much exhausted, flowers well the second summer, and even longer. By removing a portion of the flower stems in the summer the plants will throw up young, strong shoots by autumn, making vigorous plants that will endure safely almost any winter. The Antirrhinum is one of our most satisfactory plants. When plants are weakened by too profuse flowering the first summer, they suffer during hard winters, but when checked as we have advised, and no seed allowed to form, they will do well the second and even the third summer.
Antirrhinum Firefly, orange and scarlet, with white throat,
Brilliant, scarlet and yellow,
Galathe, crimson, throat white ; large,
White-flowered, white; not showy, but good, papillionaceum, blond red, throat pure white, caryophylloides, irregularly striped,
Tom Thumb, about 6 inches high ; mixed colors
Best and brightest varieties mixed,

## ASTER.

No flower is more popular than the Aster, and few have held so high a place in popular esterm for so many years, and it is still growing in favor. For an autumn show of flowers, we were about to say, we have not its equal, but we are reminded that when we get enthusiastic over any of our special favorites, we are ready to say the same thing about a good many, like the mother, of each of her children. Pcrhaps we can safely say that for an autumn display it has no successful rival among the Annuals. Give the Aster a deep, rich soil, and
mulching with coarse manure is very beneficial, and if extra fine flowers are needed for exhibition or any other purpose, a little liquid manure occasionally will give the most gratifying results. Plants may be grown in the hot-bed, cold-frame, or a seed-bed in the garden, but toobtain good flowers the Aster plant must be strong and "stocky." A plant that is what the gardeners call "drawn" wiil never produce very fine flowers. A "drawn" plant is one that, by being crowded in the seed-bed, or some other cause, has become tall, slender and weak. The Aster transplants easily. Twelve inches apart is the proper distance for making a showy bed of the large varieties : the dwarf kinds may be set six inches or less. It is not best to have Asters flower too early in the season, and there need be no haste in starting seed in the spring, for the Aster, like the Dahlia, is essentially a fall flower, and the flowers are always the largest and most perfect and enduring in the showery weather and cool, dewy nights of autumn. The tall varieties with large flowers need a little support, or during storms of wind and rain they are often blown down and their beauty destroyed when in full blossom. Set a stake in the ground near the stem, so that its top is only about two-thirds the height of the plant, then fasten the main branches to this stake by means of loops, but do not pass the string around the whole plant. We give engravings in which we have endeavored to show the habits of several varieties, but, of course, in so small a space could do the plants nothing like justice.
Aster, Truffaut's Pæony-flowered Perfection, large, beautiful flowers, petals long; a little reflexed; 2 feet in height; mixed colors,
Truffaut's Pæony-flowered Perfection, same as above, in twelve separate colors, and very true to color ; each color,

15
New Rose, 2 feet in height ; robust ; large flowers, petals finely imbricated and of great substance ; one of the very best ; mixed colors, . .
New Rose, twelve separate colors-white, crimson, violet, etc., each color,
Cocardeau, or New Crown, two colored flowers, the central petals pure white, sometimes small and quilled, surrounded with large, flat petals of a bright color; 18 inches ; mixed colors,
Cocardeau, or New Crown, carmine, violet, blue, deep scarlet, violet brown, etc., each with white center; each variety,
New Pæony-flowered Globe, the earliest of the Asters - two weeks earlier than Truffaut's Pæony-flowered; flowers very large; plant branching and strong; does not require support,
New Victoria, flowers large ; habit pyramidal; 2 feet high; one of the finest: mixed colors, .
Washington, the largest Aster we have ever known, and we have exhibited them five inches in diameter and perfect; mixed colors,
Hedge-Hog, or Needle, petals long, quilled, and sharply pointed; two feet; mixed colors,
Imbrique Pompon, very perfect ; almost a globe and beautifully imbricated; mixed colors,
Diamond, is a comparatively new Aster of the Dwarf Imbrique class. Plants eighteen inches in height, very robust, blooms freely, flowers perfect and compact, large ; mixed colors,
Half Dwarf multifiora mauve, one of the best, about 15 inches in height, of fine form ; flowers perfect and abundant, delicate white and mauve,
New Chrysanthemum - flowered Dwarf, a desirable class, i foot in height; late, and valuable on this account, as wcll as for its great beauty ; mixed colors,
Chrysanthemum-flowered Dwarf, White, a superb variety ; every flower usually perfect, Newest Dwarf Bouquet, each plant looks like a bouquet of flowers; fine for edging or small beds; about 12 different colors mixed,

15

## ASTERS.



DWARF BOUQUET
PEONY-FLOWERED.



A:G ER FLOWER


NEW RUSE.

## ARGEMONE.

The Argemones are free blooming, hardy annuals, with large flowers, resembling a single Poppy, while the leaves are armed with slender prickles, and very
 much resemble Thistle leaves. It is called Prickly Poppy almost every where. The plants grow about two feet in height, and make very good low screens or hedges, for which purpose set the plants about ten inches apart in the rows. The foliage is large, pretty in form, and of a pleasant light green color.
Argemone grandiflora, white petals, yellow stamens; four inches in diameter,
Mexicana, flowers bright yellow,
Hunnemanni, carmine and yellow,

## BARTONIA.



Bartonia aurea is a very showy, half-hardy annual. The leaves are somewhat Thistle-like in appearance, gray and downy. The flowers are of a very bright metallic yellow, and exceedingly brilliant in the sunshine. It likes considerable moisture, and young plants sometimes suffer in a dry time. Flowers about twice the size of engraving. Sow seed where the plant is to flower, as it does not bear transplanting very well.
Bartonia aurea, plant prostrate in habit,

## BRACHYCOME.;



The Brachycome iberidifolia is a Daisy-like flower, found on the banks of the Swan River in Australia, and
is sometimes called Swan River Daisy. An elegant little plant, growing about eight inches in height, of compact branching habit, and abundance of flowers, something like those of the Cineraria. An excellent flowering plant, deserving more attention than it receives, the blue being particularly desirable.
Brachycome iberidifolia, (Swan River Daisy,)
blue and white, separate or mixed,
5
BROWALLIA.


The Browallias are excellent, free flowering, half-hardy annuals, and quite valuable for winter house plants. The flowers are both beautiful and delicate, and the prevailing color being blue are very desirable. Seeds grow freely, and plants give abundance of bloom. Plants about eighteen inches in height, and should be set a foot apart. The Browallias, like the Nemophilas and Whitlavias, and other small and modest flowers, are not as highly appreciated as they deserve.
Browallia Cerviakowski, blue with white center. elata alba, 5
elata grandifiora, blue,
Mixed varieties, . . . . . . . . . . . . . . . . 5
BALSAM.


The Balsam, like the Aster, is one of the most beautiful and popular of our Annuals. Like that flower, too, it is a favorite, and so much improved during the last quarter of a century, that it scarcely bears a resemblance to the old flower. Our climate is wonderfully adapted to the growth of the Balsam, and with a good, rich soil, and decent care, plants and flowers of the greatest excellence are produced. Sow in a frame or bed, and transplant when two or three inches in height. The Balsam loves a warm place. When the plants appear to be making too thick a head, so as to hide the flowers, it is a good plan to cut out some of the branches when small. The Palsam can be pruned to any desired form, to two or three or even one branch, and on the next page we have given engravings showing plants pruned in several ways. Some people, however, prefer the Balsam unpruned, being better satisfied with a good show of flowers than with a few choice ones. We should advise giving a trial of several plans. The small engraving at the right shows the Dwarf variety improved. As Balsam flowers have very short stems they are best arranged in a shallow dish or basket of moist sand or moss, one of which methods we have shown in the engravings. For the center of a bouquet a good

## BALSAMS.



BALSAM PLANTS.


BALSAM FLOWERS - NATURAL SIZE,

Balsam flower is almost as desirable as a Camellia, but must be supplied with an artificial stem


Balsam, Camellia-flowered, French, double, perfect in form ; mixed colors,
Camellia-flowered, French, ten colors, each in separate package ; each color,
Camellia-flowered, White, extra choicc, - double,

Camellia-flowered, Spotted, German, double; spotted with white; mixed colors,
Rose-flowered, French ; double ; mixed colors, Dwarf Camellia-flowered, Spotted, German, 8 or 9 inches in height; splendid for a border or outside row of a bed,
Extra Double Dwarf, very double; 6 inches, Half Dwarf, $\delta \delta$ inches in height,
Carnation, double; striped like the Carnation, 15 Solferino, white, striped and spotted with red, 15 Common Double, occasionally only semi-double,

## CALLIRRHOE.



Species of Mallow-like plants, with large, purplish flowers, and showing a white center, which gives the flower a very beautiful appearance. They are five petaled, and about two inches across. Sceds under favorable circumstances will grow freely in the open ground. Thin out the plants so that they will be about a foot apart. Plants commence to give flowers when small.
Callirrhoe pedata, crimson with white edge ; 2 feet io pedata nana, flowers rich velvety crimson with white eye: r foot,
involucrata, with large purplish crimson flowers ; native of the western prairies,


One of the oldest and most popular and useful little flowers is the Candytuft. It blooms long and freely, is perfectly hardy, so that most kinds may be sown in the earliest spring, or even in the autumn. Its neat little clusters of flowers are quite a treasure to the bouquet maker, particularly the white. The prevailing colors are white and purple, though some new kinds are verging on the crimson and carmine. The Candytuft is so hardy and so able to care for itself that it usually receives but little attention, yet a rich soil, kept mellow, and an occasional watering will show a wonderful effect on the clusters of flowers. Thin out the too numerous buds. We have grown the flower heads more than three inches across. Sow seed where plants are to flower, very early in the spring, or in more moderate climates in the autumn. Our engravings show the ordinary form of the heads and plants, and also the pyramidal formed spike and the plant of the Rocket.

## Candytuft, Purple,

## White,

Rocket, pure white, in long spikes,
Lilac, bluish lilac,
Sweet-scented, pure white ; slightly fragrant,
Rose, rosy lilac,
Dunnett's Extra Dark Crimson,
New Carmine, true to color,
Mixed colors,

## CENTAUREA



The Centaurcas are a very large family, perfectly hardy, and some of them are considered in some parts of the world more troublesome than beautiful. The

English farmer takes no delight in the Blue Bottle, or Corn Cockle in his wheat field. It is known here as Bachelor's Button, its true name being Centaurea Cyanus. The Centaurea Americana is the largest and best, and is known as the Basket Flower, because the involucre has the appearance of a basket filled and overflowing with the hair-like petals
Centaurea Cyanus, known as Bachelor's Button and Cor= Bottle, various colors mixed,
Sweet Sultan, mixed varieties,
Americana, very large flowers; lilac purple:
strong plant,
All above kinds mixed,
COLLINSIA.


Collinsias are free-flowering, hardy annuals, the flower stalks being one foot to eighteen inches in height. The flowers are in whorls, and several of these around each flower stem. Seed may be sown in the open ground. Collinsia, mixed varieties,

## CACALIA.



Cacalias are pretty, half hardy annuals, with small, tassel-like bloom, and from the form of the flower often called Flora's Paint Brush. The flowers are borne in clusters on slender stalks, about a foot or so in length. Sow seed under glass, if possible, though they do pretty well in a warm bed in the garden. Set the plants six inches apart. They keep in bloom from early summer until autumn, furnishing flowers for cutting every day ; particularly valuable for small bouquets.

## Cacalia coccinea, scarlet, <br> coccinea flore-luteo, yellow,

## CANNA.



The Cannas are stately plants, with broad, green, highly ornamental leaves, that make superb beds for the lawn, giving our grounds in the North a tropical appearance exceedingly pleasant. There are several varieties, the leaves of some being entirely green, while in others the leaf-stem, mid-rib and veins are red. Some kinds grow four to five feet in height, while others are only about three feet. In a cold climate it is well to grow young plants in pots under glass, but we have seen excellent beds even farther north than Rochester, from plants grown from seed put in the ground the middle of May. Many, to be certain of success, however, obtain roots, which, if planted out early, soon yield vigorous and luxuriant plants, and, with their rich foliage, make a delightful contrast to ordinary garden plants.
Canna Indica (Indian Shot,) rubra, red, . . . . Io
Warczewiczii, red; foliage striped
Selowii, scarlet; profuse blooming,

Canna compacta elegantissima, large; reddish yellow; free flowering,

## Nepalensis, superb yellow flowers,

Mixed varieties,

## CALENDULA.



The Calendula is the fine old and well known Marigold family, which every one knows, but may not recognize by this name. The name was given because some of the species were supposed to be in flower every month in the Calendar. The old Pot Marigold, much prized by housekeepers in Europe for flavoring is C. officinalis. Formerly the flowers were thought to possess valuable medical properties. The English name is a corruption of Mary's gold.
Calendula officinalis Le Proust, uniformly double ; nankeen, edged with brown,
Meteor, the handsomest of the Calendulas, perfectly double and beautifully striped, the petals having a creamy center edged with orange yellow officinalis, Pot Marigold,

## CALANDRINIA.



A very pretty genus of plants, with succulent stems and fleshy leaves, and, like the Portulaca, belonging to the Purslane family. The engraving shows the habit of the plant, which does best in a light, sandy soil, but better if sown under glass.
Calandrinia grandiflora, rose ; flower-stalks one to two feet,
umbellata, rosy purple; perennial, but flower-
ing the first season,
CH ÆNOSTOMA.


The Chænostoma fastigiata is a pretty, clwarf, compact plant, with white flowers. It is very good for edgings, baskets, or little clumps, and may be used in any place where a small white flower is appropriate.
Chænostoma fastigiata,

## CALLIOPSIS.



The genus Calliopsis embraces a very useful and brilliant class of hardy annuals. The plants are usually two or three feet in height, of slender habit and rapid growth. The flowers are of every shade of yellow, orange and rich reddish brown, and make brilliant groups or low screens. Seeds grow very readily, and may be sown where plants are to flower.
Calliopsis, mixed colors of every shade,

## CATCHFLY.



The prettiest of the Silenes is S. Armeria, called Lobel's Catchfly. Small flowers, white, red or rose. Plants a foot or more in height. Set flowers six to eight inches apart, so as to form a clump or border. A viscid moisture on the stalks sometimes entraps the flies, hence the name.
Catchfly, Silene Armeria, (Lobel's Catchfly,) mixed colors,

## CAMPANULA.



The Campanulas embrace a great many beautiful and popular perennials, like the Canterbury Bell, which will be found described in the department of plants that flower the second season, and also a number of a nnuals of great value for forming masses, as they are neat in habit, hardy, and free bloomers. Seed may be sown in the open ground or under glass. Set plants five or six inches apart in beds. The annual Campanulas make handsome masses or borders.
Campanula speculum, mixed colors,
Lorei, blue and white mixed,

## CENTRANTHUS.



The flowers of Centranthus are small, borne in clusters, as shown in the engraving, on light green, almost transparent stems. They form beautiful. masses or borders, and for cutting for bouquets, or other floral work, are excellent. We have never experienced difficulty in obtaining plants from seed in the open ground.
Centranthus, mixed varieties,

## CLARKIA.



The Clarkias are desirable flowers, and in some countries are used for masses of colors, in the manner we employ the Phlox Drummondii, and with the same good results. They do not seem to thrive so well under our bright summer suns. Seed sown in the autumn give early summer flowers. There has been much improvement in this flower in recent years, in single and double sorts, both in size and form of flower, so that for early spring flowers, or for cool, shady places, we can cheerfully recommend the Clarkias. The seeds we offer are of the newest and best kinds of both the double and single varieties. Flowers about three times the size shown in the engraving.
Clarkia, Double, of best varieties, mixed colors,
Single, the latest and best varieties, choicest colors
5
CONVOLVULUS.


Every one, of course, is acquainted with the old Morning Glory, which is Convolvulus major, but all do not know the Dwarf Morning Glory, Convolvulus minor. It has a trailing habit, and we have tried to show its appearance in the engraving, each plant covering a space two feet or more in diameter. The flowers are about two-thirds the size of the Morning Glory, and a bed of them forms a beautiful mass. Like the climbing Morning Glory, the flowers close in the afternoon,
Convolvulus minor, mixed colors,
Mauritanicus, desirable for hanging baskets,
bearing many lavender blue flowers,


Celosias are interesting and brilliant annuals, and when well grown from seed of good quality never fail to please the grower and attract attention. There are two desirable forms of the Celosia, the Cockscomb and the Feathered. The Cockiscomb is so named because it resembles the comb of that bird, as will be seen by the engraving in the center. There are several colors, red, orange and yellow, but the bright reds are the best. These combs are often grown a foot or more across the top. Vick's New Japan Cockscomb far excels every other variety in the varied forms and beauty of the combs and the brilliancy of their color. The engravings show some of the forms these combs assume, and also a plant, though the plants are very different in habit. It not only sustains its original character, but seems to like the American climate and soil. In many specimens the comb is so nicely cut as to resemble the finest coral, both in form and color, and this appearance we have endeavored to show in the engraving at the top of the page. Some of the side branches also assume the square instead of the comb form, as shown. The engraving on the left shows the general habit of the plant. The Feathered Celosia has large, feathery plumes of great size and beauty. Our Celosia superba plumosa is the very best of this class in cultivation, and comes true from seed. We give a little engraving to show the habit of the plant, but cannot, of course, do justice to its beauty. The feathery heads are often a foot in length, bright crimson, but do not reach their best until toward autumn.

## Celosia cristata, Cockscomb, Crimson Giant.

This is one of the largest and brightest of the common Cockscombs, the form of which is shown in the central engraving,
Vick's Japan Cockscomb, an entirely new and distinct and a very beautiful variety,
Dwarf varieties mixed,
Tall varieties mixed,
superba plumosa, a new and really superb feathered Celosia; bright crimson in color; a bed of this in the autumn is a beautiful sight,

CREPIS.
There are several varieties of Crepis-yellow, pink, purple, and white. They are hardy annuals, and will give good plants if sown in the open ground in early spring. The Crepis will never become very popular, but it is not without merit. The engraving shows the form of
 the flower. Plants one foot in height. Set them eight or ten inches apart.
Crepis, all the best varieties mixed,
5
CLEOME.


Cleomes are annnals worthy of culture, the plant making a shrublike bush about eighteen inches in height, and should stand for flowering about a foot apart. The flowers are singular, as will be seen by the engraving, and are sometimes called Spider Flowers, because the stamens look
like the legs of that insect.
Cleome speciosissima, rosy,

## CHAMÆPEUCE

The Chamæpence is a singular and rather elegant Thistle-like plant, with variegated leaves, and the sharpest spines imaginable. It is perennial, living several years, but not flowering until the second year: but this is not of much consequence as its beauty is principally in the plant. Flowers yellow. We have found the plant hardy in the coldest winters.
Chamæpeuce diacantha, hardy; yellow flower, 10 Cassabonæ, Fish-bone Thistle, . . . . . . . 10

## DIANTHUS.



The varieties of Dianthus known as Chinese Pinks and Japan Pinks are among the most brilliant of our garden flowers. Plants of the tall sorts are from twelve to fifteen inches in height; the dwarf make low, compact plants. Seed may be sown in the spring, under glass or in a seed-bed.
Dianthus Chinensis, best double varieties mixed, imperialis (Double Imperial Pink,) mixed,
imperialis rubrus striatus, double, white, striped with red,
imperialis purpureus striatus, double, white, striped with purple,
imperialis flore-albo pleno, double, white,
imperialis flore-pleno atrosanguineus, blood red; double,
Heddewigii, large flower, three inches in diameter, beautiful, rich colors, finely marked, .
Heddewigii flore-pleno, often double, but sometimes only semi-double,
Heddewigii albus plenus, large, white, double flowers,
laciniatus, flowers very large, sometimes three inches in diameter; petals very deeply fringed and beautifully colored,
laciniatus flore-pleno, magnificent double flowers, very large ; petals deeply serrated,
Mixed seed of last five varieties
Heddewigii diadematus fl.-pl., (Diadem Pink,) brilliant markings and dazzling colors, . hybridus, mixed colors,
Best dwarf varieties mixed,

## DELPHINIUM.

The Delphiniums are beautiful plants, generally known as Larkspurs. They prefer a cool soil and season. Sow the seed in the autumn, or very early in the spring. Branching varieties grow two feet in height, and should be planted eighteen inches apart. The Rockets should be set in rows five or six inches apart.
Delphinium Ajacis hyacinthiflorum, (Double Dwarf Rocket, mixed colors,
elatior fl.-pl., (Tall Rocket) large plant; very showy,


Delphinium Consolida fl.pl., Stock-flowered,) double, branching; fine for cutting; mixed colors, 5


Consolida flore-pleno candelabrum, ifoot in height; flowering late,
imperiale, (Emperor Larkspur, 'fine, compact plant, brilliant colors; mixed,

IO
cardiopetalum, 18 inches; makes a good hedge, 5
DATURA.


Datura is a large, strong-growing plant, with trumpetshaped flowers, the best bearing blooms six inches in
length, mostly white, sometimes tinted with a delicate blue. The Datura seems to double in almost every style, but some prefer the single. The roots can be preserved in a cellar, like Dahlia roots. Plants three feet in height ; set the plants three feet apart.
Datura Wrightii, is one of the best, with trumpet shaped flowers from seven to nine inches long, white, faintly tinted with lilac, sweet-scented,
humilis flava flore-pleno, a splendid plant, with large, yellow, double flowers,
atroviolacea plenissima, flowers dark, usually shades of violet, very double,
fastuosa alba plena, fine, double white,
fastuosa Huberiana, flowers large and double, inside white, outside generally colored,

## DOUBLE DAISY.



Every one knows the Daisy. Give it a cool, partially shaded place. Sow seed very early. The flowers are abundant in early spring, and may be made to flower later by the use of water. Plants can be removed safely even when in flower. The plants should be about six inches apart when set, so that when in perfection they will nearly cover the ground.
Double Daisy, best German seed, mixed colors, . 20
White, constant, . . . . . . . . . . . . . .

## DIDISCUS.



Didiscus cœruleus is an annual, about two feet high, with numerous umbels of sky blue flowers. Sow under glass.
Didiscus cœruleus,
10

## EUPHORBIA.



The Euphorbia marginata grows about two feet in height. The large leaves are nearly two inches long,
and smaller at the tops of branches, light green and white margined. A native of our Western States and Territories, and called Snow on the Mountain.
Euphorbia marginata,
5
ESCHSCHOLTZIA.


Eschscholtzia plants grow from six inches to a foot in height. Leaves finely cut, and of a glaucous green color. Flowers yellow, orange and white. Known as the California Poppy. Seed may be sown in the garden, where the plants flower.
Eschscholtzia, all varieties mixed,
5

## ERYSIMUM.



Erysimums form fair looking plants, about eighteen inches high, with clusters of yellow or orange, fragrant flowers. Plant and blossom resemble the single Wallflower, but both flowers and clusters are smaller. The Erysimums are very desirable for cutting.
Erysimum Perowskianum, deep orange flowers, 5
Arkansanum, sulphur yellow,
5

## EUTOCA.



The Eutocas are coarse-growing plants, flowers of dark colored sorts intensely blue. Do best in warm sandy soil, giving more flowers than if in a rich soil. Desirable for cutting; a branch placed in water will bloom many days.
Eutoca viscida, dark blue; pretty, . . . . . . . 5
Wrangeliana, lilac; 6 inches, . . . . . . . . 5
multiflora, flowers more freely than the others, 5


Fenzlia dianthifora is a neat little plant, bearing a perfect mass of small flowers. The flowers are rosy tinted with dark purple throat. Good for pot and basket culture, and desirable for edgings.
Fenzlia dianthiflora,
15

## GODETIA.



Plants a foot or more in height; free and constant bloomers; colors pink, and red, with white.
Godetia, best varieties mixed,


Grammanthes gentianoides is a useful little plant, particularly adapted to rock-work or baskets. Flowers small and abundant, star shaped, as seen in engraving. Grammanthes gentianoides, reddish orange, .

GAILLARDIA.


Gaillardia, known as Planket Flowers, are good bedding annuals, being strong, constant bloomers through the whole summer. Set plants twelve to eighteen inches apart. Gaillardia picta, red and yellow,
Josephus, very brilliant; red and orange,
albo-marginata, red, bordered with white, Amblyodon, fine red,
picta Lorenziana, is a fine new double variety ;
heads two inches in diameter. See engraving, Io


Gilias are free-flowering, hardy annuals, one foot to eighteen inches high, with clusters of small, delicate flowers; desirable for cutting. Seed may be sown in the open ground, but if transplanted, remove when small.
Gilia achilleæfolia, mixed colors,
capitata, mixed colors,
tricolor, mixed colors,
All varieties mixed,

## GLAUCIUM.



Glaucium corniculatum, one of the Horned Poppies, is the very prettiest of our white-leaved plants. The leaves are silvery white, something like the old "Dusty Miller." Fine for edgings, vases, ribbon beds. Sow late in the winter in the house.
Glaucium corniculatum, .
15

## HUNNEMANNIA.



Hunnemannia fumariæfolia makes a growth of about two feet ; the flowers are bright yellow and tulip-formed. At the North should be treated as an annual; makes a rapid growth and flowers the first season.
Hunnemannia fumariæfolia,
helianthus.


Helianthus is the well known old Sunflower; coarse, tall plants, from four to eight feet in height, bright yellow flowers. The best double varieties produce a very good effect among shrubbery, and when used as screens. The Sunflower is hardy and sometimes reproduces itself from self-sown seed. The seeds of the single varieties are of considerable value for oil as well as for feeding. Helianthus globosus fistulosus, the best of the Sunflowers; very large; double,
Double Green-centered, a large flower with green center when young; when old, perfectly double flower; 5 to 8 feet in height,
New Mammoth Russian, single; very large,
Common Single, usually grown for the seed; per lb .50 cents,

## KAULFUSSIA.



Kaulfussias are pretty, free-flowering, hardy annuals, with the appearance of single Asters. The plants make a low growth, only about six inches in height. The colors of some are very intense; blue, rose and violet. Kaulfussia, mixed colors,

## LEPTOSIPHON.



Leptosiphons are low, pretty, hardy annuals, growing less than six inches in height. Do not bear our hot, dry summers very well. We sow seed late in autumn, or early in the spring, so as to have flowers before hot weather.
Leptosiphon, mixed varieties,

5

5

5

## LINUM.

Some of the Lobelias are hardy perennials, like the Cardinal Flower. Annual varieties are mostly of a trailing habit, bearing numbers of small flowers, fine for baskets, vases, edges of beds, etc.
Lobelia cardinalis, our native Cardinal Flower: spikes of brilliant scarlet flowers; blooms firsi year if well started with heat,
hybrida grandiflora, large, dark blue flower, with white eye,

Erinus compacta, deep, rich blue, .... Io
Erinus compacta alba, white,
pumila grandiflora, a compact, erect little plant, for pots or edgings,
Mixed varieties for baskets, etc.


A fine half-hardy annual, with bright crimson flowers. Neat and slender habit, like all the Flax family, and grows eighteen inches or more in height. Seeds germinate best in the hot-bed, but do well if sown in the garden in a light soil. Set plants a foot apart.
Linum grandiflorum rubrum,
5

## LYCHNIS.



To obtain good flowers the first summer, start seeds under glass and transplant as early as the weather will permit. Plants live for several years.
Lychnis Chalcedonica, bright scarlet; has a fine appearance when grown in masses; 2 feet,

Haageana, vermillion colored flowers, i foot, . Io
Haageana hybrida, large flowers, white, rose, red, etc., I foot,
grandiflora gigantea, flowers very large. of
various colors, .

## LUPINUS.

Lupins are a well known genus of very conspicuous plants, called, commonly, Sun Dials. They are hardy, and seed must be sown in the open ground, having a tap root and not transplanting well. The flowers are pea formed, in long spikes; the leaves compound and very pretty. Prevailing color blue, though there are white and yellow varieties. There are, also, many perennial kinds.


Lupinus, mixed varieties,

## MALOPE.



The Malope is a strong growing plant, two feet in height. Seed may be sown under glass, and then plants will bloom very early; or in the open ground, with a later but quite as strong a growth.
Malope grandiflora, large, purple flowers.
grandiflora alba, pure white,

## MIGNONETTE.

Seeds of Mignonette can be sown at any season, so that by having pots prepared at different times a


NEW SPIRAL.


PARSONS' NEW WHITE.
succession of flowers can be secured, and Mignonette adorn the button hole, and perfume the house at all times. New White has a large flower, more robust in growth than other varieties, though the Mignonette is grown mostly for its fragrance. R. ameliorata has reddish stamens, giving a slight tinge to the flower. Mignonette
sown early in the garden will give flowers through the summer. New Spiral has long, strong spikes, as shown in the engraving. We need not describe the common Sweet Mignonette that everybody knows, and yet very few cultivate, compared with the many that might show their love of this sweet little flower.
Reseda odorata, (Sweet Mignonette,) a well known, fragrant, little, hardy annual; per oz. 20 cents,
odorata grandiflora ameliorata, large variety of Mignonette, reddish tinge to flowers; per ounce, 25 cents,

5
Parson's New White, a robust Mignonette ; flowers larger and showing more white than the common sort; per oz. 50 cents,

5
New Hybrid Spiral, robust plant, long spikes,
Golden Queen, a very fine new and distinct variety, with flowers of a golden hue; the best of recent introductions,

## MARIGOLD.



The Marıgolds are tall, coarse plants, often more than two feet in height. Flowers large, double, in color yellow, orange and brown. There are several dwarf varieties, growing only about a foot in height. The African varieties are more robust than the French, but flowers of the latter are better.
African Marigold, mixed varieties, . . . . . . . 5
French Marigold, Striped, yellow and brown, 5
Tall varieties mixed,
Dwarf varieties mixed, 5

Tagetes signata pumila, a beautiful plant, forming a globular, dense mass,

5

## MARTYNIA.



The Martynias are robust, hardy annuals, requiring at least three feet of space to perfect their growth. The engraving gives a view of the flower. The colors are yellow, white and purple.
Martynia, mixed varieties,

## MEDICAGO.



Medicagos are more or less cultivated for their curious seed vessels. The Snail and Hedge-hog are the best.


Snail, clover-like plant, with small, yellow flowers, 10 Hedge-hog, like above, except seed-pod, . . . . io


Perennial plants, flowering first season if sown early, small, white and blue flowers. Seed may be sown in a hotbed and transplanted, or in the open ground in the spring. Myosotis alpestris, blue; 6 inches, . Io
alpestris, white; 6 inches,
alpestris rosea, rose; 6 inches,
palustris, (Forget-me-not,) white and blue,
Azorica, dark blue; iffoot, 10

10

Azorica var. cœlestina, flowers sky-blue,

## MIMULUS.



The Mimulus, or Monkey Flowers, are beautiful, tender looking plants, with almost transparent branches. Fine for baskets, vases and house culture.
Mimulus roseus pallidus, very fine, .
cupreus, beautiful, orange and crimson,
hybridus tigrinus, as beautifully spotted as the
finest Calceolarias,
hybridus tigrinus flore-pleno, a double Mimu-
lus, with the most durable flowers,
moschatus, (Musk Plant,)
quinquevulnerus maximus, from best varieties,

## MIRABILIS.



The Mirabilis, or FourO'clock, grows two feet high, bright foliage, fragrant flowers and desirable colors. Set
 plants two feet apart. Makes a nice summer hedge, if set in a row about a foot apart. Seed should be planted in the open ground where the plants are desired. Flowers open in the afternoon, hence the name Four-O'clock. Mirabilis Jalapa, (Marvel of Peru) mixed colors, 10 foliis-variegatis, flowers of a variety of colors ; leaves light green, faintly marbled,
longiflora, white, exceedingly sweet-scented;
flower tube 3 or 4 inches long,
longiflora violacea, same as above, but violet, iо

## MESEMBRYANTHEMUM.

The Mesembryanthemums are pretty, half-hardy annuals, with delicate, succulent, almost transparent branches and leaves. The most popular are known as Ice Plant and Dew Plant. Both are of drooping habit, and adapted to basket and vase work. The flowers of the Ice Plant are small and white. The Dew Plant has a smooth, light green, dewy looking leaf, and a very pretty pink flower.
Mesembryanthemum crystallinum, (Ice
Plant, ) prized for its singular icy foliage . . .
tricolor, pink, with purple center, 5
tricolor album, white, . : . . . . . . . . . . 5
glabrum, (Dew Plant,) reddish violet, . . . . 5

## MOLUCCA BALM.



The Molucca Balm is commonly known as the Shell Flower, because of the resemblance of the calyx to a shell. It is a strong annual, two or three feet in height, having but few leaves. Very curious and attractive.
Molucca Balm, or Shell Flower,
Io
NYCTERINIA.


Small, half-hardy annuals, about eight inches in height, with sweet-scented, star-shaped flowers. Very good for edgings of small beds or rockwork.
Nycterinia selaginoides, pink, with yellow center, 5
Capensis, white, very sweet scented,

## NEMESIA.



Pretty, free-blooming, half-hardy annual, about eight inches in height, of compact habit; curious, delicate flowers. Looks best in masses. Plant five inches apart. Nemesia floribunda, white and yeliow,


Nolanas are trailing, hardy annuals. Prefer a light soil. Seed may be sown in the border where the flowers are desired, or in a seed-bed to be transplanted as needed. Excellent for rock-work, baskets, etc. Treatment like the Portulaca, which it resembles in many respects. Flowers cup-formed, something like those of the Morning Glory.
Nolana, mixed varieties, .

## NIGELLA.



Seeds grow readily, may be sown in the open ground early in the spring. Hardy annuals, with finely cut leaves and curious, showy flowers.
Nigella Damascena, (Love-in-a-Mist,) double ; one foot,
Damascena nana, dwarf; variety of colors; 6 in.
Hispanica, large-flowered; very fine; one foot,
Fontanesiana, much like N. Hispanica, but blooms two weeks earlier,

## NEMOPHILA.



The Nemophilas are pretty, delicate, hardy annuals. The flowers are mainly blue and white. They do best if sown in a frame and transplanted early, as the hot sun injures the flowers ; but do finely all summer, if planted in a rather cool, shaded place. Set about six inches apart. A few plants set early among spring flowering bulbs in Autumn, or seeds scattered over the beds, will give a good account of themselves in early spring.
Nemophila, mixed varieties,

## NIEREMBERGIA.



The Nierembergias have whitish flowers, tinted with lilac, with a deep purplish lilac blotch in the center. Tender perennials, suitable for house culture, or may be treated as tender annuals. For baskets, vases, etc., we cannot recommend them too highly. Plants slender, with abundance of flowers, and almost perpetually in bloom.
Nierembergia gracilis, plant very branching,
spreading; fine for pots, or the border, . . . .
frutescens, taller and of more erect habit than
preceding, with flowers larger and more open, io
OBELISCARIA.


The Obeliscarias are coarse plants with showy flowers. The ray flowers are of a rich velvety crimson, edged with yellow. The central cone, or disk, is brown until the florets expand, and then is bright yellow. Flowers on long stems, plants eighteen inches in height. It resembles somewhat the wild flower of our meadows, Rudbeckia hirta, or Cone Flower.
Obeliscaria pulcherrima,
OXYURA.


Oxyura chrysanthemoides is a pretty, little, hardy annual, neat in habit, branching, about eighteen inches in height; flower daisy-like. Lemon yellow, white edging. Oxyura chrysanthemoifles,
©


Enotheras are very fine half-hardy annuals, opening their flowers suddenly in the latter part of the day, and making a most brilliant exhibition during the evening and early in the morning; they certainly look like things of life as they open with a nervous motion that cannot only be seen but heard. Some of the large varieties attract much attention. The low, white variety, acaulis alba, is a marvel of beauty, pure white, and one or more flowers appearing each evening. Most of the other varieties are yellow. No plant in the garden is more interesting to the children, who watch the opening flowers with the greatest pleasure.
Enothera acaulis alba, a very dwarf or rather stemless plant, the leaves lying ciose to the ground,
Lamarckiana grandiflora, flowers yellow, 4 inches in diameter; plant grows 4 feet in height,


The Portulaca is a popular, hardy, creeping annual, each strong plant covering a space about a foot in diameter, with flowers of almost every color imaginable. It delights in a warm sun and sandy soil, and the drouth is never too long nor the heat too intense for this beautiful little salamander. When everything else is perish-

ing for lack of moisture, the Portulaca will give its largest flowers and brightest colors. We well recol-
lect when the Portulaca gave us but a few colors, and a clouble flower would have beer a wonder. Now we have all the colors that heart can desire, and flowers as double as roses, and almost as large. The Portulaca does not like a clay soil nor black muck. It makes a brilliant bed on the lawn. Sow seed in the open ground early, or under glass. The plants can be transplanted when in full flower, and in making a ribbon bed with Portulaca, we always wait until the first flower opens, so as to be entirely sure of the colors. Only one possible objection can be made to the Portulaca, and that is its flowers are fully open only in sunshine; like the sun-dial, it counts only the bright hours. The perfectly double Portulaca forms no seed; so that seed must be saved from semi-double flowers, and from fifty to seventy-five per cent. of plants from this seed will usually give double flowers.
Portulaca alba, pure white,
alba striata, white, striped with rose, 5
caryophylloides, rose, striped with carmine, . . 5
New Rose, fine rose color, . . . . . . . . .
Thellussonii, fine crimson, . . . . . . . . . . 5 5
splendens, rosy purple, . . . . . . . . . . . 5
aurea, straw color,
aurea vera, deep, golden yellow,
aurea striata, sulphur yellow, striped with gild,
Fine mixed,
Double Rose-flowered, a perfectly double variety, as much so as the most perfect Rose, and of many brilliant colors, as well as striped. First quality, mixed colors,
Double Rose-flowered, seven different colorscrimson, rosy purple, rose, white, rose striped with carmine, orange, yellow-each color


Good annual varieties of the Poppy are numerous, ranging in size from the little Ranunculus-flowered, an inch in diameter, to the large Pæony-flowered. They have strong tap-roots, and are difficult to transplant ; it is better to sow the seed early in the spring where the plants are to flower. All the Poppies are perfectly hardy. The grand oriental Poppy will be found in the Perennial Department, under the name of Papaver.
Poppy, Ranunculus-flowered, small, double, . 5
Murselli, mixed colors, very showy, double,
Pæony-flowered, large flowers, very double,
Carnation (somniferum, fl. pl.,) (Double Opium Poppy), splendid large double flowers; mixed colors,
Papaver umbrosum, flowers bright vermilion, with a shining black spot on each petal; very showy. Plant eighteen inches in height, .
somniferum (Opium Poppy), true, single, per pound, S1.00: per ounce, ro cents,
Scarlet Single, the single Scarlet Corn, or Field Poppy, of Europe,


The Pansy is a popular flower with both florists and amateurs, giving abundance of bloom until after severe frosts, enduring our hard winters with safety, and greeting us in the earliest spring with a profusion of bright

blossoms. It will flower better in the middle of the summer, if planted where it is somewhat shaded from the hot sun, and especially if furnished with a good supply of water, but in almost any situation will give fine flowers in the spring and autumn. Pansy seed may be sown in the hot-bed or open ground; if sown in the spring, get it in as early as possible, so as to have plants in blossom during the eariy rains. Seeds sown in a cool place in June or July, and well watered until up, will produce fall flowering plants. To have good flowers, the plant must be vigorous, and make a rapid growth. Young plants give the largest flowers. Old worn-out plants

should be replaced. The little engraving shows a good way of exhibiting Pansies, in a shallow dish, or basket, filled with damp moss or sand. If the plants come into bloom in the heat of summer the flowers will be small at first, but as the weather becomes cooler they will increase in size and beauty. Often plants that produce flowers two and a half inches in diameter during the cool, showery weather of spring, will give only the smallest possible specimens during the dry weather of summer. Pansy, King of the Blacks, almost coal black, coming true from seed,
Emperor William, new; fine large flower, ultramarine blue with violet purple eye,
Lord Beaconsfield, deep purple-violet, shading off in the upper petals to a white hue,
Dark blue, very rich and constant,
Azure blue, extra fine,.

Pansy, Light blue, lovely shades of sky-blue, . It Violet, with white border; somewhat resembling the fancy Geraniums,
Dark purple, rich, deep purple; very fine, . . . $I_{5}$
Marbled purple, new colors,
15
Striped and mottled, extra and very showy, . I5
Yellow-margined, beautiful color, with margin or belt of yellow,
Mahogany-colored, a very fine variety, . . . $1_{5}$
Bronze-color, very good, . . . . . . . . . . $I_{j}$
Red, bright coppery colors, but not strictly red, $I_{5}$
Pure yellow, generally true to color, . . . . . $I_{5}$
White, sometimes slightly marked with purple, is
Snowy White, a new pure white flower of good form and size. The best white we have ever seen, and generally coming true from seed,
Odier, or Large-eyed, dark spots on each petal and large eyes,
Mixed seeds of above sorts,
Extra choice, very large flowering,
25

## PALAFOXIA.



Palafoxia Hookeriana is a fine annual. Flowers are rosy crimson, with a dark center. Set the plants about ten inches apart.
Palafoxia Hookeriana,
PERILLA.


Perilla Nankinensis is a very fine and dark ornamenal-leaved annual. It has a broad, serrated leaf, of a purplish mulberry color, and eighteen inches or more in height. Very desirable for the senter of a bed of orna-mental-leaved plants, and also for a low screen or hedge.
Perilla Nankinensis,


The Phlox Drummondii, for a splendid mass of colors and a constant display, is not excelled by any other annual or perennial that we are acquainted with. It has every desirable quality for this purpose. The colors range from the purest white to the deepest blood purple or crimson, and yellow, and striped, the clear eye of the Phlox being peculiarly marked. Seed may be sown in the open ground in May, or in hot-bed or cold-frame earlier; and in either case, from June, during the summer and autumn, they make a most brilliant bed of showy yet delicate flowers. A good ribbon bed of the Phlox is a dazzling sight, and there is nothing so cheap. In a good rich soil it will grow eighteen inches or more in height, and we know of no annual or perennial that will give a more satisfactory return for the outlay. Set the plants about one foot apart, unless the soil is very poor; if too thick they suffer from mildew. The Phlox makes a very good border or low summer hedge. The finest effect, however, is produced by planting each color in a separate bed, or in ribbon fashion, its constant blooming making it desirable for these purposes. In selecting plants for a ribbon bed get good contrasts of color, as white, scarlet, rose and blue. Phlox usually comes very true from seed, so that it is particularly desirable for forming ribbon beds, and if a plant of a wrong color is found it can be easily removed, and the place will soon be filled, for the Phlox is a vigorous grower when it has room. A few papers of seed, that costs but little, will make a grand bed. The seed of the Phlox is perfectly hardy, and we have good success in planting in the autumn, but it must be sown so late that the seed will not start in the fall, for the plants will not bear frost. Early spring is generally the best for sowing. We grow from five to ten acres of Phlox every year, devoting much time and means to its improvement, and have no hesitation in saying our strain of Phlox Drummondii is the best the world produces.
Phlox Drummondii, Deep Blood Purple, . . io Brilliant Scarlet,

## Scarlet Fringed,

## Large Blue, white eye, the nearest to blue of the

 Phloxes, but really a fine purple,Violet Queen, violet, with large, clear white eye,
Carmine Queen, beautifnl carmine, with large, white eye,
Leopoldii, splendid deep pink, with white eye, rosea, beautiful rose color,
rosea albo-oculata, beautiful rose, with distinct white eye,
variabilis, violet and lilac,

Phlox Drummondii Radowitzii, rose, striped with white,
Radowitzii kermesina striata, crimson, striped with white,
Radowitzii violacea, violet, striped with white, flore-albo, pure white,
flore-albo oculata, pure white, with purple eye, Chamois Rose, very delicate and fine,
Isabellina, light dull yellow,
Vick's New Double White, a very fine, robust, half-dwarf, nearly all coming double; very desirable for cutting,
All varieties mixed,

PHLOX DRUMMONDII GRANDIFLORA.
The flowers of this new section have round petals, and larger flowers than the old sorts. The following varieties we have found to be nearly constant.
Phlox Drummondii grandiflora splendens, bright scarlet, with white eye : the finest variety and quite constant,
alba pura, white, large,
elegans, margin from rose to crimson, with very large, round, white center, or eye,
atropurpurea alba-oculata, dark purple, with white eye,
atropurpurea striata, dark purple, striped with white,



都

 10
carminea alba-oculata, rose-carmine, with white eye,
violacea alba-oculata, violet, with white eye, 10 quadricolor rosea, rose petals,separately shaded Io Choice mixed,
 blue, though some are white. Very fair as border plants and good for bouquet making. Good for bee fool.
Phacelia congesta, light blue ; per oz., 20 cents, 5 tenacetifolia alba, white; per oz., 20 cents


Petunia seed sown in the spring will produce flowering plants in June. Set the plants about eighteen inches apart. They come pretty true from seed, but are not reliable in this respect, being inclined to sport. They do well sown in a cold-frame, hot-bed, or in the open ground. Few plants will make a more showy bed than the Petunias, giving flowers from early summer until after frost. The seeds of the Double Petunia do not possess as much vitality as those of the single, and a good deal of care must be used to get them to germinate, nor will they all come double. There are two distinct kinds of single Petunias, the Grandiflora, sorts with large flowers; and the small-flowered section, which gives abundance of bloom. These are sold as Blotched and Striped, Fine Mixed, and Countess of Ellesmere, and make wonderfully pretty

beds, few things better. The latter flowers are pink, and come always true from seed. For showy beds, therefore, the small-flowered kinds are best, but for little groups of plants, or single plants, the Grandifloras are admirable, the flowers often being four inches in diameier.

## LARGE FLOWERE1).

Petunia hybrida grandiflora kermesina, grandiflora maculata, splendid spotted, grandiflora venosa, variety of colors, beautifully veined,
grandiflora rosea, splendid large flowers, bright rose, white throat,
grandiflora marginata, large flowers, bordered and veined with green, . .
grandiflora violacea, one of the noblest of the large-flowered Petunias, and of a rich violet,
grandiflora superbissima, magnificent flowers, of extra large size, the very deep throat beantifilly veined to the base,

[^0]Petunia, Double. The seed we offer is the best to be obtained. The double Petunia bears no seed, and but little pollen. Packet of 50 seeds, Vick's New Fringed, a new strain, with fringed and frilled edges, very distinct and beautiful, and coming usually true from seed,
small flowered. Suitable for bedding.
New Dwarf Inimitable, a really dwarf variety, forming a compact little plant five to eight inches in height by as much in diameter, covered with regularly striped flowers. Admirably adapted for massing, as well as for pot-culture, Countess of Ellesmere, dark rose, with fine white throat,

Blotched and Striped,

Fine mixed,
IO

## RICINUS.



The Ricinus has very ornamental foliage and showy fruit. Plant seed in open ground, in a dry situation, as carly as safe in the spring. Fine for center of beds. Ricinus macrocarpus, whitish, beautiful; 6 feet, 10 purpureus, purple, magnificent; 6 feet, . 10 Borboniensis, beautiful, large leaves; io feet, . to sanguineus, blood red stalks, scarlet fruit, one of the best; 5 feet,

Io
Africanus hybridus, fine, stalk and fruit rose; 6 feet,

Io
giganteus, large, fine and showy; 6 feet, . . . Io
New species from the Philippines, very large leaves; 6 to ro feet,
Guyanensis nanus, dwarf, only 2 to 3 feet high; fruit rose-colored; fine for outside of groups, . communis (Palma Christi), common Castor Oil Bean ; per lb., 50 cents ; per oz., io cents, .

