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J. M. Cullough

J. M. Cullough

McCullough's
Seed Catalogue
 AND
AMATEUR'S GUIDE
Souvenir Edition

The J.M.McCullough's Sons Co.
 R. S. McCULLOUGH, PRES'T GEO. H. PARVIN, V.-PRES'T

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Established 1838

Instructions To Purchasers



Established 1838

POSTAGE When ordering Beans, Corn or Peas to be forwarded by mail, be sure to add 6c per pound for POSTAGE in first and second zones. For third zone add 7c per pound; for all other zones add extra postage in proportion. See Parcel Post Rates.

Packets and half pounds of Beans, Corn and Peas are sent postpaid at prices quoted, and all other varieties of Vegetable and all Flower Seeds will be forwarded free by mail at Catalogue Prices unless otherwise noted. Grass Seeds, Clover Seeds, Miscellaneous Seeds, Plants, Tools and Supplies are not sent free by mail—see Parcel Post Rates.

Order Early. It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

Send the Money with the Order. Postal Note, Postoffice Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D. Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so we can forward our Catalogue with regularity; if you receive two Catalogues of the same kind, please hand one to some friend who has a garden.

Should an error occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your Name and Address distinctly and in full; please use the Order Sheet and Envelope inserted in this Catalogue.

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All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate.

NOTE:—When estimating postage on goods not included in our free delivery, bear in mind that while the packing on one pound may only weigh the fraction of a pound, it must be considered as a full pound when adding postage. On larger quantities add postage in proportion.

Limit of weight for delivery within local, first, second and third zones is 70 pounds; to all other zones, 50 pounds.

When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

Zone	First Pound	Each Additional Pound
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4—300 to 600 miles.....	7c	4c
5—600 to 1,000 miles.....	8c	6c
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7—1,400 to 1,800 miles.....	11c	10c
8—all over 1,800 miles.....	12c	12c

Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.

About Warranting Seeds—We have often been asked if we “**guarantee or warrant our Seeds.**” We beg to state plainly **we do not**, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to **our interest to send none but the very best quality of Seeds.** It would be folly to do otherwise, unless we wanted to sacrifice our good reputation for selling **Reliable Seeds**, which we are constantly striving to extend.

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We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

We shall always be pleased to reward customers who send us the names and post-office addresses of their friends who buy Seeds, Bulbs, Plants, Poultry Supplies, etc.



J. M. McCullough

WE present herewith the portrait of the late Mr. J. M. McCullough, who founded our business in November, 1838.

During the past 85 years, our business, from an humble beginning has developed into one of the leading Seed Houses of America, equipped with an organization that is complete in every detail.

A Year's Work in the Garden

UNDER this head we shall endeavor to make some suggestions as to the laying off and management of the Vegetable Garden for succession of crops. Not only to the Amateur does a calendar of garden operations for each month serve as an excellent guide, but it is almost indispensable to the mature gardener in planting his crops; the double cropping of his ground; arranging and directing his work. If we succeed in assisting even only a few of our friends, we shall have accomplished our purpose. In submitting an outline of the year's work, our suggestions will lead to error, unless regard is paid to difference of latitude. The planting operations suggested by us are intended for the latitude of Cincinnati; consequently, those living farther north or farther south will be guided accordingly. Little can be done in January in the garden, but this is the time to prepare for the year's work. First we would suggest that you make a plat of the ground, setting off spaces that you wish to devote to different flowers and vegetables, always reserving the best place for some special variety in which you desire to excel. Then you should begin looking after your supply of seeds, as it is dangerous to wait until you are ready to plant; you will also avoid a rush and obtain a better selection. If you contemplate having a hot-bed—and no well regulated garden should be without one—if you desire to obtain the greatest amount of satisfaction, now is the time to make your preparations. First, see to it that you have a full supply of fresh horse manure and have it piled so as to induce heat. The market gardener will never overlook this.



FEBRUARY

IF any of the foregoing remains undone see to it at once. Select the spot for your hot-bed, make the frames, procure sash, mats, or shutters for protection, then prepare your bed. It is almost impossible to be successful in operating a garden of any considerable size, without hot-beds. Lack of space prevents us giving detailed information for the construction of hot-beds; this information will be furnished on request. The latter part of the month when the hot-bed is in proper condition, sow the earliest seeds, especially Beet, Carrot, Lettuce and Radish. Have your garden tools repaired, or purchase needed ones. The best gardeners always have good tools, light steel hoes, always bright and clean, spading forks for four-fifths of the digging, light steel rakes, and a reel and line which are always needed for straight rows. Market gardeners will have sown Cabbage, Lettuce, Cauliflower Seeds, etc., for early plants to have them of large size and hardened thoroughly when the ground will permit of their transplanting in the garden in April. If you have vegetables stored in your cellar, they should be closely watched, for in February many attain their full ripeness and decay begins. In our latitude February is not too early to plant Sweet Peas. Follow planting instructions given in our Catalogue for Sweet Peas.

In the South during this month spring will have arrived, and the operations recommended for April in this latitude will make it a busy month. Generally, hardy vegetables should be sown at the earliest moment in southern latitudes, to make as much growth as possible before hot, dry weather, but the more tender vegetables should not be sown until peach blossoms appear.



MARCH

NEXT to good seeds the chief essential is good soil. From our own observation and experiences of many years, we are convinced that most of the land through exhaustive croppings has become sour and impoverished, and needs first the application of lime to sweeten, and then the application of either Sheep Manure or well rotted stable manure to enrich the soil. Bear in mind it is false economy not to use a sufficient quantity of fertilizer. You will be well repaid for this attention to the soil, and besides you will be able to get your seed in much earlier than otherwise. Spring with us usually opens early in April, but is sometimes two weeks earlier. When the buds swell, the leaves start and the forces of vegetation awake, this may be accepted as the starting point of spring operations. It is desirable to start right and to do everything on time. Nowhere is delay more unfortunate, as Nature never rests day or night.

If the frost is out and the ground is dry enough, a few of the hardiest seeds may be risked this month. "Maud S" and "Alaska" Peas are little injured even if the ground is again closed by frost, but the wrinkled sorts rot more easily, and should not be sown until later. To reduce chances of failure to a minimum, inoculate all Peas with Edwards Legume Bacteria as per instructions contained in our Catalogue. Weather conditions permitting, Onions, both sets and seed, will be safe, and Cabbage, Carrots, Lettuce, Radishes and Beets will usually come through safely. These should be sown upon some dry, warm portion of the garden, open to the sun and protected from the wind. If a hard freeze threatens after they are up, straw can be scattered over them thinly, and removed after danger is past. Asparagus beds should be thoroughly cleaned of weeds and growth of last season, then covered with a dressing of manure or rich compost, adding a few handfuls of salt, which should be worked in with the spading fork as soon as possible to induce early growth, and the Rhubarb should receive an abundance of manure, worked in with spading fork or plow. Early Potatoes to be planted in April should now be cut to two eyes and put away to heal. Sweet Peas should be planted this month if omitted in February.

In the South the early crops already need weeding, and later sowings must be made to keep up a supply for the table, of Peas, Lettuce, Radishes, etc.;

APRIL

THOUGH occasionally the buds start in March, it is more generally well into April before spring opens, and directions given for the former month must be observed in this. To have a good garden it is not enough to be early about your work, but your ground must be made rich, and must be thoroughly and frequently tilled. Do not be afraid of too much manure and too much tillage. They will not only increase the quality and quantity of your crops, but also the earliness.

Plant early, though there may be risks. If you wait until all danger is past, your enterprising neighbor will certainly get ahead of you. If plantings of some of the hardest sorts were made last month, repeat them for a succession, and for a certain crop, should others fail. Sow Parsnip and Salsify at once, as they need the whole season. Early Potatoes, planted two or three inches deep, are now safe. All the hardy vegetables—Beet, Cabbage, Cauliflower, Cress, Carrot, Celery, Lettuce, Onion, Parsnip, Radish, Spinach and Turnip Seeds—which have not yet been sown, should at once receive attention. Sweet Corn, Dwarf Beans, early Cucumbers and early Bush Squash should be risked in small amounts late in the month. Notice, we say **risked**, and should none or but few seeds grow, do not blame the Seedsman, but at once plant again, and note the result. Early Cabbage and Cauliflower should be transplanted into the open garden early in the month. If the planting of Sweet Peas has been omitted in February and March, they must be planted early this month.

The **Market Gardener**, whose income depends so much upon the earliness of his crops, will generally risk considerable; and having a soil and location adapted to earliness, and an abundance of hot-beds, his spring's work will much of it be crowded into this month. Since the advent of the Automobile and the consequent scarcity of stable manure, many of our Market Gardeners have been compelled to erect green-houses for growing crops of Lettuce, Cucumbers and Tomatoes, and also other Vegetable plants for transplanting.

In the South, the garden is so far along, the chief care is to till the crops already growing, and to repeat sowings for a succession.



MAY

IN this month are made the principal plantings of the tender vegetables, in which we include Corn, Beans, Cucumbers, Egg Plants, Melons, Tomatoes, Squash and Peppers. The Cucumbers, etc., on pieces of sod in the hot-bed, may now be set in the open garden. Seed for the late crop of Cabbage should be sown on several different days (to be sure of a stand), between the 5th and 15th of this month. Beets for winter use, and Carrots, Sugar Beets and Mangel Wurzels for stock, may be sown any time this month.

Before any weeds appear, stir the ground. Watch for Cucumber-bugs and Cabbage-fleas, and use "Slug Shot" freely to kill them. Transplant Tomatoes into the open ground by the middle of the month.

If the Asparagus bed is strong and well established, it should be cut clean till Peas appear. The same plantings recommended for the private garden should also be made by the marketman.

In the South later sowings of both hardy and tender vegetables should be made, to keep up a succession and a constant supply throughout the long summer. In a climate where they attain such perfection, none should fail to have an abundant supply of that most delicious Bean—the Lima.



JUNE

NEARLY all the seeds for the year's supply of vegetables have now been planted, and many of the crops are well advanced. One of the pleasantest returns afforded in this month, more than any other, is the contemplation of the thrift and promise of the garden. All nature is now at her best, and if the garden has been properly planted and industriously tended, it cannot fail, especially during this month, to please its owner.

The principal work will be the war with the weeds and bugs. Any vacancies should at once be replanted. Plant Cucumbers for pickles, and Sweet Corn for late use, and if more Potatoes are wanted, Bull Moose, Hoosier Boy and Carman will mature if planted now or as late as the middle of July.

The **Market Gardener** will find this the busiest month for sales of all the year. By the first of the month Green Peas are ready, and are quickly followed by Beets, early Cabbage and Potatoes, and since all are in such large demand, the handling is no small task.

Prick out Celery plants, and transplant late Cabbage into the field, on very rich, strong ground. Rutabagas should be sown about the 20th, and, if possible just before a rain.

In the South but few seeds sown in the heat of the season will repay the labor, and the principal work is to tend the crops maturing.



JULY

IS not a month of hard work. Weeds must be removed and none allowed to go to seed. Turnips may be sown in the latter part of the month and Celery set out in very rich soil. Some of the quick-growing sorts of Cabbage may still be set out. If drouth sets in, the cultivator and hoe should be kept in constant use. Hoe Cabbage while the dew is on, but Beans and Celery when it is off. You should, early this month, enjoy your first Tomatoes and Sweet Corn, which will prove the wisdom of risking a planting in April. Winter Top Onion Sets should be planted this month for early spring onions.

AUGUST

LITTLE can be planted this month, except Turnips, which may be sown on rich soil as late as the 20th, though the old rule is, "Sow your turnips the 25th of July, wet or dry, a thimbleful to the rod." Give your Cabbages frequent hoeing and hill them up. The Cucumbers for pickles should be picked clean, as they cease bearing as soon as they are left to go to seed. Pull Onions as soon as the tops are dry; leave on the ground thinly spread until thoroughly dried, then throw into a pile to sweat a few days, when they should be opened and dried again, after which, on a warm day, haul them and spread on the barn floor, or other suitable place. Occasionally we have been well paid for planting the earlier varieties of Peas and Beans this month for September and October crops. Plant Winter Top Onion Sets this month if omitted in July.



SEPTEMBER

MOST crops of the garden are about matured, and are now ripening, but Turnips, Ruta Bagas, Cabbages, and Celery will this month make their principal growth and demand frequent hoeing, the final banking to be given about October 1st to the main crop of Celery, so that it will be well bleached and ready for storage early in November. Hardy Lettuce sown early in this month, in a sheltered, well drained locality, and, in winter, protected by straw, will in spring show a fair proportion of live plants, which will be far ahead of spring-sown crop. Round or Bloomsdale Spinach, under similar treatment, usually does nicely. Hubbard and other winter Squashes should be stored before frost. Beets are so exposed to the action of frost that they should be gathered before other roots. Early in the month sowings should be made of Cabbage, Cauliflower and Lettuce to be wintered in cold frames.

Shallots, Potato Onions and Potato Onion Sets, may be planted this month for early green Onions in spring. In our latitude it is advisable to give some winter protection to Shallots, and Potato Onions and Sets.



OCTOBER

THE sowing and tillage of the season is now past, and the gardener must secure all the crops not yet harvested. Roots, if stored in the cellar, should be covered with dirt to keep them fresh and avoid wilting. Parsnips will winter in the ground, but it is unpleasant digging them in the spring, and they had better be stored in sand. Late growing varieties of Potatoes, should be left in the ground to ripen as long as it is safe.

When crops have been removed, the garden should be spaded or plowed and then sown with a crop of Rye or Vetches to be turned under early in spring. This is the cheapest form for supplying humus to the soil and for conserving moisture.

If the planting of Onions was omitted in September, this should be attended to this month.

In the South, Onion Sets for spring bulbs should be put out, and hardy seeds, like Lettuce, Spinach, Radish, and Peas, should be again sown for succession. Earth up Celery, and, by frequent hoeing, keep the garden in thrifty growth as long as possible.



NOVEMBER

IF any crops are still ungathered, at once secure them. Generally, Celery, Parsnips and Salsify are the only ones safe to leave out so long, and the former is not regarded as safe unless banked up well, so as to get the most benefit from the action of frost. Asparagus tops should be cut off and the bed dressed with an abundance of manure to be forked in next spring.

Soil for hot-beds should be got ready, sifted and put in covered bins, so that it should have all of its natural moisture when wanted for use. Land designed for Onions, Beets, Radishes, Carrots and the earliest vegetables should be heavily manured and plowed ready for early use in the spring. We would always advise manuring and plowing the garden this month, as it will be in much better condition to work in the early spring, as soon as frost is out.