## SALPIGLOSSIS.



Salpiglossis is a splendid half-hardy annual, with flowers of a peculiar richness, very delicately and beautifully pencilled. About two feet in height. Seeds may be sown under glass, but do well in the open ground, if the soil is light.
Salpiglossis, mixed colors, from very choice plants, to


Salvia, called Flowering Sage, grows freely in any light, rich soil; from eighteen inches to two feet in height. Plants should get a good start in the hot-bed, and not be planted out before the weather is warm. Thrifty plants may be potted in the fall for winter blooming.
Salvia Rœmeriana, scarlet, . . . . . . . . . . Io bicolor, blue and white, splendens, true; large, scarlet,
patens, flowers of a delightful blue. When grown
in the house the flowers are superb,

## SAPONARIA.



The Saponarias are low plants. For a small pot or edging they are very desirable. Setting alternate plants of pink and white produces a very fine effect.
Saponaria Calabrica, rich, deep pink, alba, white,


The tall Scabiosas grow eighteen inches in height, the flowers being on very wiry stems. The dwarf sorts are about a foot in height. Sow in the garden or under glass. Plants, if thrifty in the autumn, not weakened by overflowering, often flower the second season.
Scabiosa, all colors mixed,
Double Tall, new,
Double Dwarf, very pretty, compact plant, . . 5 stellata, starry seed vessels; excellent for winter bouquets,

## SCHIZANTHUS.



The Schizanthus may be treated as half-hardy annuals, and do well in the house or open ground. Indeed, those plants that have flowered in the garden may be removed to the house in autumn. About two feet in height, and bear hundreds of flowers.
Schizanthus, best varieties mixed,
SEDUM.


Sedum cœruleum is one of the Stonecrops, and an annual. Good for rock work and masses.
Sedum cœruleum, blue; 3 to 4 inches in height, ro

## STOCK, TEN-WEEKS.

The Ten Weeks or Annual Stock presents nearly or quite all the requisites of a very perfect flowering plant-good habit, fine foliage, beautiful flowers of almost every desirable tint. Seeds of the Stock may be sown in the open ground, or in the hot-bed or cold franie; but if transplanted, let this be done when the plants are small, just out of the seed-leaf,
 or the plants become slender and never make good plants nor flower well. A little shade from the hottest sun, and water in the evening, will add much to the size, beauty and durability of the flowers. Set a foot apart. Make
 the soil deep and rich. Some of the varieties are desirable for winter flowers, and are used for this purpose by florists. Indeed, any of them will do well in a house that is tolerably cool and moist. If the plants that are not too far advanced are taken up carefully in the autumn and potted, they will flower elegantly in the house in winter. It is a good plan to sow seeds late in the season for this purpose. Although not a constant bloomer, like Phlox, Petunia, \&-c., the flowers endure for a long time, and the side shoots give a succession of flowers, under favorable circumstances, for months ; indeed, the growth and flowering seem almost perpetual where the plant can obtain a needed supply of moisture. Below will be found the best sorts known.
Stock, Largest-flowering Dwarf, a plant of dwarf habit, with magnificent large spikes of very large double flowers; all colors mixed,
Largest-flowering Dwarf, white, flesh-color, rose, carmine, crimson, blue, lilac, violet, purple, brown, brick red, aurora color, chamois, canary yellow, ash, etc., each color,
Largest-flowering Dwarf, Blood Red, richest, deepest colored Stock grown,
Large-flowering Pyramidal Dwarf, a plant of pyramidal habit, with long spikes of large flowers, many choice colors mixed,
Large-flowering Pyramidal, Celestial Blue, excellent color,
Dwarf German, a fine dwarf variety, very free bloomer, mixed colors,
Wallfower-leaved, smooth, dark, shining leaves, like the Wallflower; dwarf habit. Set only six inches apart. Mixed colors,
Wallfower-leaved, White, is a most beautiful variety, the flowers being the clearest possible white, and contrasting grandly with the dark green, glossy foliage. It is grown largely by florists for cut flowers,
Wallfower-leaved, Blood Red. This is the deepest red of all the Stocks, and is a very choice variety, prized by florists for cutting. The Wallfower-leaved Stocks are all of a dwarf, compact habit,
Branching German, large growth, branching, spikes numerous, long, rather loose, mixed,
Early Autumn-flowering, commences flowering in the autumn, and if removed to the house will bloom during the winter; mixed colors,

## SENSITIVE PLANT.



The Sensitive Plant is really a pretty plant, and affords a good deal of amusement, not only to children, but to those of larger growth. Seed should be started under glass, and not transplanted to the open ground until the weather is warm. A plant or two reserved for the nouse will afford a good deal of pleasure during the winter. Start a young plant in a pot, and plunge the pot in the earth to the rim, removing it to the house in autumn.
Mimosa pudica, a tender, sensitive annual,
5


The Spraguea umbellata flowers in dense umbels, on leafless stems, six inches or more in length; blossoms are pink, and nearly everlasting. Sow seed under glass or in a sheltered place.
Spraguea umbellata,

## TROPEOLUM MINUS.



Tropæolums, known as Nasturtiums, are half-hardy annuals. Flowers of all different shades of yellow and red. T. minus are dwarf, round-headed plants, about a foot high, and make very
fine beds in the garden. T. majus and T. Lobbianum are described among the Climbers. The Dwarf Tropæolums are great favorites with many, and in England are almost entirely used for makıng dense masses of color. Some of the beds of scarlet that we saw were unsurpassed in brilliancy. This flower has of late been much improved, the blos-
soms being larger and more brilliant than the oldfashioned sorts. When planted in poor soil they flower profusely, and remain in flower a long time. Set plants about one foot apart.
Tropæolum minus, Dark Crimson,
Crystal Palace Gem, sulphur, spotted with maroon,
Dwarf Spotted, yellow, spotted with crimson,
Tom Thumb Beauty, orange and vermilion,
Tom Thumb Yellow,
Carter's Tom Thumb, scarlet,
Tom Thumb Rose, new color in Nasturtiums,
King of Tom Thumbs, foliage dark bluish green ; flowers brilliant scarlet, .
King Theodore, flowers very dark, .
Ruby King, foliage very dark, I

Mixed varieties, .

## VERBENA.



Sow Verbena seed under glass early in the spring, and transplant after three or four inches of growth. Good healthy plants can be produced from seed as readily as almost any tender annual, plants that will perfectly cover a space four feet in diameter, flower well in July, and continue strong and healthy until destroyed by frost. Very few annuals will make the gorgeous display during the summer months, or furnish more flowers for cutting, than the Verbena. Another strange fact, not generally known, is that nearly all Verbenas raised from seed are fragrant, the light-colored varieties particularly so.
Verbena hybrida, choice seed, saved only from the most beautiful named flowers,
Striped, excellent flowers, with broad Carnation like stripes. Inclined to sport, .
Scarlet, brightest scarlet, quite true,
Pure White, new, quite true from seed,

## VINCA.



A genus of beautiful greenhouse perennials, may be treated as tender annuals for the garden. If sown under glass, and strong plants are set out early, in a warm situation, they will flower in the summer and autumn, and may be potted for the house before frost. Not suitable for out-door sowing in northern latitudes. Plants about eighteen inches high.
Vinca rosea, rose ; 2 feet, 10
rosea alba, white, red eye, ....... . . . .
rosea nova spec., pure white,
10
Mixed varieties, .
10


The Whitlavia is a pretty annual, with delicate foliage and drooping clusters of blue and white bells. Plants are perfectly hardy, proof against cold and wet, but suffer often in hot, dry weather. For a shady spot there are few flowers that give more pleasure. The Whitlavia is a good plant for baskets, vases and pots.
Whitlavia grandiflora, hardy annual, io inches high, violet blue, bell-shaped flowers,
grandifiora alba, similar to grandiflora, but white,
loxinoides, an excellent variety of the same habit as W. grandiflora, but larger flowers; tube of the corolla pure white, limb delicate light blue,
Mixed varieties,
ZINNIA.


The Zinnia is a large, free-growing flower, so easily grown, and so handsome that it will always be popular. It is in flower all summer. The Double Zinnias usually grow about two feet in height, giving flowers quite as double as the Dahlia. The Zinnia makes an excellent border or summer hedge plant, and for this purpose set plants twelve to fifteen inches apart, so as to make a continuous row or border. The seeds grow easily, and young plants can be moved as safely as Cabbage plants. Zinnias must be familiar to all our aged readers, for, as far back as we can recollect, the old single variety was grown under the name of Youth and Old Age in almost every garden. Having taken particular pains in improving the Zinnia, we think our strain is excellent; indeed, our Zinnias have been pronounced by florists from England, France, and Germany, the best in the world.
Zinnia, Double, Choicest, best colors mixed, . Io
Eight separate colors-scarlet, yellow, orange, purple, salmon, pure white, etc.,-each color,


## CALAMPELIS.



Calampelis scabra is a very beautiful climber, foliage very pretty, with bright orange flowers, and produced in racemes; blooms profusely the latter part of the season. Sow seed in the hot-bed or green-house.
Calampelis scabra, Eccremocarpus scaber, 5

## CARDIOSPERMUM.



Cardiospermum Halicacabum is a curious, half-hardy annual. Sow seed under glass, and if planted in the garden, find it a sheltered situation.
Cardiospermum Halicacabum, . . . . . . . . 5

## THE GOURD FAMILY.



The Gourds are a numerous family, and exceedingly dissimilar in character. Indeed, many members are not generally known as Gourds, so we give first a list of what we may call the Gourd proper, and then describe other members of the tribe. The Gourds are a vigorous class of plants, admired principally on account of their curiously-formed and often strangely-colored fruits ; the foliage is abundant, and often very curious. Useful
for covering old trees, fences, arbers, etc. The culture is the same as required for Squashes, Melons, etc. A collection of the leading sorts is very interesting. The following are some of the most valuable of the family:

Gourd, Hercules' Club, large, long, club-shaped, 10 Smallest Lemon, yellow
Pear-formed, yellow and green, cream-striped, 10 Gooseberry, small, bright green,
Striped Apple, small, yellow, beautifully striped, io Egg-formed, like the fruit of White Egg Plant, 10
Orange, the well-known Mock Orange, . . . . io
Calabash, the old-fashioned Dipper Gourd,


The following are handsome plants, mostly with delicately cut foliage, white, fringe-like flowers, and pretty, small fruits, some of them highly colored.
Abobra viridiflora, a beautiful climber, with delicate foliage, and oval, scarlet fruit,
Bryonopsis laciniosa, foliage elegant; fruit scarlet, striped with white,
Momordica Balsamina, orange and red,
Tricosanthes Colubrina, true Serpent Gourd, 10
Cucumis odoratissimus, fruit orange-yellow, sometimes spotted with red, varying from the size of a plum to that of an orange; very fragrant,

10
Coccinea Indica, a handsome climber, with glossy foliage and scarlet fruit,

## DOLICHOS.



Plant Dolichos seed in the garden where the plants are desired, and in as warm and dry a spot as possible. Large varieties grow from six to twenty feet; the dwart variety grows four or five feet in height.
Dolichos Lablab (Hyacinth Bean), a fine climber, with purple and lilac flowers,
albus nanus, white, dwarf,
spec. giganteus, large, free grower,


The Loasa is a good climber, with curious yellow and red flowers. The branches are covered with stinging hairs that give pain when touched. Blooms abundantly. Loasa nitida, yellowish, light green leaves, lateritia. large, yeliow flowers in abundance, Herbertii, fine scarlet,

## MAURANDYA.



Maurandya plants should be grown in the hot-bed or greenhouse. Growth of plant, five or six feet, and the foliage abundant. The flowers of the Maurandya are of good size and form and color, being about the size and appearance of Digitalis, and the colors different shades of blue, white and mauve. Good for baskets, vases, or for verandas.
Maurandya Barclayana, blue and white,
Barclayana purpurea grandifiora, purple,
Barclayana Scarlet, mauve,
Finest mixed,

## IPOMCEA.


lpomoeas succeed best if started in the hot-bed. De-
sirable for pots, baskets, etc., for the house, also for greenhouse decoration they are very good.
${ }^{\top}$ pom@e limbata elegantissima, large, blossoms
rich, mazarine blue, with a showy white margin,
grandiflora superba, fine, large flowers, skyblue, with broad border of white,
Bona Nox Good Night, or Evening Glory), flowers large, white,
coccinea, sometimes called Star Ipomœa, with small, scarlet flowers,
Quamoclit Cypress Vine, tender; flowers elegant; foliage beautiful ; mixed colors,
Scarlet, white, rose, each color,
5

PEAS, FLOWERING.


Flowering Peas are among the most useful and beautiful of all our hardy annuals. Nothing can be better for large bouquets, as the flowers are lively and deiicate, varying in color from the darkest purple imaginable, and including the brightest pinks; as fragrant as Mignonette. The Pea luxuriates in a cool, moist soil, and in a damp season.


Peas should be shown tour inches deep, and as early in the spring as possible. Don't wait for fair weather. Use plenty of seed, so that they will not be more than an inch apart. Hoe the earth toward the plant a little, but do not form a ridge, and furnish support early. The Flowering Sweet Peas are the sweetest of our climbing annuals, and as beautiful as any.

Peas, Sweet, Scarlet Invincible, a beautiful deep scarlet variety; lb., \$1.30; oz., 15 cents, .
Scarlet, per lb., $\$ 1.00$; per oz., io cents,
Scarlet, Striped with White, per lb., $\$ 1.00$; per oz., io cents,
Purple Striped, per lb., $\$ 1.00$; per oz., io cents,
Invincible Striped, perlb., \$r.30; per oz., 15 cts,
Blue Edged, white and pink, edged with blue; per lb., \$1.30; per oz., 15 cents,
Painted Lady, rose and white; per lb., \$1.00; per oz., io cents,
White, per lb., \$r.oo; per oz., io cents, .
Black, very dark, brownish purple; per lb., \$1.30; per oz., 15 cents,
Black, with Light Blue, brownish purple and light blue ; per lb., \$r.3ヶ; per oz., 15 cents,
Crown Princess of Prussia, bright blush; per lb., \$1.60; per oz., 15 cents,
Butterfly, white, laced with lavender-blue; per lb., $\$ 1.60$; per oz., 15 cents,
All colors mixed, per lb., 75 cents; per oz., io cents,
The two varieties below are not Climbers, but Creepers, and nice for baskets, nor are they fragrant.

Peas, Scarlet Winged, beautiful, small flowers, Yellow Winged, same habit as Scarlet Winged,

THUNBERGIA.


Thunbergia starts rather slowly at first. Seed requires hot-bed treatment, but plants are grown easily from cuttings. Flowers white or orange ; fine for baskets. All the varieties, except unicolor, have a dark, purplish eye, almost black. For house culture, baskets and vases, there are few plants superior to the Thunbergia. They may be used very effectively in beds, pegged down.
Thunbergia Bakeri, pure white ; very fine,
alata, yellow or buff, with dark eye,
alata unicolor, yellow,
aurantiaca, bright orange, with dark eye, . . .
aurantiaca unicolor, bright orange,
Above mixed, .

## TROPEOLUM.

The Tropæolum majus, or Nasturtiums, are among our very cleanest and pretiest and best Climbers. They require but little care, for seed sown in the spring of the year in any fair garden soil will produce plants ten or twelve feet in height before autumn. They do not require even a rich soil, for a rich soil is apt to be productive of leaves rather than flowers. They bear hot and dry weather very well, and we believe are not troubled by any insect, for the stems and leaves contain a pungent juice they do not like. In some places young shoots are used as a salad. and the seed pods are con-
sidered a very good substitute for Cress. There are several varieties, differing as well in the color of the

foliage as in the flowers. The leaves of some are very light transparent green, while in others they are very dark, almost purplish. The flowers are of almost all shades of yellow, scarlet, striped and spotted. The climbing Tropæolum is an excellent plant for baskets, vases, etc., and can even be used for bedding by pegging down the branches occasionally. Our engravings show the flower of Tropæolum majus nearly natural size, also that pretty little variety Tropæolum peregrinum, commonly known as the Canary Flower.


Tropæolum majus, atropurpureum, crimson, . 5 coccineum, scarlet,
Dunnett's Orange, dark orange, . . . . . . . 5
Edward Otto, bronze, silky and glittering, . . 5
Schulzii, brilliant scarlet,
Scheuerianum, straw color, striped with brown, 5
Scheuerianum coccineum, scarlet, striped, . 5
luteum, yellow,
Common mixed; the green seed pods used for pickles; per oz. 15 cents,
peregrinum, (Canary Flower,) . . . . . . . ${ }^{1} 5$
Tropæoium Lobbianum is a pretty, but somewhat delicate class, very free bloomers, and desirable for house culture in pots or baskets.
Lobbianum, mixed varieties, . . . . .. . . . . 15
Caroline Smith, scarlet, . . . . . . . . . . 20
Giant of Battles, sulphur, spotted with red, . 20
King of the Blacks, dark brown, . . . . . 20
Lilli Smith, orange scarlet, . . . . . . . . 20
Napoleon III, golden yellow, spotted with brown.

[^1]

The Everlasting Flowers are a treasure in the winter, when it is desirable to decoratechurch or school-room or home. They retain both form and color for years, and make excellent bouquets, wreaths, and every other desirable winter ornaments. The flowers should generally be picked as soon as they expand, or a little before, and hung up in small bunches, and so that the stems will dry straight ; if too large they will mildew. The Gomphrenas must not be gathered until fully developed. The grasses give an airy grace to bouquets of these flowers, and make also fine winter ornaments when used alone. They should be gathered when about coming into flower, and dried in the shade. Our little engravings will show the character of most of the varieties. They make cheap and very acceptable holiday presents. Price List of Dry Flowers and Grasses, Straw and Willow Baskets, and Pampas Plumes, sent on application.

## ACROCLINIUM.



The Acroclinium is one of the most beautiful of the Everlasting flowers. It is of strong growth, about eighteen inches in height, and bears a great number of pink and white daisy like flowers, with a yellow center. Should be gathered the first day they open, or before fully open, to secure a bright center when dried.
Acroclinium roseum, bright rose color,
roseum album, pure white,
roseum fl. pl, flowers perfectly double, and somewhat larger than those of the single sorts, 25 Both colors mixed,


Ammobium is a small but pretty little white flower. The plant grows about eighteen inches in height, is stiff and angular in appearance. One of the hardiest of the Everlastings. Very useful for making up in bouquets, summer or winter.
Ammobium alatum grandiflorum is twice the size of the old variety, and of a purer white, .

## GYPSOPHILA.



Gypsophilas, though not Everlastings, are valuable for bouquet-making, either green or dried. All flower . the first season, but G. paniculata continues to bloom several years. Dry well.
Gypsophila elegans, hardy annual : white; 6 in., muralis, hardy annual; rose-colored flowers; paniculata, perennial; white,.

GOMPHRENA.


The seed of Gomphrena does not germinate very well in the open ground, and it is best therefore to sow it in a hot-bed, if possible. Set the plants about a foot apart. About eighteen inches in height. If the cottony coating which surrounds it is removed, the seed will be more certain to. grow.
Gomphrena globosa alba, pure white,
globosa rubra, dark purplish crimson, . . . . 5
globosa rubra, dark purplish crimson, . . . . 5
globosa striata, pink and white striped, . . . 5
globosa carnea, flesh-colored, . . ...... 5
aurea superba, orange; large and fine, . . . 5
Above mixed, . . . . . . . . . . . . . . . . .

## HELICHRYSUM.

Helichrysum flowers are large and full, and of a good variety of colors. Plants generally about two feet in height. Cut just before the flowers fully expand. Plant about a foot apart. Seeds germinate readily, even in the open ground. The colors are white, yellow and red of very many brownish shades. One of the best Everlastings.


Helichrysum monstrosum, large, showy flow-
ers; variety of colors; double,.
monstrosum, Double Rose, fine color, . . . 5
monstrosum, Double Red, very bright, . . . 5
monstrosum, Double White, pure, . . . . 5
monstrosum, Double Yellow, . . . . . . . 5
bracteatum, bright yellow; 18 inches, . . .
minimum, dwarf; both flowers and buds excel-
lent for wreaths, etc.; various colors, . . . . .
nanum atrosanguineum, crimson; i foot, . . 5

## HELIPTERUM.



The Helipterum grows about a foot in height, branching, bears very many clusters of flowers. Should be taken when the buds are about opening, tied in bunches and hung up in a shady place, and the flowers will open in the drying process, and retain their color and brightness for very many years.
Helipterum Sanfordi, one of the choicest Everlastings, a foot high ; flowers small, rich yellow, corymbiflorum, clusters of white flowers, . IO

## RHODANTHE.



Some care is necessary in starting seeds of the Rhodanthe, but after good plants are grown we never fail to obtain abundance of flowers. The flowers should be gathered before they fully expand, as if allowed to grow too long, they open too much and lose their beautiful bell form. One of the prettiest Everlastings Rhodanthe Manglesii, fine for house culture, delicate for out-door; often, however, makes a most beautiful display in the garden, .
maculata, more hardy and robust than R. Manglesii; rosy purple,
maculata alba, pure white, yellow disc, . . . io
atrosanguinea, flowers dark purple and violet, 25

## STATICE.

Statices bear their small flowers in panicles. They are not Everlastings, but, like the Gypsophilas, are of great value for drying, as they retain their color when dried, and work up with the true Everlastings to very great advantage. They are also useful in summer for bouquets of fresh flowers.

Statice Bonduelli, annual; golden yellow flowers; ifoot in height,

5
Besseriana rosea, perennial; small, rose-colored flowers; very pretty,
coccinea, perennial ; fine, . . . . . . . . . . .
incana hybrida nana, perennial ; mixed colors, latifolia, perennial; one of the best,
sinuata, beautiful annual; blue flowers; i foot,
Thouinii, dwarf annual; flowers in spikes,
5

## WAITZIA.



The Waitzias are an interesting class of annuals, bearing their dry or everlasting flowers in clusters. The flowers are very good, though showing too much of the center, which becomes discolored unless picked early. With this precaution they make a desirable addition to our stock of Everlastings. All the varieties have yellow flowers. The seeds are very fine and should be sown under glass, or much success is not to be anticipated, though they come up well in a light soil.
Waitzia aurea, fine yellow,
25
grandifiora, flowers large, golden yellow,
25

## XERANTHEMUM.



Xeranthemuns are free-blooming annuals of a very neat, compact habit, and growing less than a foot in height. The leaves are silvery and flowers abundant on strong stems, and are purple, rose, and white. Seeds germinate freely ; plants transplant well when young, and should be set about ten inches apart.

Xeranthemum, Large Purple-flowered, the largest-flowered, very double and fine,
plenissimum roseum, fine rose-colored, very double; new,
superbissimum flore-pleno, purple; very fine pompon-flowered; new,
superbissimum flore albo pleno, white, pom-pon-flowered; a fine new variety,
Double White, very fine,
Mixed colors, 10

## \&ORNAMENTAL GRASSES. \%

Agrostis nebulosa, the most elegant of Ornamental Grasses; fine and feathery; delicate,
Arundo Donax variegatis aureus, perennial; strong stem, with golden-yellow striped leaves; 6 feet high,
Avena sterilis, (Animated Oat, thirty inches high,
Briza maxima, an elegant Skaking Grass, one of the best of the Ornamental Grasses, perfectly hardy; sow in the open ground any time in the spring; ifoot,
Briza geniculata, small, flowers freely, and is always desirable ; 8 inches,
Brizopyrum siculum, dwarf, with shining green leaves; very pretty; 8 inches,
Bromus brizæformis, a very fine Grass with elegant hanging ears, well adapted for bouquets, either in summer or winter; flowers second summer; something Briza maxima; r foot, .

Chrysurus cynosuroides, (Lamarckia aurea), dwarf; yellowish, feathery spikes,
Coix Lachryma, (Job's Tears, grows about 2 feet, broad, Corn-like leaves,
Erianthus Ravennæ, as fine as Pampas Grass, which it resembles, and very much superior for a Northern climate, being quite hardy. Plants, 25 cents each ; seeds,
Gynerium argenteum, (Pampas Grass ', a noble Grass, flowers second season, not hardy here,
Hordeum jubatum, (Squirrel Tail Grass, fine
Lagurus ovatus, dwarf; showy heads; called
Hair's Tail Grass ; ifoot ; sow early,
Pennisetum longistylum, a very graceful Grass, growing 18 inches,
Stipa pennata, (Feather Grass), magnificent Grass, flowering the second season, .
Trycholæna rosea, a very beautiful rose-tinted, Grass; 2 feet,


In this section will be found those Biennials and Perennials that do not flower until the second season, and, as will be seen, contains some of our oldest and best flowers. The first summer the plants merely grow and gather a store of strength for next summer's flowering, and a stock of material for next seasun's flowers. The seed may be sown in early spring with the Annuals, or later in the summer; but if sown late, give the seed-bed a cool, damp place, or keep the ground shaded and quite moist by artificial shading and watering, until the plants appear, or very likely the seeds will not germinate. This class of flowers do not usually keep in bloom a long time, and therefore are not suited for the lawn, where a continuous show of flowers or pretty foliage is absolutely necessary. To many, however, the border of Perennials is the most interesting part of the garden.

## ADLUMIA.



Adlumia cirrhosa, or Alleghany Vine, is a pretty biennial climber, with pale green foliage. Sow seed in the spring, in a damp, cool place. Transplant in the autumn, if possible. The flowers are pink and white.


Adlumia cirrhosa, or Alleghany Vine, and sometimes called Wood Fringe,


## ALYSSUM.



A free-growing perennial, of compact habit, and small, golden-yellow flowers: Plant about ten inches high. Well adapted for rock-work, and forms an excellent mass for a bed. Seeds grow readily. Plants increased by layering. The popular name is Gold Dust. Alyssum saxatile compactum,

## AQUILEGIA.



The Aquilegia is the old and well prized Columbine, of almost every conceivable color, and singular variations of form. Like a good many of our perennials, this flowers early in the spring. Seeds may be sown in the open ground. Plants can be increased by a division of the roots. It grows wild in most every temperate country in the world, and called by children the Wild Honeysuckle. Aquilegia, Carnation, or Striped, white, with broad red stripes; double,

Aquilegia leptoceras chrysantha, the beautiful large-flowered, Canary yellow variety, obtained first from Arizona. An excellent sort, . . . . Skinneri, very beautiful ; colors scarlet and yellow, 10 cœrulea, flowers very large; sky blue and white, io glandulosa vera, very fine, large, dark purple ; 25 Mixed varieties,

## ASPERULA.



Commonly known as Woodruff, found in open, dry woods in many parts of Great Britain, and is much prized and cultivated almost everywhere. Less than a foot high, the flowers white and fragrant, and when cut and dried it emits a flavor like bitter almonds or Heliotrope.
-Asperula odorata,

## CRUCIANELLA.

A pretty plant, with clusters of small pink flowers, and desirable for rock-work, vases, etc.
Crucianella stylosa, ifoot in height,


The most magnificent of all the Dianthus family. Flowers large, beautiful, and delightfullv fragrant ; a rival of the Rose. Seed may be sown under glass in the spring, or in the open ground, and the second summer they will flower. Some will prove single, others semidouble, and these can be pulled up as soon as they show flower. Young plants are perfectly hardy ; but when old, they are injured in the winter. A suceession of young plants should be procured, either from seeds or from layers, every year.
Carnation, German seed from named flowers, . . 25 Extra Italian seed, saved from prize flowers only, 50 Choicest, with white ground, Choicest, with yellow ground,50 50

CAMPANULA.


The perennal Campanula is the well known, popular, large, bell-shaped flower, known everywhere as Canterbury Bell. There are double varieties of every color. but, though curious, are not really so beautiful as the old single bell. They lose that light, transparent grace that is so attractive in a flower. We never yet saw a bell-shaped flower improved by doubling.
Campanula Carpatica, blue and white mixed,
Medium, Canterbury Bell,) flowers large, plant 2 feet in height ; single varieties mixed, . Double varieties mixed,
calycanthema, a new and beautiful variety, shown in the engraving,
grandiflora, large, deep blue,
pyramidalis, fine large flower, white and blue,
CEDRONELLA.


A fine plant, with fragrant leaves, and long spikes of purplish flowers; a long time in bloom; 2 feet in height. Cedronella cana, purple, fragrant,


The Digitalis is quite a stately plant, when well grown, with flower stems at least three feet in height. The racemes of flowers, as shown in the engraving, are often
two feet in length, containing scores of the prettily spotted, thimble-shaped flowers. Perfectly hardy, and seed may be sown in the spring in the garden, and transplanted as desired. In the autumn large plants can be divided, and thus plants may be increased indefinitely, but it is well to secure a few fresh plants from seed occasionally, as in this way new varieties are obtained.
Digitalis purpurea, purple flowers; 3 feet, . . . purpurea alba, white,
Nevadensis, red. purple spots; 3 feet,
gloxinæflora, new ; beautifully spotted; 4 feet,
Mixed varieties,

## DELPHINIUM.



The perennial Delphiniums, commonly known as Larkspurs, are valuable plants, the foliage clean and pretty, habit strong and good, the flowering branches often four feet in height, the spikes of flowers six inches or more in length. Sow seed in the spring, and strong plants will be produced by autumn that flower the next spring.
Delphinium formosum, brilliant blue; white eye, 1 о formosum cœlestinum, celestial blue; flowers large, spikes long, nudicaule, a beautiful bright scarlet variety; native of Californian mountains; new,
Chinense, fine; blue, white and pink, mixed, . New varieties mixed,

## DICTAMNUS.



Dictamnus Fraxinella is a desirable hardy perennial, with racemes of large, showy flowers, often a foot in length. There are two varieties, pink and white. The plant attains a hight of two or three feet, the leaves beautiful in color and form. It is desirable in the border for a summer hedge or screen, and for decorative purposes, where large flowers are admissible. Seeds germinate freely if sown either in the autumn or spring. Plants can be safely transplanted or shipped at either season. Dictamnus Fraxinella, mixed varieties. .

## HEDYSARUM.

Pretty much :ill the species of Hedysarum are handsome flowering plants, producing racemes of attractive pea-formed flowers. It bears some resemblance to the Scarlet Clover, but is a much bolder and handsomer flower, and a desirable peremial. Perfectly hardy, and seed may be sown in the open ground.
Hedysarum coronarum, fine scarlet,
rucoaoumr flore albo, white,

## HOLLYHOCK.

A good, double, clear white Hollyhock is a very good substitute for a Camellia or a white Rose, as a center of a bouquet. We do not now think of one as good, except the double white Balsam. In situations suitable for tall flowers, we know of nothing better than 2 the Hollyhock ; and yet the improved varieties do not grow very high, from four to five feet being about the average. The Hollyhock is biennial. New plants are obtained from seed and by dividing the roots. Seeds sown in the summer will give plants that will en-
 dure winter. The Hollyhock will last a great while, for several years, if not allowed to flower too freely. Plants are, however, so easily grown from seed that little trouble is usually taken to preserve old plants. The plants may be protected during winter with a little straw or evergreen boughs, or leaves.
Hollyhock, Double, very double and fine, from
the best named collection in Europe, . . . . .
HONESTY.


Lunaria biennis is what is known as Honesty in all our gardens, and by all florists. Honesty, the cultivated variety, bears racemes of pretty, single, purple flowers. The silvery seed pouches are curious and pretty, and very desirable for house ornaments. Indeed, the plants are principally cultivated for these winter ornaments, and the form of them we have endeavored to show in the engraving. The plant is very hardy; two feet high.
Honesty, Purple,

## IPOMOPSIS.



The Ipomops is are very beautiful plants, with long, elegant spikes of rich orange and scarlet flowers, excellent for conservatory and out-door decoration. The foliage is very fine, giving great beauty to the plant, which grows usually from three to four feet in height, and keeps in
flower a long time. The plant is a little difficult to keep -over winter, but generally proves quite hardy in a dry place. A wet situation is sure to destroy them in winter, causing decay at the surface of the ground. With this - exception, there are few plants easier of culture.

Ipomopsis, mixed varieties,

## LINUM.

Every one is acquainted with our common Flax, which is a Linum. There are several varieties of ornamental Flax well worthy of culture, however, which few people know. The plants are very graceful, the foliage and stems delicate, and the flowers seem floating in the air. Seeds may be sown either under glass or in the garden.


Linum perenne, blue
perenne album, white,
perenne roseum, beautiful rose-colored,
puteum 5
luteum, yellow,
Narbonese, splendid, . . . . . . . . . . . . Io
Mixed varieties, . . . . . . . . . . . . . . . . 5

## PINK.



Very closely related to the Picotee and Carnation, but -smaller flowers and more hardy. Flowers very beautiful and fragrant. Seed may be sown under glass or in the garden. Nothing prettier for a button-hole flower. Plants are hardy until they become old. It is best to keep a few young plants coming on. Treatment same as Carnation.
Pink, best double, mixed colors, 25

## PENTSTEMON.



The Pentstemon is one of the best of the perennial border plants. The very pretty long-tubed flowers grow in panicles, and are purple, blue, scarlet, rose and white. . Seeds may be sown in May, in a cool, shady place, or
under glass. Flowers of different varieties present a great difference in appearance, some being very open and others tubular.
Pentstemon, mixed varieties,
10
PICOTEE.


Very much like the Carnation, as fine and more delicate in its coloring. Seed sown in the open ground in May or June, will flower well the next season; started under glass earlier, by fall will make strong plants. Treatment like the Carnation. Some of the plants grown from seed will prove single, and these can be pulled up and thrown away as soon as they show their flowers; but enough plants with good flowers will be usually produced to give a very good collection from a paper or two of seed. Sow seed in spring or early summer, so as to have good strong plants by autumn. Throw a few boughs or straw on the plants to shelter them a little from winter storms.
Picotee, German seed, from named flowers only, . 25
Italian seed, saved from prize flowers only, . . 50
PEAS, PERENNIAL.


Perennial Peas are perfectly hardy in this climate, die down to the ground every winter and start again in the spring. Grow ten or more feet in height.
Perennial Peas, all varieties mixed,


We have found the Pyrethrum to be entirely hardy in this section. It would be well to sow seed under glass, but we have grown it by sowing seed in the open ground. A good double Pyrethrum is as desirable as a good Aster, quite as large and as double.
Pyrethrum hybridum, double varieties mixed, Parthenium flore-pleno, the double Feverfew, parthenifolium aureum, Golden Feather, prized for its yellow foliage,

## ROCKET.



The Sweet Rocket is a very hardy biennial, bearing clusters of single flowers, and fragrant during the evening. The best colors are purple and white. The plant, with fair culture, will grow eighteen inches in height, and seed will germinate readily in the open ground.
Rocket, Sweet Purple,
Sweet White,
 William are of exceedingly beautiful colors, very large, and almost perfect in form, with trusses of great size. Treatment as for Carnation. The plants are perfectly hardy, and may be increased by a division of the roots. There are very good double varieties. It is well to raise new plants every few years from seed, for old plants become debilitated and unsightly. The Sweet William is a very old and once popular flower, and its merits will be again appreciated when people get tired of bedding plants.
Sweet William, Perfection,
Common Double,
5
Dunetti, blood red; velvety texture,
STOCK.


Brompton Stock cannot endure our winters, but plants grown in open ground can be removed to the house in autumn, where they will flower well if not kept too hot and dry. In spring they can be transferred to the garden. Stock, Brompton, best mixed colors.

Emperor, hybrid between Brompton and Annual, 25
Tree Giant Cape Winter,
25

## VALERIANA.



The Valerian is a beautiful border plant. The improved varieties bear large corymbs of small flowers, scarlet, white, and red. Plant from two to three feet in height. The Valerian will bear shade and moisture. We found it wild throughout Europe.
Valeriana, scarlet, white, red, or mixed, each, . . 5

## WALLFLOWER.



By growing Wallflower plants in the ground and transplanting to pots in the autumn, or better, by placing plants in pots when taken from the seed-bed, and sinking the pots to the rim in earth, good plants will be secured for winter flowering in the house. Give a cool room and plenty of water. By placing the pots in a pit or cold cellar, with a little light, plants will live during the winter. Where winters are not very severe the Wallflower must make a most desirable plant, giving plenty of early spring flowers. Wallfower, fine mixed colors; double, .

Most persons procure house plants from the greenhouses, and when but one or two of a kind are needed this is a good plan. Some, however, have greenhouses and desire many plants, and others take pride and pleasure in growing from seed-in watching every day's mysterious growth, om the tiny seed-leaf to the fully developed prant, in all its grand display of beauty. To all such we shall be happy to furnish seeds. The seeds of Greenhouse plants are very small and delicate, generally, and require the greatest care to ensure success; and not only care but knowledge, for many are natives of milder climates, and our treatment is, of course, artificial, as we have to endeavor to give them the conditions under which they flourish in their native homes. These conditions are usually warmth and moisture-a humid, warm air as well as soil. The best advice we can give in regard to sowing the fine and delicate seeds is this: Sow the seeds in boxes or large pots. Obtain a mellow soil, such as could be made by rotting turf, and to this add about one-fourth sand, which will make a soil that will not bake. See that it is free from worms and insects of all kinds. Sow the seeds directly on the surface, and then dust on top a little fine earth through a sieve. The work so far is well done. How, now, shall be secured the moisture, and warmth, and air necessary? If you pour on water, even from a fine rose, it is very likely your seeds will be washed down into the light earth and be ruined; so, then, just put on water in spray. As the seeds are so near the surface it will not answer to let the sun shine upon them directly, or it would dry them up in five minutes, so the boxes in which the seeds are sown must be shaded. Now we have only to look at the atmosphere. If the air of the house is dry and dusty, the seeds will have a hard time, and perhaps will be ruined, and when this is the case, cover the boxes or pots with glass, and that will secure a damp atmosphere, caused by the moisture arising from the earth. When the plants are up they must have a little air, and sometimes sunshine, or they will become mouldy and decay near the surface of the ground. So, watch, and if you see signs of droop-
 ing, give air immediately. As the seeds are mostly delicate, it is best to make several snwings at different times. We give engravings of most of the kinds in this Department ; others will be found in the Department of Tender Plants.


CYCLAMEN PERSICUM.

linaria crmbalaria.


CLIANTHUS DAMPIERI.


Calceolaria.


APPLE-SCENTED GERANIUM.


TROPEOLUM PENTAPHYLLUM.

Abutilon, finest varieties mixed,
Begonia, Tuberous,
Boston Smilax,(Myrsiphyllum asparagoides), the most popular plant now known for decorative purposes; fine climber, furnishing yards of glossy green trimming,
Calceolaria hybrida tigrina, spotted; seeds saved from the best collection in Europe,
hybrida grandiflora, very large, superb flowers, James' International Prize, saved from the choicest varieties only,
Carnation, Remontant, or Tree Carnation, choicest Italian seed,
Centaurea gymnocarpa, desirable for its delicately cut and graceful white foliage,
candidissima, an effective white-leaved bedding plant,
Clementei, crested,
Chrysanthemum Indicum, finest double, . . . Pompon, or Dwarf, splendid,
Cineraria hybrida, of first quality; finest largeflowering prize varieties mixed,
hybrida, New Dwarf, of compact growth, . . maritima, white-foliaged plant, similar to the Centaureas,
Clianthus Dampieri, splendid shrubby climber, with clusters of brilliant scarlet flowers,
Coleus, mixed seeds from choicest sorts,
Cuphea platycentra, Cigar, or Fire Cracker Plant,
Cyclamen Persicum,
Fuchsia, choice mixed, .
Geranium, common mixed,

## SEEDS OF HARDY CLIMBERS.

These plants are mostly obtained by purchasing roots, and this is the better way when they can be procured. Some, however, cannot get plants and must be content with seeds. Sow very early in spring or autumn in drills, in well prepared beds. Keep soil mellow.
Ampelopsis quinquefolia, Virginia Creeper, Ampelopsis Veitchii, good wall plant, clinging to the smoothest surfaces,
Bignonia radicans, Trumpet-Vine,
Celastrus scandens, Climbing Pitter-Sweet,
Clematis flammula, European Sweet, white, .
Clematis Vitalba, Virgin's Bower, white,

## Geranium. Apole-scented. <br> 丞 

Gloxinia hybrida, best quality, choice flowers, from Benary's choice collection,
hybrida erecta, fine variety ; upright flowers, .
Heliotrope, best mixed,
Hibiscus immutabilis, rosy flowers; 3 feet, . . 15
coccineus, scarlet; 3 feet,
Humea elegans, a beautiful ornamental biennial, 4 feet high, with graceful dark flowers,

10
Lantana, finest mixed, . . . . . . . . . . . . . 15
Linaria Cymbalaria, (Kenilworth Ivy), . . ${ }^{25}$
Nerium Oleander, common Oleander, . . . . . Io
Oxalis floribunda, a free-flowering Oxalis, and one of the very best of basket or pot plants; white and pink, mixed,
Passifiora cœerulea, the most hardy of the Passion Flowers,

15
Primula Sinensis (Chinese Primrose) fimbriata rubra, red; extra, .
fimbriata alba, white; extra, ..... 50
fimbriata striata, white, striped with red, ..... 50
Fern-leaved, very pretty Fern-like foliage, ..... 50
Choicest varieties mixed,50
lore-pleno, a large percentage of
fectly double, and good colors,50
flore-albo pleno, double white; package of 20seeds,50
Solanum ciliatum, very fine; red-fruited, fruithanging on the plant a long time,1о
Tropæolum pentaphyllum, ..... 25


For the convenience of customers, and to prevent mistakes by those who have not had much experience in gardening, we have arranged our lists and descriptions of seeds and plants in separate departments, according to their nature. This Department is devoted entirely to Bulbs and Plants, and has two divisions. The plants described in the first part are those that will bear a Northern winter without injury, like the Lilies, Pæonies, Hardy Shrubs, etc., and in the other, those that, at the North, must be taken up in the autumn, like the Gladiiolus, Dahlia, Geranium, etc. Many things that at the North are tender are quite hardy at the South.
The system of packing adopted is now so complete, that although we send out many packages annually to every State in the Union, it is rare to receive a complaint, while we receive hundreds of letters attesting satisfaction at the light, simple and safe method we practice, and the fine condition in which plants arrive. There is, however, always a little risk in sending plants by mail.

All Plants are sent by Express, at the expense of the purchaser, unless specially ordered otherwise, or where in our judgment the Expressage would be too costly, and we earnestly advise our customers to have their plants always sent by Express, except, perhaps, in the far West, or where the Express charges are very high, as our system of light packing makes the charges comparatively low, and they almost invariably arrive in perfect order when thus sent.

We will send plants. by mail as heretofore, but more of them for the same amount can be sent by Express than by mail; for in all orders sent by Express, extra plants are always included that are of more value than the cost of expressage.

As it is much more difficult to pack a single plant, so that it will carry safely, than a larger number, we trust our customers will order accordingly. For economy and safety in packing it is best to order at least a dollar's worth of plants.

Bulbs, of course, we shall send by mail, as usual. When Seeds and Bulbs or Tender Plants are ordered together, ifi not safe to send all, on account of cold weather, the Seeds will be sent at once, and the Bulbs and Plants as soon as safe.

## MARDY PLANTS AND BULBS.

Should the weather be unfavorable, or the ground not prepared on their arrival, Hardy Plants, Roots, \&c., had better be placed in the cellar, the Lily and Pæony being covered with about two inches of moist (not wet) soil, while shrubs and grasses, like the Hydrangea, Deutzia, Eulalia, \&c., require only their roots covered, with the soil made firm around them.


Hardy shrubs, blooming in the early fall, when scarcely any other tree or shrub is in flower.

## Single White,

## Double White,

Double Red,

## AMPELOPSIS.



There are few plants of more value to the gardener than the Hardy or Perennial Climbers. Once planted they remain, and get larger and better every season. The Virginia Creeper, a native of our woods and waste places, is known and prized almost all over the world. These hardy climbers are invaluable for covering arbors, old stumps, trees, etc., and should be used freely. The general cultivation of the simple Virginia Creeper has done more to beautify American villages and rural homes than any fifty plants in existence. It is the American Ivy, and well performs the work done by the old English Ivy in Europe.

## Ampelopsis quinquefolia, or Virginia Creeper,

 called American Ivy and Woodbine; a very rapid grower, leaves turning to crimson in autumn. This is a native plant, and the hardiest, most rapid growing climber we have,Veitchii, (see colored pages,).

## AKEBIA.

Akebia quinata, a singular Japanese Climber, with small, pretty foliage, and small chocolate-brown flowers, sometimes almost purple. It is a neat, plant, and grows rapidly, often making a growth of twenty feet in one season, giving good satisfaction.
Akebia quinata,

## ACHILLEA.

SEE COLORED PAGES.
Achillea Ptarmica fl. pl., dozen, $\$ 2.00$; each, . 20


A rapid growing, hardy climber, attaining a height of thirty or more feet, with large leaves ten inches across, and curious, pipe-shaped yellowish brown flowers.
Aristolochia Sipho, or Dutchman's Pipe, . . 50

## ANEMONE.



Anemone Japonica alba, one of the besi hardy, white - blooming, autumnflowering, plants we have. It is plain-looking during summer, with dark green foliage; but in the latter part of summer flowerstems appear, growing eighteen inches high, with white flowers. It bears from a score to a hundred flowers, continuing to improve until destroyed by frost. The flowers are about two inches in diameter. Excellent for cemeteries.
Anemone Japonica alba,
rubra, deep rose color,
Coronaria is of low growth, and flowers in early summer. The roots are somewhat like the ginger root in appearance, and will keep a long time. Plant early in spring in the garden. Dry roots, double or single, per doz.,

25

## ASTILBE JAPONICA.



The Astilbe or Spiræa Japonica is a very pretty dwarfish plant, with handsome, glossy foliage, and delicate, feathery trusses of very small flowers that are really elegant, and exceedingly useful for all ornamental work. It is of easy culture, very hardy, and should be in every garden, and it is the most satisfactory plant we have for cemetery purposes, as it requires no special care after being planted. It is also an excellent house plant, and one of the best to force ${ }^{\circ}$ for winter flowers.
Astilbe Japonica, (Spiræa Japonica, white. .