DECEMBER

IN this month nothing can be done in the garden, but this is an excellent time to clean up the fence rows and corners, rake up all the rubbish and burn it, instead of allowing it to remain as a harboring place, through the winter, of destructive insects and bugs.

The Amateur and Market Gardener alike will find this an excellent time to study up his business and make new plans. The mistakes of the year should be reviewed and such provisions made that they will not be repeated. A plat of the garden, with the crops to be grown, the manure to be used, etc. takes but little work to prepare and is of great value in the hurry of spring. In making planting plans, care should always be taken to rotate crops whenever possible.

Directions for the Cultivation of Flowers from Seed

"**Annuals**" are plants which flower, produce seed, and die the same year they are sown; "**Biennials**", those which are sown one year, bear their flowers and seeds and die the next; under the term "**Perennials**" are classified those which grow and flower for several years; and included in one or the other of these classes are hundreds of floral gems. These three classes are each again divided into hardy and half-hardy sections, and, as they require different modes of treatment for their successful cultivation, the few details we give under each heading may be useful to those who have had but little practice among them.

Hardy Annuals are such as can with safety be sown in the open ground, requiring no protection; they will grow in almost any ordinary garden soil, and, if judiciously selected and sown in succession, they are capable of yielding a profusion of flowers, equal in many respects to the "summer bedders" which often occasion so much anxiety and care. The object to be aimed at in the culture of Annuals should be a steady and fairly vigorous growth, the desideratum being flowers and plenty of them, and not an over-luxuriant growth with a scarcity of blossoms, as is nearly always the result of a too liberal application of manure.

Sow late in March or during April, either in their permanent place in the open ground, or in shallow boxes two or three inches deep, placed in a warm window, or in a hot-bed, the latter method being generally preferable, as plants grow harder by being transplanted. The selection of the soil is a very important point; a light, rich, sandy loam, not too wet or too dry, makes the best seed-bed, and is often improved by the addition of a little pulverized charcoal. Smooth the surface before sowing, cover the seed with sifted earth and always keep the soil moist.

The absolute essential of successful flower growing is not to bury the seed too deep. The very best of seed can not grow when choked with soil. Amateurs fail here oftener than at any other point, and the seeds and the seedsmen are unjustly blamed for the failure. Generally, seeds should not be covered to a depth greater than two or three times their diameter. Fine seeds, such as Portulaca, etc., ought not to be covered at all, or but slightly, pressing it down with a strip of board. Sun and light must be excluded from the newly sown seed—cover with paper held down by sticks or stones until the seed has germinated, and then gradually admit the air and light. Knowing the height and general habit of the plant, thin accordingly, always leaving sufficient space between them for each plant to fully develop itself. Any neglect in this particular is fatal to the production of fine flowers, a little extra trouble in thinning being amply repaid by the greater profusion and lengthened duration of the blossoms. Keep them free from weeds, run the hoe among them occasionally, and water if necessary at any time.

Half-Hardy and Tender Annuals. This section comprises some of the most useful and interesting plants suitable for the summer decoration of the flower garden, but being of a rather tender nature they require careful treatment in the first stages of their growth. For flowering in the open air, the first sowing is made in heat, in March or April, and the second in the open ground when the risk of frost has passed. For early sowing, use shallow pans or boxes, well-drained and filled with a nice light compost of loam, leaf-mould and sand; place them in a frame where they can have the advantage of a little bottom-heat, and there they will germinate quickly. When large enough, prick out into a little stronger compost, either in pots or boxes, or under hand-lights, and gradually harden off, for planting out in May. If only a few are required, and not very early, they should be sown thinly on a half-spent hot-bed or in the house. If sown after the middle of May they may be planted in the open ground like Hardy Annuals. In the case of very small seeds, such as Petunia, Lobelia, etc., the covering of soil should be very thin, barely hiding the seeds, and as seeds so small are liable to be carried down into the soil unless very carefully watered, it is even advisable to moisten the surface of the soil before sowing instead of afterward. Toward the end of May, when the danger from night frosts is past, the plants can be transplanted to their permanent positions in the open bed or border. Tender Annuals should be sown in the same way as the Half-Hardy ones at any time from the month of February according to the peculiarities of each. The plants should be potted off singly into rich compost and kept as close to the glass as possible. Re-pot when necessary, and grow on in heat rapidly until the plants are well advanced. Keep them well supplied with water, and a uniform temperature must be maintained so that they may not receive any check while growing. They should then be gradually hardened off so as to be ready for placing in the conservatory as they come into flower. Many of the varieties may be planted in the flower garden about the middle of June, where their neat and attractive appearance will add considerable interest to the summer display.

Hardy and Half-Hardy Biennials and Perennials. Under the heading of Biennials and Perennials are included many of our finest flowering plants, which are often neglected because they do not bloom the first year from seed. This long waiting for bloom may, in many cases, be avoided by treating the seeds as recommended for Half-Hardy Annuals, and starting them sufficiently early to form large, strong plants by the time they should be planted in their permanent quarters. The hardier species and varieties of Biennials and Perennials may be sown at the same time as Annuals, if desired, always choosing showery weather and a shady situation for the operation; but if they are wanted for flowering the following spring, sow in May or June, and again at the end of August or beginning of September. The plants raised from this later sowing should stand in the seed-bed all winter, and be transplanted the following spring. Those raised in May or June should be pricked out thinly on a nice piece of ground and encouraged to make a good growth before they are lifted and planted out in October. Many of the species improve by age, forming large clumps or bushes, and, by being divided occasionally, the stock is increased and the plants invigorated. Half-Hardy and Tender subjects should be treated, in a general way, as if they were Annuals, with regard to their propagation and subsequent culture.

Seeds of Greenhouse Plants. These can be sown at any season of the year, but extra care should be given them, especially to such varieties as Begonias, Calceolarias, Cinerarias, etc., as the seeds are very small and delicate. Sow the seed in well-drained pans, choosing for soil a fine sandy leaf-mould; press it firmly, smooth the surface and sow the seed very evenly; cover with a light sprinkling of sand or not at all, lay a pane of glass over the pan, place it in a close frame and keep shaded. Most failures are due to mistake in watering, which should be done very carefully; the seed pans should never be allowed to dry out, as one neglect will kill the seeds just starting, while on the other hand a slight excess of water will cause the seeds to rot. After the plants are up, remove the glass and prick into other pans with the same soil; great care should be taken not to pull the plants or tear the roots in transplanting; lift with trowel or stick and shift with good roots. Keep them shaded after transplanting until the young plants are well established in the new soil. As soon as the plants touch each other, transplant again into small pots with similar soil, using the same precaution of shading at first. If troubled with green flies, fumigate occasionally with tobacco.

McCullough's

Founded 1838
Established 85 Years



TRADE MARKS REGISTERED.
McCULLOUGH'S SEEDS.
XXX, BUCKEYE.
SUBURBAN LAWN GRASS.
CENTRAL PARK LAWN GRASS.

SEEDS for 1923

OUR policy adopted many years ago of carefully eliminating all undesirable varieties of GARDEN SEEDS has been an important factor in maintaining our high standard of quality for over three quarters of a century.

POSTAGE When ordering BEANS, CORN OR PEAS to be forwarded by mail, be sure to add 6c per pound for POSTAGE in first and second zones. For third zone add 7c per pound; for all other zones add extra postage in proportion. See postal rates, page 1. Packets and half pounds of BEANS, CORN and PEAS and all other VEGETABLE SEEDS offered in PACKETS, OUNCES, QUARTER POUNDS and POUNDS are sent postpaid at prices quoted, except where otherwise noted.

ARTICHOKE

One ounce will produce about 400 plants.

THE Globe Artichoke is cultivated for its flowerheads, which are cooked like Asparagus. Plants set in any good soil, with slight covering in winter, will remain in bearing several years. Seed may be sown indoors and plants potted same as the Tomato, and set out in May, or can be sown in hills outside, and thinned out to one plant in each hill.

Large Green Globe.....Pkt., 10c; oz., \$1.00.

ASPARAGUS SEED

One ounce will produce about 800 plants.

ANY good loamy, not too weedy, garden land is good for growing the plants. Sow in rows 12 to 15 inches apart, as early in spring as the ground is in fit condition, and give good cultivation; also thin the plants to stand 2 or 3 inches apart. Deep, warm, rich, loamy soil, deeply and thoroughly stirred, is required for permanent bed. Use manure and fertilizers freely. Make furrows 4 or 5 feet apart and 6 to 8 inches deep. Set the one or two-year-old seedlings 2 feet apart in the bottom of furrows and cover lightly at first. Gradually fill in with soil and old compost. In early spring, fork or plow the bed shallow and carefully, or pulverize the surface by harrowing. Give clean cultivation until fall; then cover with manure or compost. Second season after planting, hill up the rows, especially for blanched "grass," and cut sparingly for use. After that the bed will give full crops.

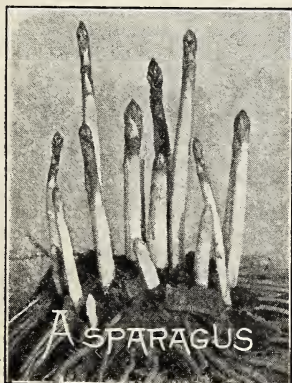
Argenteuil. This variety is largely grown in France for the Paris market. The stalks grow to a mammoth size.....Pkt., 5c; oz., 10c; ¼ lb., 30c.

Barr's Mammoth. A fine large-stemmed green variety. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Columbian Mammoth White. Large, white stalks. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Conover's Colossal. Large and productive.....Pkt., 5c; oz., 10c; ¼ lb., 30c.

Palmetto. An early, prolific and very desirable variety. Pkt., 5c; oz., 10c; ¼ lb., 30c.



ASPARAGUS ROOTS (See Plants and Roots, end of the Vegetable Seeds.)

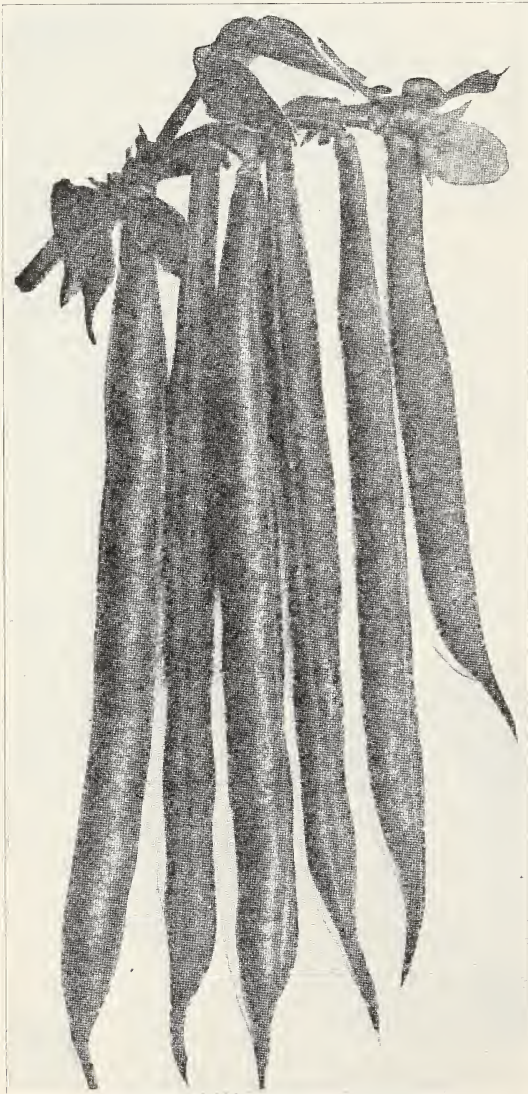
BEANS Dwarf or Bush

One pound will plant 200 feet of row—100 to 120 pounds per acre.

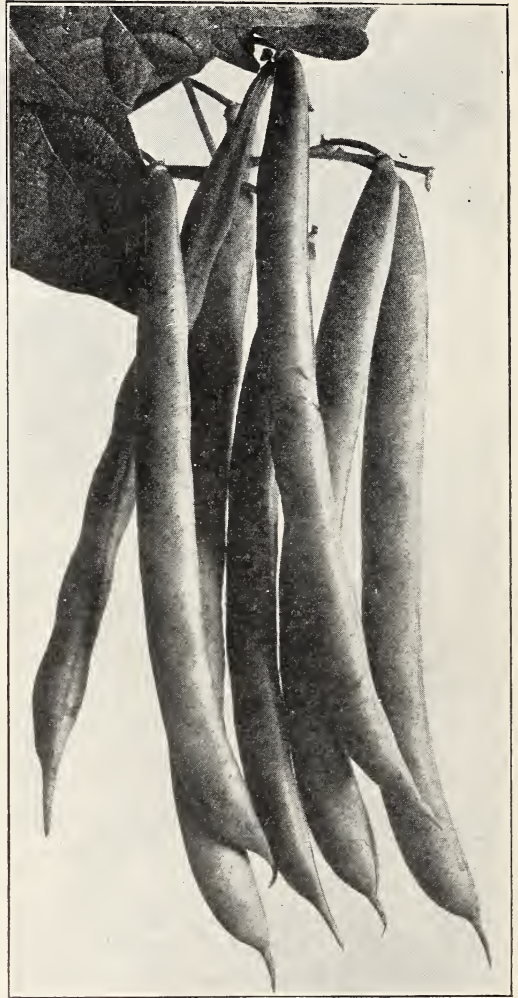
WHILE the Bean is a very tender plant and, therefore, should not be planted until there is no more danger of frost, still it often pays to take some risks. Plant in a warm, loamy soil at the beginning of warm weather in spring and at intervals for succession until August. Rows may be made 2 feet apart and the beans planted 2 inches deep and a few inches apart in the rows, or 3 to 4 beans in hills 6 to 8 inches apart.

Cultivate and hoe frequently, always, however, when the vines are perfectly dry; working them when wet with rain or dew will cause them to rust and injure the crop. In hoeing, draw the soil up towards the rows or plants. For string Beans gather the pods clean as soon as fit for use. The plants will remain all the longer in bearing.

All varieties of Beans, pkt. 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 1.



Norwood Stringless Green Pod



Round Pod Red Valentine

Green-Podded Varieties

McCullough's Norwood Stringless Green Pod.

This variety is superior to any other green-podded bean grown. It is positively stringless, and ripens a week earlier than the Valentine. The pods which are produced in abundance on the vines are long, straight, round, deeply saddle-backed, brittle, tender and of real good flavor. Has a much larger pod than the Valentine.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

McCullough's Improved Round Pod Red Valentine.