## AQUILEGIA.



The Aquilegias, probably better known as Columbines, have always been favorite flowers, and in good demand. They grow freely from seed, but a good many would rather pay a little more and have flowers the first season. Aquilegia leptoceras chrysantha is one of the most showy of the family, the plant becomes larger and stronger, and flowers more beautiful each year.
Aquilegia leptoceras chrysantha, from Arizona, flowers large, canary yellow. A most charming acquisition. In bloom from early summer until winter,

## BIGNONIA.

A splendid hardy climbing plant, producing large trumpetshaped, orange-scarlet flowers about three inches long. They are produced in clusters, and are quite as handsome in the bud as when fully expanded. The foliage is also very beau-
 tiful, having a bright, glossy appearance that always attracts attention. This plant is not only an admirable climber, but, on the lawn, makes a pretty bush if the tops are cut back, having the appearance of a strong, drooping shrub.
Bignonia radicans, or Trumpet Creeper, . . 25
CALYCANTHUS.


The Calycanthus, or Alspice Bush, as it is often called, is a most desirable hardy shrub. The leaves are slightly fragrant, the bark and flowers exceedingly spicy. The plant makes a bush several feet in height, is hardwooded, the leaves large, and the flowers abundant, and of a brownish or cinnamon color.
Calycanthus floridus, (Sweet-scented Shrub), . 25

## CELASTRUS.

A very beautiful native plant, well worthy of cultivation; leaves pea-green; flowers small, followed by clusters of orange capsuled berries.
Celastrus scandens, or Climbing Bitter-Sweet, 25


Clematis jackmani.
No flower has more rapidly advanced in popular favor than the Clematis. Within a few years it has become the favorite climber of the world. It makes a quick, rapid growth, and produces its beautitul showy flowers in the greatest profusion. For pillars, trellises, bedding in masses, or planting about rock-work, the Clematis cannot be excelled. The large-flowering varieties are particularly desirable for these purposes. In the fall give the plants a good top dressing of well-rotted manure. The following spring spade it in carefully, mixing it well with the soil, and it will prove very beneficial to the plants.

## LARGE-FLOWERING YARIETIES.

Clematis Jackmani, an English hybrid; large, intense violet-purple flowers, from 4 to 6 in . in diameter. The most showy of the hardy climbers, old plants being literally covered with flowers, I oo Lanuginosa candida, flowers large, almost pure white, 5 to 6 inches in diameter, . . . . r oo Henryi, flowers large and finely formed; color beautiful creansy white,

## SMALL-FLOWERING VARIETIES.

Although the flowers of the varieties named below are not large, they are produced in such great profusion as to make them very showy and desirable.
Clematis crispa, a handsome variety, with bellshaped, lavender flowers, growing from eight to ten feet high; the flowers are borne on long, single stems, and are delightfully fragrant,
coccinea, scarlet; the flowers of this variety differ in form very much from the others in our list, and look more like a bud than a blossom; when planted near, or in connection with other varieties, the contrast is very striking,
graveolens, a very strong, quick grower, with yeliowish flowers, two inches in diameter, followed by seeds that are covered with tufts of beantiful silk-like threads,
Flammula, European Sweet, flowers white, small, and very sweet scented, . .
Virginiana, common Virgin's Bower, a native of rapid growth, with clusters of small, white flowers, succeeded in autumn by fruit with conspicuous feathery tails,
Vitalba, a very strong, rapid grower, often called Traveler's Joy. Flowers greenish white, and Almond scented,

25

## DAPHNE.



The Funkia, called the Day Lily, is a very superb autumn flower, very desirable for planting on the side of a lawn or at the edge of shrubbery. It will increase in size and beauty every year. The plant has very showy foliage, prettily veined. Flowers are of various shades, from pure white to dark blue.
Day Lily, White, (Funkia alba,) Japonica, light blue, with narrow foliage, Japonica, light blue, with narrow foliage, . .
cœrulea, dark blue, with broad, glossy foliage, 20 undulata media picta, lavender, foliage light green, beautifully variegated with white. A splendid plant for cemetery purposes,

## DEUTZIA.



We can highly recommend the Deutzias for hardiness, good habit, the great profusion in which they produce their flowers, and in every respect as being among the most desirable hardy shrubs in cultivation. The flowers are in racemes from four to six inches in length. The first time we saw this plant in flower we thought it the prettiest shrub in existence ; each, 25 cents.
Deutzia gracilis, flowers white, single, and so profuse as to cover the branches.
crenata flore-pleno, flowers double, white, with back of petals pink.
Double White, pure white, making it one of our best spring flowering shrubs.
We can send large plants of the above by express at 50 cents each, purchaser to pay charges.

## DICTAMNUS.

The Dictamnus Fraxinella is a choice hardy perennial, forming a bush about two feet in height, of a very neat habit, both in foliage and flower. The flowers produced in racemes often a foot or more in length, a little odd in appearance, but very handsome and quite fragrant. Dictamnus Fraxinella, white; $\$ 3$ per doz.; each, 30

## DAISY.

Every garden, however small, should have a few plants of the Daisy. They are among the first flowers of spring, blooming almost as soon as the snow is gone. Plant in a cool, shady place, if possible. In severe winters they need a slight protection of straw or leaves. The new varieties are very desirable.

Double Daisy, white; per dozen $\$ 2.00$; each, 20 Red, per dozen $\$ 2.00$; each,
Longfellow, new ; flowers light pink, reverse of petals crimson; per dozen, $\$ 2.00$; each,
Crimson Button, new ; rich dark crimson; per

dozen, $\$ 2.50$; each,
25

## DICENTRA.



Dicentra spectabilis, sometimes called Bleeding Heart, bears heart-shaped, deep pink flowers, a dozen or more being borne on a graceful, drooping raceme, a foot or more in length. Excellent for the garden, and perfectly hardy everywhere, and for the house there are very few plants that will give more pleasure for so little trouble and expense.
Dicentra spectabilis,
25

## DELPHINIUM, (Larkspur.)

See engraving page 38 .
The Perennial Delphiniums, like their relatives, the Annuals, commonly called Larkspurs, are valuable plants, and in no other way can we get such a grand and constant display of blue flowers. Formosum is a most brilliant dark blue, by all odds the finest blue flower known among our hardy plants. The Chinese are generally of lighter shades, from lavender to intense deep blue.
Delphinium formosum, dark blue flowers, large and brilliant,
New Chinese, perfectly hardy, . . . . . 25

## ERIANTHUS.



Erianthus Ravennæ, for general culture, is the best tall Ornamental Grass we are acquainted with. It is almost as beautiful as Pampas Grass, while its entire hardiness everywhere must make it popular as its merits become known. It is propagated both by seeds and division of the roots. The flower stems are often ten feet in height, and the feathery head about a foot. The roots are robust, and we have never lost one by shipping. The Erianthus makes a good clump for the side or back of the lawn, or among shrubbery:
Erianthus Ravennæ, mailing plants, $\$ 2.00$ per
dozen; each

## EULALIA.

SEe colored pages.

## Eulalia Japonica zebrina,

 Japonica variegata,
## FORGET-ME-NOT.

See engraving page 21 .
The Myosotis has always been a favorite, especially the little Forget-Me-Not, M. palustris, though nearly all the vareties are called by this name. The plants like a moist, cool situation, but succeed in any fair garden soil. Myosotis, (Forget-Me-Not,) blue,

## FRINGE.



The Purple Fringe is a very desirable shrub, much admired for its curious fringe or hair-like flowers that cover the whole surface of the plant. It grows from ten to twelve feet high, and is very showy. The flowers are produced late in spring, and in erect spikes that remain on the plant all summer. This shrub may be better known to many of our customers under such names as Smoke, or Mist, Tree.

The White Fringe has large, glossy leaves and produces its flowers in drooping racemes about the time the foliage starts. Plants each 25 cents.
Purple, (Rhus cotinus).
White, (Chionanthus Virginica).


Everybody knows the Hydrangea, an old pot plant, with a globular mass of flowers, and when well grown a very good thing. But all do not know that the finest addition made to our flowering-shrubs in twenty years is a hardy Hydrangea, called Hydrangea panicu-
lata grandiflora. It is as hardy as a Lilac bush, a medium sized, hard-wooded shrub, bearing on the tops of the branches immense clusters of white flowers. These clusters are sometimes almost a foot in height, and about the same in width, and generally remain in bloom a long time.
Hydrangea paniculata grandiflora. Plants,
according to size, each 25 cents to . . . . . . r 00

## HONEYSUCKLE.



The different varieties of the Honeysuckle are esteemed among the most desirable hardy climbers. Certain it is that the associations connected with the fragrant Honeysuckle will make it always popular. Among flowers none has been more written about than this, none more prized by people, prince or poet. Its common, or, rather, poetic, name is Woodbine; the botanical name is Lonicera, given in honor of a German botanist.
Honeysuckle, (Hall's Halleana,) an evergreen variety from Japan; flowers pure white, changing to yellow ; very fragrant,
Scarlet Trumpet, monthly, evergreen, or nearly
so; flowers scarlet outside and yellow inside, .
Japan Golden-veined, foliage small, beautifully netted with yellow, flowers white, sweet, .
Monthly Fragrant, or Dutch, flowers red and pale yellow,
Chinese Twining, flowers nearly white, . . . 25
HOLLYHOCK.


There are very few plants whose flowers so perfectly combine large size and delicacy as the Hollyhock. Its flowers are quite as double, and almost as pure and perfect as those of the Camellia, and when we remember that they mass around a column from three to five feet in
height, we get some idea of their beauty. Seeds sown in the spring produce plants that will bloom the second summer. Plants set out in the spring will flower about midsummer, and for several years if not allowed to bloom too freely the first year. We have excellent, healthy young plants, grown from seed, that if planted in the spring will flower the first summer, and usually for two or three summers after. The colors are nicely assorted, so that almost every color, from white to purple, may be expected. Hollyhock, Double, assorted colors; good plants,
will flower first season, per doz. \$2.50; each, 25

## HYACINTHUS CANDICANS.

This plant somewhat resembles the Yucca, although not so large. It throws up a flower-stem about four feet high, on which it bears from twenty to thirty pure white, bell-shaped flowers. They are very gracefully hung, forming almost a perfect pyramid. Young bulbs are best for planting, as they bloom well the first and generally the second season, after which they seem to loose much of their vigor. They are quite hardy, but it is well to give them a slight covering for winter.
Hyacinthus candicans, good young bulbs, each, 25

## JASMINUM.

A half-climbing shrub, with handsome foliage and pure white flowers that are very fragrant.
Jasminum officinale,

## IVY.

For a climbing plant in the garden to do duty as a screen for an old wall or building, or to adorn either when new, it is a well-known and favorite plant. For in-door winter decoration the Ivy is unequaled, as it can be trained in any desired form, and will bear any amount of hardship and bad usage. The Ivy is not quite hardy far north, but plants that have done service in the garden all summer can be taken up in the autumn and potted for the house. In the spring, the plants can be transferred to the garden, by just sinking the pots in the earth. In the autumn they are ready for service in the house again, and better than ever.
Ivy, English, the old popular variety. Plants, 25,50 and 75 cents each.
New Silver Striped, leaves heavily bordered with pure white; fine,
Rhombia, leaves small, bordered with white, . 25
Maculata, light green, mottled with white, . 25

## IBERIS.

Iberis gigantea alba, or New Hardy White Candytuft, is an excellent plant for cemetery decoration, bedding, or house culture. The flowers are about twice the size of the old species, and pure white.
Iberis gigantea alba, plants, each,
25


AURATUM.


LANCIFOLIUM.


LONGIFLORUM.

The Lily is a favorite flower everywhere, a Queen of Fiowers, and only the Rose can dispute its claim to queenly honors. The Lily abounds everywhere, in the humid vale and on the lofty mountain top, and, truly, no earthly monarch was ever arrayed as one of these simple, yet beautiful nlowers.

With few exceptions, Lilies succeed in our gardens admirably, and continue to increase in strength and beauty for many years. The collection of lilies is now so large and so good that no lover of flowers can afford to ignore this interesting and elegant family, and no garden can be considered complete without at least several of the best varieties. All Lilies require deep planting, and should not be disturbed for several jears. In almost every case flowers will be obtained the first summer after planting, but it will be quite as well for the health
of the plant if there is no bloom until the second season. In the North it is well, before winter, to cover the ground over and around the bulbs with three or four inches of leaves or straw, or coarse manure, as a winter protection.

## Each. Doz.

Lilium auratum, the magnificent Japan Lily, with large, handsome gold-banded flowers that are exquisitely fragrant ; a situation with partial shade and light, porous soil is best adapted for this variety,

So $25 \$ 20$
candidum, common white, ...... 25250
Canadense, our native Lily, . . . . . . 25250
croceum, flowers brilliant orange color,
with small black dots; very showy, . . 25250

Lilium excelsum, delicate cream or buff, Er , Doz. lancifolium rubrum, white and red,
Japonicum longiflorum, white, trumpetshaped; 5 inches long,
lancifolium album, white,
pardalinum, one of the most desirable of the Canadense class; flowers yellow and red, spotted,
Speciosum album, (Præcox,) white, Takesima, large, trumpet-shaped, white, tenuifolium, foliage slender and flowers brilliant scarlet. This is a little beauty, tigrinum, Tiger Lily,
tigrinum fl.-pl., Double Tiger Lily, . .
Thunbergianum grandiforum, large cluster of dark red flowers,

PERENNIAL PHLOX.


The flowers of the Perennial Phlox, when the plants get strong, are immense bunches of bloom, from the purest white to crimson. Plants will keep increasing in size, and may be divided at the roots every two or three years. When in flower they are two feet or more in height. Seed does not germinate very readily, unless sown as soon as fully ripe. The Perennial Phlox is perfectly hardy. Plants are shipped with perfect safety Perennial Phlox, 25 cents each; $\$ 2.50$ per dozen.
Adelina Patti, dwarf; rosy-white, with crimson eye.
Albertus, bright reddish-crimson, shaded.
Comtesse de Chambourd, white, with pale pink eye.
Jules Ferry, dark mauve-violet, large white eye.
La Gracieuse, white, with pink eye.
Lulli, violet-purple, dwarf.
Mad. La Donette, white.
Miss Robinson, pure white.
Modesty, purple, with carmine eye.
Paul de Segur, white, with pink eye
Prince Christian, bright crimson ; large flower.
Rose of Castile, rosy-red.
Souv. de la Motte, lilac, with large eye
Wm. Bull, lavender; large flower.

## PINK.

See engraving page 39 .
The Double Garden Pinks bloom early, are dwarf in habit, and make fine edgings for walks. Most of them are white, with colored margin, and very fragrant. Per dozen, $\$ 2.50$; each, 25 cents.

PERENNIAL PEA.


The Perennial $J$ ea is so hardy, so continuous a bloomer, so good both in flowers and foliage, and so vigorous a climber, that we advise every one to plant it. The plants grow to a height of ten feet or more, and produce their flowers in clusters, improving each year.
Perennial Pea, good roots,

This is one of the most beautiful of our hardy flower-
ing shrubs. It makes a splendid lawn plant, and is also very showy to plant in a front line of shrubbery. The flowers are produced before the foliage, and make a gorgeous display. To those who may be desirous of obtaining a plant for a hedge, we can recommend the Pyrus most highly. The plant is naturally of rather compact habit, and not only gives us a hedge with beautiful foliage, but one of flowers also.
Pyrus Japonica. Plants, each, zo cents; Seedlings, per hundred (purchaser to pay Exipress charges), \$10.00.


The Pæonies are perfectly hardy, and they will succeed in any ground, unless water lies on the surface or near the roots in winter. They may be planted in the autumn or spring, and are increased by division of the roots. These divisions should be made either in the autumn, or very early in the spring, and not until the plant becomes large. In the South the Pæony grows well, but the buds often blast unless grown in partial shade, and liberally supplied with water. Our engravings show a plant in flower, and also a root. Plants, 25 cents each, and $\$ 2.50$ a dozen. As we have a very large stock of about twenty of the very best kinds in cultivation, we will furnish one of each of a dozen of these varieties, of our own selection, for $\$ 2.00$, and in all cases prepay postage or Express charges.
Pæonia fragrans, one of the best pink varieties.

## Double White.

Active, rose ; flowers very large and compact.
anemoneflora striata, outside petals pale rose, center cream and rose.
Buyckii, outer petals rose, center salmon and rose.
Comte de Paris, fine, bright rose.
centripetala, outside petals pink, second row fringed, center full.
Duchesse d'Orleans, violet rose, salmon center.
elegantissima, outside petals blush, inside chariging salmon.
Faust, blush center, tinged with salmon.
Fulgida, crimson.
Grandifiora carnea plena, outer petals pale pink, center white.
Grandifiora nivea, rosy-purple, center salmon.
Latipetala, outside petals flesh, center yellowish.
Mad. Morren, rosy pink, center salmon and rose.
Nivalet, rose.
Perfection, rose, inside salmon, narked with purple.
Pomponia, large, purplish pink, with salmon center.
pulcherrima, rose and salmon.
Plenissima rosea superba, deep rose, tinged with salmon.
Reevesii, delicate rose, center petals fringed.
striata speciosa, pale rose, center nearly white.

Pæonia Triomphe du Nord, violet and rose. Victoria Modeste, violet-rose, center cream. Victoria tricolor, rose, center yellowish white. Virance, purplish-rose.


The Tree Pæony bears flowers in form like the common Pæony, but they are light pink or blush in color, and the plant, instead of dying down to the ground every winter as our common herbaceous Pæonies, is a small, hard-wooded shrub, bearing its branches above the ground.
Tree Pæony, good roots, each,
\$1 00

## PENTSTEMON.

See engraving page 39 .
The Pentstemon barbata is an excellent herbaceous border plant, usually growing from three to five feet in height, and continues in flower a long time. The flowers, which are long tubed, are borne on spikes, and hang. in little clusters. In color they are bright scarlet with yellowish throat.
Pentstemon barbata, each,


The plants of the Hybrid Perpetual class are entirely hardy. The flowers are of immense size, often five to six inches in diameter, and of the most beautiful colors, from pure white to the darkest shade of crimson. Through their blooming season, in June, they give us a show of brilliant colors unequaled by any other plants. In the spring, cut back all the shoots, or stems, and they will send up new ones, which will make a very strong growth and give abundance of bloom. The following are only a few of the Hybrid Perpetual Roses we cultivate, but form a good collection. Those who leave the selection to us shall have our best efforts to serve them well, with some new and valuable varieties.

HYBRID PERPETUAL ROSES. -25 cts. each ; $\$ 2.50$ per dozen, or $\$ 2.00$ per dozen our own selection.
Rose Achille Gonod, bright carmine, very large, full. Augusta Mie, delicate pink; free blooming.
Anne de Diesbach, carmine, beautiful shade.
Archiduchesse D'Autriche, soft satiny-pink; full and good size ; habit vigorous, very free bloomer.
Ambrogio Maggi, bright rose; globular-shaped. Antoine Mouton, deep rose, tinged with lilac.
Antoine Ducher, violet-red; large, well shaped flowers.
Alexandrine Bachmetieff, cherry-red; flowers rosette shaped, medium size.
Belle Normande, light rose, large and fine.
Baron de Bonstetten, beautiful dark velvety-crimson; large and fine.
Baron Chaurand, bright maroon, strong grower. Baronne Prevost, deep rose; very large and full. Col. de Rougemont, purplish rose, large and fine. Comtesse de Serenye, silvery-pink, often mottled. Countess of Oxford, carmine red, tinged with lilac. Coquette des Blanches, white, with pink tinge. Caroline de Sansal, delicate blush.
Coquette des Alpes, white, occasionally tinged with pink, flowers in clusters.
Comte de Flanders, rich, deep velvety-purple, shaded with carmine; large, full, and well formed. Duplessis Mornay, brilliant fiery crimson.
Dr. Marx, rosy carmine, full, extra.
Dr. de Chalus, velvety scarlet, shaded rose at edge.
Dr. Sewell, crimson scarlet, beautifully shaded with purple, full and finely cupped.
Dupuy Jamain, bright cherry red, large and full. Ferdinand de Lesseps, purple, shaded violet. Gen. Washington, crimson scarlet ; fine.

Rose Gen. Jacqueminot, rich crimson-scarlet, very bright and velvety. It produces beautiful buds that are much admired and in great demand. This is, undoubtedly, the most popular Rose in cultivation.
John Hopper, bright rose, with carmine center; large and full.
Jules Margottin, deep rose; large and fine.
Louis Bonaparte, fine deep rose.
La France, silvery-rose changing to pink ; a most constant bloomer; very fragrant; beautiful both in flower and bud.
La Reine, deep rosy-lllac; free flowering, fine
Lord Macauley, scarlet crimson.
Louis Odier, bright rose ; medium size ; well formed.
Louis Van Houtte, crimson and maroon; large.
Leopold Hausburg, large, bright crimson.
Madame Alfred de Rougemont, pure white, deli-
cately shaded and tinted with blush; very sweet.
Mad. Marie Finger, light rose, darker in the center: globular form, large.
Mad. Clert, clear pink: fine.
Madame Plantier, Hyb. China,) summer bloomer ; pure white.
Mad. Nachury, dark rose ; fine flower.
Mad. Marie Bianchi, lilac, shaded lighter in the center, outside of petals nearly white; globularshaped flowers, very sweet.
Magna Charta, pink, suffused with rose; large, full. Paul Neyron, deep rose ; very large.
Prince Camille de Rohan, rich, dark velvety crimson, shading to maroon; very double and sweet.
Perfection des Blanches, pure snowy white; free bloomer; flowers large and very fragrant.
Pæonia, bright clear red, very sweet ; one of the finest old varieties.
Paul Ricaut, bright crimson.
Paul Verdier, fine bright rose.
Souvenir du Comte de Cavour, bright crimson, shaded.
Souvenir de Ducher, rich, deep crimson; compact.
Souvenir de Madame Berthier, bright red, tinged with purple ; large.
Thomas Mills, bright rosy carmine; large, cupped.
Victor Verdier, bright rose, crimson center.


MOSS ROSES. -25 cents each ; $\$ 2.50$ per dozen.
Moss Roses are very popular and much admired for their buds, which are covered with a moss-like texture. They are perfectly hardy.
Aphelis purpurea, violet purple; large and full; very double and fragrant.
Alice Leroy, rosy lilac.
Comtesse de Murinais, pale flesh, chaı ging to white.

Rose Duchesse d'Istrie, bright red: fime form.
Eliz. Rowe, light rose.
Henry Martin, dark rose color.
Mrs. Wood, deep red, tinged with purple
Mad. de la Rochelambert, fine, clarar rose
Mad. Alboni, clear pink, changing to blush.
Princess Adelaide, pink, blooming in clusters, often called "Climbing Moss.'
Raphael, pinkish white.
White Perpetual, white.
CLIMBING ROSES.- 30 cents each, except where noted. Climbing Roses are perfectly hardy, blooming early in the summer, and when in a rich soil soon cover any arbor or porch.
Baltimore Belle, pale blush; nearly white. Gem of the Prairies, carnine-crimson; 40 cents. Greville, or Seven Sisters, blush and crimson. Queen of the Prairies, rosy-red; one of the best. For List of Monthly Roses see Tender Plants.

## STIPA.

Probably better known as Feather Grass, is perfectly hardy. The plants attain a height of about two feet, and produce their beautiful feathery stems , in great abundance. The stems may be cut when quite green, and after having been thoroughly dried, may be used with other Ornamental Grasses in making bouquets, for which purpose it is almost indispensable.
Stipa pennata, good roots, each,
25
SNOWBALL.


A well-known shrub, producing large, round clusters of snow-white flowers in May.
Snowball, (Viburnum opulus,) each, . . . . .
25

## SPIRFA.



Spiræa prunifolia, a beautiful hardy shrub that blooms in May. The flowers are about half an inch in diameter, double, and pure white, often covering the entire branch. When in bloom, a single branch may be bent so as to form a very perfect natural wreath of pure white. Spiræa prunifolia, (Bridal Wreath,) each, .


The Syringa Philadelphus, or Mock Orange, is one of the most desirable shrubs. Its beauty and fragrance make it a universal favorite. The plants grow to a height of eight or ten feet, and bloom most profusely. They are perfectly hardy, standing our severest winters without the slightest injury.
Syringa grandiflora, pure white; flowers in May, 25

## THRIFT.



Thriit, known also as Sea Pink, and the true name of which is Armeria vuigaris, is a hardy little evergreen plant, with masses of narrow, dark green leaves, and bearing clusters of pink flowers in early summer. It will endure the winters of most Northern climates, and is the best hardy border plant we have yet found. It also makes a very good pot plant for winter.
Thrift, plants, each, $I_{5}$ cents; per dozen,
5150

## VIOLET.

The little, sweet-scented Double Violet is perfectly hardy, and flowers freely very early in the spring. Plants may be set out either in the spring or autumn, and can be increased by division when they attain a large size. Flowers well in the house, if not kept too hot and dry. Plants, 20 cents each; $\$ 2.00$ per dozen, except where noted.
Violet, English, dark blue.
Neapolitan, light blue.
Double White.
Marie Louise, light blue, but darker than the Neapolitan. Very fine, indeed, blooming profusely early in spring, and late in fall. Easy to force in winter.
Belle de Chatenay, double, whitc; flowers laıge.
Margeurite de Savoie, new; flowers large, deep blue, and very fragrant. Each 25 cents.
Swanley White, new. This is a sport from Marie Louise, blooming as freely, and equally good for forcing. The flowers are large, pure white, and very fragrant. Each 30 cents.

## THYME.

The ornamental-leaved varieties of Thyme arc excellent for baskets and pots, or for margins of flower beds, while they are equally as good for flavoring as the common Thyme. We thus get beauty and usefulners.
Thyme, Golden, per dozen, $\$ 2.00$; each,
20
Lemon, per dozen, $\$ 2.00$; each,
20
WATER L_ILY, (Nymphæa odorata.)


Nymphæa odorata can be grown in any swampy piece of ground, and even in tubs of water sunk in the ground, or on the surface, and in aquariums in the house. For ponds, if a soft, muddy bottom, tie the root close to a stone large enough to sink it, and drop it in near the shore in two or three feet of water, as the bloom is much better in shallow water. If a hard bottom, dig a small hole and cover it lightly. For tubs, take any strong barrel free from oil, tar or salt (molasses barrels are best ), saw in two, put in six or eight inches of fine loam, or pond mud, if handy, lay in the roots, being careful to straighten out the small fibers, and cover two inches deep, fill the tub gently with water and keep full. This is all the care they need; paint the outside of tubs to suit your fancy, and set on a brick or plank platform in any locality you may desire. These tubs should be put in a cellar in the winter, to keep from freezing ; fill with water when put away, and they will come out all right in the spring. In warm climates, where the surface of the water will not freeze more than an inch or two, they can remain out of doors the year round. For an aquarium, take a common stone or earthen flower pot, half gallon size, put in two or three inches of fine loam, put in the root in an upright position, leaving the top or crown end a little below the top of the pot, (if the root is too long, cut off the lower end), now fill in fine loam, straightening out the fibers as you fill in, cover the root up. leaving the stems and leaves above the dirt. Place it in the aquarium, and your work is done. On obtaining the roots, if you are not ready to plant them, put them into a dish of water and they will keep several days.
Nymphæa odorata, per dozen, $\$ 4.00$; each,
YAM.

The Chinese Yam, (Dioscorea Batatas), may never be desirable for food, but it certainly makes a very pretty running vine, often called Cinnamon Vine, because its flowers are thought to have a cinnamon fragrance. It is very desirable for baskets or vases. The tubers are hardy, and may remain in the ground for several years. The engraving shows the appearance of a tuber.
Chinese Yam. Tubers, £r. 50 per dozen each,


The Wistarias are strong and rapid growers, desirable for trellises, porches, etc. When well established they grow twenty feet or more in one season. The flowers are in long racemes, and are produced very freely. A large plant in bloom is a most gorgeous sight.
Wistaria Sinensis, Chinese Wistaria, flowers light purple; each,

## WEIGELA.

A beautiful shrub that blossoms in June and July. The flowers are produced in so great profusion as almost entirely to hide the foliage. They are very desirable for the border, or for grouping, and also as specimen plants for the lawn.

## Weigela Desboisii,

25
rosea,
25
variegata, foliage beautifully variegated,
30
Large plants of Desboisii and rosea by Express, 50 cents each, purchaser to pay Express charges.

YUCCA.


The Iuccas are erect and noble plants, with long, narrow, strong, sharp-pointed leaves, with a peculiar tropical aspect. Filamentosa, shown in the engraving, is the hardiest, and will endure the winter in most parts of the country. It sends up a strong flower stem in the middle of the summer, bearing a large spike of whitish flowers.

Yucca filamentosa, strong i year old roots, 30
cents ; strong 2 year old roots, . . . . . . . . Seeds of lincca, per packet, .

## TENDER BULBS AND PLANTS.

This Department embraces a large number of our most beautiful Bulbs and Plants, as will be observed when we mention that it moludes the Gladiolus and Dahlia, the Calla and Canna, the Geranium, Coleus, and, indeed, all our Bedding Plants.

If the plants cannot be planted on their arrival they should be put into small pots, using a good, light soil, and watered thoroughly, after which shade them and water sparingly until they show signs of growth.

Plants that are sent by mail have but little soil left on them, and they should receive very careful treatment, especially the first few days after their arrival. If they look wilted, put them in luke-warm water for fifteen or twenty minutes; this will greatly revive them. Those sent by express are generally in such condition as to require larger pots than the ones from which they were removed at the time of shipment. Caladiums, Tuberoses, Callas, Gloxinias and similar plants should, as a rule, be started as soon as received, while Dahlias, Gladioli, $\&$ c., should be kept in a cool place until proper time for planting.


Hard-wooded, greenhouse shrubs, blooming almost the entire jear; well-adapted for house culture; also fine for bedding out in the summer; flowers bell-shaped and drooping. They are called Flowering Maples, because the leaf bears a strong resemblance to the leaf of our Sugar Mapie; indeed the whole plant looks somewhat like a dwarfed Maple tree. The Abutilons are very popular on account of their healthfulness, their cleanly habit and their constant flowering. Plants, 25 cents each. $\$ 2.50$ per dozen, except where noted.
Abutilon Arthur Belsham, large, clear crimson.
Boule de Neige, flowers white.
Darwinii, orange-scarlet, pink veined; covered with flowers.
Ed Layellion, bright golden yellow.
Ella Ambler, orange yellow, red veined.
Fraseri, bright crimson; flowers very large and showy.
Mesopotamicum, habit drooping, flowers scarlet and yellow.
Mesopotamicum var., variegated foliage.
Monarch, peach tint, veined with light crimson; flowers large.
Perle d'Or, dwarf habit; flowers orange-yellow; free bloomer.
Robt. George, orange, veined with crimson.
Roseum, pink flowers; very free bloomer.
Royal Scarlet, bright crimson; dwarf.
Seraph, pure white; dwarf.
Santana, brownish crimson.

Abutilon Sensation, new, (see colored pages); 30 cents each.
Snowstorm, white; very fine.
Thompsoni variegata, leaves mottled with yellow.
New Double, Thompsoni plena. This splendid acquisition is a sport from Thompsonı var.; the foliage has retained the same variegation, but the flowers are large, full, and perfectly double; color, rich orange, shaded and streaked with crimson; 30 cents each.
Yellow Boy, fine yellow.

## ACHYRANTHES.

Bright-leaved plants, used largely for bedding, for which they are admirably adapted. They are of easy culture, standing the hottest summer weather perfectly. per dozen, $\$ 2.00$; each 20 cents.
Achyranthes aurea reticulata, leaves green and yellow.
Verschaffeltii, leaves carmine and pink.
Lindenii, leaves dark blood red, one of the best dark-foliaged plants we have.
Cæsii, leaves large, green and yellow.
Hoveyi, leaves large, carmine, crimson and bronze. Emersonii, like Lindenii, but lighter shade.
Collinsi, the finest variety yet introduced; foliage golden yellow and green, beautifully variegated; stems and midrib crimson.

## ALTERNANTHERA.



Plants with beautiful variegated foliage, used for a border or for ribbon lines; grow about six inches high, and twelve in diameter; varying in rich tints of green, crimson, amber and orange. The following list includes the best varieties. Per hundred, $\$ 10$; dozen, $\$ 1.50$; each, 15 cents.
Alternanthera amabilis, leaves tinted rose.
aurea, foiiage dark green and golden-yellow, the latter color predominating.
aurea nana, new; foliage bright green, beautifully variegated with yellow. See colored pages.
latifolia, broad, smooth, autumn-tinted leaves.
spathulata, leaves tinted carmine and green.
tricolor, leaves rose, green, and carmine.


A greenhouse shrub, with scarlet flowers; blooms summer and winter; not subject to insects of any kind. One of the most satisfactory house plants grown.
Achania Malvaviscus, each,
25

## AGERATUM.

See engraving page 6 .
Very useful plants for bedding or borders, flowering continually during the summer. By cutting back and potting in the fall they will continue to flower all winter. Per dozen, $\$ 2.0$; ; each, 20 cents.

## Ageratum Blanche, pure white.

Cannell's Dwarf, bright lavender blue.
John Douglas, azure blue; compact habit.
Mexicanum var., foliage variegated with creamy white: flowers blue.
White Cap, new ; pure white; compact grower.

## AGATHEA.

The showy, daisy-like flowers of this little plant are handsome, and very desirable for cutting. It blooms very freely, and is of easy culture.

## Agathea Celestis, flowers light blue, with yellow

disc ; per doz., $\$ 2.00$; each,

## AGAPANTHUS.

The Agapanthus is a noble plant, with slightly recurved leaves. The handsome blue flowers are produced at the top of the flower-stems, that grow from three to four feet in height, often bearing from twenty to thirty flowers.
Agapanthus umbellatus, foliage dark green, . 30 umbellatus variegatus, white-striped foliage.

## ALYSSUM.

See engraving page 6.
Pretty plants for vases, pots or baskets ; flowers very fragrant. Price 20 cents each.
Alyssum Double White.
gigantea, new ; improved double white.
The Gem, a nex variegated Alyssum, with full, double, white flowers, leaves broad, center light green, bordered with pure white.
variegata, foliage striped; single.

## AQUARIUM PLANTS.

We put these plants under this heading as they are especially adapted for the purpose. They are also used for Wardian Cases, Ferneries, Hanging Baskets, etc.; the set for 60 cents; each $2 \overline{5}$ cents, except where noted.
Aspidistra lurida, leaves I foot long and 3 inches wide, very effective.
Cyperus alternifolius, a grass-like plant, surrounded at the top with a whorl of leaves.
Reineckea carnea, a dwarf, grass-libe plant, with purple flowers.


Azaleas are popular evergreen greenhouse shrubs, grown principally for cut flowers and decorative purposes. To the florist they are very valuable, and almost indispensable. The flowers are produced in great profusion, and are of various colors, from pure white to dark crimson. There are also striped and double varieties. Plants should be plunged in some shady place through the summer.
Azaleas, each, 50 cents to . . . . . . . . . . . . I ${ }^{\circ}$


The Amaryllis are interesting plants, desirable for growing in pots, producing showy flowers, that are very attractive and handsome. The bulbs should be potted in a rich sandy loam, with good drainage. They require abundant moisture when growing, but at their season of rest water should be given sparingly. We have a fine stock of the varieties named below.
Amaryllis Valotta purpurea, throws up a flower stem about eighteen inches in height, bearing from four to eight brilliant purplish scarlet flowers ; a fine pot plant : bulbs, each,

5c Johnsoni, an elegant pot plant, with crimson flowers five inches in diameter: each petal striped with white. Flower-stalk two feet high, with clusters of three to five blooms; bulbs, each, . 100

Amaryllis formosissima, (Jacobean Lily), flowers dark crimson; 8 to 10 inches high. The bulbs are dormant during the winter; fine bulbs, \$3.00 per dozen ; each,
Treatiæ, (Zephyranthes,) a native of Florida, known, also, as the Fairy Lily. The bulbs of this variety are very small. The flowers are solitary, on stalks about ten inches in height; good bulbs produce two to three flowers each. It is best to grow this variety in two and onehalf or three-inch pots. Per dozen, \$r.oo; each, rosea, similar to the above, except that the flowers are light rose or pink. Dozen, $\$ 2.50$; each,

## ANTHERICUM.

An elegant house plant with dark green leaves, beautifully bordered with broad stripes of pure white: it throws up long spikes of small star-shaped flowers, which are very effective: fine for hanging baskets.

## Anthericum vittatum variegatum,

picturatum, similar to $A$. vitatum, except the markings, which are reversed,

50

## BEGONIA.

This family we divide into three classes: 1st, Tuberous Rooted; 2d, Flowering varieties; 3d, Rex, or Ornamental leaved varieties.

TUBEROUS BEGONIAS.


The tuberous-rooted Begonias are now quite popular for planting out in the spring, as we plant the Tigridia, Tuberose, \&c. The bulbs are of singular appearance, and produce fine plants that will flower profusely until frost, either in the garden or in pots, and seem to bear either sun or shade. Some of the varieties bear very large drooping flowers, as shown in the engraving, while others have smaller blossoms in erect spikes. After the tops die down take up the bulbs, dry them, and keep them in dry sand in a cool place tiil spring. Begonia, Fine Seedlings, unnamed. These are hybrid seedlings from the best named varieties, and are really very fine, the flowers of most of them are large, varying in color from almost pure white to dark scarlet. Per doz. § $\$ .00$; each, discolor, leaves large, under side crimson; flow-
ers pink,

## FLOWERING BEGONIAS

This beautuful class of plants, the type of which is shown in the illustration, is deservedly popular. Their beauty of foliage, combined with graceful flowers and free-blooming qualities, make them most desirable plants. 'They require about the same temperature as Bouvardias, an average of seventy degrees, to bring them to perfection. - -s pot plants for summer or winter decorations they have but few equals. Plants, 25 cents each; $\$ 2.50$ per dozen, except where noted.
Begonia argyrostigma picta, one of the best for
house culture; leaves green with white spots; flowers
white. Each, 35 cents.
Dregei, white, fine.

Begonia fuchsioides, scarlet; winter flowering.
glaucophylla scandens, a drooping variety; flowers orange-scarlet.
grandiflora rosea, light pink; winter flowering.
Gilsoni, new, double. The only double flowering variety of this class. Flowers large, white, shaded carmine. It is a strong, free grower, and makes a handsome specimen plant; each, 50 cents.
Goury, new ; (SEE COLORED PAGES); each, 30 cents.

hybrida multifiora, rosy pink; winter flowering. incarnata, strong grower; flowers pink; very fine. miniata, flowers bright scarlet; plant fine form; winter bloomer.
metallica, a very handsome variety, the foliage of which is dark green, with a beautiful silvery lustre; flowers pink.
Massiliensis, new; (SEE COLORED PAGES) ; 30 cents each.
Richardsonii, flowers white; leaves finely divided.
rubra, leaves dark green, fluwers scarlet rose, in immense clusters : 35 cents each.
Sandersonii, scarlet; fine winter bloomer.
subpeltata nigricans, bronzy foliage; flowers pink.
Weltoniensis, rich pink; stems red.
Weltoniensis alba, white.
zebrina, foliage dark green with whitish veins ; flowers light pink.

BEGONIA REX


The Rex varieties, of which we have a dozen or more, varying in color and markings, are very effective as pot plants. Care should be taken to keep the foliage free from dust. Occasionally, the plants may be showered, but should not be exposed to the sum until the leaves are perfectly dry. The engraving represents the variety Louis Chretien, one of the most showy of this class ; 40 cents each, except as noted.

Begonia argentea, center of leaf very dark metallic green, shading lighter toward the center; band very bright and silvery; edge of leaf shaded like center.
Bijou de Rougemont, center of leaf dark green, intermingled with the broad silvery band; edge of leaf dark green.
Louis Chretien, a new variety of special merit, with leaves of dark bronzy green, beautifully lighted in the center with bright metallic purple, the whole having a rich velvety appearance; each, 50 cents.
Mrs. Stuart, center of leaf dark bronze-green ; band irregular; bright green border; edge of leaf dark.
Queen of Hanover, leaf silvery-white ; border of a darker shade, with an occasional spot of dark green.
Rex, the old variety, center and border of the leaf dark bronze-green • band large and distinct.
Regina, center and border of leaf dark green, with fine silver spots; band bright and perfect.
Sir Colin Campbell, center of leaf small; dark green band, wide and silvery; border bronze-green. The O'Donohue, center of leaf small, dark green ; band very broad, with a greenish cast.

## BOUVARDIA.



This is a beautiful class of autumn and winter blooming plants deserving much attention. They are easily raised, and reward the grower with a profusion of brilliant flowers all winter. By plunging the pots in summer a vigorous growth will be ensured. "Plunging," as gardeners call it, is sinking the pot in the soil as low as the rim, so that the pot is hidden and the plant looks as though it were simply growing in the bed without any pot. They should be removed to the house or conservatory in September, before frosts, and they require more heat than Geraniums, Carnations or Abutilons. In color they vary from the purest white to the deepest scarlet; \$2.00 per dozen; 20 cents each.

## SINGLE BOUVARDIA.

Bouvardia Hogarth, light scarlet.
Leiantha, dark scarlet.
Humboldtii corymbiflorum, flowers pure white, over two inches long, and delightfully fragrant.

## Davidsonii, white.

The Bride, pink.
elegans, bright carmine; free bloomer.
sanguinea, rich crimson; free bloomer.

## DOUBLE BOUVARDIA.

The Double Bouvardias are now among the most popular plants for forcing or house culture. The flowers are a trifle larger than those of the single variety, and perfectly double, each floret resembling a miniature Tuberose; per dozen, $\$ 2.50$; each, 25 cents.
Bouvardia President Garfield, double pink Alfred Neuner, double white.

CALLA, OR RICHARDIA.


SPOTtEd CALla.


EGYptian lily.

Richardia Ethiopica is the well-known Egyptian Lily, or Lily of the Nile, with large white flowers, broad foliage, and it will prosper under very adverse circumstances, if given plenty of water. It is an excellent plant for aquariums. In the spring it may be planted in the garden until the autumn.
Richardia Ethiopica, or Egyptian Lily. Our Calla roots are large and fine, as we have them grown for us in California, where the Calla is perfectly at home ; each,
Extra large tubers ; each,
albo-maculata, or Spotted Calla. This is a fine plant for summer. The bulbs must be kept in dry sand in the winter, .

## CALCEOLARIA.

This beautiful plant is an acquisition to any collection It may be grown in pots or bedded out. The sirgular shape and novel colors of the flowers make them very attractive.
Calceolaria, (shrubby) each,


The Caladium esculentum is one of the handsomest of the ornamental-leaved plants. Roots obtained in the spring will make good plants in the summer, and in the fall they should be taken up and stored in a cellar. Leaves three feet or more in length, nearly as broad There is nothing so good as this Caladium for a grand bed of foliage in the garden.
Caladium esculentum, gond roots, each,
Extra large ronts,


## CACTUS.

The Cactus family is interesting on account of the curious leafless growth of the plants and the beauty of the flowers; the. Lobster Cactus, especially, is a great favorite.

## Cactus Epiphyllum truncatum Lobster Cactus,) winter-blooming, <br> Cereus grandiflorus or Night-blooming Ce-

 reus,
## CARNATION.

The Carnation is one of the sweetest, prettiest flowers that grow, It is beautiful and fragrant, and gives plenty of flowers a long time. The ever-blooming varieties are admirable for winter-fiowering in the greenhouse and window-garden, and are the main dependence of the florist for the preparation of floral ornaments in the winter. The best way is to get young plants in the spring and plant them out in the garden. Pinch off the tops of all long shoots as they appear, so as to form compact plants, and all buds that appear previous to the middle of August. After that allow all to grow. Take up and pot the plants about the first of October and remove them to the house. loung plants, 20 cents each, or $\$ 2.00$ per dozen, except as noted.
Carnation La Purite, carmine. See colored pages.
Hinsdale, lilac, mottled with white, clove scented.
Peter Henderson, large, pure white, very fine. See colored pages.
President DeGraw, pure white ; very fine.
Snow White, pure white.
Snowdon, pure white.
Mrs. Henderson, beautiful scarlet; very fragrant.
Gracie Wilder, delicate pink ; finely fringed. See colored pages.
Buttercup, new; light yellow, slightly streaked with carmine: very fine; 30 cents.
Duke of Orange, orange-yellow, striped and edged with carmine. See colored pages.
King of Crimsons, crimson-maroon; fine.
President Garfield, vermilion red; very fine.
Field of Gold, new ; pure, light yellow; 50 cents.
Fancy, new ; scarlet, shaded yellow, with stripes and dashes of crinison ; so cents.
Miss Joliffe, delicate pink, slightly tinged with salmon; fine.
Philadelphia, bright scarlet ; flowers large and perfect. See colured pages.
Scarlet Gem, new ; beautiful shade of scarlet ; strong grower; dwarf; 30 cents.
Mrs. McKenzie, rose color; fringed.
Hinzies White, white; flowers very liarge.
Rosy Morn, dark pink, shaded salmon.
Seawan, dark crimson-maroon; a profuse bloomer. See colored pages.
The Century, rich, glowing carmine; flower very full and double.


An old greenhouse shrub. Should always be grown in pots and in a cool place. Heat causes the buds to drop. Although many succeed with them in house culture, still we do not generally recommend them for the house. Summer treatment the same as for Azaleas.
Camellia Japonica. Small plants, by mail, 50
cents to \$r.50; larger, by express only, \$2.00 to 500

## CAPE JASMINE.



A pretty evergreen shrub with double white flowers an inch and a half in diameter and very fragrant.
Cape Jasmine, Gardenia florida,).
30
CORONILLA.


A pretty flowering and beautiful foliage plant. The flowers are pea-shaped, bright yellow, and fragrant. Blooms freely during winter, and occasionally through the summer. It is a plant of easy culture and one that will give general satisfaction.
Coronilla glauca variegata, each,
25

## CENTRADENIA.

A beautiful winter flowering plant that will give good satisfaction with ordinary treatment. The foliage, as well as the flowers, is very attractive.
Centradenia rosea, flowers rosy violet,


The Cestrum is a plant of easy culture, and is seldom attacked by insects of any kind. They may be plunged in the open ground during the summer, and should be removed to the house before frost. After the plants have done blooming they may be removed to a cool cellar.

## Cestrum, or Night Blooming Jasmine.

aurantiacum, orange yellow,
25
Parqui, flowers greenish white,

## CANNA.

See engraving page 13 .
The Canna is a fine foliage plant, making a good bed alone, but particularly desirable as the center of a group of foliage plants, for which it is one of the best, growing from three to six feet. The leaves are sometimes two feet in length, of a beautiful green, some varieties tinted with red. Roots can be takeil up in the autumn and placed in the cellar. No one can fail to be pleased with this plant.
Canna Ehemanni, a new variety with very large crimson flowers, about three inches long and two inches wide. The habit of growth of this variety is good, and the large, handsome flowers add much to the beauty of the plant; each, robusta, a very fine, tall-growing, dark-leaved variety, grows 8 to 10 feet high; each
Assorted varieties, per dozen, \$2.50; each, . . .