Our stock of this is extra choice. This variety is usually ready to pick in thirty-four days after planting. The pods are very thick and fleshy, of finest quality and unequalled in uniformity of ripening, which latter fact, combined with its earliness, makes it one of the most profitable sorts for the gardener.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Black Valentine. This variety is very productive. Pods are extremely long, round and straight, and are quite attractive in appearance. The quality is also good, pods being decidedly tender. Suitable for both early and late planting, being extremely hardy. It will withstand early and late frosts.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

BEANS

Dwarf or Bush Green-Podded Varieties, Continued

One pound will plant 200 feet of row.

All varieties of Beans, pkt. 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 1.

Bountiful. An improved Long Yellow Six Weeks. Being earlier, hardier and producing better and larger pods and more of them. Pods grow to large size, are broad and fleshy; absolutely stringless, tender, of finest flavor and good appearance.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Burpee's Stringless Green Pod. This variety is stringless and remains tender and crisp. The pods are pale green, long and straight, perfectly round and meaty, maturing with the earliest of the green pod varieties.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Full Measure. Highly recommended as one of the most popular varieties for the Market Gardener. Very early and prolific. The pods are long, straight and handsome; meaty, stringless and of good quality; thick, flat or almost semi-round.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Improved Refugee, or Thousand to One. Medium or late variety; grown for pickling.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Tennessee Green Pod. A very recent introduction, very meaty flat pods of large size and good flavor. Dwarf vine with heavy foliage. It is very hardy and an excellent cropper on poor soil or hillside.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

DWARF SHELL BEANS

Horticultural Dwarf. Excellent quality as a shell bean, either green or dry.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

White Kidney, or Royal Dwarf. A superior kind for baking, and is also excellent when shelled green.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Red Kidney. Similar to White Kidney except in color.

Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 90c; 15 lbs., \$2.50.

White Marrowfat. Grown for sale as a dry bean for winter use; excellent shelled, either green or dry.

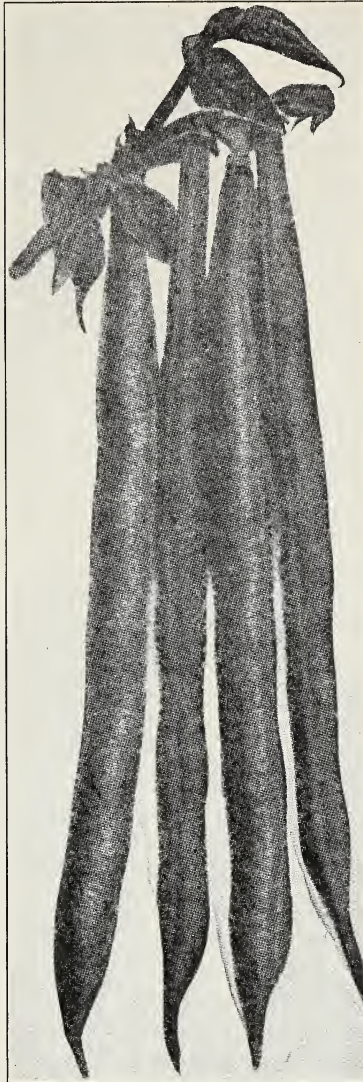
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.10; 15 lbs., \$3.00.

Mexican or Prolific Tree. Grows 18 inches high, branching like a tree, bearing its pods so high that they do not touch the ground.

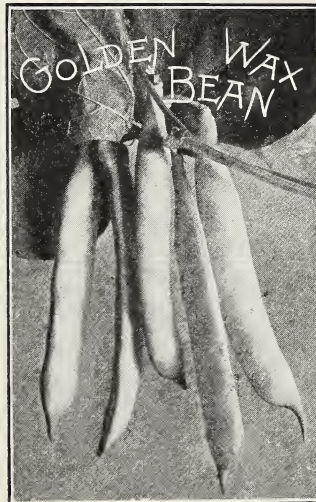
Pkt., 5c; ½ lb., 10c; 1 lb., 15c; 5 lbs., 65c; 15 lbs., \$1.75.

Navy. The old standard sort for winter use.

Pkt., 5c; ½ lb., 10c; 1 lb., 15c; 5 lbs., 65c; 15 lbs., \$1.75.



full Measure



BEANS

Dwarf or Bush Wax or Yellow-Podded Varieties

One pound will plant 200 feet of row.

All varieties of Beans, pkt. 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail see "Postage" page 1.

Burpee's Kidney Wax. Plant is robust in growth and produces large crops of long, stringless, fleshy and brittle pods, which are somewhat flattened in form, lemon-yellow in color and of superior quality. Foliage and pods are remarkably free from rust.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Round Pod Kidney Wax. The plant grows tall, strong and sturdy, with long, round, handsome, stringless pods of large size, very solid and full of meat, crisp, brittle and free from rust. The earliest and best Wax Bean for either the market or home garden. We recommend it very highly.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Golden Wax, Improved. One of the best strains of Golden Wax. Prolific, of best quality; pods long, straight, thick and vines very erect.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Davis' White Kidney Wax. Very productive, white-seeded, rustless string or snap variety; long, flat pods, which are very tender while young.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Wardwell's Kidney Wax. Almost entirely free from rust and spots. The pods are long and showy, very tender, stringless and of excellent quality.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Curries Rustproof Wax. This variety has proven to be practically rust-proof, in addition to which it is unusually prolific, bearing large crops of long, flat, light yellow pods.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Black Wax Improved. Very early and prolific; pods round, meaty, brittle and stringless; deep golden yellow and excellent flavor. Bush is of dwarf growth.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Pencil Pod Black Wax. Plants grow about fifteen inches high and are extremely productive. Magnificent straight pods six to seven inches long, light golden yellow in color, beautifully rounded, meaty and deeply saddle-backed; flesh brittle, solid and entirely stringless, of fine mild flavor.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

BEANS—Continued

Dwarf or Bush Lima

One pound will plant 100 feet of row.

THE Dwarf Lima class can not be recommended too highly. The Beans can be grown and gathered much more easily than the Pole Limas as the plants require no support. They can also be grown closer together than those of any Pole variety. Dwarf Limas are fully equal in quality to Pole Limas and as a rule are earlier maturing.

Limas require a longer season for maturing than other garden Beans. Do not plant till the ground is dry, weather warm and danger of frost is over. If possible, select rich light soil. Plant eye downward in rows two to three feet apart, and four to six inches apart in the row, covering one and one-half to two inches deep. If planted in hills, make the hills two to three feet apart one way and two to two and one-half feet the other and plant four to six beans in a hill. Hoe often, but only when the leaves are dry.

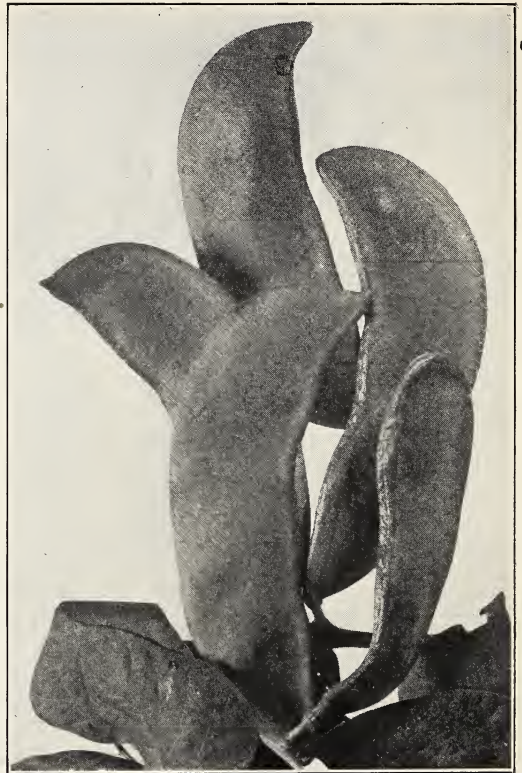
All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage," page 1.

Wilson's Improved Bush Lima. We consider this variety the best Bush Lima Bean in cultivation. Of strong, upright growth, producing large pods which frequently contain five or more thick, luscious beans. Matures one to two weeks earlier than Burpee's Bush Lima and is more productive, as it continues bearing until frost.

Pkt., 5c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

Fordhook Bush Lima. This is one of the best Bush Lima Beans in cultivation. It has a distinct upright vigorous growth; the pods, which are borne in clusters well above the ground, frequently contain as many as 5 thick luscious beans. It matures very early and continues in bearing till frost. This is so far ahead of the old strain of Burpee's Bush Lima, that it should be used instead; the bean is thicker, sweeter and earlier, being also more prolific.

Pkt., 5c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.



Wilson's Bush Lima

Burpee's Improved Bush Lima. Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are of the most luscious flavor.

Pkt., 5c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

Burpee's Bush Lima. This is the true bush form of the old large Lima Pole Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush 2 to 2½ feet in diameter, requiring no poles or stakes, yielding from 50 to 100 fine pods, similar to those grown on the Large White Lima Bean.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Henderson's Bush Lima. For convenience and practical use in the home garden, it is a really good thing. It grows without the aid of poles, in compact bush form, about 18 inches high.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.



Gardening is both pleasant and healthful, and a satisfactory garden depends largely upon good seeds. In view of prevailing conditions in our country the Vegetable Garden means more to the American people than it ever meant before.

BEANS—Continued

POLE LIMA

One pound will plant 100 feet of row.

OF all the Pole Beans, Limas are considered to have the greatest economic value. The culture is the same as for other Pole Beans except that being more tender, the beans are usually planted one to two weeks later. Plant in hills about three feet apart, and one to two inches deep, using five or six beans to each hill, and set a pole firmly in the center. Manure liberally in the hill with well-decomposed fertilizer.

Thin the plants, leaving three in each hill. Many cultivators consider it best, in planting Limas and other flat beans, to place the eye down, claiming in this way that they will germinate more quickly. Lima Beans for early use may be grown in frames and transplanted.

All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" Page 1.

**McCullough's
Extra Large Lima**

A choice selection of the Large Lima. It produces pods and beans of large size and in great abundance.

This variety is without doubt the best for private gardens. The quality is much better than any other variety, the Beans cooking rich and meaty.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00

Early Leviathan Lima. The earliest variety of Pole Lima; produces pods in clusters. A good variety where the season is short.

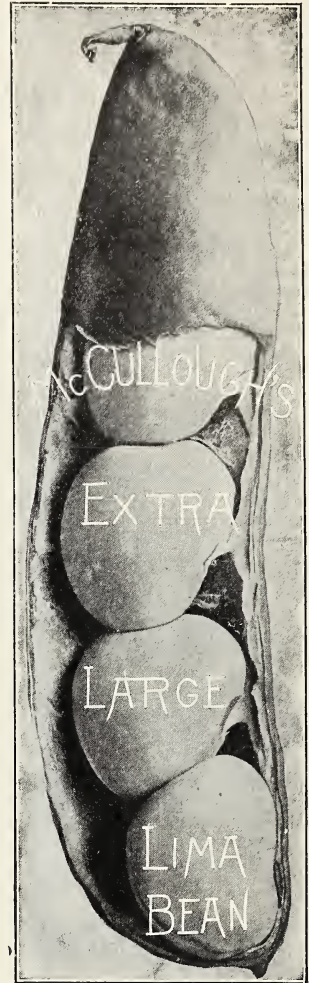
Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

King of the Garden Lima. A vigorous grower, bearing profusely. The beans are large and of rich flavor.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.

Seibert's Early Lima. The earliest of all the large Limas. Vine is hardy and vigorous, continues in bearing longer than any other; fine quality.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.



BEANS

Pole or Running Varieties

One pound will plant
200 feet of row—90 to
100 pounds per acre.

THE Pole or Running varieties are tender and should be sown two weeks later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart; plant 6 to 10 beans in a hill, 2 inches deep, leaving space in center for the pole. When well started, they should be thinned to from 4 to 6 plants in a hill.

All varieties of Beans, pkt., 5c. All packets and half pounds of Beans are sent postpaid; for larger quantities by mail, see "Postage" page 1.

Kentucky Wonder, or Old Homestead (Green Pod). An old favorite, with long, fleshy, deeply saddle-backed pods. Very prolific, producing an abundance of fine, stringless, crisp beans until late in the season. One of the best green pole beans, producing pods in clusters, ready for use about 85 days from time of planting.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Black Kentucky Wonder. This variety produces long pods one-half larger than the brown seeded variety. Pods are round, very fleshy and of good quality. The vines are vigorous, climbing well and very productive, bearing long, light green pods in clusters. This variety is a shy seeder.

Pkt., 5c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75.

White Kentucky Wonder, or Burger's Stringless. This desirable variety is earlier and consequently covers a longer season of productiveness than the brown seeded Kentucky Wonder. Pods are borne in clusters and average six to eight inches in length, entirely stringless, uniformly straight, of a dark green color and of mild, sweet flavor. The dry beans are pure white.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.

Cut Short, or Corn Hill. One of the best varieties of Corn Beans in use. Can be used as a snap or shell bean. Considered the best Corn Bean for this section.

Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

BEANS—Continued

Pole or Running Varieties

One pound will plant 200 feet of row—90 to 100 pounds per acre.

- Horticultural.** (Wren's Egg, or Speckled Cranberry). This old favorite is an excellent Corn Bean, green shell bean or dry bean for winter use.
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.
- Lazy Wife.** An excellent late green-podded pole bean. Pods of medium dark green color, thick, very fleshy and entirely stringless. The pods remain green and tender until nearly ripe. Beans are white and excellent as shell beans for winter use.
Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.
- McCaslan.** The pods, produced in great abundance, are a rich, dark green color, measuring about ten inches long, rather flat and slightly curved. Fine for use as a snapshort, being entirely stringless when young. If pods are picked before maturing, vines bear till frost. If pods are allowed to mature, they produce a good sized white bean for winter use.
Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.
- White Creaseback.** A good grower and very productive. Pods 5 to 6 inches long, perfectly round, with a crease in the back. The pods are stringless, fleshy and of good quality.
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.
- White Sickle.** Somewhat like the Kentucky Wonder, but has a nice white bean when dry and makes an excellent shell bean for winter. Very popular in the South.....Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.25.
- Scarlet Runner.** An ornamental climber. Bright scarlet flowers; pods are edible when picked young.....Pkt., 5c; ½ lb., 25c; 1 lb., 40c.
- Scotia, or Striped Creaseback.** A hardy and very productive green-podded cornfield bean. The vines are sturdy and of good climbing habit with small-medium deep green leaves. The pods are long, about 6 inches, very cylindrical or completely rounded, distinctly creasebacked, very fleshy and of excellent quality. The color when in condition for use as snaps is light silvery green, becoming tinged with purple as the pods mature. This variety is especially suitable for growing in corn for snaps.
Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$4.00.
- Tennessee Wonder, or Egg Harbor.** Large green pods, curved, double barreled, tinged with purple and wrinkled, depressed between each of the eight or nine seeds. Considered one of the largest of all cultivated beans.
Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40.
- Ohio Wax Pole.** Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost....Pkt., 5c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60.
- Golden Cluster Wax.** The pods are from 6 to 8 inches long, stringless, very tender and of delicate flavor.....Pkt., 5c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60.