## CENTAUREA.

White foliaged bedding plants, that make the prettiest and most effective borders for beds of ornamentalleaved plants. They are commonly called Dusty Millers. Used generally for bordering beds of Coleus or Geraniums. 20 cents each; $\$ 2.00$ per dozen.
Centaurea gymnocarpa, leaves deeply cut.
candida, leaves smooth and very white.

## CINERARIA MARITIMA.

A white foliage plant, with deeply cut leaves, somewhat similar to Centaure: $i$, but more vigorous in growth; fine for borders; per dozen, $\$ 2.50$; each, 25 cents.

## COBGEA.

See engraving page 30.
The Cobœa is a handsome climber, making a strong, rapid growth-often twenty feet in one season. The plants commence to bloom when quite small, and continue to flower all summer. In the autumn they may be cut back, potted, and removed to the house or corservatory, where they will do good service all winter. They are very desirable for vases, hanging baskets, or trellises.
Cobœa scandens, flowers purple, an inch and a half across, 25

## CHRYSANTHEMUM.

The Chrysanthemum is the prettiest and most valuable late autumn and early winter flower. In November and December there is nothing that will make such a cheerful display. They are almost hardy, but not quite, north of New York City. The best way is to get young plants in the spring, and sink the pots in the soil up to the rim, water quite freely, and keep the plants well cut back until about the middle of August. They should be repotted at least twice during the summer. Take them to the house in October and November, and you will have a grand display for two months. There are three classes of Chrysanthemums, the Chinese, bearing a large, loose, graceful flower; the Pompon, with small and perfectly double flowers in great abundance; and the $\mathcal{F a p a n e s e}$, with ragged, fringe-like flowers, like Chinese, only more so. Recently, additions have been made to these classes, of which we offer the following: Anemone flowered, or quilled, and Hybrid Pompons. The flowers of the latter are beautifully and regularly scolloped. The prevailing colors are white, the different tints of yellow (and the yellow colors are exceedingly fine,) and different shades of red. The reds are not brilliant. Fine plants, good assortment of colors, 20 cents each; $\$ 2.00$ per dozen.

## JAPANESE, OR FRINGED.



Chrysanthemum Bouquet Nationale, white, lemon center.
Chang, dark orange-red, back of petals yellow.
Elaine, pure white; the flowers assume a different tint when old.
Incomparable, bright, golden yellow.
Juvena, dark maroon, shaded blood-red.
La Charineuse, purple, shaded lilac and white.
Mrs. Charles Carey, white ; flowers large.
Bois Rose, Fearly-white, shading to light rose.
M. Desbreaux, deep chestnut-red; very large.
M. Brun, deep lilac; full; high center.

Rosea superba, lilac-rose, tıpped with buff; large and fine.

HYBRID POMPON.
Fimbriatum, rosy lake, suffused white; yellow center.
Princess Meletia, white,
Toussaint L'Ouverture, rose-pink, tipped yellow; gold center.
Anais, rosy-lilac, with white shadings and gold tip.


Chrysanthemum Brilliant, crimson scarlet.
Eleonore, crimson, tipped gold.
Golden Cedo Nulli, canary yellow.

## Jonquille, yellow

Mlle. Marthe, pure white; dwarf.

## Modele, pure white.

Model of Perfection, pink, margined with white.
Snow Drop, white; fine for cutting.
Duke Long yellow.
Perfection, reddish-brown.
Star of Whyke, pure white.

## ANEMONE FLOWERED POMPON.

Antonius, canary yellow.
Calliope, rich ruby-red; high center.
Mme. Sentir, pure white.
Chinese, or large flowering.


Amphilla, bright crimson.
Aregina, purplish crimson and amaranth.
Cherub, golden amber, tinted with rose.
Empress of India, white; large and fine.
Jardin des Plantes, rich golden yellow.
Spotless, pearly white; large.
Bendigo, golden-yellow.
Golden Star, jellow.
Lord Aicester, primrose color. Anemone flowered chinese.
George Hock, white.

## SEEDLING CHRYSANTHEMUMS

These are of American origin. The single and semidouble varieties are very showy, having the golden-yellow disc which is always conspicuous, and at the present time much sought for in many flowers. The double varieties are mostly of the Japanese type, with large, showy flowers.

SINGLE AND SEMI-DOUBLE.
Chrysanthemum, James Y. Murkland, petals snowy-white; very long, reflexed on the outer edge ; inner petals very irregular.
Mrs. C. L. Allen, deep rose, with pure white ring around yellow disc.
Peter Henderson, pure lemon-yellow ; flowers very large.
President Arthur, outer rays intense crimson, bright golden-yellow ring around disc.
Canary, yellow.
DoUble.
Bohnie Rose, deep rose, reverse of petals silverypink; the flower on opening is quite flat, but afterwards takes a globular form.
King of Primroses, primrose-yellow, faintly striped with rose.
Mr. W. Barr, base of petals bright crimson; partly tubular, with points of pure yellow.
Mrs. Robertson, creamy white, base of petals golden yellow.

## CHRISANTHEMUM FRUTESCENS.

This is the Paris Daisy now so fashionable and in such demand during the winter. The flowers much resemble our common field Daisy ; almost constantly in bloom. Each, 20 cents.

## CHRYSANTHEMUM ETOILE D'OR.

Golden Paris Daisy, similar to the above, except in color, which is beautiful golden yellow, both petals and disc. Each, 20 cents.

## COLEUS.



The Coleus is the best and cheapest ornamentalleaved plant we have for ornamental bedding, in what is sometimes called the carpet style. A few dozens of these plants will make a bed of which no one will have any cause to be ashamed. There is such an endless variety in their colors and markings that, with a little taste in planting varieties, the most gratifying results can be obtained at a trifing cost. Plants should be set about a foot apart, so that when the size of the bed is ascertained, it is easy to figure how many plants are needed of each kind for a row. Each 20 cents; doz., \$2.
Coleus Acme, foliage broad; golden center, veined with crimson.
Asa Gray, orange-crimson, violet veins and center, spotted and edged with green.
Beauty, bright red, edged with green and yellow; deeply cut; dwarf.

Coleus Charm, yellow tinged with bronzy'-scarlet.
Crimson Velvet, crimson, spotted with black edge serrated and lightly bordered with green.
Dr. Jos. Hooker, dark crimson, stained dark brown; very narrow, dark green margin.
Dazzling Gem, crimson center, spotted and bordered with yellow ; edge bright green.
Excelsior, yellow, slightly stained with green, and maculated with crimson.
Golden Bedder. See colored pages
Hero, chocolate-maroon, almost black.
James Barnshaw, yellow and crimson streaked,
Miss Retta Kirkpatrick, large white center, shaded yellow, bruad green lobed margin, large foliage.
Mrs. Wilson, center of leaf bright pink; border creamy-white, veined with a lighter shade of pink; light, serrated margin.
Mrs. Garfield, very bright crimson, marbled and shaded pink, with a light bar of yellow : deep green serrated margin.
Marvelous, brilliant crimson, marbled with yellow and brown.
Mrs. Geddes, crimson-maroon, bright center; compact grower.
Mrs. Schultz, bright scarlet and carmine on goldenyellow ground.
Prince of Prussia, crimson scarlet, yellow margin.
Pharo, rich crimson scarlet, mottled with yellow; blackish toothed margin.
Puck, pale buff, tipped with green, carmine stems and leaf stalks.
Progress, ground color bright green ; the whole leaf is splashed and spotted with yellow, crimson, purple, and maroon.
Pictus, a distinct variety, green, yellow, red and brown.
Superbissima, blackish maroon, with a brilliant broad purple band through the center of the leaf.
Seraph, fiery crimson, spotted with chocolate, bright green serrated margin.
Triumph, foliage large, rich, rosy crimson, beautifully veined and shaded with pink.
Tesselata, marbled with green and pale yellow
Verschaffeltii, veivet-crimson.

## NEW COLEUS.-Each 25 cents.

Clara Snooks, center of leaf carmine and maroon, with white border and veins, edge of leaf bright green.
C. M. Clark, dark claret with carmine veins, edge of leaf dark green.
Mrs. T. S. Dean, dark brown with black flakes and spots, veins carmine, edge of leaf lightly bordered with green.
Yellow Bird, foliage light yellow.

## CUPHEA.



Cuphea platycentra is a good basket plant, also an excellent plant for house in the winter; tube of flowers scarlet; lip white and black; very free blooming.


The Clerodendron is one of our most beautiful plants for hot-house culture. C. Balfouri is a handsome greenhouse climber, with large clusters of crimson scarlet flowers, each flower encased in a bag-like caly'x of pure white. When trained on a trellis the drooping panicles have a rich and elegant appearance. It can be trained as a shrub also, and makes a very showy pot plant, blooming, as it does, almost continuously in the winter. C. Fragrans fl. pl. is of dwarf habit, with pinkish-white flowers, double and very fragrant.
Clerodendron Balfouri, each,
Fragrans, fl. pl., each,


A very handsome shrub, hardy in the Southern States, flowers very freely, almost concealing the plant with blossoms. In the North the plants may be wintered in a cool, dry cellar; 25 cents each.
Crape Myrtle, Pink.
White.

## CYCLAMEN.

The Cy.clamen is particularly adapted for windowculture, and will give more flowers with less trouble than almost any plant we are acquainted with. The colors are usually white, tipped at the base with rosy purple. Use a small pot, and place the crown of the bulb just above the surface of the soil. Keep the plants cool until the leaves are well grown. When the flower-buds begin to rise on the foot-stalks, remove to a sunny shelf, where they will soon show bloom. Place as near the glass as possible. After the blooming season (generally two or three months,) is over, gradually withhold water. Cyclamen Persicum,

## CAMPSIDIUM.

An elegant climber, of rapid growth; fine for conservatories ; foliage fern-like. It has no need of flowers, as the foliage is an ornament in itself. Do not allow the soil to become wet or sodden, as then it is apt to drop its leaves. The plant branches freely, and succeeds in any ordinary garden soil. It is also very fine for a window-box out of doors in the summer, growing much stronger than it does in the house. A very pretty plant that all people who cultivate it like.
Campsidium filicifolium,


The Dahlia is the grandest autumn flower we have. Nothing is its equal in any respect in September and October. It is in its glory when everything else is faded or fading, and surrenders only to the Frost King. Put Dahlia tubers in the ground when the season becomes warm, covering the neck some three inches. If many shoots start, thin them out. After flowering, and before hard frosts, take up the plants, remove the tops, dry the bulbs a little, and put in the cellar until spring, when they can be divided and replanted. Look at them occasionally to see that they are not shriveling from too dry an atmosphere, nor starting the eye early in consequence of too much moisture and warmth. The Dahlia is divided into four pretty distinct classes, - the ordinary or Show Daklia; the Divarf or Bedding Datilia, making a thick, compact bush only eighteen inches in height, but with flowers of full size; the Pompon or Bouquet, with small, very perfect flowers, and the Single Dahlia, which is now becoming very popular, and is especially desirable for cutting. Our engravings show the classes.

As the Dahlia is a Fall flower, there is no need of planting before about the middle of May, or even later. Tubers can be forwarded as soon as danger from frost is passed-about first of April. Price, except in the select list of scarce sorts, 25 cents each, and $\$ 2.50$ per dozen. If the selection is left to us, we will sell bulbs at $\$ 2.00$ per dozen, and we think we can make a selection that will delight any lover of this beautiful flower. Our stock forms the largest and finest collection in the world.

## GENERAL COLLECTION.

Dahlia Ada Tiffin, light peach, tinged with rose.
Adelaide, clear yellow, high center.
Admiration, yellow ground, edged and mottled with lake.
Alexander Cramond, crimson and maroon; very effective.
Amazon, yellow, with scarlet edge.
Anna Warner, creamy ground, shaded to flesh color. Arthur, deep lilac, full size.
Beauty, yellow, suffused with rose, and sometimes tipped white.
Benjamin Crossland, rich dark purple.
Bessie, lilac; full size: constant.
Bird of Passage, white, tipped with pink; always reliable.

Dahlia Bizarre, light ground, heavily striped and flaked with purple.
British Triumph, rich crimson.
Buttercup, yellow, tinged with red on the edges.
Cecelia, pale yellow, good form.
Celestial, French white; good form and substance.
Charles Lidgard, deep yellow, edged with red.
Charles Turner, yellow, edged with crimson.
Chris Ridley, bright glowing crimson.
Constancy, yellow ground, deeply edged with lake.
Consul, pale orange, suffused with yellow at base of petals.
Crown Prince, fine buff; free bloomer.
Dayspring, new variety of buff; very fine shape.
Delight, creamy white, slightly edged with purple.
Dragon, yellow, tipped with crimson.
Duc de Brabant, new lilac; fine form.
Duchess of Wellington, white, tipped with purplish crimson.
Duke of Albany, rich crımson.
Duke of Connaught, dark crimson, shaded purple; handsome.
Duke of Edinburgh, deep yellow.
Earl of Radnor, rich plum color; large and fine.
Emily, blush, suffiused with rose; iarge, free bloomer.
Emily Edwards, blush white, slightly tinted.
Emperor, purple-maroon; large.
Empress Maud, white, edged with purple; good form.
Ethel Newcombe, light yellow, tinted, high center.
Fancy Boy, light scarlet.
Fanny Purchase, bright yellow ; very fine standard variety.
Firefly, deep scarlet; good.
Flambeau, bright orange-scarlet.
Flamingo, vermilion scartet; very fine flower.
George Dickson, chestnut-brown, a peculiar color. George Rawlings, very dark maroon; full size.
Glory of Summer, rich, glowing salmon-scarlet.
Golden Gate, yellow, tipped with red.
Hebe, pale, rosy lilac; good petal and outline.
Hercules, yellow, striped and speckled with crimson.
High Sheriff, very dark, nearly black.
Hugh Austin, orange-scarlet, striped with dark red; very fine.
H. W. Ward, yellow ground, heavily edged deep crimson.
James Cocker, fine purple.

Dahlia James Stephens, bright orange-scarlet; new color; very fine.
James Vick, purplish maroon; color intense; full and symmetrical.
James Wilder, maroon; good form; a beauty.
J. Neville Keynes, large, shaded yellow.

John Cocker, very dark maroon.
Joha Forbes, fawn color, striped maroon.
John Greenaway, crimson ; compact ; fine form.
John Lamont, maroon, with darker stripe ; very fine.
John Wm. Lord, copper red.
John Wyatt, crimson-scarlet.
Joseph Ashby, shaded orange, beautiful form.
Joseph B. Service, bright yellow; large and fine.
Lady Allington, dark scarlet, tipped white.
Lady Antrobus, red, tipped with pure white.
Lady Paxton, red, tipped with white.
Lady Wimborne, deep pink, heavily shaded with rose; very pretty, new color.
Lizzie Leicester, yellow base, heavily tipped and pencilled lake.
Maggie Soul, blush white, edged with purple; very pretty and free.
Magician, deep yellow, distinctly striped with scarlet.
Maid of Athens, dark maroon, tipped with red and white.
Maria Gerring, white, striped deep purple.
Miss Browning, clear yellow, beautifully tipped with white.
Miss Rodwell, rosy-purple, tipped white.
Mirefield Beauty, a beautiful shade of red; the flowers of this variety are always perfect.
Modesty, blush, with light center; large, with great substance.
Mr . Compton, dark maroon, with a shade of purple; free and constant.
Mr. Cornwallis West, scarlet, with orange shade ; very attractive.
Mr. Cross, cerise, a bright glowing color.
Mr. Dix, deep scarlet.
Mr. J. C. Reid, light orange ; large and constant.
Mrs. Bunn, light ground, finely striped with purple.
Mrs. Hodgson, yellow ground, heavily edged with crimson.
Mrs. Stancombe, canary-yellow, tipped; beautiful.
Mrs. W. Dodds, blush center; outer petals light lilac.
Oriole, golden ground, striped and tipped with scarlet. Picotee, golden yellow, laced with bright crimson. Pioneer, black ; large size.
Prince Bismarck, fine large purple; unsurpassed. Princess, white; large flower; free bloomer.
Prof. Fawcett, dark lilac, striped with chocolate. Purity, purest white; free and constant.
Purpurea superba, violet-purple; fine and free bloomer.
P. V. Nasby, bronze, striped maroon.

Queen of Spain, shaded buff; new color.
Queen of Sports, white and lilac, purple striped.
Rev. Dr. Moffat, beautiful dark mulberry.
Revival, rich crimson; full size and perfect.
Robin Adair, peculiar shade of brown; flowers fine shape and very perfect.
Ronald, buff; free bloomer.
Snow Cloud, pearly white ; withstands the sun.
Snowdrift, clear white; full size; free bloomer.
Startler, very darl: maroon, with white tips.
Sunbeam, clear buff, with a beautiful outline.
The Pet, dark maroon, tipped with white.
Thomas White, dark crimson maroon; very free.
Walter Weir, crimson, shaded purple and violet.
William Ady, lilac, striped with purple.
William Dawkins, fawn, edged with bright crimson.
Woman in White, large ; white.
Walter H. Williams, a splendid bright scarlet; high center.
Yellow Boy, deep yellow.
Yellow Standard, yellow.

## POMPON, OR BOUQUET.

Dahlia Admiral Dot, purplish-lilac; finely quilled.
Ardens, brilliant scarlet.
Bird of Roses, rose, tipped with carmine.
Burning Coal, yellow, with intense scarlet tip.
Coquette, dark crimson, shaded to orange.
Cupid, white ground, tipped and suffused with rose.
Dr. Schwebes, crimson-scarlet.
Emotion, crimson, tipped with white.
Gem, intense rich scarlet.
Isabel, bright orange-scarlet ; free and effective.
Lady Blanche, small, pure white ; fine for cutting.
Lilac Pompon, lilac, most perfect form.
Little Agnes, light pink.
Little Bob, fine, deep scarlet.
Little Daisy, white, tinged with rose.
Little Duchess, garnet, with light rose at base of petals.
Little Fireball, bright scarlet; full center.
Little Goldlight, gold, tipped with scarlet.
Little Leopold, deep pink; very fine.
Little Lina, blush, tipped with violet.
Little Madonna, crimson, tipped with white.
Little Philip, creamy buff, edged with lilac.
Little Princess, rose shaded.
Little Snowball, pure white.
Little Virginie, bright rosy purple.
Mabel, lilac; excellent form and free.
Meteor, bright scarlet.
Nymphe, yellow, tipped with red.
Patti, rosy ground, tipped with carmine.
Peacemaker, rosy-lilac; free.
Sappho, rich maroon; splèndid.
The Khedive, deep crimson, suffused with white at base of petals.
Titania, yellow, with bronze tip.
White Aster, pure white; fimbriated.
DWARFS, OR BEDDERS.


DWARF DAHLIA PLANT.
Aurora, yellow; large.
Dawn, creamy ground, tipped with rose.
Dwarf Queen, purple, tipped with white.
Fire King, bright crimson.
Fraulein Hettergot, light and rose ; fine dwarf: Gem of the Dwarfs, red, tipped with white.
George Thompson, yellow; large ; free bloomer. Goldfinder, golden yellow.
Leah, fine shade of orange, tinted with rose.
Marguerite Bruant, white; good bedder.
Meta Bartelles, very fine pink.
Mt. Blanc, clear white.
Pearl, pearly white.
Rising Sun, large, intense scarlet.
Rose Queen, rose, with light center.
Sambo, dark maroon.
Vulcan, deep red, large flower; fine.

## SINGLE DAHLIAS.

Albion, orange, shaded rose.
Cervantesii, light orange-scarlet.
Cloth of Gold, rich yellow.
Cyrus, rosy purple.
Duchess of Westminster, white ; broad petals,
Duke of Teck, rich mauve; fine form.

Dahlia General Diaz, vivid scarlet.
Harold, dark, velvety maroon ; nєarly black.
Juarezii, dazzling scarlet, (Cactus-like).
Lutea, pure yellow.
Lutea grandiflora, clear deep yellow; large, fine. Paragon, rich, dark maroon, shaded with purple.


Single daitla flower.
Purple Paragon, deep violet-purple; self.
Queen of Singles, rich magenta, suffused with rose. Rob Roy, intense scarlet.
Rupert, crimson-scarlet.
Scarlet Gem, bright scarlet.
White Queen, large, white, and very free bloomer.

## NEW AND SCARCE VARIETIES.

Price, 50 cents each ; $\$ 5.00$ per dozen.
Dewdrop, dark crimson.
Figaro, orange; heavy scarlet tip.
Gaiety, yellow, striped with red, sometimes tipped white.
Goldfinch, yellow, striped with purple, and tipped white.
Hon. Mrs. Percy Wyndham, yellow, deeply edged with purple.
Lilly Ward, white, tinged with pale rose near center.
Lottie Eckford, white, striped with purple.
Lucy Berry, lilac, suffused with white at base of petals.
Marmaduke, white, heavily striped and flaked magenta.
Mrs. F. Foreman, rich lilac.
Mrs. W. Gladstone, delicate pink.
Mrs. W. Haskins, fawn.
Mrs. G. R. Jefferd, large, deep yellow.
Muriel, clear yellow, full size.
Polly Sandell, lemon, tipped with fawn.
Rosetta, large, fine purple.
Ruby Gem, ruby-crimson, with small yellow tip.
Statesman, purplish-crimson.
Sunbeam, deep yellow.

## ERYTHRINA.

The Erythrina, or Coral Plant, is a fine, rcbust plant, with broad leaves and large red flowers, an inch or two in length, and growing in long racemes, sometimes ten or twelve inches in length. The roots are thick and fleshy, but not exactly tuberous, and may be kept in a pit or cellar during the winter. Plants put out in the spring will flower during the summer, and before hard frosts should be taken up, cut back and stored away until the following spring.
Erythrina crista galli, roots, each

DAPHNE.


A handsome evergreen shrub, growing from three to six feet high, that, when well trained, forms a handsome, compact bush. The flowers are white, slightly tinged with pink, and are borne in clusters on the ends of the shoots; they are highly esteemed for their delightful fragrance, on account of which they are grown quite extensively for cutting.
Daphne Indica, each,


Very ornamental pot plants, grown for their beauty of form and foliage. They require re-potting about three times a year to keep them in a healthy condition. The leaves should be washed with a damp sponge weekly. They are also especially adapted for use in hanging baskets, or vases, as center plants, for which purpose they are without an equal.
Dracæna terminalis, or Dragon Tree. Foliage dark crimson, marked with pink; 75 cents each.
indivisa, with narrow, grass-like foliage. 75 cents.

## ECHEVERIA.

This class of plants are now attracting unusual attention. They are well adapted for rockeries, carpet beds, or the outer edge of ribbon beds; also excellent house plants, that will succeed with almost any kind of treatment. The flowers are also quite attractive.
Echeveria retusa floribunda, leaves green, flowers rosy pink

25
Hoveyi, foliage beautifully striped the entire
length with cream and white.
50

## FICUS.

The India Rubber Tree is a popular house-plant, as it succeeds well with ordinary treatment, and its large foliage and erect form are much admired. The plants require plenty of light, and should never be exposed to draughts. Sponge the leaves often, to keep them free from dust.
Ficus elastica, or Rubber Tree, with thick shin-
ing, leathery leaves, ten inches long by three wide ; an excellent and showy pot plant. .
repens, a fine creeper for greenhouse, or outside
decoration in the South,
Parcelli, a very thowy foliage plant, with large
green leaves, marbled and blotched with white,

FUCHSIA.


The Fuchsias, as all know, are elegant flowers, delicate in coloring and exquisitely graceful in form. When in full bloom they are a most beautiful sight. The plants we offer are strong and thrifty, grown specially for summer and winter flowering, and may be trained in almost any desired form. The Fuchsia requires a light, rich soil. Sprinkle often and give plenty of light and air. The usual plan is to obtain plants, flower them in the house during winter, and then consider them useless. This is all wrong. If you have any defective spot on the north side of the house that you wish concealed during the summer, nothing will answer the purpose as beautifully as the Fuchsia. Put out the plants in early summer, sinking the pots a little deeper than the rim, and before the first frost remove the plants to the house, and they will make you glad all winter, and be ready for service in the garden again the next summer. To those unacquainted with varieties who may prefer to leave the choice to us, we will make a selection that we are quite sure will be satisfactory, for our collection is large and fine. Plants 25 cents each; $\$ 2.25$ per dozen, except where noted; or $\$ 2.00$ per dozen our selection.

## SINGLE.

Fuchsia Arabella, corolla rose, sepals white.
Aurora Superba, sepals salmon, corolla orange.
Beacon, sepals rose, corolla violet.
Black Prince, corolla reddish rose; sepals carmine.
Bird of Paradise, sepals crimson, corolla brilliant magenta.
Brilliant, corolla scarlet ; sepals white ; winter flowering.
Canary Bird, sepals scarlet; corolla dark purple; foliage golden yellow ; very fine.
Carl Halt, sepals white, corolla crimson, striped with white ; winter flowering.
Charming, sepals crimson, corolla violet.
Chas. Blanc, tube and sepals rosy-pink; corolla rich amaranth.
Clipper, sepals carmine scarlet; corolla deep purple.

double fuchsia.
Fuchsia Covent Garden White, tube and sepals white; corolla clear lake.
Earl of Beaconsfield, rosy carmine, corolla deep carmine, large flower. 30 cents.
Elegance, sepals scarlet, corolla violet.
Jules Ferry, violet; sepals bright rose; flowers fine form.
Mrs. Marshall, corolla carmine ; sepals white ; winter flowering.
Magnum Bonum, sepals broad, of a brilliant red; corolla rich violet purple.
Mr. King, new ; tube and sepals soft coral-red ; rich deep purple; fine habit; flowers medium size; 30 cents.
Pearl of England, one of the best winter blooming sorts; sepals white, petals rosy scarlet.
Pendulaflora, character and habit very distinct; the leaves are quite narrow, and from four to six inches in length. The flowers are produced in clusters from the axils of the leaves and the terminal shoots; the tubes are about four inches in length; color rich crimson, shaded maroon. 30 cents.
Rose of Denmark, sepals blush ; corolla pink.
Speciosa, scarlet; sepals blush; winter-flowering; one of the best.
Sunray, violet and crimson; leaves beautifully variegated; 30 cents.
Swanley, sepals white; corolla rosy carmine.
Star of Wilts, tube and sepals cream color; corolla large, pinkish violet, with distinct margin of orange. Try Me, Oh, corolla very dark, sepals red; dwarf; very free bloomer.

## DOUBLE.

Avalanche, corolla violet; sepals crimson.
Avalanche, Smith's, white; sepals crinison.
Champion of the World, flowers very large, sepals coral-red, corolla dark purple; 30 cents.
Deutscher Kaiser, sepals rosy crimson, corolla violet purple.

Fuchsia Gem, corolla large, deep violet; sepals crimson; winter flowering.
Gustave Dore, sepals light rose, corolla pure white.
Jeannie d'Arc, tube and sepals bright scarlet ; corolla pure white; dwarf.
Kingsburyana, sepals coral red, corolla white ; fine vigorous grower, flowers large and showy.
Mrs. H. Cannell, white corolla; carmine sepals.
Montrose, corolla white ; sepals rose.
Miss Lizzie Vidler, corolla soft mauve ; sepals light rosy-red.
Madame Galli Marie, corolla white ; sepals crimson.
New Mastodon, tube and sepals deep crimson; corolla rich, deep violet ; flower very large.
Phenomenal, new ; (SEE COLORED pages); 30 cents.
Prince Napoleon, corolla purple; sepals waxy crimson.
Princess of Wales, sepals crimson; corolla creamy white.
Pascal, sepals light rose, petals violet-rose; semidouble.
Nellie Morton, new ; seedling from Miss Lucy Finnis, possessing almost the same habit of growth, color and shape, except that the corolla is not as double, which is a great advantage, as the flowers do not bear so heavily on the slender branches, thus giving the plant a much better appearance. Undoubtedly this variety will become very popular. Plants each, 50 cents.
Tower of London, corolla violet blue; sepals crimson; very large.
Vainqueur de Puebla, corolla white, veined with rose; sepals red.
Victor Hugo, sepals clear red; corolla clear lilac; new color; flowers very large.
White Giant, sepals crimson; corolla white; very large flower: fine grower.

FARFUGIUM.


Farfugium grande is a first-class ornamental plant for pots, well adapted for house culture. The leaves are thick and leathery, dark green and with yellow spots the size of a five-cent piece; quite hardy.
Farfugium grande, each,

## FEVERFEW, (Pyrethrum.)

The Feverfews are among the handsomest and most useful of our border plants.
Feverfew, Double White, with Daisy-like flowers; good for either house or garden ; always desirable for cutting. ${ }^{25}$ cents.
Aurea or Golden, with bright yellow foliage; very much used for edgings of beds; 20 cents each; $\$ 2.00$ per doz.
Little Gem, a new dwarf variety, growing only from cight to twelve inches in height. The flowers are large and of the purest white; splendid for cutting; per doz. $\$ 2.50$; each 25 cents.

## GLAUCIUM.

See engraving page 18 .
A white-leaved ornamental plant, fine for bedding or borders. Leaves long, gracefully recurved, cut and curled.
Glaucium corniculatum, per dozen, $\$ 2.50$; each, 25

## FERNS.



These beautiful plants are now quite generally cultivated. Some of them do exceedingly well with room culture, especially the Pteris; the beautiful Japanese Climbing Fern, Lygodium scandens; the Sword Fern, Nephrolepis; and the graceful Adiantums. All do well in ferneries or Wardian cases. In summer they should be set out of doors on the shady side of the house or fence. Shower them frequentiy both in summer and winter. We have many very excellent varieties of Ferns. not named below ; plants 25 cents each.

Lygodium scandens, a beautiful climbing Fern. from Japan, growing from ten to twenty feet and succeeding admirably with common room culture. 50 cents to $\$ 1.00$ each.
Nephrolepis exaltata, or Sword Fern, very desirable for house culture, especially for hanging baskets 50 cents each.

## GLOXINIA.



Gloxinias are among the handsomest of our summerblooming greenhouse plants. Bulbs should be started in the spring; in a warm place. They require partial shade and a liberal supply of water when growing. After blooming, water should be withheld, and the bulbs remain dry through the winter. 50 cents. each.


GERANIUM.


A group of scarlet Geraniums is a dazzling sight from June to November. No flowering plants are more grown and certainly none are more suitable for large beds where a mass of bloom is desired. When used in connection with Alternantheras, Coleus, and other foliage plants, they make an attractive display. The Silverleaf Geraniums, and some of the scented varieties, form an excellent border for a bed of scarlet Geraniums, provided they are well cared for, and the buds pinched off as they appear.

The class of single varieties embraces every color from purple and scarlet to white. Plants make a vigorous, healthy growth, and bear the hottest suns admirably, and are, perhaps, the most useful for lawn beds. Plants should not be put into the ground until the weather is quite warm and all danger from frosty nights is over, in Northern States toward the last of May, and they should be set so that when grown they will cover the ground.

The Geranium family is so extensive and varied that we have deemed it desirable to describe the characteristics of the best classes. Plants intended for winterblooming should be grown in pots through the summer and not be allowed to bloom; or cuttings should be made in September. Geraniums, to bloom well in the house, require to be kept quite cool and to have plenty of air. $\mathbf{2 5}$ cts. each; $\$ \mathbb{2}$ per doz., except where noted.

## SINGLE.

Geranium Avenir National, scarlet lake, fine truss. Anna Scott, rich deep crimson, shaded with maroon; splendid bedder.

## Blanche, white.

Blonde Beauty, deep flesh color, shading to white, large truss, of good habit.
Coquette, peach blossom, base of upper petals white, flowers and truss very large.
Col. Holden, rosy crimson.
Cinderella, bright rosy salmon, fine truss.
Coleshill, soft scarlet, fine for early flowering.
Cardinalis, rich deep crimson.
Crimson Vesuvius, same habit as Vesuvius; color much darker.
Cygnet, pure white, truss very large, free bloomer.
Dick's Seedling, white, with large salmon eye.
Dr. Denny, the nearest approach to a blue Geranium of any yet introduced, color rich purplish magenta, base of upper petals bright crimson tinted with orange; 40 cents each.
Distinction, leaf green, with a narrow zone of deep black near the edge.
Defenseur de Belfort, purple scarlet; fine.

Geranium Eros, scarlet, white eye ; fine form.
Eugenie, rose, with a light shade of magenta; base of upper petals white.
Excelsior, bedding; scarlet; fine.
Favorite, light pink; truss large.
Freak of Nature, center of leaf quite white with green margin, flowers scarlet. 35 cents each.

## Gen. Grant, scarlet.

Gracie, white, with distinct red ring around a small pure white eye. 35 cents.
Guinea, brilliant orange-scarlet, florets finely formed. Hebe, cherry crimson, fine form
Happy Thought, leaf with a large yellowish white center and green margin ; flowers magenta.
Harry King, vivid scarlet, white eye.
Jealousy, orange-scarlet, with a decided orange hise.
Jennie Dodds, clear light magenta, very free bloomer.
Kate Nicholson, dwarf, pink, free bloomer.
Kate Patterson, rich, bright salmon.
Lewis, carmine, beautiful shade.
Leviathan, crimson-scarlet shaded vermilion, individual flowers large, and finely formed.
Lydia, brilliant scarlet.
May Queen, flesh color, outer half of petals a lighter shade.
Mad. Danelle, clear rose marked with white.
Master Christine, dwarf; pink; very fine bloomer. Mathilda, rose pink, free flowering, fine bedder.
Mrs. James Vick, white edges, pınkish center; without an equal for winter.
Mrs. Windsor, blush white, with large vermilionscarlet center; habit dwarf.
Mad. Aline Frilleuse, orange scarlet, large truss. Mrs. Moore, pure white, with a beautiful ring of bright salmon around a small white eye, habit dwarf, free-flowering, very desirable: 30 cents.
Mad. Racimer, rich deep crimson; large truss.
Mrs. Harkett, rich salmon, tinted rose; white eye.
Neptune, light magenta, base of upper petals white, large flower, good truss.
New Life, the flowers are vivid scarlet, irregularly striped with salmon and white, like a Carnation ; truss good; very free flowering; sports sometimes.
Novelty, a very distinct variety ; lower petals scarlet; upper petals rich pink with shadings; 30 cents.
Pantaloon, bright salmon, the center of each petal having a large, distinct white blotch.
Pauline Lucca, pure white, the individual flowers are large and perfect; we consider this the finest single white ; 35 cents.
Par Excellence, bright scarlet, free bloomer.

Geranium P. L. Courier, immense truss of clear vermilion flowers; extra fine.
Queen of the West, light scarlet.
Ralph, crimson scarlet, shaded purple, flowers large. Salmon Vesuvius, salmon color, with white eye.
Sensation, fine rose color; very large clusters.
Sir Harry. See colored pages.
Snowden, dwarf white, flowers large, fine.
Snow Flake, white.
Streak of Luck, color salmon, distinctly striped with white; very free flowering; large truss.
Surprise, bright scarlet.
Sunset, bright rosy-salmon.
Sunshine, vermilion-scarlet; large, well-formed truss.
Vesuvius, a popular English variety ; dwarf; fiery scarlet, and a very free bloomer.
White Clipper, white, fine bedder.
White Perfection, pure white, free bloomer.
White Tom Thumb, pure white.
White Distinction. The old Distinction was much prized for its splendid deep zone, but its flowers were never very attractive. The white variety now offered is in every way similar as regards growth and foliage ; its flowers are pure white, and form a beautiful contrast with the dark zone ; 50 cts .
White Vesuvius, pure white: divarf; good bedder.
Wm. Cullen Bryant, the truss and individual flowers are very large.
W. K. Harris, dwarf, rosy pink.

Wood Nymph, clear pink; free blooming.

## DOUBLE.

The Double Geraniums have been wonderfully improved the past few years. We now have them of as many and as beautiful colors as the single. For bedding they are about as good every way as the single, and for cutting much better. The white varieties of Geraniums both single and double have shown a marked improvement, some of which hold their pure color without showing the slightest tinge of pink. The double Geraniums bear very large trusses of flowers, forming solid masses, and endure the sun as well as the single.

Asa Gray, fine salmon.
Anna Montel, dwarf, delicate rose.
Auguste Villaume, clear bright red, fine bedder.
Acme, very rich vermilion, with beautiful velvety surface, fine bedder, free bloomer.
Archduke Rudolph, deep magenta-scarlet; free bloomer; dwarf.
Apple Blossom, rosy-salmon, with pink shadings.
Bouquet, fine scarlet, shaded with rose, good bedder.
Bataclan, deep purple violet, flowers large, and with enormous trusses.
Bishop Wood, the best double bedding Geranium out : scarlet and violet; very fine.
Brilliant, fine bright scarlet.
Candidissima plena, large and full, snowy white.
Crimson Gem, fine crimson, shaded scarlet.
Congress, light carmine, upper petals shaded vermilion, truss large, strong grower.
Chieftain, carmine, upper petals shaded magenta.
De ute Ancelon, magenta, truss beautiful shape.
Depute Laflize, truss round, vermilion purple.
Delicata, flesh tint, beautifully shaded with vermilion, very large truss.
Dame Blanche, white : free bloomer.
Defiance, beautiful crimson; a fine bedding variety-
Effective, scarlet, large flower.
Eclipse, rosy-crimson.
Elegance, very brilliant rose pink; flower medium size ; very free bloomer.
Emerson, flesh color, shaded salmon and deep pink.
Ernest Lauth, glowing crimson, illuminated with scariet : immense truss.
Enchantress, clear rose ; fine.
Guillion Mangilli, dazzling crimson scarlet, lower petals shaded with violet; very large flower.

Geranium Gen. Farre, flowers salmon, irregularly mottled with rose, and sometimes blotched white.
Henry Cannell, intense deep scarlet, flower quite l..rge, truss good size, fine bedder.

James Vick, fine shade of crimson, lower petals changing to violet rose.
J. C. Rodbard, brilliant red, upper petals tinged with purple ; truss large.
J. H. Klippart, bright vermilion scarlet, shaded mahogany at base of petals.
Jules Simon, clear rose; dwarf.
J. P. Kirtland, deep crimson, flushed with purple.

La Jeannette, pure white, flowers very perfect.
Le Pere Secchi, orange salmon.
Louise, bright salmon, shaded rose.
Laura Leigh, cherry, shaded orange.
Mad. Amelia Baltet, white, free flowering.
Mary Anderson, vermilion scarlet.
Meteor, bright crimson.
Mad. Neury, magenta, upper petals shaded orange.
Mrs. E. G. Hill, pale blush, overlaid with a delicate lavender shade ; truss and flowers large; fine.
Mad. Thibeaut, flowers very large, deep rose-pink, upper petals marked with white; good bedder.
Mons. Gelein Lowagie, intense scarlet, and salmon.
M. Tisserant, bright rose, truss and flowers large.

Magenta King, flowers a most beautiful shade of magenta; free bloomer; extra fine; 35 cents.
Mary Geering, pink; fine shade.
Mina, rich, dark scarlet ; flower very large and fine. Mavourissa, deep crimson truss large.
Mrs. Chas. Pease, rich, deep pink; upper petals marked with white.
M. Hardy, blush, shaded lilac-pink; flowers fine shape.
Princess Stephanie, dwarf; flowers large; lilacpink; an abundant bloomer; fine.
Pocahontas, rose-pink, upper petals margined white.
Peter Henderson, bright orange-scarlet, base of petals white, truss large, flowers fine form.
Pres. Leon Simon, bright clear red, flamed salmon.
Progress, dark scarlet; very fine.
Queen of Beauties, pure magenta, base of upper petals white, dwarf.
R. B. Hayes, fine deep scarlet.

Ruby, scarlet, very brilliant.
Remarkable, crimson, shaded scarlet, truss large; an abundant bloomer.
Rosy Morn, light rose, large truss.
Rosalia, very deep carmine, shaded, flowers large, habit neat and compact.
Ruby Triumph, crimson-scarlet; large truss.
Simon Delaux, cherry purple; dwarf.
Sparkier, crimson, large flower.
Sylphide, dwarf; flowers delicate rose; magnificent. The Ghost, white; very free bloomer.
Victory, rose scarlet.

## NEW VARIETIES

Each 50 cents, except as noted. SINGLE.
Ferdinand Kauffer, in color the flowers of this variety are identical with Dr. Denny, while the habit of the plant is much improved, being a much stronger grower, and producing larger trusses of flowers.
Lady Reed, pure white, with large scarlet center: flowers fine form, and very large.

## DOUEIE.

Etoile des Roses, bright rose; base of petals pure white : truss large, and well formed. 35 cents.
George Thorpe, most intense bright crimson; fine bedder: 30 cents.
Hoff Beach, rich amaranth-purple, truss and flowers large: 30 cents.
Mrs. W. P. Simmons, deep salmon, with darker shadings. 30 cents.

Geranium May Wayte, violet-crimson, shaded scarlet; good bedder; 30 cents.
Pharos, white ; free, strong grower; truss large and well formed; when bedded out the flowers assume a delicate pink tinge; very fine.
Queen of the Fairies, bright flesh color, mottled with pearly-white; flowers well formed; 30 cents.
Soleillet, violet-crimson, base of upper petals orangescarlet.

## SWEET SCENTED.

The fragrant Geraniums are treasures. For making bouquets, and as a back ground for button-hole flowers they are indispensable. The leaves are beautiful as well as fragrant. Some varieties are more finely cut, as will be seen by the descriptions.
Rose; Oakleaf; Nutmeg, Citron and Pennyroyal; are among the most fragrant.
The following are also choice :
Apple, round, light green leaf, delightfully fragrant. 30 cents each.
Betulini, (Birch !eaved,) leaf small, flowers nearly white.
Dr. Livingstone, leaves finely divided.
Mrs. Taylor, flowers large ; deep scarlet.
Shrubland Pet, fine soft leaf and carmine flowers.
Variegated Rose Scented, a sport from the rose scented variety; leaves bordered with white, sometimes assuming a pinkish tinge; very showy.

## IVY-LEAF.



IVY-LEAF GERANIUM.
This class has thick, glossy, and Ivy-shaped leaves, and the plants are of a drooping habit. They are excellent for baskets, vases and house plants, and not undesirable for beds on the lawn. The engraving shows the form of the leaf, and also somewhat of the white and colored markings.

## SINGLE.

Alice Lee, leaf golden yellow, flowers crimson.
Duke of Edinburgh, leaves light green, broad white margin ; flowers rose.
Holly Wreath, leaves light green; broad, yellowish margin; flowers rose.
L'Elegante, white margin, tinged with pınk: flowers white.
La France, flowers deep violet amaranth; upper petals orange.

> DOUBLE.

Anna Pfitzer, flowers large; salmon pink.
Gloire D'Orleans, crimson-magenta, fine
Lucy Lemoine, flowers nearly white, purple veined. Robert Fortune, bright carmine ; flowers large, fine. Dr. Broca, bright clear rose.

## TRICOLOR-LEAVES FINELY VARIEGATED.

These Geraniums are much prized for the beauty of their foliage, which is very handsome. For culture in the house or conservatory, they are among the best.

Mrs. Pollock, flowers scarlet. 30 cents.
Harmonie, orange-salmon; double; 50 cents.

## BRONZE.

The leaves of the Bronze Geraniums show the most beautiful shades of yellow and bronze or brownish red, the foliage being as handsome as flowers.

Beauty of Calderdale, golden bronze.
Bronze Prince, showy foliage ; flowers salmon.
Cloth of Gold, leaves yellow and green.
Fanny, truss and flowers large, peach tint.
Marshal McMahon, very vigorous, scarlet.

SILVER-LEAF-LEAVES WHITE MARGINED.


This class have marked leaves, the center being bright green, and the edges silvery-white. No plants make a better edging or border to a large bed. Flowers of several good colors. This is one of the most useful of the Geraniums, and is the plant most used for borders, while it makes most elegant single plants for the house as well as the garden.

## Bijou.

## Mountain of Snow.

Mad. Salleroi. See colored pages.
Bright Star.
Silver Queen, flowers pink.

## PELARGONIUMS.

These are more commonly known as Lady Washington Geraniums. The flowers are large, with deep blotches on the upper petals, and bright spots on the lower. While in bloom during the months of May and June, they are very beautiful and ornamental, either as pot plants or in the garden. Although their time of biooming is short, their great beauty while in flower makes them very desirable; 30 cents each.

Favorite, delicate pink, dark blotch.
Gen. Taylor, carmine with crimson blotch.
L'Avenir, beautifully striped white and crimson.
Emperor, white, maroon blotch.
The Belle, white, maroon blotch, shading to crimson. Virginalis, pink, dark maroon blotch.

NEW MONTHLY PELARGONIUMS.


FRED. DORNER.
This wonderfully free-flowering strain of Pelargoniums promises to be very popular. They bloom almost constantly the year round. For house culture they are among the best plants that can be obtained. They are also very fine for bedding, as they stand the hot sun as well as the bedding varieties.

Fred. Dorner, maroon, bordered with white; very showy: 50 cents.
Freddie Heinl. rose, bordered with white; 75 cents.


Our own seedlings often rival the most costly French sorts in beauty. We sell no flower with more pleasure, because we know that while those who have plenty of means can indulge in new, costly, and really magnificent varieties, those who have but little can secure a dozen bulbs that will be a delight and a joy through half the summer. Some kinds have a large, flat bulb, and others one that is sinall and somewhat conical. In fact, seedlings generally have the egg-shaped form. One cut shows the way in which little bulblets form at the base of the bulb. These may be kept until spring and sown in drills In one or two seasons they will make bulbs large enough to flower.

## DESCRIPTIONS OF BEST NAMED VARIETIES.

Each. six to nine inches apart, and about four inches deep. Plant from middle of April to first of June. In the fall, before hard frosts, take up the bulbs, remove the tops, leave to dry in the air for a few days, and store in some cool place, secure from frost until spring. Although the new, high priced sorts are very fine, many oider, cheap varicties are nearly or quite as good. Indeed, some of the comparatively old sorts are unsurpassed. Where the selection is left to us, we try to give the greatest amount of beauty for the least money.
The Gladiolus is becoming exceedingly popular in all parts of the world, and while no flower has shown such wonderful improvement in the twenty years past, none has shown such a rapid advancement in public favor.


The Gladiolus is the most beautiful of the Summer or Tender Bulbs, with tall spikes of flowers, some two feet or more in height, often several from the same bulb. The flowers are of almost every desirable color, brilliant scarlet, crimson, creamy white, striped, blotched and scarlet, crimson, creamy white, striped, blotched and

Gladiolus Abricote, flowers large, bright rose, tinged with lilac,
Addison, dark amaranth with white stripes, . . io
Adonis, light cherry, lower petals yellow with crimson blotch,

го
Africaine, slaty brown on scarlet ground, streaked with scarlet and pure white, white blotch,
Agatha, large flower; rose, orange-tinged, blazed with amaranth,
Agrius, bright salmon, slightly feathered at the outcr edge with vermilion : blotch cream color,
Amalthee, white, streaked with garnet, large garnet blotch,

Gladiolus Amaranthe, violet rose, flaked with carmine,
A mbroise Verschaffelt, carmine, garnet flamed,
Andre Leroy, fine deep cherry red, flamed and striped with a rich darker shade; white blotch, white stripe in center of each petal,
Andromede, rose, slightly tinted with carmine, and streaked with white ; large yellow blotch,
Anna, cherry, orange tinged, lower petals striped with carmine on white ground,
Antigone, delicate rose, flamed with carmine,
Arabi Pacha, flowers scarlet, very bright, blotch ivory-white bordered with golden-yellow,
Aramis, long spike, large flowers, rose, tinged with orange, edged with carmine cherry; lower division white, striped with bright carmine, . . I
Archiduchesse Marie Christine, white, slightly tinged with lilac, flamed rosy carmine,
Ariane, white ground, bordered and flamed with carmine rose,
Arsinoe, satin rose, flamed with carmine,
Arethuse, white, rose tinted, carmine striped,
Asmodee, brilliant cherry-purple, edged and flamed garnet; blotch white, white line in each petal,
Astree, white, with carmine blotch, beautifully striped,
Atlas, white, slightly tinged with lilac, and striped bright violet,
Ball of Fire, scarlet crimson, maroon blotch with blue center,
Baroness Burdett Coutts, delicate lilac tinged with rose, flamed with rosy purple,
Bayard, carmine-red, slightly tinged with lilac, white line in center of each petal,
Beatrix, white ground, flushed with carmine lilac,
Bella Donna, white, tinted with lilac, lower petals striped with carmine, .
Benvenuto, orange red, with white blotch,
Bernard de Jussieu, violet, shaded cherry and purple, with purple blotch,
Bicolore, bright rosy-salmon, lower petals ivorywhite suffused with rose at the edges,
Bijou, light cherry, flamed with scarlet,
Bowiensis, vermilion scarlet; very tall spike; in flower a long time,
Brenchleyensis, vermilion scarlet; fine old variety,
Calypso, flesh colored rose, blotched with carmine,
Canary, light yellow, rose striped, sometimes pink,
Carnation, large flowers of a fleshy white color, tinged at the edges with rich carmine, the lower petals blotched purplish carmine,
Cassini, rose, flamed with carmine,
Celimene, light orange red, flamed with bright red,
Ceres, white, marbled and striped with rose and purple,
Cervantes, bright rose, slightly tinged with lilac, profusely streaked with carmine, white line in each petal,
Charles Dickens, light rose, blazed and striped with carmine,
Chateaubriand, cherry rose, carmine streaked,
Chloris, white ground, mottled with carmine, flamed with purplish carmine, lower petals blotched with carmine purple,
Christopher Columbus, rosy carmine, flamed with red, violet red blotch on lower petals,
Ciceron, dark rose, tinged with violet crimson, flamed with bright carmine, white throat,
Citrinus, a very fair yellow,
Cleopatra, large flower; soft lilac, tinged with violet, purple feathered blotch,
Colbert, cherry red, white blotch, white line in each petal,

Gladiolus Coquette, cherry red, striped with delicate rose, white blotch,
Corinne, rosy carmine, shading to cherry, blotch creamy white, striped violet, white line in each petal,

200
Corsaire, very dark velvety-scarlet, tinted with blown at the edge of the petals,
Daubenton, rosy lilac shading to bright rose, flamed with carmine, carmine violet blotch, white line in the center of each petal,
Delicatissima, white, tinged with carmine lilac,
De Mirbel, rose, tinted with lilac, striped with dark crimson,
Diamant, fleshy white, throat ivory white, blotched and streaked with carmine,
Didon, white and lilac; large and fine,
$\qquad$
Don Juan, bright orange red, yellow blotch, . Io
Dr. Fontan, rosy lilac, heavily striped with bright carmine,

75
Dumont d'Urville, bright cherry, flaked and striped with rosy carmine, distinct purple blotch, white stripe in center of petals,
Eldorado, pure yellow, slightly-striped with purple, .
Elvire, white, flamed with carmine,
Etendard, large flower, white, blazed with lilac,
Eugene Scribe, flower large and wide, rose, blazed with carmine red; very fine,
Eva, white, slightly tinged with rose and pale lilac,
Eclaire, fine pink, flaked with deep rose, pure white blotch, white line in each petal,
Fanny Rouget, bright rose, striped with carmine,
Fatima, ground ivory-white, profusely striped with bright rosy-salmon, violet blotch on creamy ground,
Fenelon, rose, violet-tinged, flamed with carmine,
Feu-follet, ivory-white, tinted and striped with red at the edges, white line in each petal,
Flamingo, fiery red; blotch of rich purple, very brilliant and showy,
Flamboyant, fiery scarlet, fine spike, . . . . I
Ginevra, cherry rose flushed with red, center of each petal veined with white,
Giganteus, large flower, rose shading to cherry, carmine blotch, whole flower marbled white, . .

20
Gloire de Fontainebleau, bright rosy-carmine, striped red at the edges, white line in each petal, I 50
Grand Lilas, delicate lilac, novel shade,
Grand Rouge, flowers large, bright scarlet, with small violet blotch in the throat,
Gulliver, flowers bright carmine, pale yellow blotch, slightly streaked violet, broad white line in each petal,

75
Hecla, fiery orange scarlet, center pure white, feathered with carmine,

30
Henry Clay, rose striped with scarlet, white blotch, white line in each petal,

Iо
Hercules, very large flower; scarlet, flamed with orange red, violet blotch,

50
Horace Vernet, long spike of large flowers, bright purplish red, pure white stain,
Ida, large flower, white, rose-tinted, blazed with carmine rose,
Imperatrice, white, striped and dashed with carmine,
Isaac Buchanan, fine yellow,
1о
James Carter, light orange red, very bright, with a large, pure white throat, . . . . . . . .
Jeannette, bright rose, striped and blotched with rosy carmine at the edges,

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Joconde, cherry rose, fringed bright carmine, streaked white, clear throat,
John Bull, whitish, sometimes strived with lilac,
20
Jupiter, large flower, light red, blazed dark crimson,

40
Leda, bright flesh, striped with lilac carmine, . . 40

Gladiolus La Candeur, large flower, white, slightly striped with violet,
La Fiancee, pure white, with bluish violet stains,
La France, white, flamed with carmine toward the edges, amaranth blotch on creamy white ground,
La Perle, pure lilac, blotched with violet carmine on the lower petals,
Leander, dark lilac, shading off to carmine, a white line in the center of each petal, large white blotch,
Le Phare, brilliant fiery red; very showy,
Le Poussin, light red, white ground; very pretty,
Le Tintoret, cherry rose, carmine blotch on yellow ground,
Le Vesuve, intense fiery red; rich,
Leviathan, bright rose, flamed and striped carmine, amaranth blotch on crearny white ground.
Lord Byron, brilliant scarlet, stained and ribboned with pure white,
Lord Raglan, salmon, spotted with scarlet, dark garnet blotch,
L'Ornement des Parterres, white ground, blazed with lilac, rose, and carmine,
Louis Van Hcutte, velvety carmine, branches freely, and flowers a long time,
Lulli, bright cherry, lower petals carmine-streaked,
L' Unique Violet, dark lilac, tinted with violet, 1 oo
Mabel, pure white in the center, blotched with brilliant carmine at the outer edges,

I 50
Madame Desportes, pure white, striped violet, 100
Madame Furtado, white, flamed with crimson, darker crimson stripe in the throat,
Madame Vilmorin, rose, with white center, and edged with dark rose,
Mademoiselle Marie Mies, delicate rose, flamed with carmine, blotch of rosy purple on pure white ground,
Marechal Vaillant, brilliant scarlet, white throat and stripes; splendid,
Margarita, white, suffused with dark crimson,
Mars, beautiful scarlet,
Mary Stuart, white, rose tinged, carmine flamed,
Matador, brilliant carmine red, striped and blotched pure white, .
Mazeppa, rosy orange, large yellow stains, striped with carmine,
Merville, cherry rose, flamed with carmine, with lighter center,
Meteor, dark red, brilliant, pure white stain,
Meyerbeer, brilliant scarlet, amaranth red blotch,
Michel Ange, dark crimson and purple, with white,
Minerve, crimson, carmine feathered white blotch,
Miriam, white, feathered and blotched with carmine rose,
Mile. Marie Verdalle, rosy-salmon flamed and striped vermilion and dark carmine, large creamy white blotch, streaked violet,
Mount Etna, brilliant velvety scarlet, slightly streaked with darker scarlet at the edges, white line in the center of each petal,
Mons. Legouve, fiery red, white blotch, white line in each petal
Murillo, cherry rose on light ground, white blotch, white line in each petal,
Nelly, white, carminate rose, dark stain,
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Nereide, pale rose, suffused with lilac, violet blotch in the throat,

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Nestor, yellow, lower part darker, striped with red,
Newton, dark crimson, light ground, lined white,
Octavia, light rose, blazed with red, white blotch,
Opale, delicate rose, throat cream color, shaded lilac at the base,

Gladiolus Ophir, dark yellow, mottled with purple,
\$3 15
Pactole, yellow, tinged with rose at the edges, blotch of darker shade,
Panorama, lılac, shaded and mottled with brilliant carmine, throat creamy white, white
line in each petal,
Parmentier, clear amaranth, flamed and striped with carmine, amaranth blotch on creamy white ground,
Penelope, blush white, lower petals tinted with yellow and streaked with carmine,
Pepita, flowers golden-yellow, slightly striped with carmine at the edge of the petals,
Phedre, long spike, pure white, bordered and blazed with cherry rose,
Phœnix, cherry rose, flamed with a darker shade, pure white blotch and bands,
Phœbus, fire red, with large showy white blotch, 75
20
Picciola, satin rose, carmine-flamed, white blotch,
Pictum, salmon scarlet, flaked with carmine,
Picturata, carmine lilac, flamed with violet, dark carmine blotch,
Plutarque, rosy carmine, tinged with crimson, carmine feather on white ground, . . . .
Pomone, rosy white, blotched and striped with amaranth red, .
Primatice . . . . . . . . . . . . I
Primatice, long spike, large flowers, fine rose, lilac-tinged, blazed with bright carmine,
Prince of Wales, bright fiery red, white blotch, violet-feathered,
Princess Marie de Cambridge, large flower, white, with carmine stains,
Princess of Wales, white, blazed with carmine and rose, stained with deep carmine,
Psyche, satin rose, bordered with dark crimson, with lighter center,
Queen Victoria, very large flower, pure white, stained with carmine; splendid,

20
Racine, cherry, tinged with violet, white center, 25
Redoute, fine rose, tinted with violet, blazed with bright carmine, white blotch,
Reine Blanche, white, slightly feathered with crimson, garnet stripe in the throat,

30

Richard Cœur-de-Lion, crimson red, flamed
with garnet, lower petals spotted golden yellow,
Roi Leopold, rose, crimson-blazed, carnation stripe,
Rosa Bonheur, white and lilac, stain dark violet,
Rosea Perfecta, rose, tinged violet, white line,
Rossini, long spike, amaranth red, lined with white,
Rubis, carmine, cherry center, carmine blotch, .
Sappho, long spike, fine cherry, orange-tinted, white blotch, bright red-striped,
Seduction, rosy salmon colored flowers, very bright and open, of a delicate pearly rose, white blotch feathered with carmine,
Sirene, delicate rose, flamed with red, red blotch on yellow ground,
Sylphide, white, flamed with carmine, large purple carmine blotch,
Sylvie, white, edged with cherry rose, throat clear 20
Teresita, pure white, suffused with rose, and striped with carmine at the edges, lower petals pale rose blotched and striped with violet,
Themis, satin rose, flushed carmine, cream blotch Titania, light salmon, flamed with cherry,
Triumphans, cherry, shading off to currant red,
Van Spandonk, long spike, fine flowers, fiery red,
Velleda, delicate rose, striped with light scarlet, lilac blotch,
Venus, long spike, ground pure white, blazed rose,
Virginalis, white, bordered and flamed carmine,
Zenobia, fine spike, rose, violet-tinted, blazed with dark carmine, center well lighted, white blotch edged with carmine, .

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## OUR NEW VARIETIES.

The following list of new varieties were originated on our own grounds. Having given special attention to this flower for several years, we can now offer some of the finest new varieties in cultivation ; equal, at least, and in many respects superior, to the most costly French sorts. Besides these, we have many varieties that are equally as fine, but not in sufficient quantities to offer at present. Those named below are a few very marked superior flowers that we have selected from many thousands that we have grown from the seed and flowered. Those which were not very marked in character, if fine, have been placed with our unnamed class.

## Each.

Gladiolus Brunette, beautiful shade of carmine,
blotch crean color, striped with purple, white
line on each petal,
\$0 20
Bryant, rose, heavily striped and flaked with deep scarlet ; blotch lemon color; each petal has a distinct white line; the whole flower has a rich velvety appearance,
Dr. Warder, blush, flaked with rose and cherryred; garnet blotch bordered with golden yellow,
David Copperfield, pink, flushed with carmine, throat gold, striped and feathered with crimson,
Charlotte Cushman, brilliant scarlet, beautiful large white throat, white line in each petal, .
Holmes, clear rose, striped with darker rose, large white blotch, flushed with lemon,
Innocence, pure white. This we think is the first pure white Gladiolus ever offered. The flowers are not large, but very compact on the spike, 300
Longfellow, white; a very fine line of violet in each of the lower petals,
Lowell, rose shaded with scarlet, a shade of garnet in the throat,

## NEW FRENCH VARIETIES OF 1884.

Colorado, fine spike of brilliant orange flowers, with large white blotch,
. 300
Conquerant, flowers large; beautiful carmine; blotch pure white, white line in each petal, . . 300
Constance, amaranth-red, with small, creamywhite blotch,
Crepuscule, lilac-rose, slightly flushed with carmine ; edge of petals feathered violet, . . . . 400
Gallia, rosy-white, flushed with bright carmine at the edge of petals,
.400
Loredan, bright cherry-rose, with creamy-white spots, slightly shaded with slate color at outer edge of petals,
Medicis, bright cherry-rose, streaked white, and flushed with carmine at outer edges,
Papillion, yellow ground, flaked and bordered with carmine, resembling the markings of a Picotee,
Quinola, scarlet; blotched with rosy-white, and flushed with darker red,
Tamerlan, garnet-red, flushed with slate color at outer edge,

## NEW FRENCH VARIETIES OF 1885.

Ali, very pale creamy-rose, striped with cherryred; yellow blotch bordered with rose and finely striped with purplish-red,
Amitie, large fleshy rose-colored flowers shaded with straw color on the lower petals, streaked with purple; edges flamed with bright rose, $.5 \infty$
Daphnis, fine rosy-salmon flamed with slatyviolet; blotch white,
$6 \infty$
Eugene Souchet, bright rose color with large white blotch and stripes; color at outer edge of petals very bright,
Gordon Pacha, rosy-carmine flaked with bright carmine; blotch white with garnet stripes; white line in each petal,

500
Latone, white ground and stripes, shaded carmine and edged with deeper carmine,

Gladiolus Mad. Auber, pale rosy-lilac; blotch creamy-white, sometimes flaked light rose,.$\$ 6$ oo Stanley, rosy-salmon flamed with dark rose; small yellowish-rose blotch,
$5 \infty$
Therese de Vilmorin, creamy-white; blotch light yellow with purple stripes,

8 oo

## GLADIOLUS - SELECTED NAMED DOZENS.

There are many really fine varieties of Gladioli that are cheap compared with the prices of the new sorts, yet it is sometimes difficult to make a selection from descriptions alone. We are confident that selections made by ourselves when the beds were in their best condition, will give far better satisfaction than any the purchaser would be likely to make from the most careful descriptions. When the Gladioli are in flower we spend several days making the best possible selections of dozens, endeavoring to give the very greatest amount of beauty for the least money. We therefore commend these dozens to those who do not feel confidence in their own judgment. The $\$ 3 . \infty 0$ dozens we recommend to those who are not supplied with the good standard varieties :

Collection No. 1.-12 named varieties, . . . \$1 00


## UNNAMED GLADIOLUS.

Very fine Mixed Varieties, of various shades of red, per dozen,
Fine Mixed Varieties of light colors and white, per dozen,
Fine Mixed Varieties, assorted colors, per doz., 50
Mixed Gladioli, assorted colors, per 100, . . . . 3 oo
Mixed Gladioli, light and white, per 100, . . . . 500
Not less than 50 at 100 rates.
nta These unnamed Gladioli are really very fine. Do not think they are poor because so cheap. Wegrow them all, and do not intend to have a poor one in the lot.

PTse Seed from our named collection, package, 20

## HYDRANGEA.



The Hydrangeas are well-known, favorite plants. Hardy south of Philadelphia; grown at the North as pot plants; their immense heads of bloom make them very conspicuous. A little shade and plenty of water seem to meet all their needs. They can be put in the cellar in the fall. For decorative plants on a piazza or porch, few plants are more desirable. One each side of the front door steps make a fine effect. each 30 cents, except where notcd.
Hydrangea hortensis. The old variety with bright pink flowers.
Otaksa. A Japanese variety, with immense heads of pale pink bloom.
Thomas Hogg. A pure white variety, with heads as large as the pink. A most beautiful shrub.

Imperatrice Eugenie, white, with blue and rose.
Japonica, white outside, with rosy pink center.
Japonica variegata, foliage green and white, beautifully marked; 30 cents.
speciosa variegata, center of leaf pure white with broad margin of bright green: very showy 50 cts.

## HIBISCUS, (Chinese.)



Greenhouse shrubs, with dark glossy leaves, and large showy flowers; excellent for bedding out in the summer. If grown in pots will flower well in the house during winter. Its flowers are truly gorgeous, very large and of the most brilliant colors ; single or donble, 25 cents each
Hibiscus Collerii, double, chamois yellow, blotched with crimson at the base of petals; new color.
fulgidus, very large; carmine scarlet, at the base of each petal is an oblong blotch of cleep crimson.
grandiflorus, crimson and scarlet.
lutea, double, beautiful yellow, marked with pink at the base of petals.
miniatus semi-plenus, double, vermilion scarlet; very showy.
Dennisonii, very light rose, changing to almost pure white; fine.
Cooperii tricolor, foliage beautifully variegated with dark green, pink and white; flowers crimson.
Schizopetalus, new ; beautiful and distinct variety; pendulous orange-red laciniated flowers; 30 cents.

## HELIOTROPE.



Well-known plants; grown for their exquisite fragrance. They make handsome plants when bedded
out, blooming moderately through the summer, and in great profusion early in the fall. They are also very clesirable for house culture, a single plant filling a whole room with perfume. Each 25 cents; $\$ 2.50$ per dozen.
Heliotrope Corymbosa, lavender.
Forget-Me-Not, a beautiful seedling with very large flowers, fully one-half larger than those of the older varieties; color light lavender; truss large and finely formed; very desirable for cutting; 30 cents. Garibaldi, nearly white.
Juliette, bluish lilac.
Lady Cook, dark violet.
Louise Delaux, rose, shaded with violet.
Mrs. Lewington, very dark purple.
Mad. de Blonay, pure white.
Nelly, nearly white.
Maculata, purple, white eye.
President Garfield, a beautiful shade of lavender: 30 cents.

## IVY, GERMAN.

These plants, which are not true Ivies, but so called, are very rapid growers, and most suitable for hangingbaskets and vases, for which they are unsurpassed.
Ivy, German, or Parlor, with smooth, glossy, light green leaves; a very rapid grower,
Cape Ivy, a variety of the above, with thick, dark green leaves

IMPATIENS.


Very pretty plants for pot culture that carry their flowers in a conspicuous and showy manner, and are constantly in bloom. The habit of growth and foliage somewhat resembles the Balsam.
Impatiens sultani, flowers rosy-carmine, . . . . 25
sultani alba, flowers pure white,
25
50

## JASMINE.

The Jasmine is a favorite green-house or house plant everywhere. It is the idol of the poets and one of the sweetest flowers; 25 cents each.

- Jasminum grandiflorum, foliage fine ; flowers white, star-shaped, and very fragrant, blooming from November till May. Easy of culture.
revolutum, a half climbing plant with thick evergreen foliage, flowers bright yellow, very fragrant.


## KENILWORTH IVY.

See engraving page 42 .
A pretty drooping plant, with small lilac flowers ; fine for the house, or for baskets and vases.
Kenilworth Ivy, (Linaria Cymbalaria, each, .


## MADEIRA VINE.

The Madeira Vine is a beautiful climber, with thick, glossy, light green, almost transparent leaves, and climbing twenty feet or more, and twining in any desired form. Plant the tuber out of doors in the spring, and it will commence to grow at once. In the autumn cut off the tops, dig up the tubers, and keep them in the cellar over winter. They are excellent for house climbers. The flowers are white, small, in long racemes, as shown in the engraving. When planted in the garden to produce rapid growth and plen: $y$ of flowers, give it a sunny situation.

Madeira Vine, roots, per dozen 75 cents ; each,

## OXALIS.

This Oxalis is one of the prettiest plants we are acquanted with for borders of beds, edgings of walks, etc. It forms a rounded edging less than a foot in height, and about the same breadth. The leaves are in nine divisions, as shown in the engraving, and the bright flowers stand well up above the foliage. They


## LEMON VERBENA.

A shrubby plant, with light green, fragrant leaves, and lilac tinted flowers. An old favorite.
Lemon Verbena, Aloysia citriodora, each, . 25
LANTANA.
The Lantana is of easy culture; its free-flowering qualities make it very desirable for the house. They can be trained in almost any desired form, and are almost continuously in bloom. The flowers are small and in clusters; 25 cents each; $\$ 2.50$
 per dozen.
Lantana alba perfecta, pure white.
elegantissima, very light yellow.
Golconda, canary-yellow, shading to salmon.
Harkett's Perfection, a pink flowered variety, with fine variegated foliage.
Jacques Minot, deep jellow and lilac.
Le Patriote, deep yellow, large flowers and truss.
Le Styx, yellow and orange-scarlet.
Lina Entiger, straw color; dwarf.
Marcella, ilac rose, changing to yellow.
Pluie d'Or, semi dwarf, bright yellow, good bedder. Schlegelii, yellow, orange and purple.
Snowball, white.

## MAHERNIA. (Honey Bell.)

A fine foliaged pot plant, of easy culture; bell-shaped flowers ; fragrant.
Mahernia odorata, yellow,
25

## MARANTA.

An beautiful ornamental-leaved plant, leaves large, with bands of dark velvety green; fine for ferneries.
Maranta zebrina,
25

## MYRTUS.

A beautiful evergreen greenhouse shrub that blooms early in the spring. The flowers are pure white, and remain on the plant a long time.
Myrtus communis, single,
communis fl. pl., double,
open in clear weather and close with the setting sun. The bulbs are small, and should be planted an inch or two apart. In autumn take up and keep from frost.
Oxalis lasiandra, bulbs, per dozen iocts., per $100 \quad 50$ oxalis Deppir.

Another excellent Ox alis for summer borders and edgings. It bears but few flowers, but the leaves are handsome enough to compensate for the lack of flowers. They are of a lively green, with a black zone, and form an unbroken rounded border. Plant bulbs in early spring, and before winter take up and store away from frost.
Oxalis Deppii, per hundred, 50 cents; per doz., . 10
oxalis floribunda.


An ever blooming variety, excellent for pots and baskets; leaves three-parted, flowers in clusters, haif an inch or more in diameter.
Oxalis floribunda alba, per dozen, \$r.00; each, 10 rosea, per dozen $\$$ r.oo; each, .

## oxalis ortciesi.

A variety from Peru, growing a foot or more in height, like a small tree in shape. The upper side of the leaf is a rich olive-green, the under side purple. It has not bulbous roots. Fowers a good yellow.
Oxalis Ortgiesi, plants, each,

## OTHONNA.



A charming basket plant, with cylindrical leaves and pretty starshaped, yellow flowers, blooming almost constantly. Habit drooping, and should be always grown in a hanging pot, basket, or on a bracket. Its foliage is fleshy, like that of the Mesembryanthemum, but delicate and graceful, and makes a rapid growth, drooping several feet below the basket.

Othonna crassifolia, plants each,
25

## OLEA.

A plant of Olea fragrans should be in every home. It grows with little care, and the dainty white blossoms are a constant delight, filling the rooms with exquisite fragrance. The dark and shining leaves always have a beautiful and fresh appearance. Hardy at the South. Olea fragrans, (Fragrant Olive,) each, $\qquad$

## OLEANDER.

An old-fashioned shrub grown as a pot plant, with a profusion of large flowers.
Oleander, Double Pink, the old variety,
25


These beautiful climbers are so varied in the markings and colors of their flowers that it would be useless to attempt to describe them. Therefore we merely give the predominating color of each variety. They are very desirable for the house or conservatory, and succeed well with ordinary treatment.

## Passiflora cœrulea, blue,

## Pfordti, purple,

Smithi, carmine,
Trifasciata, new; foliage very dark green, almost black, with three distinct bands that are overcast with a shade of crimson,
Quadrangularis folia variegata, new; foliage beautifully dotted and striped with rich goldenyellow; each, .

## PILEA.

A graceful plant, with frond-like leaves, that are covered with very small pinkish-white flowers. When the flowers are ready to expand, the least moisture causes them to burst. The pollen is then thrown out with great force, and has the appearance of smoke. Pilea serphyllifolia, (Artillery Plant,) each, . 2


Few house plants afford better satisfaction than this. It requires to be kept cool, a north window suiting it best. Care should be taken in watering that no water fall on the buds, as it causes them to rot. In the summer they can be turned out into a shady border. The plants should be divided, if wanted for the next winter, put into small pots, and kept shaded until well rooted; then, as they grow, re-pot, using a size larger pot. This is especially desirable for the double varieties, as in this way double flowers a-e insured, while, if the seed is sown, a goodly portion of the plants will bear single flowers. The single kinds are usually grown by sowing seed in pots or pans in June, pricking off when the plants have three rough leaves, and potting the young plants as they grow. These plants will be in flower by December, continuing all winter.
Primrose, Single White, 50 cents.
Single Pink, 50 cents.
Double White, 75 cents.
Semi-Double Pink, 6o cents.
POMEGRANATE.


This beautiful plant blooms profusely from July to October. Flowers bright orange scarlet; plants should be removed to the cellar in the fall, and remain dormant until spring. This variety was grown by a gentleman of Kentucky, who honored us in its name.
Pomegranate, (James Vick,) dwarf,

PANCRATIUM.


With us this has proved quite interesting grown as a pot plant, and, from the peculiar shape of its flowers, has attracted much attention. It is a native of the South, where it is perfectly hardy. Flowers pure white and quite fragrant.
Pancratium rotatum, good bulbs, each,

## PEPEROMTA.



Small plants that are desirable for pot culture, ferneries, \&c. P. resedæflora bears small spikes of white flowers on pink stems, on which are small velvety leaves. The flowers of P . maculosa are inconspicuous, but the foliage is beautiful ; each 25 cents.
Peperomia resedæflora, leaves small ; flowers white. Maculosa, leaves green, striped with grayish-white.


The Plumbagos are desirable on account of their beauxiful shades of blue, a color by no means too common among our flowering plants. 25 cents each.
Plumbago Capensis, very pretty plants, producing large heads of light blue flowers.
Larpentæ, dwarf; indigo blue ; fine for bedding out ; quite hardy.

## PETUNIA.

Few plants give better satisfaction where a mass of flowers is desired than the Petunia, especially the single varieties. They flower from the time they are planted in spring, until killed by frost. The double varieties are very fine, but do not flower as freely as the single.
Petunia, Double, per dozen, $\$ 2.50$ : 25 cents each.
Single, per dozen $\$ 1.50$; 15 cents each.

## PILOGYNE.

A beautiful, rapid-growing climber; excellent for screens or verandas: in fact, for the latter it has no equal. Fine also for the house in winter. This plant, though so slender in appearance, makes a wonderful growth, forming a mass of foliage that will entirely cover a window or screen in a short time.
Pilogyne suavis, per dozen, $\$ 2.50$; each, . . . . 25

## RIVINIA.



Rivina humilis is a beautiful little pot plant, with racemes of small white flowers, followed by scarlet berries. The plant is in fruit and flower the entire year. It is also a very pleasing and suitable plant for ferneries, the bright scarlet berries, being partly concealed by the Ferns, add much to their beauty.
Rivinia humilis,
25

## RHYNCHOSPERMUM.



A handsome climber, with white Jasmine-like flowers that are very fragrant and produced freely during the spring months. Plants for house or window garden culture may be trained on a smail trellis. The flowers are handsome and very desirable for bouquets, etc. Each 30 cents.
Rhynchospermum jasminoides, with plain green foliage.


No garden, however small, is complete without Roses. The Rose stands, as it has for years, Queen of the Flowers. With a proper selection of kinds, we can have our Roses from June till heavy frosts come with withering touch. In the list below we give the everblooming class, comprising Teas, Noisettes, Chinas and Bourbons. Even so far North as this they give us better satisfaction than any other class of Roses,-first, on account of their free blooming qualities; then their exquisite fragrance and delicate colors. Some are almost hardy here, and do well if slightly protected with leaves or straw, while a little further south they stand the winters with no protection whatever. If the plants are taken up in the fall and trimmed back, and put in earth in a box, in a cool cellar, with just water enough to keep them from shriveling, they will come out fresh in the spring, and start into bloom in a very short time. As pot plants in winter, varieties should be selected that are adapted to the purpose. These should be kept in pots through the summer, in a partly shaded situation, care being taken that they do not root through the bottom of the pot. Keep the buds picked off through the summer. All Roses delight in a rich, generous soil. For select list see colored pages.

MONTHLY ROSES,-Fine strong plants, 20 cents each; $\$ 2.00$ per dozen, except where noted, or we will send one dozen varieties of our own selection for $\$ \mathrm{I} .50$.
Initial letters are as follows to indicate classes : $t$. Tea;
c. China; b. Bourbon; h.t. Hybrid Tea; n. Noisette.

Rose Agrippina, bright crimson. $c$.
Alba rosea, blush, rosy center. $t$.
Aurora, silvery rose $t$.
Bon Silene, carmine tinted with salmon. $t$.
Charles Rovolli, carmine-rose; free bloomer. $t$.
Comtesse Riza du Parc, bright coppery rose, tinged with soft violet crimson; large flower. $t$.
Coquette de Lyon, pale yellow, flower medium sıze. $t$.
Douglas, rich crimson, distinct. $t$.
Duchesse de Brabant, light carmine, tinged with violet. $t$.
Gen. Tartas, deep rose, shaded salmon. $t$.
Gloire de Dijon, cream shaded with flesh. $t$.
Hermosa, pink. $b$.
Isabella Sprunt, canary yellow. $t$.
Jules Finger, bright losy scarlet, beautifully shaded with crimson; flowers full and finely formed. $h, t$.
La Princess Vera, rich ivory white, shaded with coppery yellow, veined with pale blush and carmine. $t$.
Louis Richard, coppery rose, changing to buff, shaded with carmine, center sometimes brilliant rosy crimson. $t$.

Rose Lamarque, white, shading to lemon. $n$.
La Pactole, pale lemon. $t$.
Madame Camille, delicate rosy flesh, changing to salmon. $t$.
Mad. de Vatry, rich crimson scarlet, very bright. t.
Marechal Niel, yellow, tea-scented. $n$.
Madame Lambard, silver bronzc, changing to salmon, shaded with carmine and rose. $t$.
Marie Guillot, white, with lemon tinge, $t$.
Madame Caroline Kuster, orange yellow. $n$.
M'lle Rachel, white, delicately tinged with lemon. $t$.
M'lle Mathilde Lenœrts, bright pink, tinged with white, $t$.
Marie Van Houtte, white, tinged with yellow, and shaded pale rose. $t$.
Monthly Cabbage, a fine old variety; bright rosypink; flowers remarkably full and fragrant.
Peerless, crimson; quite hardy. $b$.
Phœnix, rosy-purple; quite hardy. $b$.
Queen's Scarlet, rich, dark crimson; free bloomer. $c$.
Queen of Bedders, flowers large; rich deep crimson; very double; free bloomer. 30 cents. $b$.
Reine Marie Henriette, clear cherry red; flowers borne in clusters. $t$.
Saffrano, saffron-yellow. $t$.
Sanguinea, deep crimson. $c$.
Souvenir de la Malmaison, pale flesh; large. $b$.
Triomphe de Luxembourg, coppery rose, large and full. $t$.
Triomphe de Milan, white, with pale yellow center. $t$.
W ashington, white cluster ; quite hardy: $n$.

## NEW AND SCARCE YARIETIES.

Abbe Girardin, soft, satiny rose, shaded darker in the center ; 30 cents. $b$.
Andre Schwartz, bright glowing scarlet, shading to rich crimson; profuse bloomer: flowers large and full; 25 cents. $t$.
Catharine Mermet, flesh color; flowers large, buds finely formed; very fragrant; 25 cents. $t$.
Camoens, light pink, tinged with yellow at the base. 30 cents. h. $t$.
Cornelia Cook, pure white, extra. 30 cents each. $t$.
Duchess of Edinburgh, intense glowing crimson; very brilliant and beautiful. 30 cents each. $t$.
Etoile de Lyon, beautiful deep yellow; flowers large and fine shape; an abundant bloomer. This is probably destined to be one of the most popular Roses in cultivation. 40 cents. $t$.
Madame Welche, beautiful amber yellow, deepening towards the center to orange, tinged and shaded erimson. 30 cents each. $t$.
Niphetos, pure white ; very large ; extra. 30 cts, $t$.

Rose Perle des Jardins, rich shade of yellow, very perfect in form, free grower, and very profuse bloomer ; 25 cents each. $t$.
Pierre Guillot, bright, dazzling crimson, shading to carmine; flowers large, double and full; very fragrant. 40 cents. \%. $t$.
Red Malmaison, bright glowing crimson; flowers full and perfectly formed; ;o cents. $b$.
Reine Maria Pia, deep rose, center reddish crimson. зo cents. $t$.
Sunset. A sport from Perle des Jardins. The flowers are a beautiful saffion color, heavily tinted with orange. They are handsome in the bud, anc' on opening are full, and perfectly double; 30 cts. $t$.
Viscountess Falmouth, bright shining rose, reverse of petals bright carmine ; very large; full ani: splendid form. 35 cents. It. $t$.

## POLYANTHA ROSES.



This class is a distinct one. For many purposes its varieties are excellent. They are continuously in bloom; desirable for house culture. The flowers are produced in clusters, and, although not large, are very perfect and handsomely formed. Splendid for cutting. Each, 30 cts.
Anne Marie de Montravel, pure white; flowers double and perfect.
Little White Pet. This is one of the best. The flowers, on opening, are very light pink or blush, but change to pure white. Splendid for cutting.
M'lle Cecile Brunner, salmon-pink, deeper in the center: flowers small, a beautiful miniature Rose.
Mignonette, rose, changing to blush ; clusters very large ; flowers small and delicate.
Paquerette, pure white, full and prettily formed.
For Hardy Roses see pages 51 and 52 , where will be found descriptions of the choicest Hybrid Perpetual, Moss, and Climbing varieties.

## SALVIA, (Flowering Sage.)

No plant grown gives us such a brilliant display of flowers in the autumn as the Salvia. Splendid for pot culture in the house. 25 cents each, except where noted. Salvia Bruantii, dwarf; flowers large ; rich dark red.

Leucantha, base of tubes rosy-mauve, upper part of tubes pure white.
marmorata nana, of neat dwarf habit; flowers alternately marked scarlet and white.
Mons. Issanchou, flowers scarlet and white: a strong, robust grower.
Mrs. Stevens, this variety is identical with Salvia splendens, except the color, which is deep crimson. patens, this is the most exquisite blue of any flower we have ; flowers large ; 2 inches in length.
rosea, small flower, bright pink.
splendens, the old scarlet variety.

## SOLANUM.

The Solanums are mostly nice compact plants, and desirable on account of their fine scarlet fruit which remain on the plant a long time. 25 cents each.
Solanum capsicastrum, Jerusalem Cherry, with bright red berries, which hang onall winter.
capsicastrum var., a variegated.leaved variety.
jasminoides, a beautiful climber for the house in winter; requiring but little care.
jasminoides variegata, foliage, beautifully marked with white

## SMILAX.

A popular and well-known climber with beautiful foliage of a dark glossy green, used largely with cut flowers, particularly wreaths, \&c. An excellent plant for parlor or window culture. 20 cents each.

## TRADESCANTIA.



The following varieties of Tradescantia (often called Wandering Jew, ) have beautifully marked foliage, and are fine for hanging baskets and vases, or for house culture, as they will endure almost any hardship, if liberally supplied with water.
Tradescantia zebrina, leaves dark green, with a $: 1-$ very stripe. 25 cents.
multicolor, beautifully striped with white, crimson, and olive green: sometımes sports. 30 cents each.


The Tuberose is a beautiful, pure white, wax-like, very sweet scented, double flower, growing on tall stems, each stem bearing a dozen or more flowers. In cold latitudes, obtain tubers early, plant them in boxes of earth, and keep in a warm place in the house; when warm weather transplant to the garden. Those who want this beautiful flower in the early winter can plant a few bulbs in pots in July or August, sink them to the rim in earth in the garden, where they can remain until the cool nights of autuinn, then remove to the house. Our Tuberoses are all of our own growing, and splendid bulbs.
New Dwarf Tuberose, "Pearl, "per dozen,
\$1.00; each,

## TRITOMA.

The Tritoma flowers late in the summer, usually commencing in August, and continuing till winter, and is adapted for large beds or groups, the many flame-colored racemes forming a stately object. The flower stems grow from four to five feet in height, surmounted by a spike of curious red and orange flowers, a foot in length The Tritoma is almost hardy anywhere, but far North, for safety, store the plants in a pit or cellar in winter. We have known them to keep well in Central New York, for five years in the garden, but it is not safe. Tritoma Uvaria, ronts, each,

## TIGRIDIA.



The flowers of Tigridia are about four inches in diameter. Set about the middle of May, and take them up in October, dry for a few days in the air, and pack away in dry sand or saw-dust, free from frost.
Tigridia conchiflora, yellow and orange, with dark spots; 75 cents per dozen; each,
pavonia, red, crimson spots; 75 cts. per doz.; each 1o

## TROP ÆOLUM.

See engraving page 28.
These plants are quite desirable for house culture. They flower freely, and are almost constantly in bloom both winter and summer. Splendid for hanging baskets, vases, etc ; each 25 cents.
Tropæolum Ball of Fire, single; rich deep scarlet. Double Orange, flowers light orange scarlet.
Hermann Grosshoff, bright orange-red flowers; very perfect.

## VERONICA.

A beautiful class of plants, blooming in autumn. Flowers in spikes three to four inches long, and light blue; leaves thick and glossy. Each 25 cents.

## Veronica Blue Gem, dwarf.

variegata, foliage margined with white.
WAX PLANT.


Wax Plant, (Hoya carnosa,) a greenhouse climber, with thick, glossy leaves, and umbels of flesh-colored flowers.
carnosa variegata, a variety with beautiful variegated foliage, edge of leaf banded with white,


The Verbena is one of the prettiest, and the most popular of all the flowering plants suitable for forming beds on the lawn. It commences to flower and spread from the first day the plants are set until late in the autumn, every day becoming better and more handsome. The improper growing of plants has checked the popularity of this useful flower to some extent, for it has been difficult in many places to procure healthy plants. A healthy plant will cover a space three feet in diameter. Our plants are grown with care, and are as robust as seedlings. With names, $\$ 1.00$ per doz.; $\$ 7.00$ per hundred; without names, 75 cents per doz.; $\$ 5.00$ per hundred. Our Verbena plants are the strongest and healthiest in America.
Verbena Alba Pura, clear white.
Acquisition, red, striped and mottled crimson.
Aristides, rich purple, white eye.
Aulic, scarlet, white eye.
Azurea, blue.
Bandeau, fine purple.
Belle de Baum, apple blossom.
Bertha, deep pink.
Blue Beard, indigo blue.
Cascade, white.
Cherry Bird, deep red.
Chimera, reddish purple, white eye.
Comet, scarlet, small white eye.
Commentator, blue, white eye.
Darinda, mulberry.
Dictator, violet, large white eye.
Ermine, white.
Fusilier, soft scarlet.
Gaiety, magenta.
Gladiator, scarlet.
Gondola, deep pink
Honora, rich velvety maroon.
Humboldt, maroon.
Lucida, scarlet.
Madame Verwest, deep violet-purple.
Medallion, mottled chocolate and purple, white eye
Miss Keith, carmine-red, white cye.
Mrs. Barker, deep rose.
Mrs. Raymond, soft scarlet, white eye.
Multicolor, white, striped and flaked scarlet.
Nomad, purplish maroon.
Noontide, shaded carmine, white eye.
Nosegay, purplish lilac, white eye.
Purple Gem, rich violet-purple.
Red Cap, vermilion red.
Regalia, crimson.
Rosetta, magenta, white eye.
Snowbird, white.
Stellus, white, striped scarlet.
Uralia, lilac, purple striped.
Zebra, light lilac, striped purple.

## VINCA.

A drooping plant; much used in vases or baskets. They are among the best and hardiest of our small plants for the purposes designated. 25 cents each.
Vinca Periwinkle, ) Harrisonii, center of leaves marked with light green.
major variegata, a very rapid grower ; leaves glossy green margined with white.


As beds of Scarlet Geraniums, Verbenas and Ornamental-leaved plants are so popular, making handsome and enduring beds from June until frost, we offer the most popular kinds for making these beds at a very low price. We can ship as soon as the weather becomes mild in the spring, but there should be no haste in setting such plants out, certainly not until the nights are warm. It is a custom in some places to raise flower beds in the center, but it is not a good plan in a warm, dry climate, unless water is abundant, so that the bed can be showered every evening, for they dry out much quicker than flat beds, and are not desirable. Our people have copied this plan from moist, foggy countries. When beds are made of several varieties of plants, and one or more grow so rapidly as to make the bed uneven, the rapidly growing sort can be kept pruned back. In circular beds it is always best, of course, to place the tallest growing plants in the center, as it is in all beds that are viewed from all sides, but a bed that is only seen from the front, like a border, having a hedge, or something like it for a background, should have the back row of plants the tallest, and the front ones the shortest.

The proper distance for setting Bedding Plants is twelve inches apart, except Verbenas, which should be eighteen inches, and Alternanthera which should be only six inches. It is easy, therefore, to ascertain how many plants are needed for a bed of any dimension. The bedding system of gardening has been popular for some years, and certainly has its advantages. Plants are selected for this purpose that will keep in blossom the whole season, and the flowers of which will bear the sun without injury. By this plan, therefore, the beds, if well made, alway's look neat and beautiful.


POPULAR BEDDING PLANTS.
Plants in quantities, for bedding, packed and shipped, by Express, the purchaser to pay the charges at the following prices: per dozen. per 100 per dozen. per too

| Plowing prices: | per dozen. | per 100 |  | per dozen. | per 100. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Achyranthes, | \$100 | \$ 700 | Centaureas, | 150 | \$10 0 |
| Alternanthera, | 100 | 700 | Coleus, | 100 | $\bigcirc$ |
| Caladium Esculentum, | I 5 | 10 00 | Geraniums, |  | - |
| Cannas, | I 50 | 10 0 | Verbenas, |  |  |

## PLANTS AND BULBS IN \$I.oo COLLECTIONS.

by mail, postage paid by ús.
These collections we offer for the benefit of our retail trade, and pride ourselves on our success in giving perfect satisfaction in the past. Each plant is well-grown, carefully labeled, and in good, thrifty condition. We will send one-half of any two collections at the same price as one. In all cases the selection of varieties must be left with us. If those ordering prefer to have them sent by Express and pay the charges, we will furnish any THREE of the above collections for $\$ 2.00$, and any five for $\$ 3.00$.

| Io Abutilons, . . . . . . . $\$ 100$ | 12 Gladiolus, named, . . . \$1 0 |
| :---: | :---: |
| Io Achyranthes, . . . . . . 100 | 25 Gladiolus, fine mixed, . I oo |
| Io Ageratums, . . . . . . . i 00 | 8 Hardy Shrubs \& Clim'rs, I 00 |
| Io Alternanthera, | 8 Heliotropes, . . . . . . 100 |
| Io Basket Plants, . . . . . I co | 8 Hibiscus, . . . . . . . . 100 |
| 10 Begonias, . . . . . . . . 100 | 6 Hydrangeas, . . . . . . 100 |
| 8 Bouvardias, . . . . . . 100 | Io Ivies, assorted, . . . . . I 00 |
| Io Carnations, Monthly, . I oo | Io Lantanas, . . . . . . i co |
| 10 Chrysanthemums, | 8 Perennials, assorted, . I 00 |
| Io Coleus, | 8 Perennial Phlox, . . ; I 00 |
| 8 Ferns, . . . . . . . . . I 00 | 8 Roses, Hybrid Perpet'al, I 00 |
| 10 Fuchsias, . . . . . . I 00 | 1o Roses, Monthly, . . . . I 00 |
| Io Geraniums, . . . . . . . I | 8 Roses, Climbing, . . . . I 00 |




12 Gladiolus, named,
25 Gladiolus, fine mixed,
8 Hardy Shrubs \& Clim'rs,
8 Heliotropes,
8 Hibiscus,
6 Hydrangeas,
o Ivies, assorted,

- Lantanas,

8 Perennials, assorted,
8 Roses, Hybrid Perpet'al,
o Roses, Monthly,


## SMALL FRUITS.

We pack plants carefully, and guarantee their safe arrival to destination, after which our responsibility ceases. All plants will be sent by Express, at the expense of the purchaser, except as noted.