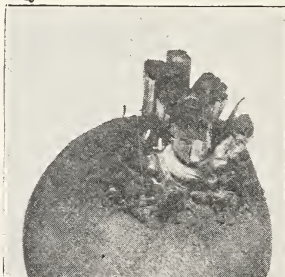
Ohio Wax Pole

BEETS

One ounce will sow 100 feet of drill—12 pounds for an acre.

THE soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply sow in spring as soon as the ground becomes fit to work, in drills twelve to sixteen inches apart and one inch deep.

Or seed may be sown under glass four weeks sooner, and the young seedlings transplanted to open ground to give an extra early crop.



"McCullough's Norwood"

For main crop, sow the first week in May, and for winter use sow in June. When the plants have attained three or four leaves, thin out so they may stand five or six inches apart. Keep free from weeds by hand-weeding or hoeing. In October roots may be taken up and stored in the cellar or in pits outside like potatoes, care being taken that they are not bruised or injured in the process.

McCullough's "Norwood"

A superb early main-crop Beet both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, deep through, smooth and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. The roots can be used early only partially grown, being ready for use almost as quickly as the Extra Early sorts and of better quality. It retains its choice quality and freedom from woodiness until the beets have reached their full size. Foliage is small, of a rich bronze color.
Pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50.

Arlington. A dark-leaved, early blood variety, closely following Eclipse in maturing, but of darker color and superior quality. An excellent Beet for market gardeners.
Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Bassano. (The Table Sugar Beet.) A very early flat variety, tender, juicy; flesh white and rose-colored, very sweet.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

B E E T S—Continued

Columbia. One of the finest main-crop Beets. Flesh deep blood-red and of rich flavor. The roots can be used when only partially grown.

Pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50.

Crimson Globe. A handsome early or main-crop variety, of medium size, almost globe shaped and entirely free from rootlets. Foliage rich bronzy purple. The flesh is blood-red, slightly zoned.

Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Crosby's Improved Egyptian. An improved strain of the Egyptian Beet, especially recommended as an extra early sort. It is much thicker than the original strain.

Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Detroit. Color of skin dark blood-red; flesh bright red, zoned with a lighter shade, very crisp, tender and sweet.

Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Early Blood. Flesh dark red, a standard round variety with small top.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Eclipse. One of the best early sorts, with a small tap root and small collar. Flesh dark red, zoned with a lighter shade, sweet, crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Edmand's Early. Uniform small top, bronzy red; exceedingly tender and sweet; skin blood-red; flesh dark red.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Egyptian Extra Early. One of the earliest, of good quality and medium size; a fine forcer; small top.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Fireball. An extra early Turnip-rooted variety of the finest table quality. The flesh is solid, crisp, sweet, and of a brilliant fiery red color. It is perfectly globular in form with smooth skin, a tiny tap root, and very slender leaf stalks.

Pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50.

Half Long Blood. One of the best for winter use. Roots are only half as long as the Long Blood, but weigh as much on account of their thickness.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Long Dark Blood. A good late variety for fall and winter use; sweet and tender.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

SUGAR BEETS and MANGEL-WURZELS

For Cattle and Poultry

SUGAR BEETS

One ounce will sow 200 feet of drill—five and one-half pounds for an acre.

Sugar Beets are not as heavy yielders as the Mangels, but are of superior quality, containing a large amount of sugar. They are excellent for feeding cows, improving wonderfully the quantity and quality of the milk.

Vilmorin's Improved. A medium sized white Sugar Beet brought by the most careful selection to the highest perfection, both in shape and color of roots. Greatly esteemed by sugar manufacturers.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Lane's Imperial. One of the best for field culture; early, large and productive.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Giant Half-Sugar Green Top. Longish ovoid; red skin, white flesh; crisp and fine.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

MANGEL-WURZELS

One ounce will sow 200 feet of drill—five and one-half pounds for an acre.

Fattening, breeding and milk cattle do equally well on them. About one-fourth of the daily rations should be of roots. Sow in rows 2 ¼ feet apart as soon as the ground can be thoroughly worked. Cover seed about 1 ½ inches. When 4 inches high, thin to 8 inches apart.

Mammoth Long Red. Roots of large size and excellent quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 60c.

Yellow Globe. Of large size and globular form; very productive.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 60c.

Golden Tankard. Bright yellow, large, handsome, heavy cropper.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 60c.

SWISS CHARD or Spinach Beet

Swiss Chard or Silver Beet. This variety of Beet does not make a large root, and is grown only for its leaves, which make splendid "greens." Can be cut close to the ground and new shoots will spring up and make a fast growth. The broad, white stalks or midribs are cooked and served like Asparagus.

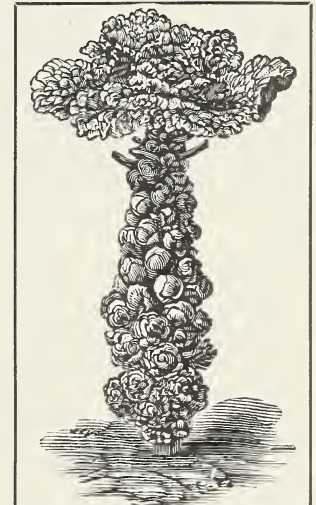
Seed planted early in spring will quickly produce plants from which cuttings can be made all summer.

Pkt., 5c; oz., 10c;
¼ lb., 30c;
per lb., \$1.00.

Swiss Chard, Giant Lucullus. This is a decided improvement over the common variety.

The plants grow from 2 to 2 ½ feet tall and when fully developed, produce about a dozen creamy white, curled leaves, which are carried on broad thick stalks about 12 inches long. The leafy portion of the plant should be cooked like Spinach and the stalks like Asparagus.

Pkt., 5c; oz., 15c;
¼ lb., 50c;
per lb., \$1.50.



Brussels Sprouts



BRŒCOLI

Sow in beds middle of spring, transplant and cultivate the same as Cabbage.

Early Large White.....Pkt., 10c; oz., 50c.

Early Purple Cape.....Pkt., 10c; oz., 50c.

BRUSSELS SPROUTS

Sow seed for plants in frames or open ground. Set plants in early spring, and for succession up to July making rows 3 feet apart and having the plants stand 1 ½ to 2 feet apart in the row. Cultivate same as Cabbages.

Dwarf Improved.....Pkt., 5c; oz., 35c.

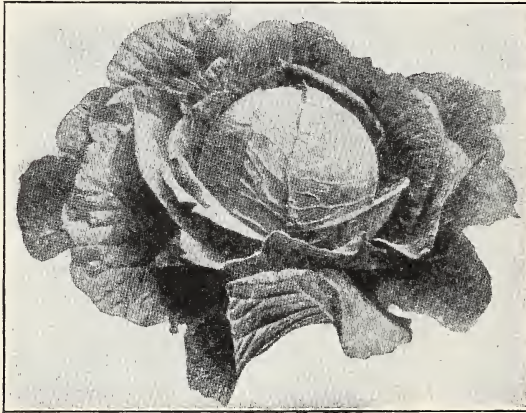
CABBAGE

Sow one ounce for 2,500 to 2,800 plants; five and one-half ounces for one acre.