## STRAWBERRIES.

For field culture, plant in rows four feet apart, with the plants one foot apart in the row. For garden culture, plant three by one foot. Should the ground not be prepared for planting, on receipt of plants, they should be carefully heeled in, in a cool, moist, shady place. Do not sprinkle the foliage, as it causes a moisture to collect, which is very injurious to the crowns, causing them to rot. In setting the plants, be careful to have the crown even with, or a little above,


MANCHESTER.
the surface of the ground, and to have the trench, or hole, in which the plant is to be set, deep enough to allow the roots their full length. Some varieties of Strawberries have pistlllate or imperfect flowers. These must have perfect-flowered varieties planted every fifteen or twenty feet among them or they will produce imperfect fruit. The pistillate varieties are marked with the letter $P$.
At dozen prices we prepay postage; at 100 rates add 50 cents per 100 for mailing, if wished by mail.
Strawberry, Atlantic, late; fruit large, rich, glossy, dark crimson, and very highly flavored; it is a good grower, and a promising addition to our late varieties; dozen 50 cents; hundred, $\$ 200$

atlantic.
Bidwell, fruit large, dark crimson, smooth and firm; very attractive, and of excellent quality ; dozen 30 cents; hundred 80 cents; thousand, .400
Cumberland Triumph, very large, smooth and uniform in size; light scarlet, very attractive and of good quality ; ripens early and lasts a long time; dozen 30 cents; hundred $\$ 1.00$; thousand,
Crescent Seedling, ( P ) bright scarlet, strong grower, exceedingly productive; ripens early and lasts a long time; dozen 30 cents; hundred 80 cents ; thousand,

Strawberry, Chas. Downing, medium early, bright crimson; of superior quality ; a good variety for home use or near market ; dozen, 30 cents; hundred 80 cents; thousand, . . . . \$ $4 \infty$


JAMES VICK.
James Vick, fruit medium size, bright scarlet turning to crimson, and borne on long, stout stems, that keep the larger portion of the fruit clear from the ground. It is a heavy yielder; the color is the most desirable that a Strawberry can have for marketing, and the fruit may be allowed to remain on the vines a week after it is ripe without the slightest injury. In the home garden this is advantageous, as there are many times when it is not convenient to pick berries as soon as ripe; dozen, 30 cents; hundred, $\$ 1.00$; thousand,
Kentucky, late; large; dark red; moderately firm, of good quality ; very productive; dozen 30 cents ; hundred $\$ 1.00$; thousand, . . . . 500
Manchester, ( P ) medium to late; average size large; of a bright scarlet color, good quality and very productive; dozen 30 cents ; hundred 80 cents; thousand,


PRINCE OF BERRIES.
Prince of Berries, a late variety, with large, dark crimson fruit, which is of superior quality; the plant is a vigorous grower, and very productive ; dozen, 50 cents ; hundred,

200
Sharpless, medium to late ; of extraordinary size ; clear light red, with a smooth shining surface; irregular in form; very vigorous, productive and of the finest quality ; dozen 30 cents ; hundred $\$ 1.00$; thousand,

Strawberry, Triomphe de Gand, medium to late; very large; glossy crimson; firm, and of a rich sweet flavor; one of the best for home use or near market; dozen 30 cents; hundred $\$ 1.00$; thousand,
$\$ 500$


SHARPLESS.
Wilson's Albany, early ; this is undoubtedly the most popular Strawberry in cultivation, and too well known to need any description ; it is still a great favorite, and will be for many years to come; dozen 30 cents; hundred 8octs.; thousand, 400

## RASP-ERRIES - Red.

If by mail, add 20 cents per dozen.
For field culture plant in rows five feet apart, with plants three and a half feet in the row, except Cap varieties, which should be six feet by three and a haıf feet. For ;rarden culture they may be set three feet apart each way, with Caps four feet by three feet.
Raspberry, Brandywine, very popular as a market vareity on account of its high color and firmness; doz., 75 cents; hundred $\$ 2.00$; thousand, 1200 Cuthbert, a most valuable late variety for home use or marketing ; large, firm, and of superior quality; very productive; dozen 75 cents; hundred $\$ 2.00$; thousand, . . . . . . . . . . I2 Herstine, early; very bright red; moderately firm, and of high, rich flavor; dozen 75 cents; hundred $\$ 2.00$; thousand,

Raspberry, Hansell, new; very early; fruit medium to large, bright crimson, firm, and of excellent quality; a strong, vigorous grower, very productive and hardy; dozen $\$ 1.00$; hundred, $\$ 500$


HANSELL
Marlboro, new ; fruit very large ; firm; a beautiful scarlet color; ripens early, and continues in good bearing a long time. The plant is a strong, vigorous grower, and thus far has proved perfectly hardy; each 15 cents; dozen, \$1.50; hundred,
Rancocas, a promising new variety, ripening a few days later than the Hansell, but more vigorous and productive than that variety; the fruit is a bright crimson color, very firm, and of good quality ; each ; cts. ; dozen $\$ 3.00$; hundred, 1500
Shaffer's Colossal, medium to late; fruit very large; quite dark, but of excellent quality; hardy and very prolific: dozen $\$ 1.50$; hundred $\$ 6.00$; thousand,

4000
Turner, early; dark red; moderately firm, of fine quality; very productive, and very hardy; dozen 75 cents; hundred $\$ 2.00$; thousand, . 1200

## RASPBERRIES-Black

Doolittle's Improved, early; mediumsize; very hardy and prolific; dozen 75 cenis; hundred $\$ 2.00$; thousand,
$12 \infty$



CUTHBERT.

Raspberry, Gregg, very large ; of excellent quality; wonderfully productive, and very hardy; medium early ; dozen 75 cents; hundred $\$ 2.50$; thousand,
$\$ 1500$
Mammoth Cluster, large ; of fine quality ; strong grower, and very productive; an excellent variety for general culture; dozen 75 cents; hundred $\$ 2.00$; thousand,
Ohio, fruit large, of fine quality, and considered the best of the Cap varieties for drying purposes. It is a strong grower, hardy and very productive; dozen 75 cents; hundred $\$ 2.50$; thousand


CH 10

Raspberry, Souhegan, new; the earliest of this class; fruit a shining jet black, large, and of fine quality; very hardy and productive; dozen $\$ \mathrm{x} .00$; hundred $\$ 4.00$; thousand, . . . . . $\$ 20.00$
Davidson's Thornless, early; medium size, and very sweet; dozen 75 cents; hundred $\$ 2.00$; thousand,

## RASPBERRIES - Yellow.

Caroline, very hardy and prolific; fruit medium to large, of fine quality; dozen $\$ 1.00$; hundred, $\$ 4.00$; thousand,
Brinckle's Orange, this variety is not quite as hardy as the Caroline; the fruit is of a much brighter color and finer quality; dozen $\$ 2.00$; hundred,
.800

## BLACKBERRIES.

If by mail, add 25 cents per dozen.
For field culture, plant in rows six feet apart, with plants three feet apart in the row. For garden culture, five feet by four feet.

Blackberries, Early Harvest, new; very early; and productive; a valuable variety for marketing, \$x 50
Snyder, the hardiest, . . . 75
Kittatinny, needs protection ni rth of New York city, . 75 $\$ 500$ $\$ 4000$ 2000

Wilson, early and very hardy,

75
100
1000

Wachussett Thornless, hardy , and almost free from thorns,

100
3000
Early Cluster, new fruit; large; quite firm, and of good quality ; very productive ; each, 25 cents, 300
Wilson junior. This variety descended from the Wilson's Early, and gives promise of outdoing that venerable variety in yield, quality, and size of fruit; each, 25 cents, . . . . 30


RASPBERRY, GREGG.

## CURRANTS.

Plant in rows four feet apart, with plants three feet apart in the row. By mail, add 25 cents per dozen.
Currant, Fay's New Prolific, red; a seedling from the Cherry Currant; fruit large; plant very productive ; I year plants, each, 75 cents ; dozen, $\$ 7.50 ; 2$ year plants, each, $\$ 1$; dozen, $\$ 1000$
Cherry, red; fruit extra large; I year plants, dozen 75 cents ; hundred,
White Grape, the best white variety ; very productive: I year, dozen 75 cents; hundred, . . 50
Red Grape, strong grower; fruit medium size; I year, dozen 75 cents; hundred,
Black Champion, a new English variety: the fruit is very large, handsome, and highly flavored; i year, each
Black Naples, an old but good variety; I year, dozen 75 cents : hundred,
Lee's Prolific, new; about ten days earlier than Black Naples; I year, dozen $\$ 1.00$; hundred, 6 oo
Prince Albert, light red; valued for its late ripening; fruit large; dozen, 75 cents; hundred, . . 5 co

## GR $\ddagger$ PES-NEW VARIETIES.

Grape, Amber Queen, very early, hardy, strong grower; ripens in August; fruit of exceilent quality : amber color, but turns darker if allowed to remain on the vine; i year, each
Duchess, bunch medium to large, handsomely formed, shouldered, very compact ; of a greenish white color ; skin thin, flesh tender, without pulp and of the finest quality ; I year vines, each, 50 cents; 2 year,
Empire State, bunches large, rom six to ten inches long, shouldered; berry medium size; roundish oval; color white, with a light tinge of yellow, covered with a thick white bloom; flesh tender. sweet, rich, and sprightly; the vine is a strong, vigorous grower, and very productive ; strong I year vines, each,
Golden Pocklington, (see colored pages.) I year, 30 cents; 2 year,

Grape, Jefferson, bunch large, often double shouldered, very compact; berries large, light red with a thin whitish bloom, very solid and sweet; vigorous, hardy and very productive; 1 year 60 cents; 2 year,

3080
Prentiss, bunch large, seldom shculdered; berry medium to large ; yellowish green, with a rosy tint when exposed to the sun; firm; flesh tender, sweet; 1 year 50 cents; 2 year,

75
Lady Washington, bunch very large, generally double shouldered; color deep yellow, with a tinge of pink when exposed to the sun, and covered with a thin white bloom ; flesh tender, soft and very sweet; I year 50 cents; 2 year,
Poughkeepsie Red, new. This and the C'lster Prolific have been exhibited at most all of our State, and many of the County, Fairs for several years past, and undoubtedly many of our customers are well acquainted with them. This variety is a cross of the Delaware and Iona, in quality it can hardly be surpassed. The bunches are larger than those of the Delaware and it is said to succeed where the Delaware will not; strong 1 year vines, each, $\$ \mathrm{~F} .50 ; 2$ year vines, each,

200
Ulster Prolific, new ; fruit handsome and of excellent quality; a vigorous, healthy grower, and very productive; color coppery-red. This variety is a cross of the Catawba and a wild Grape; strong I jear vines, each, $\$ 1.50 ; 2$ year vines, each,

200
Vergennes, bunch and berries large; of a light red color; clings firmly to the stem; flavor rich and sweet; ripens vers early, and is an excellent keeper; i year 60 cents; 2 year,

OLDER SORTS.
Add 25 cts. per doz. by mail for I year ; 50 cts. for 2 yrs
Agawam, Rogers' 1 yr. each. doz. 2 yr. each. doz Agawam, Rogers' 15, ) . So $25 \$ 250$ §c 35 ミ3 Brighton, Champion, very early; Concord, 30300
\$0 35 ? $\begin{array}{ll}25 & 250 \\ 25 & 250\end{array}$

Lady, $\begin{array}{lll}30 & 3 & 00 \\ 25 & 2 & 50\end{array}$
Merrimack. Rogers' 19 ,
Moore's Early,
Salem, Rogers' 22,
Wilder, Rogers' 4.
Worden,

## GOOSEBERRIES.

Gooseberries thrive best if planted where they will receive a partial shade. Plant the same distance as Currants. Add 25 cents per dozen by mail.


Industry, see colored pages. Each, §o cts. dozen,

500
Downing's. greenish white: doz. si. =-: hundred, io oo Smith's, large: light green - doz. \$1 25 : hundred, . 8 oo Golden Drop, fruit golden yellow; large, and of excellent quality ; each 25 cents ; dozen, $\$ 2.5$ : hundred,


Our Vegetable Department embraces almost every article of value known. We have excluded everything our experience has proved unworthy of culture, as also some untried and not very promising kinds. As fast as new Vegetables establish their good character we add them to our list, but exercise our usual caution in introducing new candidates for public favor, submitting all to thorough trials on our grounds. Much of our Vegetable seed, and the most important, are grown upon our seed farms; other kinds we obtain of the most reliable and responsible growers of England, France, Germany, and other countries, and we have no hesitation in saying that altogether our Vegetable seeds are not excelled, if equaled, by any collection in the world. Everything is tested before being packed, so that we know all will grow if treated well. We have endeavored to describe the different kinds so that their character and value may be understood, with such simple directions for culture, as with a little care will ensure success.

## ARTICHOKE.

The Jerusalem Artichoke is a wonderfully hardy and productive plant, yielding roots in immense quantities. They are like potatoes in appearance, and if we had no
 potatoes would not make a bad substitute. It is good for all stock and is not bad for the table. Plant the tubers like potatoes, and enough is usually left to seed the ground for the next crop.
There is another Artichoke, very little grown in America, the Globe Artichoke. The portion used is the flower-head in an undeveloped state. See last engraving.
Artichoke, Jerusalem, per bushel, $\$ 2.00$; per peck, 75 cts., by freight or express, charges not prepaid; per quart, by mail or express, prepaid, Globe, true, seed ; perlb., $\$ 3.00$; per 02., 30 cts.; per packet,

## ASPARAGUS.

To grow Asparagus plants from seed, sow in drills, about one inch deep, and the rows wide enough apart to admit of hoeing-about a foot. An ounce of seed is sufficient for a drill thirty feet in length. Keep the
soil mellow and free from weeds during the summer, and in the fall or succeeding spring the plants may be set

out in beds, about a foot apart each way. The beds should be narrow, so as to permit of cutting to the center. Set plants about a foot apart, and the crowns four inches below the surface, and spread the roots. Before winter, cover the transplanted beds with about four inches of manure. Salt is an excellent_manure for Asparagus. Sow a little on the surface in the spring, and it will keep down the weeds. By purchasing plants a year at least of time is saved. The young tops may be cut for the table the second summer, but not very freely until the third.
Asparagus, Conover's Colossal, large, and of rapid growth ; per lb. 75 cents, per oz. ro cents 5
Roots-r year, by mail, per roo, prepaid, . . . $\$ 1.50$ 2 years, by mail, per 1oo, prepaid, . . . 3.50 2 years, by express, per 100, not paid, . I. 50


Beans like a dry and rather light soil, though they will do well in any garden soil if not planted too early in the spring. Dwarfs are earliest and most hardy, as a general rule. In our engraving we show plants of both Dwarfs and Runners, and the old Windsor, as well as specimens of the most popular and useful sorts, drawn of the natural size of the shelled dry beans, and as true as we could make them. In garden culture Beans are generally planted in rows three inches apart, and the rows a foot apart ; in field culture in drills wider apart, so as to cultivate with horse one way. Running Beans are planted in hills two or three feet apart.

Figure 2 shows the Refugee; 3 the Golden Wax; 4, Early Mohawk; 5, Speckled Cranberry; 6, White Kidney : 7, White Marrowfat: 8, Early Valentine : 9, Early Rachel ; 10, Large Lima; 11, Horticultural ; 12, Giant Wax ; 13, Black Wax ; 14, Scarlet Runner. The engraving of plant on the right shows the habit of the Running Beans, on the left the English Broad Windsor, and the center the Dwarf.

Bears, Long Yellow Six-Weeks, one of the earliest; an excellent and productive String Bean; quart 6.0 cents,
Early Valentine, early and tender for String Beans ; per quart, 60 cents,
Early Mohawk, an early, hardy, productive and excellent String Dean; per quart, 60 cents,
Wax or Butter, a popular variety wherever known; the pods a waxy yellow, solid, very tender and almost transparent, stringless, seeds black when ripe; per quart, 70 cents,
Golden Wax, an early, stringless Bean, of goldcn wax color, and excellent quality ; quart 70 cts .
Ivory Pod Wax, a new variety, of rapid growth, very prolific; pods delicate white, stringless, succulent, and of good flavor; per cuart 60 cents,
Mont d'Or, a new German variety of Wax Bean, carly, bears profusely. (See colored pages). Per quart, 80 cents,
White Kidney or Royal Dwarf, one of the very best for shelling, either green or dry ; per quart 60 cents,
White Marrowfat, clear white, almost round, fair as a String Bean, and first class for use shelled, either green or dry ; per quart 60 cents,

Beans, Refugee, hardy, abundant bearer, flesh thick and tender, one of the best for pickling, on account of its thick flesh; will produce pods fit for use in eight weeks from planting; per quart, 60 cents,
Rroad Windsor, the celebrated Broad Bean of England, growing on a strong stalk, about two feet in height. Beans eaten shelled. Not very well adapted to our climate; quart 70 cents,
RUNNING EEANS.
"King of the Garden " Lima Bean. (For description see culored pages). Per quart, $\$ 1.50$, Large Lima, the most buttery and delicious Bean grown. Plant in a warm, sandy soil, if possible, not too early : per quart 80 cents,
Dreer's Improved Lima. It is claimed that this variety is earlier and more productive than the old sort, though the seeds are smaller. Per quart, 80 cents,
London Horticultural, or Speckled Cranberry, a round, speckled Bean, tender for Snap Beans, and excellent for shelling; quart 70 cts .,
Sarlet Runner. This is the favorite Snap Bean of Europe, and nothing else will sell as soon as this appears in market ; quart 80 cents,

## BRUSSELS SPROUTS.



The culture for Brussels Sprouts is the same as for Cabbage. If early plants are raised in a hot-bed, they will perfect themselves in September, in the north, and a later sowing should be made in the open ground, that will be in perfection about the time winter commences. These should be taken up and stored in a cool cellar, with the roots in earth, where they will remain fit for use during the winter. Where the winters are not very severe, they may remain in the ground, to be cut as needed. A good many people in this part of the country are beginning to appreciate Brussels sprouts, and surprised to find how good they are, and that they have known nothing about them. Try a few. Brussels Sprouts, per lb. $\$ 1.25$; per oz. 15 cents, 5


The Beet is a valuable vegetable, both for the table and for stock. If seed is sown pretty thickly in drills in the early spring the plants can be thinned out and prepared for the table, like Spinach, as soon as they become a few inches in height, for a month or more until the roots become as large as Radishes, both roots and leaves being excellent. When a little larger, the roots can be cooked alone, and in this way are used until winter, when those remaining should be stored away in a cold cellar, or pit, covered with earth. In this way they will keep till spring.

For Beets, the soil should be rich, mellow, and deep. Plant in drills, about two inches deep and the rows about twelve or fifteen inches apart. Set the seeds in the drills about two inches apart. For field culture the rows should be wide enough to admit the horse cultivator and the roots not nearer than one foot in the rows. The Mangel Wurzel Beets grow to a very large size, are coarse, and wonderfully productive, naking excellent food for cattle. Those who have
never tried the Mange's for stock, have yet to learn ot their great value for cattle, both for milk and meat, Then, they are juicy and refreshing, and add to the health and comfort of the animals. In no way can so much good food be grown so cheaply as in Mangels.
The engraving showing two leaves exhibits somewhat the general appearance of the Beet leaf, but more particularly the very thick leaf-stalks of the kind known as Swiss Chard, the leaf-stalks being eaten when cooked, like Asparagus, and we consider it a great luxury.
Beet, Egyptian Elood Turnip, the earliest variety grown, and valuable on this account; not very productive ; per lb. 75 cts. ; per oz. Io cts., Eclipse, new. (For description see colored pages.) Per \#h., Sr. 30 ; ounce, 15 cents,
Extra Early Bassano, an early, good Beet, tender and juicy; flesh white and rose; grows to a good size ; when sown late, it keeps well in the winter ; perlb. 75 cents ; oz. ro cents,

Beet, Bastian's Early Turnip, next in earliness to Egyptian and Eclipse, an excellent table variety; per lb., \$r.00; ounce, io cents,
Early Blood Turnip, turnip-shaped, smooth, tender and good; about ten days after Bassano; per lb. 75 cents; per oz. io cents,
Dewing's Turnip, a goodred, but not dark, Turnip Beet, about a week earlier than Blood Turnip; smooth skin and small top, and growing much above ground; flesh tender; good for summer use; per lb. 75 cents: per oz. Io cents,
Early Yellow Turnip, a variety of the Blood Turnip Beet, differing mainly in color; the roots are bright yellow ; a good early Beet; per lb. $\$ 1.00$; per oz. Io cents,
Henderson's Pine Apple, true, compact, shorttop variety ; roots medium sized and of a deep crimson; much liked here by gardeners and amateurs; per lb. \$r.50; per oz. I5 cents,
Long Blood Red, a popular winter sort; long, smooth, blood red; sweet and tender; per lb. 75 cents; per oz. Io cents,
Imperial Sugar, the sweetest and best Sugar Beet; per lb. 60 cents; per oz. Io cents, USED FOR LEAVES AND LEAF-Stalks only.
Beck's Improved Sea Kale, a variety of Beet with beautiful, tender leaves, popular for cooking as "greens"; per lb., \$r.co ; per oz., io cts.,
Swiss Chard, Large Ribbed Scarlet Brazilian, per lb. $\$$ r.oo; per oz. Io cents,
Swiss Chard, Large Ribbed Yellow Brazilian, per lb. \$r.oo; per oz. Io cents,
Swiss Chard, Large Ribbed Silver, per lb. 60 cents; per oz. Io cents,

MANGEL WURZELS-USED FOR CATtLE.
Carter's Mammoth Long Red, of very large size and good quality; per lb. 60 cents; oz. .
Carter's Improved Orange Globe, the very best round Mangel ; per lb. 60 cents; per oz. .
Golden Tankard, a new and fine variety; flesh deep yellow. Per lb. 75 cents; per oz.,
Long Yellow, per lb. 6 cents; per oz.
Olive-Shaped Red, large; 13. 60 cents; oz.

## BORECOLE, or KALE.

The Kales are more hardy than the Cabbage, and will endure considerable frost without injury. When cut frozen, they are immediately placed in cold water. They do not form heads li*ie Cabbage, but furnish abundance of pretty, curly leaves,
 that are very ornamental and highly prized. The Kale furnishes abundant food for the cottagers of Europe, and when well grown and properly prepared is good enough for any one. Culture same as for Cabbage.
Borecole or Kale, Dwarf German Greens, or Sprouts, bright green, resembling Ruta Baga tops, and of fine flavor. The plan is to sow in rows, about a foot apart, in September, and gather in early spring, like Spinach; per lb. \$r.00; per oz. ro cents,
Dwarf Green Curled Scotch, dwarf, nicely curled, and bright green; hardy, and may be cut from the ground all the early part of winter. Per lb. \$r.oo; per oz. io cents,
Dwarf Purple Kale, like the Scotch Kale, except in color, but more harly; lb. \$r.50; oz. Is cents,
Tall Green Curled Scotch, finely curled; very hardy ; one of the best: lb. $\$ 1.00$; oz. ro cents,


Brocoli resembles the Cauliflower ; indeed, it is hardly possible to distinguish the difference. Brocoli, however, is the most hardy, and in many sections of our country would not suffer in winter, but it dislikes severe summer heat more than cold; and to succeed, it would be necessary to grow late plants, and set them out after the extreme heat of summer is past. Treated in this way we do not know why we cannot have Brocoli.
Brocoli, Purple Cape, one of the hardiest and most popular varieties, and the most certain to form a good head; the earliest of the purple varieties; per lb, $\$ 5.00$; per oz. 45 cents,
Southampton, fine, hardy, large, yellow variety - one of the old popular sorts, like Portsmouth, Sulphur, etc.; per lb., \$3.00; per oz. 30 cents,

CRESS.
Cress should be sown in a hot-bed or in a sheltered spot in the garden. quite thick, in shallow drills, and in a short time it will be fit for cutting. It gives a pungent relish to Lettuce and other salad plants. A fiesh lot should be sown every week, as it
 matures very rapidly and is useful only when young. In old times it was ouite a fancy with the children, and some older people, to sow cress so as to form a name or design, which it will do very soon, as it is of very quick growth.
Cress, Fine Curled, superior; will bear cutting several times; per lb. 60 cts.; oz. Io cents,
Plain-Leaved, tender; per lb., 60 cts.; ounce, Io cents,
Broad-Leaved Garden, sometimes used for soups; per lb. \$r.oo; per oz. Io cents,
Australian, leaves delicate green, flavor mild and fine; per lb. Sr.co; per oz. Io cents,
Water, does pretty well in moist situations, but better on the edges of streams in shallow water; lb. $\$ 3.50$; oz. 35 cents ; half oz. 20 cts. ,

## CORN SALAD.

A favorite salad plant in Europe. Sown in August, and protected with a few leaves during winter, it can be gathered very early in spring. Sown in April, it is soon fit for use. The leaves
 are sometimes boiled aud served as Spinach.
Corn Salad, per lb. §r.oo, per oz. io cents,


LONG RED CORELESS.
LONG RED CORELESS.
The Carrot should always be furnished a good, deep, rich soil. Sow in drills about an inch deep, the drills about a foot apart; and at thinning, the plants should be left from four to ten inches apart, according to kind. The short kinds are finest-grained, best adapted for table use, can be had very early, and may be allowed to grow very thickly upon the ground. The large sorts are admirable for all kinds of stock, and nothing is more relished by horses in winter, and nothing is more healthful for them. Some prefer the short kinds, even for stock, as they are so easily gathered, and give a good crop.
Carrot, Early Forcing, desirable forcing, where growing small, very early Carrots will pay. See engraving, fig. o. Perlb. \$1.50; per oz. iscts.,
Early French Short Horn, small; best for table; preferred by some for all purposes, even for stock; per lb. \$I.25; per oz. io cents. See engraving fig. I
Oxheart, (for description SEE COLORED PAGES); per lb., \$2.00; per ounce, 20 cents,
Half Long Scarlet Stump Rooted, larger than Short Horn, and a desirable table variety ; per lb. $\$ \mathrm{I} .25$; per oz. Io cents,
Half Long Scarlet Pointed Rooted, a very desirable Carrot either for table or feeding, sweet and productive; lb. $\$ \mathrm{r} .25$; oz. 1o cents,
Danvers Orange, a first-class, half-long variety : flesh dark orange; very productive. Per lb. \$1.25; per oz., 15 cents,

Carrot, Long Red Coreless, is a stump-rooted variety, a foot or more in length, and two inches in diameter; per lb. $\$ 2.00$; per oz. 20 cents,. . Half Long Scarlet Carentan, a very pretty Carrot, eight inches in length and nearly coreless; perlb. $\$ 2.00$; oz. 20 cents,
Long Orange, per lb. \$1.00; oz. io cts.; fig. 3, 5
Altringham, selected, red; lb. \$1.00; oz. Io cts., engraving, fig. 4 .
Large Orange Belgian Green-Top, fine for feeding; per lb. $\$ 1.00$; per oz. ro cents; fig. 5 , Giant White Belgian Green-Top, fine for cattle ; per lb. 75 cents ; per oz. Io cents ; fig. 6, .

## CHIVES.

The Chives are small and not very important members of the Onion tribe, quite hardy everywhere. The leaves are slender, and appear very early in the spring, and may be shorn several times during the season. They are propagated by divisions of the root. The Chives make the very best border for beds in the vegetable garden, and are not only ornamental, bearing pink flowers, and a mass of green leaves, but
 equal to the Onion for flavoring soups and salads.

Roots, per bunch,

## CABBAGES.


"TRUE" JERSEY EARLY WAKEFIELD.


HENDERSON'S EARLY SUMMER


PERFECTION DRUMHEAD SAYOY:


EXCELSIOR LARGE FLAT DUTCH


NEWARK EARLY FLAT DU'TCH.


FOTTLER'S IMPROVED BRUNSWICK.


FILDER, OR POMERANIAN


LOUISVILLE DRUMHEAD.

The Cabbage requires a deep, rich soil, and thorough working. For early use, the plants should be started in a hot-bed or cold-frame; but seed for winter Cabbage should be sown in a seed-bed, early in the spring. Some of the large late varieties seem to do best if the seed is sown in the hills where they are to remain, and in that case sow two or three seeds where each plant is desired and then pull up all but the strongest. Plant the large varieties three feet apart; the small, early sorts, from a foot to eighteen inches. The Savoy Cabbages have wrinkled leaves and are of fine flavor, especially after a little frost has touched thern in the autunin. Some gardeners grow plants for early summer Cabbage in a frame in the autumn, protecting them with boards or matting during the winter. In mild climates Cabbage can `e transplanted in the autumn.
Insects have been exceedingly troublesome to Cabbage in many sections of late years. Growers must try for a rapid growth, and wage a constant warfare against the enemy. See advertisement of Vick's Exterminatnr.
Cabbage, Early Wakefield, (American seed) the great favorite with market gardeners for the New York Market ; the earliest and sure to head. The seed is true and the best; per lb. $\$ 4.00$; per oz. 35 cents ; per half oz. 20 cents,
Henderson's Early Summer. This is an old popular sort with the Long Island market gardeners. It follows the Wakefield and resembles the Early Flat Dutch ; should be sown in hotbed in February or March, as when sown in the fall and wintered over, the plants are inclined to run to seed; per lb. $\$ 3.50$; per oz. 30 cents ; per half oz. 20 cents,
Newark Early Flat Dutch. This is an excellent second early Cabbage, produced by a cross between the old Large Flat Dutch and Early Oxheart. Our seed is true and excellent ; per lb. $\$ 3.50$; per oz. 35 cents; per $1 / 2$ oz. 20 cents,
Low's Peerless, new. (For description see colored pages). Per lb. $\$ 6.00$, ; ounce, 60 cts.,
Early Dwarf York, small, very early ; per lb., $\$$ r.50; per oz., 15 cents,
Large York, larger than above; round head; good summer and fall sort ; lb. \$1.50; oz. 15 cts.
Wheeler's Imperial, one of the best carly varieties we have ever tried; lb. $\$ 3.00$; oz. 30 cts.,
Early Schweinfurth, an early Cabbage, for summer and autumn use; of large size, but not solid ; per lb. $\$ 2.00$; per oz. 20 cts.; $1 / 2 \mathrm{oz}$. 15 cts.,
Winningstadt, a fine tender variety, sugar-loaf in form; one of the best summer sorts; if sown late, good for fall or even winter per lb. \$r.50; per oz. 15 cents,
Filderkraut. This is a new German Cabbage which we introduced from Germany several years since, and altogether the most solid Cabbage grown-almost as hard as marble, and sure to head. Per lb. $\$ 2.50$; per oz. 25 cents ; per half-ounce 20 cents,
Large French Oxheart, a fine, heart-shaped Cabbage, coming in use after Early York and other earlier sorts ; very tender and fine flavored, and heads freely ; lb. \$1.50; oz. 15 cents, .
Fottler's Improved Brunswick, per lb. \$2.50; per oz. 25 cents; $1 / 2$ oz. 15 cents,
Louisville Drumhead, a variety grown largely by market gardeners in the Southwest. It stands hot weather better than most other sorts, and is sure cropper. Resembles Premium Flat Dutch; per. lb. $\$ 4.00$; per oz. 40 cents; $1 / 207.25$ cents, Marblehead Mammoth, very large winter Cabbage: heads freely, and with good soil will grow to an enormous size ; per lb. $\$ 3 . \infty$; per oz. $3^{n}$ cents ; per half oz. 20 cents,
Stone Mason Marblehead, a large, solid, tender and excellent free-heading winter Cabbage; per lb., $\$ 3.00$; oz., $30 \mathrm{cts} . ; 1 / 20 \mathrm{oz} ., 20 \mathrm{cts} .$,

Cabbage, Large Late Drumhead, a very superior drumhead variety, grown from choice heads; per $\mathrm{lb} . \$ 2.50$; per oz. 25 cts.; per $1 / 2 \mathrm{oz}$. 15 cts ., Excelsior Large Flat Dutch. This is a very superior strain of the old Large Flat Durch. Grown from the best heads; per 1 b . $\$ 3.50$; per oz. 35 cents ; 1/2 oz. 20 cents,
Premium Flat Dutch, heads well and keeps over finely ; lb. $\$ 2.50$; oz. 25 cts .; $1 / 2 \mathrm{oz}$. 15 cts., Large Flat Dutch, good for fall or winter crop, resembling the Drumhead; per $\mathrm{lb} . \$ \mathrm{I} .50$; per oz. 15 cents. .
Early Blood Red, early variety; will make fine winter Cabbage if sown quite late in the open ground; per lb. $\$ 2.25$; per oz. 20 cents,
Large Late Blood Red, pure; for pickling; per lb. \$1.50; per oz. is cents,
Perfection Drumhead Savoy. This is another variety which the market gardeners in the neighborhood of New York think they have so much improved as to entitle it to a name. It is from the old Drumhead Savoy; per lb. \$3.00; per oz. 30 cents ; per $1 / 2 \mathrm{oz} .20$ cents,
Dwarf Green Curled Savoy, heads small and rather loose: very hardy and excellent; per lb. \$1.50; per oz. 15 cents,
Early Dwarf Ulm Savoy, heads round and very solid and of fine quality; forms its head very early ; per lb. \$1.50; per z. if cents, . .

## COLLARDS

Collards, well known and prized at the South, and so nicely adapted to the Southern climate; per lb. $\$ 2.00$ : per oz. 20 cents,

5
CAULIFLOWER.


The Cauliflower delights in a rich soil and abundance of water. By sowing the early varieties in the spring, in a hot-bed or cold-frame, or even in an open border, they can be obtained in pretty good season. For late Cauliflower, sow seed in a cool, moist place, on the north side of a building or tight fence, in this latitude about the first of May, and they will not be troubled with the little black beetle, so destiuctive to everything of the Cabbage tribe when young. Do not allow the plants to become crowded in the seed-bed. Transplant in moist weather, or shade the newly set plants. A moist atmosphere and a rich soil suit the Cauliflower, and we must try to secure this as well as we can. In a dry time Cauliflower must be watered. We have seen large plantations in Europe that were watcred every day. Any person who has a good deep muck partially drained, we think, can raisegood Cauliflower with little trouble. Cauliflower that have not headed may be taken up before hard frosts and put in a cellar or pit, the roots in earth, and many will grow tolerably fair heads during the winter. We have grown crops by selecting the early kinds very early, before hot weather, and the later kinds in the cool, showery weather of autumn.
Cauliflower, Vick's Ideal. (For description see Colored paces). Per ounce, $\$ 8.00$; per $1 / 2$ oz.,
$\$ 4.00$; per $1 / 4$ oz., $\$ 2.00$,

Cauliflower, Henderson's Early Snowball, one of the earliest varieties, and very reliable for heading. Its dwarf habit and short outer leaves allow it to be planted very close- 18 to 20 inches apart; per oz. $\$ 6.00 ; 1 / 2$ oz. $\$ 3.00 ; 1 / 4 \mathrm{oz}$. $\$ \mathrm{r} .75$, Erfurt Earliest Dwarf, low, with pure white curd; one of the best and surest to head; per oz. si.so: per half oz. $\$ 2.00$,
Erfurt Very Dwarf Small-leaved, for forcing and open ground; about fifteen inches in height ; very solid pure white head. This is the Early Snowball Cauliflower of scme catalogues; per oz. $\$ 5.00$; ${ }^{1}=$ oz. $\$ 2.50 ; 1 / \frac{1}{4}$ oz. $\$ 1.25$,
Early Paris, early and fine; short stalk, white; per oz. So cents ; half oz. 50 cents,
INew Imperial, a French variety, large and very early, and in every way superior; per oz. \$1.50; half oz. 90 cents,
Erfurt Large White, a large and excellent Cauliflower: oz. $\$ 2.25$; 1/2 oz. \$1.40,
Italian Giant, a new, large and very superior variety; per oz. 70 cents; half oz. 45 cts.,
Algiers, a large, late variety, of excellent quality, and one of the surest to head; per ounce, $\$ 1.00$; per $1 / 2$ oz., 60 cents,
Early London, a valuable old sort that still maintans its popularity ; per oz. 75 cents ; $1 / 2$ oz. 50 cents,
Lenormand's, one of the largest and hardiest of Cauliflowers ; very fine; oz. 75 cents; $1 / 2$ oz. 50 cents,
Lenormand's Short-Stemmed, extra fine; per oz. 75 cts.; per half oz. 50 cts., .
Large Asiatic, a fine, large, late variety, one of the best large sorts; per oz. 75 cents; per $1 / 2$ oz. so cts,
Stadtho: Her, a large German variety; very large head and fine flavor ; per oz. 75 cts.; per half oz. 50 cts .,
Walcheren, a very hardy variety, and by many considered the best; per oz. 75 cents; per half oz. 50 cts.,

CELERY.


Sow seeds in a hot-bed or in cold-frame. As soon as the plants are about three inches high, transplant to a nicely prepared bed in the border, setting them four or five inches apart. When some eight inches high, and fine stocky plants, set them in the trenches. Earth upa little during the summer. keeping the leaf stalks close together, so that the soil cannot get between them. Finish earthing up in autumn, and never hoe or earth up in moist weather, nor when the plants are moistened with dew.
To preserve Celery for winter, dig trenches a foot in width and as deep as the tops of the plants. Stand the Celery in these, erect, as they grew, with what dirt adheres to the roots, packing closely, but not crowding. After the trench is filled it should be covered with
straw or leaves as a protection from frost. Do not cover until the weather becomes quite cold, and then only a little at a time, as the cold becomes greater. Celery will bear a good deal of frost. The trench must have good drainage.

## Celery, Turner's Incomparable Dwarf White,

 one of the very best varieties, growing stout, crisp, and of exceedingly fine nutty flavor; per lb. $\$ 2.00$; per oz. 20 cents,Sandringham Dwarf White, a new and excellent variety ; very solid, crisp, and of fine flavor; one of the best of the white varieties ; per ib. $\$ 2.00$; per oz. 20 cents,
White Plume, a new variety specially adapted to cultivation by amateurs, as its inner stalks and leaves are naturally white, and do not require blanching by the old process of high banking. By simply tying up the stalks and drawing up the soil with the hoe, the work of blanching is complete. It is ornamentai, tender, crisp, and of good flavor, but not a good keeper; per lb., $\$ 5.00$; ounce 75 cts .; $1 / 2 \mathrm{oz}, 45 \mathrm{cts}$.,
Henderson's Dwarf White, a favorite variety ; of stiff, close habit ; solid, crisp and tender; a good keeper; per lb. $\$ 3.00$; per oz. 30 cents; per half oz. 20 cents,
Crawford's Half Dwarf, a new and extra fine variety; extensively grown by market gardeners; intermediate between the dwarf and large sorts; of a rich, nutty color, and vigorous growth; per lb. $\$ 2.50$; per oz. 25 cents; per half oz. 15 cents,
Dwarf Golden Heart, half dwarf; silvery white with waxy, golden yellow heart; perfectly solid, of excellent flavor, and a good keeper; per lb. $\$ 2.50$; per oz. 25 cts ; per $1 / 2$ oz. 15 cts.,
Boston Market, of low growth, somewhat branching, white, crisp, and a favorite of the market gardeners in the vicinity of Boston : per lb . $\$ 3.00$; per oz. $30 \mathrm{cts} . ;$ per $1 / 2 \mathrm{oz} .20$ cents,
Arlington, new. (For description see colored Pages. Per ounce, 75 cents; $1 / 2$ oz., 45 cents,
Sealey's Leviathan, white, very large and solid, unsurpassed in flavor; per lb. $\$ 2.00$; per oz. 20 cents,
Laing's Mammoth Red, the largest variety in cultivation ; perfectly solid; fine flavor: an excellent keeper; per lb. $\$ 2.00$; oz. 2c cents, .
Carter's Incomparable Dwarf Dark Crimson, like Turner's Incomparable Dwarf in everything but color, being crimson; per lb . $\$ 2.00$; per oz. 20 cts.,
Turnip-Rooted, Celeriac, forming Turnipshaped bulbs, of Celery flavor; per lb per oz. zo cts.,
Seeds for Flavoring. This is seed too olll for vegetation, but excellent for flavoring pickles, etc.; perlb. 50 cents ; per oz.

## CHICORY.

Sow Chicory seed in the spring, in drills half an inch deep, and in a good mellow soil ; the after culture is the same as for Carrots. In the autumn the plants will be ready for blanching, when it is used as a salad. The principal use of Chicory; however, is as a substitute for Coffee. The roots are cut and dried, and then roasted for dulteration with Coffee. An ounce of seed will sow about one liundred feet of drill, and from two to three pounds an acre.


Chicory, Large-Rooted Long Magdeburg, per lb. \$1.00; peroz.


Below we give the earliest, medium and latest varieties of Sweet Corn. The engravings show different varieties, both as to form and comparative size, as nearly, perhaps, as it is possible to do in engravings of this character. Sweet Corn should not be planted very early in the season, for it will not make any progress until the weather is warm and will be very likely to rot. It will decay in places where our common field corn will grow, and the sweeter and purer the less hardships it will bear.

Always select a warm soil for Sweet Corn if possible, especially for the earlier varieties, as the difference in soil and exposure will make at least a week's difference in the time of maturity, besides insuring a crop. We have taken the greatest possible pains to secure very choice Sweet Corn.
Corn, Cory, new. (For description SEe colored pages). Per quart, 75 cents,
Marblehead Early Sweet. Two weeks earlier than Minnesota. Habit dwarf; ears small; very sweet; per quart 50 cents,
Early Minnesota, one of the best very early sweet varieties we have ever tried. Plant rather dwarf, ears fine for so early a variety, and of good quality ; per quart 50 cents,
Perry's Hybrid, new. For description sez colored pages). Per quart, 75 cents,
Russell's Prolific, a very superior early variety, the sweetest of the very early sorts. Ears eight to ten inches in length ; per quart 50 cents,
Crosby's Early, as early as Russell's Prolific; ears not much larger than the Minnesota, kernels small, twelve-rowed. A desirable Corn for the private garden ; per quart 50 cents,
Moore's Early Concord, a very good Corn; ears large ; ripens after Russell's, and in earliness about with Early Eight Ruwed, or Crosby's: per quart, so cents,
Early Eight-rowed Sugar, following Crosby's Early in time of maturity ; excellent; ears about nine inches long and very fine; quart so cents.,
Hickox Improved, a new and valuable variety for market, of the very best quality ; per quart 50 cents,

## Corn, Potter's Excelsior, new; a very sweet,

 rich-flavored, white sweet Corn; quart 50 cens, Triumph, the earliest of the large varieties; very sweet, rich, and delicate; per quart 50 rents, . Stowell's Evergreen, late; very select and pure; an excellent variety, remaining in a green state longer than any other kind; per quart 50 cents,10
Egyptian, or Washington Market, tall; very late, coming in after Stowell's Evergreen; sweet and rich; per quart 50 cents,
Mammoth Sugar, one of the largest varieties, and very late; twelve to sixteen-rowed; productive and fine flavored; per quart 50 cents, . Black Mexican, a rather short, black variety, very sweet and delicious; per quart 50 cents, .
Early Adams, a very early and good table variety, though not a Sweet Corn; kernels white; per quart 50 cents, 10
Parching, best white; per quart 50 cents, . . . 10

## CUCUMBER.

In this latitude it is useless to plant in the open ground until nearly the first of June. Make rich hills of well-rotted manure, two feet in diameter, and plant a dozen or more seeds, covering half an inch deep. When all danger from insects is over, pull all but three or four of the strongest plants. The middle of June is early enough to plant for pickling. Make the hills about six feet apart. For early Cucumbers, the hot-bed is necessary; but the simplest and sures. way to produce a tolerably early crop of the best kinds is, where it is designed to place a hill, dig a hole about e:ghteen inches deep and three feet across ; into this put a barrow of fresh manure, and cover with a small box-like frame, on the top of which place a couple of lights of glass. When the plants grow, keep the earth drawn up to the stems. Water, and give air.
The Foreign Varieties, represented by the long specimen in the engraiving, are of fine quality and of wonderful size, often two feet in length, but they require a hot-bed to help them along until the weather is warm. In Europe they are grown in glass houses.



IMPROVED LONG GREEN


EARLY NETTED RUSSIAN.


LONG FOREIGN CUCUMBER.

As long as fruit for the table is desired, do not allow any to go to seed, as this impairs the fruitıng of the vine. Two specimens allowed to form seed will do more harm than two dozen for the table or pickling. Some of the smalier kinds are usually preferred for pickling, but Long Green is excellent for this purpose when young, and some pickling houses use White Spine exclusively.

## AMERICAN VARIETIES.

Cucumber, Early Russian, very early, hardy and productive; small, growing in pairs; see engraving, ; perlb. \$r.oo; per oz. ro cents,
Early Netted Russian, new, and very promising,
Early Green Cluster, next in earliness to the Russian; small, prickly, in clusters, productive; per lb. $\$ \mathrm{r} .00$; per oz. ro cents,
Early Frame, a good variety for pickling and table, of medium size; per $\mathrm{lb} . \$ \mathrm{r} .00$; oz. ro cts.,
Early White Spine, an excellent variety for table ; very pretty and a great bearer ; a favorite with market growers ; lb. \$r.oo ; oz. ro cts.,
Boston Pickling, an early, very productive sort, of good quality; per lb. \$1.oo; oz. ro eents, . .
Green Prolific, one of the best of the pickling sorts; very prolific; per lb. \$r.oo; oz. ro, . .
Improved Long Green, a very fine long fruit of excellent quality ; per lb. \$1.25; oz. 15 cents, .
foreign varieties.
Cucumber, Long Green Southgate, a fine old hardy English sort; per oz. 50 cents, . . . Is Chinese Long Green, long, productive and hardy 15 Stockwood, fine, hardy, standard sort, . . . . 15 Giant of Arnstadt, one of the finest, good bearer, 25 Rollisson's Telegraph, one of the best, . . . 25
General Grant, new and excellent, . . . . . . 25
Carter's Champion, a fine winter variety, . . 25
Carter's Model, fine for house or frame cuiture ;
very prolific; keeps in bearing a long time,
25

## GHERKIN.

The Gherkin is not a Cucumber proper, but a little, rough, prickly fruit, that grows on a pretty vine, with leaves something like the Watermelon. It is liked for pickling, and is known as the West India Gherkin. What dealers call Gherkins are only small Cucumbers.



A tender plant, requiring starting in the hot-bed pretty early to mature its fruit in the Northern States. The seed may be sown with Tomato seed; but more care is necessary at transplanting, to prevent the plants being chilled by the change. Those who have no hot-beds can sow a few seeds in boxes in the house. Hand-glasses are useful for covering at time of transplanting.
Egg Plent, Early Long Purple, eight or nine inches lung, productive ; per oz. 30 cents,
Round Purple, medium size; per oz. 30 cents, Improved New York Purple, very large and fine, the best; per oz. 60 cents; half oz. 35 cts., 10 Black Pekin, per oz. 75 cents; half oz. 45 cents, 10

## ENDIVE.

Endive is an excellent autumn and winter salad. Sow seed late in the spring, or even as late as July, in shallow drills, and when plants are strong thin out to
 about a foot apart.
Endive, Moss Curled, ib. $\$ 2.00$; oz. 20 cents, Green Curled, per lb. $\$ 2.00$; per oz. 20 cents,
White Curled, per lb. $\$ 2.00$; per oz. 20 cents, .
Batavian, per lb. $\$ 2.00$; per oz. 20 cents, . . .

## KOHL RABI.

Kohl Rabi is sown for a general crop, in the spring, like the Turnip, in drills; or may be transplanted like Cabbage. For winter table use, sow middle of June. The stem, just above surface of the ground, swells into a bulb something like a Turnip, as seen in the engraving.
 It is cooked like the Turnip, and is highly prized for stook, in Europe, as a substitute for Turnips. It will bear drouth better, and therefore a crop is more certain. Kohl Rabi, Large Early Purple, beautiful purple, tender, and excellent for the table; per lb. \$r. 50 ; per oz. 15 cts.,
Large Early White, fine and tender for table; per lb. $\$ 1.50$; per oz. I5 cents,
Large Late Green, large and excellent for stock; per lb. $\$ \mathrm{I} .50$; per oz. 15 cents,
Large Late Purple, large and fine for stock; per lb. $\$ \mathrm{I} .50$; per oz. 15 cents,
Early White Vienna, delicate, much prized for forcing; per lb. $\$ 3.00$; per oz. 25 cents,
Early Purple Vienna, another forcing variety, similar to above except in color; per lb. $\$ 3.00$; per oz. 25 cents.

## GARLIC.

The Garlic is the most pungent of all the Onion family. It is much used in the south of Europe. The root or bulb i. composed of many small bulbs called "cloves," which are playted in the spring six or eight inches apart, and in August the tops will die, when the bulbs are ready to gather. They do best in a light, rich soil.
Garlic, per lb
50

## HORSE RADISH.



The best way to grow Horse Radish is from the little roots four or five incses in length, and not from the crowhs. These small roots will produce good Radish fit for use in one season's growth. Plant the set small end down, where the slanting cut is, and so that the top will be two inches under the soil. It can remain in the grourd till very late in the autumn, and $L$ le pitted, or a porti $u n$ can remain in the ground until spring. A dozen roots will give all that will be needed for family uses for a life time, for it constantly increases and the danger is that it will spread too fast and become troublesome. It is best, therefore, to
 plant it in some corner of the garden, where it can grow without injuring anything.
Roots, per 100, $\$ 1.25$; per doz., . . . . . . . . 30
LEEK.


Seed is generally sown in the spring in a seed-bed, and young plants transplanted July ist. The Leek is prized for soups, and is thought for this purpose to be superior to the Onion.
Leek, Broad Flag, perlb. \$1.25; per oz. 15 cents, 5
Musselburg, per lb. $\$ 4.00$; per oz. 40 cents, . Io

## LETTUCE.

Lettuce is divided into two classes; the Cabbage, with round head and broad, spreading leaves; and the Cos, with long head and erect, narrow leaves. The Cabbage varieties are the most tender and buttery, and the $\operatorname{Cos}$ the most crisp and refreshing. The Cabbage form has a

subdivision, called Curled, from the form of the leaves. There are several varieties with loose, curled leaves, having the habit of the Cabbage, though not forming solid heads, that are very pretty for garnishing, and considered by many the best in all respects. Sow in the open ground as early as possible; or, if you have plants from fall sowing, transplant them to a rich soil, giving plenty of room and hoe well. If the hot-bed is used, let it be started quite early. Give but little heat, and plenty of water, and air on fine days. Sow a couple of rows thick, in the front of the frame, to be used when young - say two inches in height. Let plants in the rest of the bed be about four inches apart. In a sunny country like America, Lettuce generally


CURLED Lettuce.
runs up to seed very early in the season, so that after the warm weather it is difficult to find a good head of Lettuce in most gardens. The remedy is to plant for late use in a cool, partially-shaded place, in a rich soil, and this should be supplemented by a free use of water.

## cabbage varieties.

Lettuce, New Premium Cabbage, the best variety we have ever grown; good solid head, keeping in good condition without going to seed longer than any other variety ; excellent for all uses and seasons; lb. $\$ 2.50$ : oz., 25 cts.,
Malta Drumhead, or Ice Cabbage, very large and superb; lb. $\$ 1.50$; oz. 15 cents,
Imperial White Cabbage, a fine variety; cxcellent for family use and market, as it withstands summer heat well, and remains a long time in the head before running to seed; per lb., $\$ 2.00$; oz., 20 cents,
All the Year Round, a very hardy, compact Cabbage Lettuce, with small, close heads; in perfection a long time; lb. $\$ 2.00$; oz. 20 cents,
Satisfaction, a new English variety, large, unusually tender; remaining in head a long time; lb. $\$ 2.00$; oz., 20 cents,
Early Tennis Ball, one of the earliest and best heading varieties; lb. $\$ 2.00$; oz., 20 cents,
Early Egg, very early ; the very best for forcing; small, beautiful yellow head ; lb. \$3; oz., 30 cts.,
Boston Curled, a very beautiful sort for garnishing, fair quality, early ; lb. $\$ 2.00$; oz., 20 cents,
White Silesian, early; rather loose head; tender; lb. $\$ 2.00$; oz., 20 cents, .
Early Hanson, heads very large, solid, tender, crisp; flavor fine; stands summer heat well; one of the best sorts; per lb. $\$ 2.00$; oz. 20 cts .,
Early Curled Simpson, an improvement on the old curled Silesia, very early ; fine for forcing; per lb. $\$ 2.00$; oz. 20 cents,
Black Seeded Simpson, similar in habit to the above, but much larger, and of lighter color; very crisp and tender; stands the heat of summer well ; per lb. \$2.00; oz. 2o cents,

Lettuce, Prize Head, very large; stained with red; outer leaves curled; very crisp and tender. Slow in running to seed; per lb., $\$ 2.00$; per oz., 20 cents,
Hardy Green Winter, the old Hammersmith; a good Winter Lettuce; lb. \$2.50; oz., 25 cents, cos varieties.
Lettuce, Carter's Giant White Cos, new : superb, large and exccedingly tender; $1 \mathrm{~b} . \$ 3$; oz. 30 cents,
Paris White Cos, one of the best of the Cos varieties; 1b. $\$ 2.00$; oz., 20 cents,

## MARTYNIA.

M. proboscidea produces its seed pods abundantly which, when tender, are prized
 for pickling. Our
engraving shows the appearance of the pods. They should be gathered before becoming woody.
Martynia proboscidea, per oz. 75 cents.
10

nutmeg musk melon.
The Melon, being of tropical origin, reaches perfection only in a warm temperature. In this latitude we must give the Melon every possible advantage to secure carliness and thorough ripening. The same culture as recommended for Cucumbers will insure success. It is desirable also for the North to secure early ripening varieties. There are two distinct species of Melons, the Musk and the Water Melon. The former are the most easily grown, though, with a selection of early sorts and a little attention at forwarding the young plants early in the season, a good crop of either can be secured almost anywhere. The Nelon will grow and ripen well in a warm, sandy, poor soil, but when grown in such a situation the hill must be thoroughly enriched with plenty of available food for the roots.

## MUSK MELONS.

Muskmelon, Prolific Nutmeg, (for description slee colored pages). Per 1b., $\$ 2.00$; per oz., 20 cents,
Early Christina, early, yellow fleshed; per $\mathrm{H}_{\mathrm{H}}$., \$r.50; per oz. Is cents,
Golden Netted Gem, new. (For description see
colored pages). Per lb., $\$ 1.50$; oz., 15 cts .,
Jenny Lind, an early variety; small, but of excellent flavor; per lb. \$1.25; oz. I5 cents,
Hackensack. The most popular variety in the New York market. Large, round, of excellent flavor, and very productive; per lb., $\$ 1.50$; per oz., 15 cents,
Green Citron, large, with thick, green flesh, good flavor; per D . $\$ 1.25$; OZ. 15 cents,
Large Green Nutmeg, medium size, round, flesh sreen, of good quality; ib. $\$ 1.25$; oz. $\tau_{5}$ cents,
Bay View, a varicty introduced a few years ago, and possessing merit. Fruit large, oblong; flash green, sweet, and spicy. Ripens soon after Jenny Lind; per $\mathrm{lb} \$ 1.50$; oz. I 5 cents, .

Musk Melon, Montreal Nutmeg. 'This variety has been grown by the market gardeners of Montreal for a nurnber of years. The fruit is of the largest size, often attaining a weight of fifteen to twenty pounds; shape nearly round, flattened at the ends, deeply ribbed; flesh remarkably thick, green, melting, and of the finest flavor; per lb. $\$ 2.00$; oz. 20 cents, .
White Japanese, deliciously and delicately sweet, flesh thick, very pale green, skin creamy white and very thin; per 10. $\$ 1.25$; oz. 15 cents, Surprise, a variety of recent introduction, having a thin, cream-colored skin and salmoncolored flesh; it is early, productive, and of good flavor; per lb. \$1.50; oz. 15 cents,
Casaba, or Persian, oblong, and very large, fine flavor, yellowish green flesh and netted skin; per lb. $\$ \mathrm{r} .25$; per oz. 15 cents,
Pineapple, dark green, oval, netted, flesh thick, sweet and juicy ; per 1D. \$1.25; oz. 15 cents, .

## water melons.


vick's early water melon.
Vick's Early. Long, smooth, rather small, flesh bright pink, solid, sweet, and the earliest Melon we are acquainted with; lb. $\$ 1.25$; oz. 15 cents, Mountain Sweet, dark green, flesh red, sweet and rich, early and hardy. Though one of the oldest varieties, it is still one of the best; 也., $\$$ r.oo; oz. yo cents,
Kolb's Gem, new. (For description see colored pages). Per lb., $\$ 2.00$; per oz., zo cts.,
Pride of Georgia, new. (For description SEY COLORED PaGES). per lb., $\$ 2.50$; per oz., 25 cents,
Mammoth Iron Clad, new. (For description see colored pages). per lb., $\$ 2.00$; per oz. 20 cents,
Phinney's Early, a valuable market variety; early and productive; flesh red, of excellent quality ; per lb. $\$ \mathrm{I} .25$; oz. 15 cents,
Scaly Bark, new. Desirable for shipping, as the rind is so tough they will bear a great deal of handling without injury. Size large; skin thin; flesh light crimson; tender, and of good flavor; per lb., \$r.50; oz., 15 cents,
Ice Cream, or Peerless, is a first class Melon, flesh pink, sweet and melting; white seed; per lb. \$1.oo; per oz. io cents,
Dark Icing, or Ice Rind, medium size ; shape oblong; skin thin; flesh very solid, and of fine flavor; very prolific; lb., $\$ \mathrm{I} .25$; oz., 15 cts., . The "Boss," medium sized; oblong; skin dark green; flesh deep red, and of a rich flavor: early and productive; lb., \$1.25; oz., 15 cts.,
Cuban Queen, size large; skin striped; rind rather thick ; flesh bright red, very solid, crisp, and of delicious flavor; per lb. $\$ 1.25$; oz. 15 cts.
Odella, a new, large, round, early sort: very popular where known, and one of the best for shipping ; per lb., $\$ 1.25$; per oz., 15 cents
Mountain Sprout, long, striped; scarlet flesh, good quality, but not quite as early as Moun-


Water Melon, Black Spanish, an old variety, one of the richest; round, rather small, dark green;
 Georgia Rattlesnake, or Striped Gipsy. This is the melon shipped in such large quantities from the South to all our Northern markets. Fruit very large, oblong; skin striped with light and dark green : flesh red, of fine quality ; per lb. $\$ 1.25$; oz. 15 cents, .
Orange. The flesh separates easily from the rind, fair quality ; lb. \$r.50; oz. 15 cts.
Citron, for preserves ; per lb. \$1.50; oz. I5 cents, io

## MUSHROOMS.



Mushrooms can be grown in any dark room or cellar, where the temperature can be maintained at from 50 to 60 degrees. From some old pasture procure the soil, and store it away. To one bushel of this soil add two bushels of fresh horse manure. Of this well-mixed compound prepare a bed, say four feet in width. Put down a thin layer and pound it down hard, and go on until you have a bed eight. inches thick. It will soon become pretty hot, but let the heat recede until it is only 85 or 90 degrees. Then make holes, say a foot apart, and put in the spawn, two or three pieces as large as a walnut in each hole. Cover the holes, and press the soil solid and smooth. Let the bed remain in this condition about twelve days; then cover the whole bed with some two inches of fresh loam, and over this place four or five inches of hay or straw, and the work is done. If the temperature is right, in six to eight weeks you may expect Mushrooms. The bed will continue bearing from twenty to thirty days. After the first crop is gathered, spread over the bed an inch of fresh soil, moisten with warm water, and cover with hay as before. Success in Mushroom growing depends so much upon a proper and uniform temperature, moisture, and perhaps other conditions of the atmosphere, that success is not always certain with the amateur. One pound of spawn is enough for a bed two feet by six.
Mushroom Spawn, per lb., by mall,
40
Per 6 lbs., by express, not paid,
10
MUSTARD.
Mustard being very hardy, seed can be sown as soon as the soil is free from frost. Sow in shallow drills, and cut when a few inches in height. It grows rapidly, and several sowings may be made. The
 young Mustard leaves are used for spring salad. Mustard, White, best for salad or culinary purposes; per lb. 50 cents : per oz. ro cents,
Black, this is the kind usually used for commercial Mustard, being stronger than the White; per ll. 50 cents; per oz., io cents,

## O N I O N S.



WETHERSFIELD RED.


EARLY RED.


DANVERS YELLOW.


RED ITALIAN TRIPOLI.

flat white italian tripoli.


SILVER SKIN.



POTATO ONIONS- $1 / 2$ NAT, SIZE.


NEW GIANT ROCCA.


The American Onion seed we offer is all of our own growing, every Onion examined before planting, and we believe it to be the purest and best in the world. Any one who plants 100 seeds, and gives them good care may not only reasonably expect 90 good plants, but 90 good sound, round Onions, unless they are sown so thick as to make it necessary to remove a part of them. We give correct engravings of the leading varieties, but they are only about one-fourth the natural size, and the Italian sorts even much less than this, perhaps about one-fifth.
The Onion must have a clean and very rich soil. Use well rotted manure freely, and be sure to get the seed in as early as possible in the spring; no matter if it is ever so cold and unpleasant, for if Onions do not get a goud growth before hot, dry weather, the crop is sure to be a failure. Thin out early, and keep the soil mellow and clear of weeds. Sow in shallow drills, not less than a foot apart, and thin out when the young Onions are about the size of quills. In doing this, disturb those that remain as little as possible. As Onions grow on top of the ground, they may be allowed to remain pretty thick, no matter if they crowd each other. In hoeing to destroy weeds and keep the ground mellow, do not cover the young bulbs with earth. Four pounds of seed are usually required for an acre. In cold or mucky soils, where the Danvers and Wethersfield varieties will not form bulbs, the Early Red should be tried, and will often succeed while others fail. It is an excellent variety and a good keeper. The Neiv Italian Onions, of which there are several admirable varieties, are of a sweet, mild flavor, and grow very large, often from one to four pounds. They do well at the South. Our engravings show Large Flat White Italian, Giant Rocca and Blood Red Tripoli.
It has been found difficult to grow Onions from seed in the South, while from Sers good crops are grown, and quite early. These Sets are little Onions grown the previous year, and taken up when as large as Peas. Set out in the spring they very soon form good large Onions. Their size and appearance are shown in the engraving

There are two other kinds of Onions that are not grown from seed, the Potato and Top Onions. The Potato Onion grows in clusters, under ground, as exhibited in the engraving. These little bulbs are planted in the spring and produce large Onions. The large Onions are planted the next spring and produce the clusters.
The Top Onion produces the small clusters shown in the engraving, on the top of the stem, where seed is produced in the common kinds. These small Onions are planted in the spring and the result is full grown Onions, and these large ones, with one year's growth, produce the clusters on the top for seed.
The Onion is usually a very profitable and satisfactory crop, and it is only occasionally that the market is overstocked and the price low. It is useless, however, to try to grow Onions on a poor unsuitable soil or in a careless manner. Three days of neglect when the weeds are growing rapidly will sometimes ruin a crop, and a week too late in sowing often makes the difference between a good and bad harvest. For weeding, we can recommend either the Planet Jr. or Ruhlman's Wheel Hoe, which we have found very effective. See advertisement at end of this catalogue. Manure for Onions should be well rotted, and placed on or near the surface. With proper manuring, Onions can be grown on the same land for a score of years, and it will become cleaner and better every year. The Onion is such an important crop to large growers, and the preparation of the soil and culture so expensive, and consequently a failure from bad seed or other causes is so disastrous, that long ago we determined to sell no seed of the leading American kinds, except what we grew on our own grounds, and knew to be new, true and good. The Onion crop is usurlly exceedingly profitablc, ranging from three hundred to five hundred bushels per acre, according to rich-
ness of soil, culture, \&c. The price ranges from twentyfive cents to one dollar per bushel, but seldom less than fifty cents.

## AMERICAN VARIETIES.

Onions, Wethersfield Red, one of the best varieties for a general crop; of good size ; red, flattish, productive; heads and keeps well; per $\mathbb{D}$., \$2.50; per oz., 25 cts., .
Early Red, early ; good; per ID., $\$ 4.00$; 02., 35c. Danvers Yellow Globe, a fine, large, round Onion; very choice; per $\mathfrak{f l}$., $\$ 4.00$; oz., 35 c ., .
Large Yellow, a fine, large, flat Onion: forms bulbs readily; per $\mathrm{m} ., \$ 2.50$; per oz., 25 c .,
White Globe, a large, white Onion, as large as Danvers Yellow ; per lb. \$+.00; per oz. 40 cents, Silver-Skinned, true, white: delicate; early; not a good keeper ; per B., $\$ 4 . \infty$; per 0z., 40 C .,

## new italian ontons.

New Giant Rocca, of Naples, a splendid large Onion, of globular shape, and light brown skin ; sometimes weighing 3 pounds or more; per fi., $\$ 2.50$; per oz., 25 c .,
Large Blood Red Italian Tripoli, mere flat than the preceding, quite as large, and blood red; per $1 \mathrm{l} ., \$ 2.50$; per oz., 25 c ., .
Large Flat White Italian Tripoli, very pure white skin, flat, very mild flavor; and as large as either of the above; per $\mathrm{D}_{\text {., }} \$ 2.50$; oz., 25 c ., Early Flat White Italian Tripoli, beautiful white skin, very mild, of rapid growth, early; per lb . $\$ 2.50$; per oz. 25 cents,
Marzajola, new, but probably the earliest Onion grown. In warm climates seed sown in autumn produces bulbs in March; per $\mathrm{B} . \$ 2.50$; oz. 25 C ., New Queen, white skin, fine flavor, and the best keeper of the new foreign Onions; early and very small; per $\mathbb{B b} ., \$ 3.00$; per oz., $30 \mathrm{C} .$, . . .

## onton sets.

The prices of sets given below are based on the present market rates, which, judging from the reported general good yield in set-producing regions, are not likely to materially advance. Should fluctuations occur later in the season, we shall be obliged to vary prices on bushels and pecks in accordance with the market. The price per quart will remain unchanged.

At bushel and peck rates, purchasers pay the freight or express. At the quart price we prepay postage.
English Multipliers or Potato Onions, per
bushel $\$ 6.00$; peck, $\$ 1.75$; quart,
Top, or Button Onions, per bush., $\$ 5.00$; peck, §r.50; quart,

60

Yellow Botr 50 \$r.50; quart,
White Bottom Sets, per bushel, \$6.00; peck, \$r.75; quart,

## OKRA.

The Okra is a vigorous, large plant, requiring a good deal of room, and the large kind should be planted not less than three feet apart, and the dwarf about eighteen inches. In mild climates it is only necessary to sow the seed in the open ground, about two inches deep, and then merely keep the ground clcan and mellow, as for a hill of corn.


Okra, Long Green, long, pale green, and ribbed; per lb. \$1.20; per oz, io cents,
Dwarf Green, earliest and best for the North; per lb. \$1.20; per oz. Io cents, .

## PARSNIPS.

Sow Parsnip seed as early in the spring as the ground can be made ready, in drills from twelve to eighteen inches apart, and about an inch deep. The Parsnip will bear frost without injury, and if we were to say it is the best root in the world for fatting cattle and pigs, it would not be far from the truth. We know large sections of country where hogs are fattened entirely on Parsnips. The roots may remain in the ground for spring use, but in the North, if needed for winter, may be dug and covered, like potatoes. A slight covering will answer. There are a good many varieties, some smoother than others, but we consider the two named below the best.
Parsnip, Long Hollow Crown, one of the very best Parsnips grown, either for stock or the table; per lb. \$r.oo; per oz. io cents,

## Carter's New Maltese, claiming improvement

 over old sorts : per lb. $\$ 1.00$; per oz., io cts.,

Sow the seeds early underglass, or in the open ground In warm weather; transplant when three inches hig'


LONG RED.

chili.


CAYENNE

Pepper, Tomato-formed Red, large-3 inches in diameter and 2 inches in length; oz. 30 cents,
Tomato-formed Yellov, similar to the above, except in color; per oz. 30 cents,
Large Bell, very large-nearly four inches long and three inch. d.ameter; glossy red; oz. 30 C ,

Pepper, Golden Dawn, a new variety, resembling the Large Bell in shape, but more delicate in flavor, and the color is a rich, golden yellow; per oz. 40 cents, .
Sweet Mountain, or Mammoth, much like Bell, perhaps a little larger ; per oz. 40 cents, Monstrous, or Grossum, a French variety, the largest we have ever grown; per oz. 30 cents, .
Long Red, beautiful and productive, four inches long, flesh thick and pungent; oz. 30 cts .,
Long Yellow, similar to the above except in color ; per oz. 30 cents,
Cayenne, long, slender; pungent; peroz. 30 cts ,
Cherry-formed, small, roundish, very productive, makes a pretty plant ; very hot; oz. 30 cts. ,
Red Chili, small, bright red, best for Pepper Sauce; oz. 30 cents,

PARSLEY.


Parsley seed germinates very slowly; it should be started in a hot-bed, if possible. For out-door suwing always prepare the seed by placing in hot water to soak for twenty-four hours, in a warm place. When the plants are a few inches in height, set them in rows, three or four inches apart. Parsley lives through the winter, and seed may be sown in the autumn. Some of the Curled varieties are really beautiful for garnishing, and handsome enough for bouquet green.
Parsley, Enfield Matchless, one of the mest delicate of the curled sorts; per lb. \$I.20; oz. Io cents,
Carter's Champion Moss Curled, somewhat similar to Enfield Matchless, but very much superior; the most elegant curled Parsley grown for garnishing; per lb. $\$ \mathrm{I} .20$; per oz. Io cents,
Giant Curled, very large growth, finely curled; per lb. §r.oo; per oz. io cents,
Hamburg, or Large Rooted. The roots are used for flavoring soups; per lb. §i.co; per oz. 10 cents,

## PUMPKINS.

The Pumpkin is now little used, except for agricultural purposes, the Squashes be ing so much sweeter and drier, and finer grained for the kitchen. The

farmer, how-
ever, finds the Pumpkin a serviceable addition to his feed.
Pumpkins, Large Cheese, large, skin reddish orange; lb. \$1.00; oz. io cents,
Cushaw, or Crook-Neck, solid flesh, fine and sweet; keeps well ; per lb. $\$ 1.00$; per oz. ro cts.
Sugar, small, but fine grain, and very sweet; fine for table use; per lb., \$1.00; oz., ro cts.,
Connecticut Field, lb. 50 cents; oz. Io cents, .

## POTATOES.

Of the many new Potatoes that claim public favor, we select a few of the very best in cultivation for each season, having tested and rejected scores of varieties. The drawings were made from specimens of our own growing, and show both the shape and comparative size. At the pound price we prepay postage. At peck, bushel and barrel rates the purchaser will pay Freight charges. We have the Potatoes we offer all in store, having built frost proof, airy cellars, arranged with bins, so that we can keep them at the proper temperature. At prices below we shall sell as long as our stock lasts, no matter what advance there may be. Of some varieties, we can give special prices for large quantities. Orders will be booked in the order they are received, and shipped in the same order. We shall commence shipping just as soon as danger from freezing on the way is over. When so desired, we will pack two or three varieties in one barrel, without extra cost. No Potatoes sent by express unless we receive cash with order to prepay express charges. All orders filled directly from our bins.


CHICAGO MARKET.
extra early varieties.
Vick's Extra Early. Having further tested this new variety on various soils, and in different locations, we are firm in the belief that there is no earlier Potato in cultivation at the present time. The color of the tuber is white, with a russety coating. They are perfectly formed, uniform in size, eyes flush with the surface, with a very slight indenture. It requires high culture, and must be planted on good soil, as both the tubers and tops mature and ripen very rapidly, thus showing that they require an abundant supply of nutriment in their growing season. We especially recommend this Potato to market gardeners and others who grow for early market, as it is very attractive in appearance and will sell rapidly. Unsurpassed in quality; lb., 75 cents ; peck, $\$ \mathrm{t} .00$; bushel, $\$ 3.00$; barrel, $\$ 6.00$.
Early Gem, one of the best early Potatoes we have ever grown, and of excellent quality. It is of medium size, oval-oblong in form, very smooth, as the eyes are shallow and few in number. Color very light pink or flesh colored. Flesh white, fine grained, and exceedingly mealy; lb. 50 cents ; peck 50 cents; bushel \$1.75; barrel \$4.00.
Early Ohio, a few days earlier than the Rose and similar in color and habit of growth, is more productive and equally as good for table and market purposes; lb. 50 cents ; peck 60 cts.; bushel $\$ 2.00$; bbl. $\$ 5.00$.
Early Beauty of Hebron, very productive; skin white, tinged with pink around eyes; a good keeper, excellent for table use, either baked or boiled; per lb. 50 cents ; peck 50 cents; bushel $\$ 1.75$; barrel $\$ 4.00$.
Vanguard, new ; very early; color same as Early Rose; very productive, and of good quality; per lb ., 75 cents: peck, $\$ 1.00$; bushel, $\$ 3.00$ : barrel, $\$ 6.00$.
Boston Market, tubers medium to large, oval-oblong, slightly flattened. Color light pink, or flesh, with few eyes, almost flush with the surface. Very heavy yielder, and grows compact in the hill. For home use or marketing it is one of the best; lb., 50 cents; peck, 50 cents ; bushel, \$1.75; barrel, \$4.00.

## EARLY VARIETIES.

Chicago Market, is one of the best Potatoes in cultivation, either for family use or market. The tubers are large and uniform in size, grow compact in the hill, eyes shallow and few in number. Flesh dry and well flavored. It is wonderfully productive, and succeeds well in all soils so far as we can learn. The skin is light flesh color, but partially covered with a russety coating; flesh white; lb. 50 cts.; peck 50 cts.; bush., \$1.75; bbl., \$4.00,
Early Mayflower, a very productive variety of the Snowflake class, which it resembles very much, excepting the color of the tubers, which are more inclined to have a yellowish tinge. The tubers are medium to large, uniform in size, with eyes quite even wi.: the surface. In quality it ranks with the best. Requires high culture and good soil; lb. 50 cents ; peck 50 cents ; bushel $\$ \mathrm{r} .75$; barrel $\$ 4.00$.

## SECOND EARLY.

White Superior, a new and very productive white variety; tubers large, round, sometimes oblong, and slightly flattened. It is a vigorous grower, and yields heavily, even on ordinary soil. The eyes are large and strong, but quite even with the surface. We consider this a valuable variety for marketing, as it is very attractive in appearance, and of excellent quality ; per lb., 50 cents; peck, 50 cents; bushel, \$r.75; barrel, \$4.00.
White Star, an excellent white Potato, with slightly russeted skin; tubers large, long, and of the finest quality. It is a strong grower, very productive, and may be classed among the best varieties for table use or marketing; lb. 50 cents; peck 50 cents; bushel §r. 75 ; barrel $\$ 4.00$.
Wells' Seedling, tubers of medium size ; very regular in form ; oval oblong, with few eyes that are slightly depressed; skin light pink, slightly russeted, This variety ripens between the Early and the Late Rose, and is equal to these varieties in quality ; per lb., 50 cents; peck, 50 cents; bushel, \$1.75; barrel, \$4.00.


VICK'S EXTRA EARLY


EMPIRE STATE.


VANGUARD.



RUCHESTER FAVORITE.

Late Beauty of Hebron. This varicy is a sport from the Early Hebron; the tubers are very large; color light pink, with a white blotch around the eyes, which are slightly depressed; it is very productive, and of good quality; per lb., 50 cents; peck, 50 cents; bushel, \$r. 75 : barrel, \$4.00.

## late varieties.

Empire State. This new variety is a seedling from the White Elephant, which it somewhat resembles in form. Like its parent, it is very productive, and a strong grower; the tubers are large, oblong; eyes quite numerous, and slightly depressed; skin white, sometimes with a tinge of pink around the eyes, and at the seed end; per lb., 75 cents; peck, $\$ \mathrm{r} .00$; bushel. $\$ 3.00$; barrel, $\$ 6.00$.
Vick's Improved Peachblow. This variety grows compact in the hill, is very productive, and ripens about the same time as the Burbank; tubers medium size, oval-oblong, and handsomely formed. Per lb., 50 cents; peck, 75 cents; bushel, $\$ 2.00$; barrel, $\$ 5.00$.

Dakota Red. (For description, see coloned pages.) Per lb., 50 cents; peck, 50 cents; bushel, $\$ 1.75$; barrel, $\$ 4.00$
Vick's Prize, tubers large, very uniform in size; skin white, quite smooth, with few eyes set almost even with the surface. We think this variety will give perfect satisfaction as to appearance and quality. It is an immense yielder, very hardy, and pronounced by those who have grown it extensively, to be the best and most profitable field Potato in cultivation. Per lb. 50 cts.; peck .50 cts.; bush. \$1.75; bbl. \$.4.00
Rochester Favorite, This variety somewhat resembles the Burbank, but is larger, more prolific, and very hardy. We think it will stand more dry weather and hardship than any other variety. Tubers white, oval-oblong, very uniform in size; eyes quite numerous, but even with the surface; an immense yielder, and a handsome variety for marketing; for table use it is fully up to the best; lb. 50 cts.; peck 50 cents ; bushel $\$ \mathrm{r} .75$; barrel $\$ 4.00$.

## GARDEN PEAS.

The Pea is very hardy, and will endure a great amount of cold, either in or above the ground; and as we all want "green peas" as soon as possible in the season, they should be put in as early as the soil can be got ready-the sooner the better. The earliest Peas are mostly small, round, smooth and hardy, the tallest not growing more than from two to three feet in height. Of late years some very fine dwarf, sweet, wrinkled sorts, like American Wonder, Little Gem and Blue Peter have been added to this class, of very great merit. The Late are large, mostly wrinkled, and formerly were nearly all tall, like the Champion of England, but very many excellent dwarfs have been added to the list, like Yorkshire Hero. If the Earliest sorts are planted about the first of April, in this latitude, they will be fit to gather in June, often quite early in the month. Those a little later will come in about the Fourth of July. By sowing two or three varieties of Early and Late, as soon as practicable in the spring, a supply will be had from early in June to late in July, with only one sowing After this Sweet Corn will be in demand. The very latest kinds will not succeed in this country, as they mildew in hot weather, so we have omitted them from our Catalogue ; nor will very late sowing answer.

Sow Peas in drills not less than four inches deep, about a pint to forty feet. The drills must not be nearer than two feet, except for the lowest sorts. Those growing three feet high or more, should not be nearer than three or four feet, and should have brush for their support. The large, fine wrinkled varieties are not as hardy as the small sorts, and if planted very early, should have a dry soil, or they are liable to rot. It is well to sow the earliest Peas just as soon as possible, in two or three weeks after, make another sowing, a few more early, and some for late crop. The second sowing comes in nicely. Brush should be furnished for all but the dwarf kinds as soon as they appear above ground.
We have sometimes sown a row of late and early near each other, so that the same brush would answer for both. The appearance we have endeavored to show in the engraving on the following page : early fruiting, and the late in flower.

## EARL1EST.

Peas, Vick's Selected Extra Early, the earliest and one of the best of the very early Peas : of good quality, productive; per quart, 70 cents, Kentish Invicta, round, blue Pea, and the earliest blue variety grown, as early as First Crop, excellent for family or market; 2 feet in height ; per quart, 6, cents,
Early Kent, 3 feet; the common early market Pea here; per quart, $6 x$.,

Peas, Carter's First Crop, very early and quite productive ; height, 30 inches, and giving a large crop for so early a Pea; per quart, $6 x$. .,
Waite's Caractacus, one of the best and most productive early Peas; per quart, 60 cents, quart, $6 x^{c}$.,
Blue Peter, habit like Tom Thumb, but more robust, almost as dwarf, and immensely pro ductive. It has proved the most promising of the new Peas for the American grower: quart, 60 c .,


BLISS' AMERICAN WONDER.
Bliss' American Wonder. This variety is a cross between Champion of England and McLean's Little Gem, and combines the qualities of its parents. It is the eariest wrinkled Pea in cultivation, and a superior cropper, bearing larger pods than the other early sorts, and having from six to nine large Peas in a pod. The vines are from ten to twelve inches high, and of robust habit. Our seed is true, coming from the
original stock ; per quart, 70 cents,
King of the Dwarfs, new. For description, see colored pages). Per quart, $\$ 2.00$,
McLean's Little Gem, a green, wrinkled, marrow dwarf Pea, of a delicious, rich, sugary flavor; very early; per quart, 70 cents,

20
Laxton's Alpha, an excellent wrinkled Pea, earlier than Little Gem, growing about 3? inches ; per quart, 70 cents,

Peas, McLean's Advancer, a dwarf, green, wrinkled marrow, of fine flavor and very prolific; per quart, 70 cents,


LATER CROP
Champion of England, 5 feet; rich; sweet; popular everywhere ; per quart, 60 cents,

Peas, Bliss' Abundance ; a new and remarkably productive variety ; plant about eighteen inches in height; pods three inches long; Peas large, wrinkled, and of superior quality; per quart, \$i.oo,
Bliss' Everbearing, a new, late, wrinkled sort, about 30 inches high; very robust, bearing heavy crops of large, well filled pods; Peas of excellent flavor. Owing to the branching habit of the plant, the Peas should he planted six inches apart; per quart, $\$ 1.00$,
Yorkshire Hero, a very fine, large, dwarf, wrinkled variety, of good quality and productive; per quart, 70 cents, .
Stratagem is one of the finest Peas we are acquainted with; plant about two feet in height, very robtist ; per quart 80 cents,
Telephone, a new wrinkled variety; a good cropper, bearing immense pods full of large Peas of exquisite flavor; per quart 70 cents,
Dwarf Sugar, 3 feet; pods skinless and edible; per quart, 80 cents,
Tall Sugar, 5 feet; edible pods, very large and long; per quart, 80 cents,

15

10

RADISHES.

winter varieties.
Radish, Scarlet Olive-Shaped, White Tip, called New French Breakfast; very tender and beautiful : fig. 3 ; Dh., $\$ 100$; oz., ro cents,
White Olive-Shaped, like the other oliveshaped varieties in everything except color; per $\mathrm{H}_{\mathrm{t}}$., \$1.20; per oz., ro cents,
Early Scarlet Globe. This new variety is one of the finest for forcing and market gardening purposes. Shape roundish-oval; skin brilliant red; flesh white, solid, crisp, and very mild; tops very small ; per $\mathrm{tt} ., \$ 2.00$; oz. 20 cents, Early Round Dark Red. This variety is especially adapted for forcing, on account of its very small tap-root and tops. It is also as good for summer use in the open ground as any of the summer sorts. Skin dark red; flesh white, crisp, and tender: per lb., $\$ 1.00$; 07., ro cents,
Red Turnip, round; about an inch in diameter; skin scarlet ; flesh white; good; fig. 1; lh., sı; oz., io cents,
White Turnip, similar to above except in color, and being less pungent and a few days later; per $1 \mathrm{lb} ., \$ 1.00$; per 0 z., ro cents, .


SUMMER VARIETIES
Radishes are divided into two classes, Summer and Winter. The Spring Radish must make a rapid growth to be crisp and tender. For early use, seed should be sown in the hot-bed, in drills four or five inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm, south border, under the shelter of a fence or building, if nossible. A load of fresh, sandy loam from the woods, is better than manure for the Radish crop. As soon as the first leaves appear, sprinkle with soot or ashes to save from the little turnip fly. The Winter Radish should be sown about the middle of summer, and like the Turnip makes its best growth in the autumn. Pitted nut of doors, or buried in earth in a cool cellar, it will keep crisp all winter. An hour before using place the Winter Radish in cold water.

## SUMMFR RADISHES.

Radish, Rose Olive-Shaped, oval; very tender and excellent ; an inch aind a half-long ; flesh rose color; see engraving, fig. 2; 㛾. \$1.00; oz., io cts. Scarlet Olive-Shaped, like the above except in color; per \#., \$1.00; per oz., so cents,

Radish，Yellow Turnip，similar to the preceding except in color；per fo．，\＄1．00；per oz．，Io cents，
Long Scarlet Short－Top，the favorite long market Radısh everywhere ； 6 or 7 inches long； fig． 5 ；渞．，\＄1．00；oz．，Io cents，
Salmon Color，like Scarlet Short－Top，but lighter in color；per \＄0．，\＄r．oo；per oz．， 10 cents，
Long White Naples，a beautiful long，clear white Radish，tinged with green at the top； excellent for a late Radish；fig．4； Pb ．$\$ 1 . \infty$ ； oz．，Io cents，

## WINTER RADISH．

Radish，Chinese Rose Winter，sow in summer， same as Turnips；fig． 9 ；per 施．，§1．00；per oz．，Io cents，
Chinese White Winter，an excellent white winter Radish，like Chinese Rose，except in color；fig． 7 ；pound $\$ 1.50$ ；ounce 15 cents，
Black Spanish Winter，Round，fig．8；per Io．，\＄r．00；per oz．，io cents，
Black Spanish Winter，Long，per B．，\＄1．00； per oz．，Io cents，
Large White Spanish Winter，per 何，\＄1．50； per cz．，Is cents，
California Mammoth White Winter，is really a Chinese Radish，grown by the Chinese in California； 8 to 12 inches long，and from 2 to 3 inches in diameter；white，solid and good flavor；fig．6；per pound \＄1．ミ○；per ounce 15 cents，

## RHUBARB．

The Rhubarb，or Pie－Plant，is grown from divisions of the roots，and from seed．If seed is sown in a good， mellow soil，strong plants will be obtained in one year， and some cutting may be done the second spring．


Plants put out in a rich soil in the spring are in fine condition the second season．In spring，about two weeks before frost is gone，cover one or two of the finest roots with barrels，and over and around the barrels place a heap of warm manure，and in a short time look out for delicious，tender Pie－plant．Pie－plant can also be grown in a tub in any corner of the green－house，or in a light cellar．It will thrive under almost any treatment when the soil is rich and moist，and without much light．
Rhubarb，Myatt＇s Victoria，per oz．， 20 cents，
5
Linnæus，per oz．， 20 cents，
Roots，per doz．，\＄2．50：each，

## SPINACH．



Sow in the autumn for springuse，in good drained soil，in drills a foot apart． As soon as the plants are well up，thin them to about three inches apart in the rows．Covering with a little straw or leaves before winter is useful but not
necessary．For summer use sow as early as possible in the spring．To raise Spinach in perfection the soil should be rich．
Spinach，Prickly，or Fall，hardiest and best for fall sowing；per ID．， 60 cents；per ounce， 10 cents，
Round，or Summer，for spring sowing； per fl ．， 60 cents ；per oz．，to cents，．
New Zealand，very large and luxuriant ；endures drouth well，and produces a large quantity of leaves；plants should stand at least two feet apart；per $\mathrm{H} ., \$ 1.00$ ；per oz．，iว cents，．．．．

## SALSIFY．

Salsify，or Vegetable Oyster，is considered by many a delicious vegetable，in fact，a great luxury；and is used for soups，also boiled，fried，\＆c．，and possesses the flavor of the Oyster，for which it is sometimes used as a substitute．The cul－ ture is the same as for Carrots and Parsnips， but it flourishes best， with longest，smooth－ est roots，in a rather light or mellow soil that has been well pul－ verized to the depth of eighteen inches．Sow early in the spring，in drills，a foot or more apart，covering the seed not more than two inches in depth．Thin out to six inches apart． Put seed in the ground as early as possible in the spring．A por－
 tion of the crop may remain in the ground all winter， like the Parsnip．
Salsify，per lb．，$\$ 1.20$ ；per oz．，Io cents，
5
Black，or Scorzonera，a black variety，with a somewhat bitter root，not much used at present； per oz．，з० cents，

## SEA KALE．

Sea Kale is a favorite in many parts of Europe，and the flavor is somewhat like Asparagus，but thought to be better．The part eaten is the young shoots that appear in the spring，and they are not good until blanched．Sow in the spring，and plant out like Cabbage．During the sum－ mer the plant will make a slender growth．The plant being perennial young shoots appear the second spring，and these are covered with earth to blanch，or with a flower－ pot；and if it is desired to force them，cover the pot，and earth around with
 fresh manure．

10

## SQUASHES.

The Squashes are of tropical origin, and therefore it is useless to plant them until the soil is quite warm, and all danger of frost or cold nights is over; and as they make a very rapid growth there is no necessity of haste in getting the seed into the ground. Squashes are good feeders, and like a rich soil; it is best to manure in the hill. Sow a dozen seeds in each hill, and when danger from "bugs" is over pull up all but three or four. A mellow, warm soi' is best. For bush sorts, make hills three or foul feet apart anc' for the running kinds twice this distance. Squashes are in two classes, Summer and Winter. The Suminer are used when young and tender, and the Winter, when well ripened, will usually keep till spring. Our engravings show the Hubbard, the best Winter Squash; the Essex Hybrid, and the Perfect Gem ; also the two best Summer Squashes. All Winter Squashes should be ripened thoroughly: or they are watery and lack sweetness and richness, and will not

bUSH SCULLOP.


Sumaer Crook neck.
keep through the winter. The shell of the Hubbard when ripe is as hard as a Cocoanut shell.
Squash, Early Bush Scollop, a good, early, Summer Squash, taking but little room, and bearing abundantly; plant in hills three feet

Early Bush Crook-Necked, the richest summer Squash; very early and productive ; plant in hills four feet apart ; itt., \$r.oo; oz., ro cents,


PERFECT GEM.
Perfect Gem, small, flattened, slightly ribbed; of a creamy white color; flesh fine grained, dry, sweet, and of good flavor; sets its fruits near the root. Very productive, as many as twenty-four Squashes having been grown on a single vine. Good for summer use, bat better as a winter Squash; per lb. $\$ 2.00$; oz. 20 cents,

Squash, Hubbard, an excellent Squash, almost as good as the Sweet Potato; 1b., \$1.20; oz., ro cents,

5


HUBBARD.
Marblehead, a very good winter Squash, resembling the Hubbard; sometimes quite as good, though more variable; H.., \$1.20; oz., io cents,


ESSEX HYBRID.
Essex Hybrid, or Hard Shell Turban. A cross between the Hubbard and American Turban, having the color, shape and fine quality of the Turban, with the dryness and hard shell of the Hubbard. A good keeper; flesh very thick, fine grained and solid; very productive ; very early, and of rapid growth ; per lb. \$r.50; per oz. I:,
Turban, or Turk's C._, a good fall and carly winter Squash, greenish color, striped with white; in form it somewhat resembles a turban; flesh orange; almost as good is Hubbard, and weighing about six pounds; 㖶., S1.20; o7. ro cente,


Boston Marrow, a good, tender, rich variety, for fall and winter; per $\mathrm{ll}^{\mathrm{H}} ., \$ \mathrm{I} .20$; per oz., io cents, Winter Crook-Neck, of fair quality, very hardy and a good keeper; per 13. \$1.30; per 07. Iucts.

## TOMATOES.



A trained tomato plant.
To obtain fruit very early, sow in the hot-bed in March. In about five weeks plants should be transplanted to another hot-bed, setting them about four or five inches apart. Here they should remain, having all the air possible, until about the middle of May, when they may be put out in the ground. If not too early or too cold, a cold-frame will answer for the first transplanting. Pinching off a portion of the side branches, and stopping others just beyond where the fruit is formed hastens the ripening. Very good plants can be grown in boxes in the house.

No plant will bear training better than the Tomato, and they can be made very pretty. We have described below the very best varieties in the world, and none that do not possess some merit.


1. Curled leaf.
2. HATHAWAI'S EXCELSIOR.

Tomato, Hubbard's Curled Leaf, the earliest of all the Tomatoes; small to medium in size, some specimens irregular; plant dwarf in habit; set half the usual distance apart; the leaves curlas though the plants were drying up; per oz. 30 cents,
Conqueror, is an early Tomato, ripening after the Curled Leaf, and a few days before the Gen. Grant. It has no merit except its earliness ; too soft for shipping; per oz. 30 cents,
The Cardinal, skin brilliant, glossy, cardinalred; flesh solid and of the same bright color; medium early, and ripens evenly; per oz. 30 cents,

Tomato, Hathaway's Excelsior, early, medium to large, smooth as an apple; very solid, and of excellent quality every way ; the best Tomato we have ever grown; per oz., 40 cents.; per half oz., 25 cents,
Gen. Grant, a very superior, good sized Tomato, smooth, rather flat in form: of good quality, and ripens rapidly and thoroughly; oz., 30 cents,
Mayflower, shape globular, slightly flattened, smooth; color glossy red ; ripens evenly ; per oz. 30 cents,

5

Acme, a fine, solid, smooth, early variety, medium size, red, with a purplish tinge. It is becoming quite popular; oz. 30 cents,
Paragon, medıum size, smooth, solid, second early ; per oz. 30 cents,
Perfection. A very good and productive and solid Tomato is the Perfection, originated by Mr. Livingston, who produced the Paragon and Acme; oz. 30 cents, .
Livingston's Favorite, is a new variety, originated by Mr. Livingston. It is a very large and perfect shaped Tomato, smoother than the Paragon, darker red than the Perfection; ripens evenly ; very prolific; good flavor; flesh solid; bears shipping long distances; per oz., 40 cents ; half oz., 25 cents
Early Smooth Red, early, smooth, round, medium size, of fair quality, and productive; per oz., 30 cents,

5

Trophy, very large, pretty smooth, very solid, and of fair quality; too late or it would be popular; per oz., 50 cents; half oz., 30 cents,
Large Yellow, bright yellow, large, smooth; per oz., 30 cents,
Nesbit's Victoria, an English seedling from Hathaway's; too small for general use; pear shaped, very sweet, rich and fruity in flavor, and bearing very large clusters of fruit,
Pear-Shaped, fine for preserving and pickling, .
Plum-Shaped, Yellow, preserving and pickling
Cherry, Yellow and Red, for preserving or pickling, each,

5

Strawberry, or Winter Cherry, a distinct species; prized for preserving,

TURNIPS.


The soil for Turnips should be rich and mellow. Sow in drills, from twelve to eighteen inches apart, and half an iach deep. When the plants are a few inches in height, and strong enough to resist the attack of insects, thin them out to some five or six inches apart in the drills. Swede, or Ruta Baga Turnips, should be sown by the first of June, the rows being about eighteen inches apart, and the plants in the rows not less than ten inches. The common, or English Turnip, comes to perfection in a short time, and if the weather is showery in the Autumn will mature if sown very late. In this climate we sow from the 25 th of July until the middle of August.

Though for a general crop the Common Turnips are
sown late in summer, and are gathered in the autumn, yet by sowing early in the spring, Turnips may be grown for family or market by early summer. When ordering, please be particular to state which kind is wanted. The Ruta Bagas are excellent for all kinds of stock, and are relished by all. Every farmer should grow this Turnip.


EARLY WHITE SIX WEEKS.

## ENGLISH TURNIPS.

Turnip, Early White Flat Dutch, size medium ; grows quick; 他. 75 cts. ; oz., Io cents,
Early Yellow Dutch, one of the best for the garden ; per 他., 75 cts. ; per oz., io cents, . .
Strap-Leaved, White-Top, roundish, of medium size; one of the best, either for market or family use ; per to., 75 cents ; per oz., io cents,
Strap-Leaved, Purple-Top, similar to above, purple above ground; per $\mathrm{D} ., 75$ cents; per oz., to cents,
Extra Early Milan. (For description, see COLORED PAGES.) Per lb., \$r.oo; oz., ro cents,
Early Purple-Top Munich, two weeks earlier than the common early purple-top, which it resembles; per lb., \$1.00; per oz., io cents,
Early White Six Weeks, very early and fine; per 1b., 75 cts.; oz., Io cts.,
Farlv WThite Stone. a good. globe-shap-

Long Red Tankard, good and productive for field crop, per ¥b., 75 cts. ; per oz., 10 cts., . .

Turnip, Jersey Navet, a delicate, white Turnip, long, somewhat like the Parsnip in form ; one of the best for the table, very sweet; per lb ., $\$ 1.00$; per oz., io cents
Sweet German. This celebrated Turnip is white, sweet, a long-keeper, and generally solid until mid-summer. It should be sown as early as the Swedes ; per lb. 75 cents ; per oz. io cts., .

RUTA-BAGA, OR SWEDE TURNIPS.
Ruta Baga, White Sweet, a large, white, solid Swede, sometimes called White Russian; per lb., 75 cents ; per oz., io cents,


White Red-Top, a French Swede, with reddish purple top, sweet and solid; 1b. 75 cents; per oz. rocts.,
Green-Top, a round, solid, sweet variety, very productive; per lb., 75 cents ; per oz. Io cents,
Laing's Purple-Top, an old and favorite variety, good keeper, solid and productive; per lb., 75 cents; per oz., io cents,
Carter's Imperial Purple-Top, claimed to be the best Purple-top grown ; very hardy ; perlb., 75 cents ; per oz., to cents,
Skirving's Liverpool, good quality, and of medium size, very solid and sweet ; supposed to be the best for a shallow soil ; per lb. 75 cents ; per oz. Io cents,
Hall's Westbury; one of the finest purple-top Swedes in cultivation; good for table, or for stock; per lb., $\$ 1.00$; per oz., 10 cents, . . .


In the above list of Turnips we have given the best varieties known. Our seed is all new, and either grown by ourselves or the most reliable producers in this country and Europe. We believe it to be choice and true in all respects.


A few Pot Herbs and Sweet Herbs should have a place in every vegetable garden. Every cook and every good housekeeper knows the value of the little patch of herbs upon which she makes daily drafts in the summer, and which furnishes such a nice collection of dried herbs for winter seasoning, without which the Thanksgiving turkey would bescarcely worth the having ; while as domestic medicines several kinds are held in high repute. A very small space in the garden will give all the herbs needed in any family. The culture is very simple, and the best way is to make a little seed-bed in the early spring, and set the plants out in a bed as soon as large


ROSEMARY.


SAVORY.
enough. As a general rule it is best to cut herbs when in flower, tie them up in small bunches and hang in the hsade to dry. We give a list of the herbs generally cul-
tivated and prized, with engravings showing their appearance when in condition for cutting. All kinds are fिve cents a paper, except Tarragon, which is 20 cents a paper. This seed is always very high. As Sage is grown quite extensively we sell this seed for $\$ 1.50$ per lb., $1_{5}$ cts. per oz., and this is the only kind that will be likely to be needed in quantities. Of some kinds we furnish roots, as will be seen below.

Sage, roots, by mall, per dozen $\$ 2.00$; each, . . . 25 Lavender, roots, by mail, per dozen $\$ 2,00$; each, 25 Tarragon, roots, by mail, per dozen, $\$ 2.50$; each, 25 Shallots, per quart, . . . . . . . . . . . 50

## LAWN AND OTHER GRASS AND CLOVER SEEDS.



Nothing is pleasanter about a house than a good lawn, and nothing is more easily made and kept in order by a little well directed care. To get Grass Seed up quickly and evenly, the surface must be mellow, so that it will not bake after a rain. If the soil is clayey, after sowing the Grass Seed, cover the surface with a light coating of manure, which may remain, except a little of the coarsest. Four bushels of Grass Seed for an acre are required to make a good lawn in a short time. Sow Grass Seed for lawns as early as possible in the spring, so as to give seed the benefit of early spring rains. Late sowing is seldom successful. It is better to wait until September than to sow after warm weather has commenced. The best single kind is Kentucky Blue Grass. To four bushels of this (per acre) add White Clover and Sweet Vernal Grass, about two pounds of each, and this will make an excellent lawn. Our preparation of Lawn Grass contains Blue Grass, White Clover, and Sweet Vernal Grass and other very choice and fine Lawn Grasses, and is, we think, the very best preparation possible for our hot and dry summers, as we have been long making experiments to ascertain this fact.

At the price per bushel and peck we deliver to Express Company Fiere or on board cars. No charge for bags or packing. By the quart we prepay postage.
Crested Dog's Tail, (Cynosurus cristatus,) qt.,
Kentucky Blue Grass, (Poa pratensis,) clean seed; per bushel, $\$ \mathrm{r} .75$; 2 bushels or over $\$ 1.50$ per bushel; per peck, so cents; per quart,
Orchard Grass, (Dactylis glomerata,) per bi. $\$ 3.00 ; 2$ bush. or over, $\$ 2.75$ per bush.; p-r peck, 85 cts. ; quart, .
Pacey's Perennial Rye Grass, (Lolium perenne,) per bushel $\$ 2.50$; peck 75 cents : quart,
Italian Rye Grass, (Lolium Italicum,) per bush. $\$ 2.75$; peck 80 cents; quart,
Red Top, (Agrostis vulgaris,) per bushel, \$1.25; 2 bush. or over $\$ 1.00$ per bushel : peck, 40 cts.; quart,
Sheep's Fescue, (Festuca ovina,) per quart,
Slender-Leaved Fescue, (Festuca tenuifolia,) per quart, .
Sweet Vernal Grass, (Anthoxanthum odoratum,) per $\mathrm{O} ., 75$ cents; per oz.,
Lawn Grass, fine prepared; per bushel, $\$ 2.75$; two bushels or over $\$ 2.50$ per bushel ; per peck, 85 cents : per quart,
Poa annua, a short, pale green grass, and will do with less cutting than other varicties; lb .
Clover, White, per oz. by mail, 1o cents; per fl . by mail, 75 cents; per 100 lbs ., delivered to railroad here,
Alsike, lb. by mail, 60 cents; 100 lbs ., delivered to railroad here,
$25 \infty$

Clover, Scarlet, (Trifolium incarnatum, lb., by mail, so cents ; per oz.,
Sweet, or Bokhara, (Melilotus alba,) lb. $75 \mathrm{cts}$. ; per oz.
10.
ucerne, California Alfalfa, lb., by mail, so cents; 100 lbs ., delivered here, . . . . . . . 25
Spring Vetches, per lb., by mail, 35 cents; per roo lbs., delivered here,
. 10 oo
Sainfoin, per lb., by mail, 60 cents; per bushel, delivered here,

6 oo
GRASS SEED IN BULK, BY MML.
To places that cannot be reached by Express we will send Grass Seed in bulk by mail, and prepay postage, at the following prices : peck. bush.
Blue Grass, post-paid, . . . . . . . \$1 I5 450
Orcnard Grass, " ....... I 40 560

Lawn Grass, $\quad$......... I 40 .... 50

## HEDGE SEEDS.

Those who wish to have hedges, and are not in too much haste can grow their own plants by sowing seed in drills, pretty thickly, and keeping the ground clean and mellow for one summer. Before sowing soak the seed in warm water for twenty-four hours.
Honey Locust, per lb., by mail, so cents ; 100
lbs. delivered here,
. 2000
Osage Orange, by mail, per lb.,
75

## SUGAR CANE.

The Early Amber seems to be far the best variety for the production of Syrup and Sugar, and is grown and used extensively, particulariy in the Northwest.
Early Amber Sugar Cane, per quart,
50

## TOBACCO.

Connecticut Seed Leaf, per oz. 35 cents, . . . . Io
Havana, (or Cuban,) per oz. 75 cents,
15

## BROOM CORN.

The Evergreen is the favorite Broom Corn, and we think our stock is as pure as any, though there is great need of more care and skill in growing Broom Corn seed. Evergreen, per quart

50

## FIELD LUPINS.

Popular for soiling and for sheep. Sow in the spring and plow under when in flower.
Lupin, White, considered the best in most respects ; per pound,

40
Yellow. A little iess thrifty than the White, but keeping green longer; per lb .

40
Blue. enmewhat used for soiling, but not yet so well known ; per lb.

## SEEDS IN LARGE QUANTITIES.

To those who wish to purchase seeds in large quantities, we offer them at the prices named below. The articles quoted in this list are packed and delivered at Express offices and railway depots in this city at the annexed prices. Freight charges to be paid by the purchaser on receipt of the goods, uniess the amount has been previously advanced to us for that purpose. No charge for bags, packing or carting. Articles quoted below by the pound are only furnished at these prices in quantities of five pounds and over.

## DWARF, OR BUSH BEANS.

Early Valentıne,
Early Mohawk,
Long Yellow Six Weeks,
Round Yellow Six Weeks
Mont d' or Wax,
Wax or Butter,
Golden Wax,
Ivory Pod Wax,
Crystal White Wax,
Refugee,
White Kidney,
White Marrowfat,
per bush. peck. $\$ 500$ \$I 35 $500 \quad 135$ $500 \quad 135$ $500 \quad 135$ $700 \quad 185$ $600 \quad 160$ $650 \quad 175$ 600 I 60 500 I 35 500 I 35 400 I 10 4001 10

POLE BEANS.
King of the Garden Lima, . . . . . . . 2000 600
Large Lima, . . . . . . . . . . . . . . $800 \quad 225$
Dreer's Improved Lima, . . . . . . . . 8 oo 225
Small Lima, or Sieva, . . . . . . . . . $900 \quad 250$
London Horticultural, or Cranberry, . . 650 I 75
Scarlet Runner,
$800 \quad 225$

## SWEET CORN.

Cory, 8 оо

Marblehead Early
Purry's Hybrid, 250

Purry's Hybrid, $4 \infty$

Early Minnesota, . . . . . . . . . . . . 375 I 00
Russell's Prolific. Crop total failure.
Crosby's Early,
75 I 0

Moore's Early Concord, 75 I 0

Early Eight-Rowed Sugar
375 1 00
Hickox Improved Sugar,
75 I 00
Potter's Excelsior,
75 I 00
Triumph, . . . . . . . . . . . . . . . 375
400110
Stowell's Evergreen,
50
Egyptian, or Washington Market, 0
00
Mammoth Sugar,
375
Black Mexican,
375

## FIELD AND POPPING CORN.

Extra Early Adams, . . . . . . . . . . 37
Early Adams, . . . . . . . . . . . . . 375
Parching 'ears', 375100
(For other varieties, see page 123.)
PEAS.
Vick's Selected Extra Early,
Carter's First Crop, . . . . . . . . . . 350
Waite's Caractacus,
350
Blue Peter, . . . . . . . . . . . . . . 600
Tom Thumb,
600
Kentish Invicta,
Early Kent,
500
Bliss' American Wonder,

| Carter's Premium Gem, . . . . . . . . $\$ 6$ McLean's Little Gem, . . . . . . . . . 6 | \$1 |
| :---: | :---: |
| Laxton's Alpha, . . . . . . . . . . . . 6 | 16 |
| McLean's Advancer, . . . . . . . . . . 600 | 16 |
| Bliss' Abundance, . . . . . . . . . . . 10 о |  |
| Bliss' Everbearing, . . . . . . . . . . . 10 | 2 |
| Yorkshire Hero, . . . . . . . . . . . . 6 |  |
| Champion of England, . . . . . . . . . 4 | 1 |
| Telephone, . . . . . . . . . . . . . . . 900 |  |
| Stratagem, . . . . . . . . . . . . . . . 900 |  |
| Dwarf Sugar, . . . . . . . . . . . . . 700 |  |
| Tall Sugar, . . . . . . . . . . . . . . 700 |  |
| Black-Eyed Marrowfat, . . . . . . . . . 250 |  |
| White Marrowfat, . . . . . . . . 250 |  |
| Field Peas, for sowing broadcast, . . . . 125 |  |

BEET.
per lb.
Egyptian Blood Turnip, ..... 50
Early Blood Turnip ..... 50
Long Blood Red, ..... 50
Imperial Sugar, ..... 30
MANGEL WURZEL, all varieties, ..... $3^{\circ}$
CARROT.
Early Scarlet Horn, ..... 100
Long Orange, ..... 75
Large Orange Belgian, ..... 75
Large White Belgian, ..... 50
ONION.
Large Red Wethersfield, ..... 225
Yellow Dutch, ..... 225
Early Red, (Globe,) ..... 3 75
Yellow Danvers, (Globe,) ..... 375
White Globe, ..... 375
White Portugal, ..... 375
PARSNIP.
Abbott's Improved Hollow Crown, ..... 50
RADISH.
Rose Olive-Shaped, ..... 75
Scarlet Olive-Shaped, ..... 75
French Breakfast, ..... 75
Long Scarlet, ..... 75
Red Turnip, ..... 75
TURNIP.
Early White Dutch, ..... 50
White Norfolk, ..... 50
White-Top Strap-Leaf ..... 50
Red-Top Strap-Leaf, ..... 50
Early Six Weeks ..... 50
White Globe, ..... 50
Yellow Aberdeen, ..... 50
RUTA BAGA, all varieties, ..... 50

SEED FOR AN ACRE.
Below we give the quantities of the leading kinds of seed usually sown on an acre, which will be of interest to market gardeners and others who plant iargely.

Beans, Dwarf, in hills, . $11 / 2$ bush. Grass, Kentucky Blue, for lawn, 4 bush. He its, in drills, . . . 5 to 6 lbs. Broom Corn, in hills, 8 to 10 quarts. Cabbage, in beds to transplant, $1 / 4 \mathrm{lb}$. Carrot, in drills, . . . . 3 to 4 lbs . Chinese Sugar Cane, . . 12 quarts. Ciover, White, alone, . 12 to 15 lbs . Clover, Alsike, alone, . . 8 to 10 lbs . Clover, Lucerne, or Alfalfa, . 20 lbs . Corn, in hills, . . . . 8 to 10 quarts Corn, for soiling, . . . . . . 3 bush Cucumber, in hills,

3 bush. 2 lbs .

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Peas, in driils, . . . . . . 2 bush.
Peas, broadcast, ..... 3 bush.

Potato, cut tubers, . . . . . 8 bush.
Pumpkin, in hills, . . . 4 to 6 lbs .
Radish, in drills, ... 8 to 10 lbs.
Sage, in drills, .... 8 to ro lbs.
Salsify, in drills, . . . 8 to 10 lbs.
Spinach, in drills, . . . io to 12 lbs .
Squash, bush varieties, .4 to 6 lbs .
Squash, running varieties, 3 to 4 lbs .
Tomato, to transplant, . . . . $1 / 4 \mathrm{lb}$.
Turnip, in drills,
${ }_{2}^{1 / 4} \mathrm{lbs}$.
Turnip, broadcast, . . 3 to 4 lbs .


In making up our list for this department, we have excluded many new varieties, which we are not convinced, by tial in our nwr gardens or by testimony of unprejudiced parties, are worthy of special prominence, and hisve included some older varieties which, though not novelties, are of such superior excellence that we deem them worthy of special notice.

## ECLIPSE BEET.

This variety combines many valuable qualities, and will come rapidly into favor as its excellencies become known. It is very early, maturing with the Egyptian, forming Beets of bright scarlet color, very smooth, and globular in shape; tops are quite small. The quality is excellent, as they are fine-grained, tender, and sweet. We commend this variety to market gardeners. Price, $\$ 1.50$ per pound; 15 cents per ounce ; 10 cents per packet.


GUERANDE, OR OXHEART, CARROT.


The value of Carrots for feeding purposes is not as yet appreciated by the farmers of this country, though coming more in demand every year. In Europe they are considered as necessary a crop as hay. Every one who keeps a milch cow, or horse, and has a few rods of ground to spare, should grow a few Carrots. The new variety indicated by this engraving is a valuable addition to the several older sorts, and comes to us from Europe. The specimens of the same grown in our trial grounds were of great bulk, smooth, and of good table quality; in length short, but very thick through, stump rooted. The crop can be pulled readily, while the longer sorts require digging, a point in its favor which will commend itself to those who grow in large quantities. Price, per pound, $\$ 2.00$; per ounce, 20 cents; per packet, 10 cents.

## DWARF MONT D'OR BEAN.

Of German origin, very early, but specially noted for being remarkably prolific, bearing frequently over thirty pods to the plant. Pods are round, bright golden-yellow, tender and stringless; vines of great vigor. We have found this Bean less liable to rust than others of the wax family. Gardeners will find it a valuable variety to grow for market, as the product from a small space is surprising. Price, per quart, 80 cents; per packet, 10 cents.


## KING OF THE GARDEN LIMA BEAN.

An improvement on the old Lima Bean, introduced by Mr. Platt, of Connecticut, who says of it, "The King of the Garden is a very vigorous grower, requiring but two vines to each pole. They set their pods early, at the bottom of the pole, producing a continuous bloom and fruitage to the end of the season. Many of the pods measure from five to eight inches, and contain five, six, and seven perfectly-formed Beans to the pod, of superior edible quality, unexcelled by any that have come to my notice during a practical experience in Bean culture of twenty years." Price, per quart, $\$ 1.50$; packet, 20 cents.


## VICK'S IDEAL DWARF CAULIFLOWER.



We take pleasure in presenting this variety of Cauliflower, confident that it will prove superior to any heretofore offered. Our claim is based upon the following distinct points: Extreme earliness in heading; it produces larger and more solid heads; it will stand longer without breaking; and lastly, but most important, the protecting habit of growth of the inner leaves. Grown side by side, this summer, with that excellent variety, Henderson's Snowball, and others, under equal conditions, heads of Ideal and Snowball were ready to cut at the same time, but the Ideal were uniformily larger in size, and solid, and not one plant failed to make a head. Some of the heads of the Ideal were left stand-
ing uncut two weeks after fully grown without breaking or being discolored. The growth of the inner leaves when above the head being towards the center, they completely shelter the head from the rays of the sun. The above cut, at the left, represents the protecting habit of growth peculiar to this variety. Plants very dwarf, outer leaves erect, can be set close, equally good for early or late planting. Price, per ounce, $\$ 8.00$; half ounce, $\$ 4.00$; quarter ounce, $\$ 2.00$; packet, 50 cents.

## HENDERSON'S SNOWBALL CAULIFLOWER.

A very fine variety, which has given excellent satisfaction so far as we have heard. Extremely early, and in our trials the earliest, excepting Vick's New Ideal. Very reliable in forming heads, which are large and solid. We consider it much superior to the older sorts. As spurious articles are said to have been sold under this name, we have procured our stock from the introducers and will sell it in their sealed packets only. Price, per ounce, $\$ 6.00$; half ounce, $\$ 3.00$; quarter ounce, $\$ 1.75$; packet, 50 cents.



LOW'S PEERLESS EARLY CABBAGE.

## LOW'S PEERLESS EARLY CABBAGE.

Nearly as early as Jersey Wakefield, but somewhat larger. Very round and uniform in shape, small, short stump, and few loose leaves. It has the valuable quality of remaining a long time after fully matured without bursting. Price, per pound, $\$ 6.00$; per ounce, 60 cents; per half ounce, 40 cents; per packet, 10 cents.

## EARLY JERSEY WAKEFIELD CABBAGE.

SEE CUT PAGE 91.
The earliest good Cabbage grown. While there have been many aspirants for that position, the Wakefield still holds its place at the head of the rank. It is most reliable in forming heads, which are conical in shape, very solid and of good size. The outer leaves being quite short admits of its being planted more closely than many sorts. Price, per pound, $\$ 4.00$; per ounce, 35 cents ; per l.alf ounce, 20 cents; per packet, 10 cents.

## HENDERSON'S EARLY SUMMER CABBAGE.

SEE CUT PAGE 91.
About two weeks later than the Wakefield, it forms an excellent succession to that variety. It , however, surpasses it in size, producing heads extremely large and solid. This variety is now quite extensively grown by market gardeners, as when grown from choice strains of seed it is most reliable in forming heads, which command the highest price in market by reason of their size and solidity. Price, per pound, $\$ 3.50$; per ounce, 30 cents; per half ounce, 20 cents; per packet, 10 cents.

## FOTTLER'S IMPROVED BRUNSWICK CABBAGE.

This variety has given excellent satisfaction throughout the country, and is now, perhaps, more generally grown than any other for autumn crop. It is also quite extensively used for second early, following Early Wakefield, Early Summer, or any other quite early variety. Very reliable as to heading. Our strain of seed of this variety 1s unsurpassed. Price, per pound, $\$ 2.50$; per ounce, 25 cents; per packet, 10 cents.


## LOUISVILLE DRUMHEAD CABBAGE.

An excellent variety but little known to the country at large, but very highly prized in the section where it has been grown. Our attention was first called to it by one of our customers in Indiana, who stated that there was no variety so much esteemed by the gardeners of that section as the Louisville Drumhead, the seed being so much in demand that he had paid at the rate of $\$ 25.00$ per pound for it. We took pains to procure a pound, from which we have grown the seed we now offer. We are much pleased with this variety, and recommend it for trial. Price, per pound, $\$ 4.00$; per ounce, 40 cents; per half ounce, 25 cents; per packet, 10 cents.


WHITE PLUME CELERY.

## EARLY ARLINGTON CELERY.

The chief point of excellence claimed for this variety is its extreme earliness, large, well blanched roots having been brought into market on the fifteenth of August. It is an improvement on the Boston Market Celery, being free from blight and of larger growth. We think this will become a very popular variety with market gardeners for early crop. Price, per pound, $\$ 8.00$; per. ounce, 75 cents; per half ounce, 45 cents ; per packet, 15 cents.

## PERRY'S HYBRID SUGAR CORN.

This is the largest Early Sweet Corn that we have ever seen. We have tested it for the two past seasons beside the other early varieties, and are well pleased with it. Ears of same were ready for use a few days later than the Early Marblehead, and before the Minnesota, but of double the size of either of these varieties, the ears being twelve-rowed, and sometimes fourteen.

## WHITE PLUME CELERY.

This variety, recently introduced, is destined to become one of the most popular in cultivation, and can be readily grown in every family garden. Requires no banking up for blanching, as the central stalks, heart and leaves are naturally white; it is, therefore, ready for use as soon as it has attained sufficient size. The white stalks do not appear until the plant has made a good growth. This variety is also of great value as a table ornament, it having been given the above name from the beautiful feathery appearance of its leaves. It has a rich nutty flavor, is crisp and tender, and all together we recommend it as an excellent variety, well worthy a trial by all of our customers. Price, per pound, $\$ 8.00$; per ounce, 75 cents; per half ounce, 45 cents; per packet, 15 cents. The kernels are large and tender, and deliciously sweet; stalks of great vigor, growing about six feet high, with two perfect ears to a stalk. It was sold in limited quantity in this market the

past season, and brought double the price of other varieties on the same day. A good, large, early Sweet Corn has long been desired. Our engraving was made from an ear in the green state. Price, per quart, 75 cents; per packet, 15 cents.

## CORY SWEET CORN.



A new variety of Sweet Corn, a few days earlier than the Marblehead, and producing ears somewhat larger. In general appearance it closely resembles the Early Marblehead variety, and, doubtless, came originally from the same parent seed stock. To marketmen this variety will be of great value, as it is well known the first Sweet Corn will bring two or three times the price it commands when the supply becomes general. Price, per quart, 75 cents; per packet, 15 cents.

## VICK'S PROLIFIC NUTMEG MELON.

This delicious variety of Musk Melon we introduced a number of years ago, but, not growing the seed stock of same for several seasons on our own farms, it became hybridized with other Melons, and the type was nearly lost. By repeated replanting of seed of selected Melons, we have now succeeded in restoring it to its original merit. The flavor of this Melon is unsurpassed; the fruit is small, but yielded in great abundance. Price, per pound, $\$ 2.00$; per ounce, 20 cents; packet, 10 cents.



GOLDEN NETTED GEM MELON.

## GOLDEN NETTED GEM MELON.

A variety of Musk Melon recently introduced, very popular with the Melon growers of New Jersey, and by them considered the most profitable small Melon to be raised. Skin thickly netted; flesh light green, thick meated, and very solid; flavor sweet and luscious. Extra early in ripening, and very prolific. Price, per pound, $\$ 1.50$; per ounce, 15 cents; per packet, 5 cents.

## MONTREAL GREEN NUTMEG MELON.

This variety has been grown by the market gardeners of Montreal for a number of years. The fruit is of the largest size, often attaining a weight of fifteen to twenty pounds. Shape nearly round, flattened at the ends, deeply ribbed; flesh remarkably thick, green, melting, and of the finest flavor. Price, per pound, $\$ 2.00$; per ounce, 20 cents; per packet, 10 cents.


MONTREAL GREEN NUTMEG MELON.

## KOLB GEM WATER MELON.



KOLB GEM Water melon.

This new variety originated in the South, the home of the Water Melon, and has become very popular there on account of its extremely large size, uniformity, immense yield, and excellent shipping qualities, keeping a long time without decay. For the latter reason alone, southern growers claim that this variety nets them $331 / 3$ per cent. more on shipments made to the North than the Rattlesnake, or Scaly Bark. Specimens of the Kolb Gem have been in good eatable condition three months after shipment. In flavor it is excellent. Price, per pound, $\$ 2.00$; per ounce, 20 cents; per packet, 10 cents.

## PRIDE OF GEORGIA WATER MELON.


pride of georgia water melon.
As indicated by the name, this is another new variety of southern origin. It is described as follows by the introducer. It is dark green in color, nearly oval in shape, ridged like an orange, and grows as represented, resting nearly on its end. It attains immense size, is crisp, and sweet in flavor, and of excellent shipping quality. Price, per pound, $\$ 2.50$; per ounce, 25 cents; per packet, 10 cents.

## MAMMOTH IRON CLAD WATER MELON.



Mammoth iron clad water melon.

Introduced by Mr. Burpee last season, and thus named on account of the hardness and tenacity of its shell, and the immense size of the Melons when full grown. With ordinary cultivation, on suitable soil and conditions, specimen Melons have been found to weigh seventy pounds. As this variety generally sets but two Melons to a vine, the whole vigor of the plant is given to develop them to a large size. The hardness of the rind makes it an excellent variety for shipment. The flesh is firm, and of fine flavor. Price, per pound, $\$ 2.00$; per ounce, 20 cents; per packet, 10 cents.

## VICK'S KING OF THE DWARFS PEA.

In presenting this new candidate for public favor, we introduce a variety that will fill a place not occupied by any other dwarf, wrinkled Pea, and which possesses, in addition, distinctive, important merits. In season it follows closely McLean's Little Gem, coming into market in the space intervening between the early and the late varieties. The vines are sturdy and remarkably vigorous, growing about two inches taller than the Little Gem, and bearing a profusion of pods, which are packed closely with large Peas, as shown in the engraving. On careful comparison both as to number of pods and Peas in the pods, with all of the principal dwarf varieties, including the American Wonder, we find that
 the King of the Dwarfs outyielded them all by 20 per cent., all planted at the same time, on the same soil, with equal cultivation. The King of the Dwarfs is a seedling obtained by crossing American Wonder with Mc Lean's Little Gem, and selected as the most promising from forty different seedlings. In flavor it is unsurpassed. We control the entire stock of this variety, which is limited in quantity. We offer it at the following prices: per quart, $\$ 2.00$; per packet, 25 cents.

## VICK'S SELECTED EXTRA EARLY PEAS.



While all the so-called "Extra Early" and "First and Best" Peas advertised by different seedsmen doubtless come from the same old English variety, and bear close resemblance to one another, yet experienced planters are aware that important improvements can be obtained on almost any variety by high cultivation and the most careful selection of seed stock. We have been for several years breeding up a select strain of the ahove named Pea, which we now offer tor the first time, and with which we challenge competition as to earliness and evenness .ff maturity of crop. Price, per quart, 70 cents; per packet, 10 cents.

## VICK'S EARLY SCARLET GLOBE RADISH.



We distributed a small quantity of this seed among the leading market gardeners of this city in the spring of 1884, who liked it so well that they returned and purchased all we could spare of it at the high price of $\$ 2.50$ per pound. This past season it was their leading Radish for hot-bed sowing. Their testimony is unanimously in its favor as the earliest and best variety for forcing; its color is also the handsomest. In flavor it is mild, crisp and juicy; will stand a great amount of heat without becoming pithy. This variety is excellent also for garden culture Price, per pound, $\$ 2.00$; per ounce, 20 cents; per packet, 10 cents.

## EXTRA EARLY MILAN TURNIP.

New white variety, purple-top and strapleaf. It is full as early as the Purple Top Munich, and far superior to that variety, which is inclined to be hot and bitter. The Milan, on the contrary, is mild and sweet, and remains in good condition a long time. Price, per pound, $\$ 1.00$; per ounce, 10 cents; per packet, 5 cents.


## VICK'S AMERICAN BANNER OAT.

## EエETY TO ONE.



A new variety, never before offered, of such remarkable yield and general excellence, that we claim for it superiority to any of the varieties now in use.

We have tested its yielding qualities on good and poor land with the following satisfactory results: from two sowings on good soil it yielded at the rate of one hundred and two bushels, and ninety-nine bushels per acre, respectively. Sown on common, light, sandy land, the return was at the rate of seventy bushels per acre, out-yielding the neighboring crops of Welcome, White Russian, and Probstier Oats $331 / 3$ per cent.

The grain is white, very large and plump, weighing from forty to forty-five pounds per measured bushel; the straw is stiff, of good strength, but not unusually heavy, bearing its grain all around the heads, which are quite long. When viewed in the field before the grain was cut, the estimate of rate per acre was not placed high by any one, but all were surprised who witnessed the grain coming from the threshing machine, it requiring two persons working rapidly to carry it away. It ripens quite early, and has shown no indications of rust. Its large yield is due not only to its bearing a larger quantity of heavy grain to each stem than other varieties, but to its tillering very freely. For the latter reason it should be sown more thinly than is customary. We control the entire stock of this wonderful Oat, and, having grown it on our own farms, it is pure and perfectly clean. Price, postpaid, $\$ 1.00$ per pound; per packet, 10 cents.

## ONION SFED.

It is, perhaps, needless for us to call attention here to our Onion seed, in view of the fact that our strains of Early Red Globe, Danvers Yellow Globe, and Large Red Wethersfield Onion seed are so highly prized by our customers, that for years we have been obliged to return money sent for some of these varieties, stock of our own becoming exhausted, and we did not wish to send our patrons seed of whose value we were not certain. Owing to a very unfavorable season, our crops of above are this year unusually small. Send your orders early. For prices and descriptions, see page 100 .

## STANDARD VARIETIES OF SEED GRAIN.

At pound or quart prices we prepay postage. Pecks or bushels by Express or Freight at expense of purchaser.

## SPRING WHEAT.

Saskatchewan Fife. Hard Amber. Productive, early, free from smut and disease. 1 pound, 35 cents; 3 pounds, 90 cents; peck, 65 cents; bushel, $\$ 2.00$.

Green Mountain. Amber; beardless heads; vigorous and productive. 1 pound, 35 cents; 3 pounds, 90 cents ; peck, 65 cents; bushel, $\$ 2.00$.

Champlain. White, long-bearded heads; productive and of fine flouring quality. 1 pound, 35 cents; 3 pounds, 90 cents; peck, 65 cents; bushel, $\$ 2.00$.

Mediterranean. Plump amber grain, hearded heads and stiff straw. 1 pound, 35 cents ; 3 pounds, 90 cents; peck, 65 cents; bushel, $\$ 2.00$.

## WINTER WHEAT.

Mediterranean Hybrid. Compact bearded heads ; plump amber grain, making the finest flour. Said to be the hardiest and most prolific wheat in cultivation. 1 pound, 35 cents; 3 pounds, 90 cents ; peck, 65 cents; bushel, $\$ 2.00$.

The Landreth has given satisfaction in this region. Early, hardy, prolific; stiff straw, large white grain. 1 pound, 35 cents; 3 pounds, 90 cents; peck, 65 cents; bushel, $\$ 2.00$.

Clawson. A standard variety, now widely distributed. 1 pound, 35 cents; 3 pounds, 90 cents ; peck, 65 cents; bushel, $\$ 2.00$.

## OATS.

Vick's American Banner. See page 122. For sale by the pound only.
Welcome. Recently introduced. Heavy grain and very productive. Pound, 30 cents; 3 pounds, 80 cents ; peck, 60 cents; bushel, $\$ 1.50$.

American Triumph. Tall stiff straw, grain plump and heary. Yields largely. Pound, 30 cents; 3 pounds, 80 cents; peck, 60 cents; bushel, $\$ 1.50$.

White Australian. Very similar to the Welcome in appearance and characteristics. Pound, 30 cents; 3 pounds, 80 cents; peck, 60 cents; bushel, $\$ 1.50$.

Probstier. One of the old standard varieties. Early, of stiff straw, and yielding large crops. Pound, 30 cents; 3 pounds, 80 cents ; peck, 60 cents; bushel, $\$ 1.50$.

## FIELD CORN.

Improved Leaming. Stalks of good size, setting two large handsome ears. Kernels very deep, orange color; cob very small. Per quart, 50 cents; peck, 65 cents; bushel, $\$ 2 .(1)$.

Chester County Mammoth. Well adapted to Southern and Western States. It is a Yellow Dent variety; extremely prolific. Per quart, 50 cents; peck, 65 cents; bushel, $\$ 2.00$.

Pride of the North. Yellow Dent, 16 -rowed; cob very small and red; kernels closely set upon the cob, above medium size and of a deep orange color. Stalks medium size. The earliest of the Dent varieties. Price per quart, 50 cents; peck, 70 cents; bushel, $\$ 2.25$.

Waushakum. Extra early, eight-rowed, yellow flint, and a good yielder. Per quart, 50 cents; peck, 65 cents; bushel, \$2.00.

Longfellow. An early eight-rowed yellow flint variety. Ears from ten to fifteen inches long and filled out to tip of cob. Cob small; kernels large and broad. Price, per quart, 50 cents ; peck, 65 cents; bushel, $\$ 2.00$.

Improved King Phillip. Very early, eight-rowed; kernels copper color, smooth, and of flinty order. Ears from ten to twelve inches long. Per quart, 50 cents; peck, 65 cents; bushel, $\$ 2.00$.

Early Dutton. Very early, yellow fint, growing two or three ears to a stalk. Per quart, 50 cents ; per peck, 65 cents ; bushel, $\$ 2.00$.

## BARLEY.

Manshury. New in 1882 ; six-rowed. Heads are long and drooping. Straw bright and very strong; does not lodge on richest ground. Per pound, 35 cents; 3 pcunds, 90 cents; peck, 65 cents; bushel, $\$ 2.00$.

Scotch Chevalier. Two-rowed: grain plump, thin skin, and of superior malting quality. Per pound, 35 cents; peck, 65 cents; bushel, $\$ 2.00$.

Common 4 -rowed. Per pound, 30 cents; 3 pounds, 80 cents; peck, 50 eents; bushel, $\$ 1.50$.

Common 2 -rowed. Per pound, 30 cents; 8 pounds, 80 cents; peck, 50 cents; bushel, $\$ 1.50$.

## BUCKWHEAT.

Silver Hull. Earlier than the Common Buckwheat, thinner husk and more prolific. Remaining in bloom a long time, it is valuable for hee-keepers. Price, per pound. 35) cents; 3 pounds, 90 cents; peck, 75 cents; bushel, $\$ 2.25$.

## ACHILLEA PTARMICA FL. PL.

A very fine free-flowering, hardy perennial, particularly adapted to plant among rock work, or in situations where more tender plants will not succeed. It blooms in clusters, and is very desirable for cutting, or planting in cemeteries. Valuable for forcing. Flowers pure white, double. Price, per dozen, $\$ 2.00$; each, 20 cents.


AMPELOPSIS VEITCHII.

## ABUTILON SENSATION.

This new variety is a strong, robust grower, with rich, dark green foliage and very large orange-scarlet flowers that are beautifully veined with crimson. As will be seen by the engraving, each petal of the flower is reflexed, which adds much to their beauty, as well as giving them a novel appearance. Price, 30 cents each.

## ALTERNANTHERA AUREA NANA.

This splendid new variety is a sport from A. aurea. It is of dwarf, compact, upright habit, growing only about four inches in height, and becoming a bright golden-yellow as soon as p!anted out, which color it retains all through the summer. The past season we


## AMPELOPSIS VEITCHII.

The Ampelopsis is a genus of beautiful climbing. plants. A. Veitchii, represented in the engraving, clings very firmly to the side of a house or wall, and will soon form a most perfect mass of foliage. It may be allowed to climb all over the surface of a house, or it can be confined to the foundation wall only. It is a most beautiful climber, and is fast becoming a great favorite, clinging to the smoothest surfaces perfectly, and on this account, and the beauty of its foliage it gives excellent satisfaction to those who cultivate it. Price, 25 cents each.
 used this variety on our lawn in the word "VICK," as shown in the engraving. It attracted much attention, the beautiful golden color showing to great advantage. As a plant to use for borders, or in ribbon lines, with other low-growing plants, it is without an equal. Per hundred, $\$ 10.00$; per dozen, $\$ 1.50$; each, 15 cents.



## BEGONIA.

We cannot praise too highly the varieties of Begonia offered here. They produce their flowers in the greate. $t$ profusion, in fact, they are always in bloom. The plants are handsome and showy in appearance, and the flowers splendid for cutting. Price, 30 cents each.
Begonia Goury, flowers large, white, slightly tinged with pink at the outer edge.
Massiliensis, flowers pure white.

## COLEUS GOLDEN BEDDER.

At last we have a yellow C:oleus that will stand our hottest summer and keep its pure color throughout the whole season. This variety is of very compact habit of growth, and requires but little pinching back to keep it in shape in ribbon lines or borders. A simple bed of scarlet Geraniums bordered with it makes a beautiful display. Price, per hundred, \$10.00; per dozen, $\$ 2.00$; each, 20 cents.


CARNATION PLANT AND FLOWER.
The Daphne Cneorum is a beautiful little plant, growing usually not more than a foot in height, with slender, light green leaves, and almost every branch bearing upon its point a cluster of pink flowers, as fragrant as Mignonette. It flowers early in the spring, giving a few flowers during the summer, and blooming freely in autumn. It has proved perfectly hardy here. Price, 50 cents each.


## EULALIA JAPONICA ZEBRINA.

This plant is unlike most variegated plants, as its stripe, or marking, is across the leaf, instead of lengthwise, which gives it a very peculiar but beautiful appearance. It grow's from four to six fect high, and is very graceful in form. Being perfectly hardy, it is the more desirable, as plants will improve in size and heauty each year For planting on a lawn as a single specimen plant, or for grouping, it is unsurpassed. In the fall it bears large, tassel-like plumes. These may be used as parlor ornaments, and will last for years. Plants, each, 50 cents.


EULALIA JAPONICA VARIEGATA.

## FUCHSIA PHENOMENAL.

This variety produces the largest flowers of any we have ever seen, often measuring nearly three inches in diameter. The tube and sepals are bright red, and the corolla bright violet. For full description and engraving see magazine pages. Plants, each, 30 cents.

## GERANIUM SIR HARRY.

This splendid bedding Geranium is a seedling from the popular variety, "General Grant." It originated on our own grounds several years ago, attracting much attention at that time from its free blooming qualities and splendid color. We have since used it quite extensively for bedding and feel confident in saying that it has no superior for that purpose. The flowers are handsome, being a beautiful carmine scarlet. The truss large and the foliage a beautiful dark green. See colored plate. Per hundred, $\$ 12.00$; dozen, $\$ 2.00$; each, 25 cents.

## EULALIA JAPONICA VARIEGATA.

This plant, except that the variegation of the leaf is lengthwise, is very similar in style and habit of growth to E. Japonica zebrina, and it forms so beautiful and striking a contrast to it as to make them very desirable companion plants ; each, 25 cents.


## GERANIUM MAD. SALLEROI.

An entirely distinct variety and a great acquisition to the silver-leaf class. The leaves are deep olive green in the center, with a broad white margin. The plant is of very compact habit of growth, symmetrical in form, with a dense growth of foliage, and of dwarf habit. It is a splendid variety to grow in pots as a specimen plant or to use for bedding or borders. Per hundred, $\$ 12.00$; dozen, $\$ 2.00$; each, 25 cents.

GERANIUM MAD. SALLEROI.

CHOICE ROSES.


From the mary varieties of monthly roses we grow, we have selected the following ten varieties, as those which we think will give the greatest amount of satisfaction to those who wish only a few varictics This set contains some of the most popular varieties in cultivation at the present time, while others have been selected for their free blooming qualities, and general ease of culturc.

Rose Agrippina. Bright crimson; a constant bloomer and good beddin y variety. 20 cents.
Andre Schwartz. Bright glowing scarlet, shading to rich crimson; profuse bloomer; flowers large and fill. 25 cents.
Bon Silene. Carmine, tinted with salmon; kighly scented; very handsome in the bud. so cents.
Catharine Mermet. Flesh color, with a silvery lustre; flowers large, buds finely formed; very fragrant. 25 cents.
Duchesse de Brabant. Light carmine, tinged with violet. A splendid varicty; nowers highly scented. 20 cents.
Hermosa. Pink; flowers medium size ; free bloomer. 20 cents.
Marie Guillot. White. with lemon tinge; large and full; splendid form. 20 cents.
IIarechal Neil. Vellow, tea-scented. 20 cents.
Perle des Jardins. Beautiful rich shade of yellow. Perfect in form, free grower, and very profuse bloomer. 25 cents.
Saffrano. Saffron-yellow; free bloomer; splendid in the bud. 20 cents.

## INDUSTRY GOOSEBERRY.

A new foreign variety that promises to be a valuable acquisition. The fruit is large, dark red, with a rich, pleasant flavor. It has been grown in this locality the past three years, giving the best of satisfaction; an immense yielder, and has shown no sign of mildew. Price, each 50 cents; per dozen, $\$ 5.00$.


INDUSTRY GOOSEBERRY.


## GOLDEN POCKLINGTON GRAPE.

This variety is a seedling from the Concord, raised in Washington county, N. Y. It is perfectly hardy; the vine is a strong, vigorous grower, and has never been known to mildew, either in fruit or foliage; the color is a beautiful light golden yellow, covered with a fine bloom; bunches large, sometimes shouldered; berries round, very large, thickly set on the bunch, to which they cling very firmly. In quality it is unsurpassed, being of a rich, pleasant, sweet flavor. This variety has now been quite fully tested, and we feel confident in recommending it to our customers as one that will give perfect satisfaction. Price, one year vines, each, 30 cents; two years, 50 cents.


DAKOTA RED POTATO.
We consider this one of the most remarkable varieties in cultivation. In seasons when the crop of other kinds has been almost a total failure from blight, drought, or rot, the Dakota Red has withstood all, and produced large crops of perfectly sound tubers. As a variety to grow for heavy yield it is one of the best, and we think it will give good satisfaction for table use, as it cooks well, and is of good quality, either baked or boiled. The tubers are very large, not red, but darker than the Early Rose; eyes quite deeply set; skin rough and netted; growth of top exceptionally strong. Price, per pound, 50 cents; per peck, 50 cents; per bushel, $\$ \mathrm{r} .75$; per barrel, $\$ 4.00$.

## Matthews' Garden Seed Drill.

This hand seed drill has been before the public for some years and the best evidence of its merit is its increased sale. It is designed for use in the field or garden. It is -imple in construction and not liable to get out of order. Is easily regulated to sow any size seed, having an Indicator with names of seed printed thereon, which is adjusted by simply turning the regulator antil the name of seed desired to be sown comes on top. Will last many years, and do a vast amount f work without repairs.

Price, boxed, \$10.00.


## Matthews' Combined Seed Drill and Cultivator,

As a Drill, is similar to Matthews' Garden Seed Drill, but has cultivator attachments provided with set of teeth with steel blades, which are readily adjusted, and make :t an efficient machine for use either as a Drill or Cultivator. Is adapted to any kind of soil. Price, boxed, $\$ 12.00$.


The New York Seed Drill.
Matthews' Patent.
The advantages claimed by the manufacturers for this Drill are as follows-1st, Markerbar under the frame, held by clamps, easy to adjust to any width by simply loosening Thumb nuts. 2d, Adjustable Plow, which opens a wide furrow and can be set to sow any depth. 3 d , Open Seed Conductor, to show seed dropping. 4th, Bars in Seed Conductor, for scattering seed in wide furrow, prevents disturbing strong plants when thinning out. 5th, Ridged roller. 6th, Dial plate in full sight of operator, and made of white metal, which prevents rust. 7th, Dial plate set on fulcrum, and hence holds close up, preventing seed spilling. Sth, It has a large seed-box with hinged cover. gth, Machine will stand up alone when not in tise, not liable to tip over. Price, boxed, \$10.00.

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Extra sets of five Cultivator stepls, any
width from $1^{\frac{1}{4}} \frac{1}{4}$ to $4^{1}$ in inches, 100
All extra parts supplied. Price List of same sent on application.

## Firefly Single Wheel Hoe, Cultivator and Plow.



## The Gem Cultivator, Wheel Hoe and Plow.

A well made, and thoroughly useful tool, combining a great variety of work for little money, and the lightest running implement of its kind in existence. Its working parts are two scuffle Hoes, one $4 \frac{1}{2}$ and one 9 inches wide; two Plows, right and left hand; five Cultivator teeth, all of best steel. The wheel and handles of the Gem are
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The plate of Passion Flowers, Passifiora Decaisneana, shows one of the firest specimens of this highlyinteresting genus of plants-fiowers of most wonderfully mingled, brilliant colors, more beautitul than the unaided imagination can conceive. Our artist, with admirable skill, has succeeded in transfering these colors to his painting, and every peculiar form and outline of these curiously wrought llowers is reproduced. with truth and force.
The painting of Nepenthes, or East India Pitcher Plant, is one of the handsomest of the many fineforms of this strange and interesting family of plants, and represents it to the life. The accompanying letter-press will fully describe and contain engravings of the flowers and of the appearance of the whole plant.
The painting of Cypripedium represents accurately one of the grandest tropical specimens of this genusof plants, which most of us know, through our own native speries, as the Lady's Slipper. The size of these flowers can be judged of when it is remembered that the plates are $I I 1 / 2$ inches in width ; a spread of about 5 inches each way is thus indicated.
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