FOR plants of the earliest sorts, sow seed in January or February under glass, and prick out in flats or frames about 2 inches apart each way. Transplant to open ground as soon in spring as the land can be properly prepared. A rich, warm, fibrous loam is best. Have the plants in the rows 20 to 24 inches apart, and rows at least 2 feet apart. Give thorough cultivation and irrigate in dry weather if practicable. Protect from the ravages of cutworm, maggot and green worm. A little nitrate of soda applied around the plant is of great benefit. For late Cabbage plants, sow seed in drills in open ground during April and May, and transplant in June and July, giving the plants more room than allowed for earliest Cabbages. Dusting with Slug Shot, tobacco dust, insect powder, etc., or splashing with hot soap-suds, especially Fish Oil Soap solution, are good and safe remedies for some of the insect pests attacking plants of the Cabbage.



McCullough's Early Louisville Drumhead



McCullough's Early Market

McCullough's Early Louisville Drumhead

Originated by us many years ago, and is still the peer of all other varieties for early market purposes throughout this section. It is highly esteemed by the market gardeners, and it will stand hot weather better than any other sort; will stand the entire summer without bursting; in fact, we produced heads that weighed 18 pounds on September 1, having been planted with Jersey Wakefield, which was long unfit for use. Our Louisville forms large, solid heads, and is the earliest large-heading variety, while, if planted later, it makes excellent heads for winter. The quality is very fine, and is remarkable for its certainty to head. For winter use, sow later in the season. We have received expressions of unanimous praise from all parts of the country, and could fill many pages of our catalogue with testimonials.Pkt., 5c; oz., 30c; 1/4 lb., \$1.00.

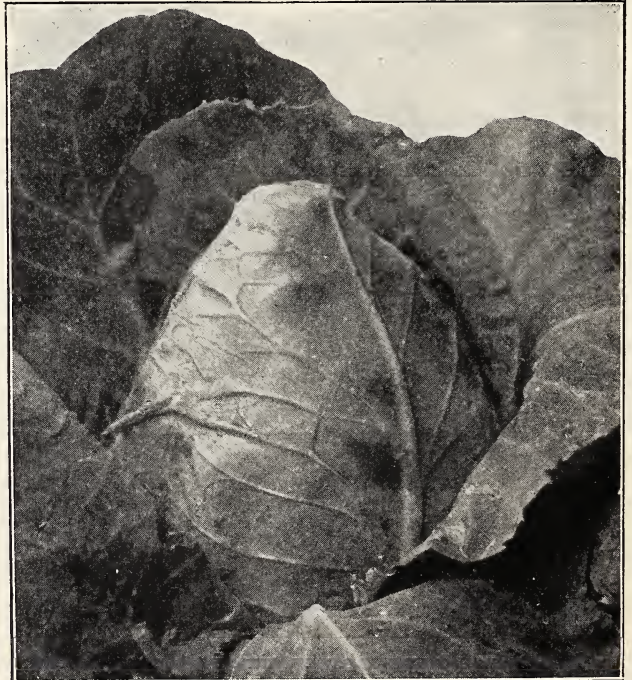
NOTE:—McCullough's "Louisville Drumhead" Cabbage is so well known and so much sought after that many firms are offering cheap stocks. We have tested many of these and find some entirely untrue and others of inferior strains. Be sure to get our highly selected, genuine type direct from us.

McCullough's Early Market

A new, early, round head Cabbage. It will produce double the crop of any other early variety; always extremely solid and fine ribbed. Once known, it will hold its own with the market gardeners and home growers alike. It is exceedingly tender, fine grained, and as a cropper no early Cabbage will approach it. Planted side by side with Early Jersey Wakefield, under the same conditions, the Early Market produced heads of marketable size five to six days earlier and in size fully double that of the Early Jersey Wakefield; was more solid and better flavored and kept in fine condition much longer. It is very dwarf and compact, allowing of close planting. Heads fine, ball-shaped, and with few outside leaves. Size ideal for marketing. (Supply limited.) . . .Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

Early Jersey Wakefield. This Cabbage, though introduced years ago, still holds its undisputed lead as one of the best extra early varieties in cultivation, and is largely grown as a First Early Cabbage. It is the good, old reliable; always depended upon for its uniformity in earliness and crop. Among its merits may also be mentioned its large size of head for so early a variety and the small outside foliage, allowing it to be closely planted. The heads are pyramidal in shape, having a blunted or rounded peak. We believe our selected stock has no equal. Pkt., 5c; oz., 35c; 1/4 lb., \$1.15.

Copenhagen Market. It is the earliest large, round headed sort. The ripening is early and uniform, maturing at one time and almost with Early Jersey Wakefield. Considering its early season, the heads are remarkably large. One of its chief features is compactness; its leaves, which are light green, are round, dish-shape and fold tightly together in remarkably compact and solid form; it is so solid that many more plants can be grown on an acre than is possible with most sorts. It has few outer leaves, which permits close planting, and it grows close to the ground on a short stem.Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.



Early Jersey Wakefield

CABBAGE—Continued

Charleston, or Large Wakefield. For some years past customers have requested us to procure for them, if possible, a Cabbage which had all the characteristics of the Early Jersey Wakefield, but of greater size. The Charleston Wakefield is a larger type, which is now so fixed in its character that we can offer it with confidence to those desiring a Cabbage of this kind. This selection will average about 50 per cent larger in size than the old type of Wakefield, and is only a few days later. Pkt., 5c; oz., 35c; ¼ lb., \$1.15.

Early Winningstadt. Heads are conical in shape, but more pointed than the Jersey Wakefield and not so early. The leaves are a rich, dark, slightly glossy green and tightly folded, the heads being the hardest of any early Cabbage. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Early Summer. A second early with large, solid, flattish heads, coming in a few days later than the Wakefield; a sure header. The plant has a peculiar bluish tinge. Pkt., 5c; oz., 25c; ¼ lb., 85c.

All Head, Early. The largest heading of the second early sorts. The deep, flat heads are remarkably solid and uniform in color, form and size. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Glory of Enkhuizen. Has become a remarkably popular early, and is regarded as amongst the most important introductions in the cabbage line for some years. It is a splendid sort for the private garden and market gardener who grows for high-class trade. The heads are globe-shaped, medium size and handsome dark-green color, just right for market; it is sure heading and is a splendid keeper and early. The quality is excellent, the leaves being fine ribbed. Pkt., 5c; oz., 35c; ¼ lb., \$1.15.

Early Dwarf Flat Dutch. This variety has for years been popular among growers, both for home use and market. Heads are borne on short stems and are very large, solid and nearly flat on top. One of the best second earlies as it stands a long time without bursting. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Succession. A good second early, round-head sort. Heads are solid, keep well and are of splendid quality; the color is a beautiful light green. Pkt., 5c; oz., 25c; ¼ lb., 85c.

All-Seasons. (Vandergaw). An early Drumhead Cabbage, yielding large, hard, solid and slightly flattened heads. As good for autumn or winter as for early summer. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Surehead. This is a good strain of late Flat Dutch, having great reliability for heading. The heads grow large and are of good texture. It is also a good keeping variety. Pkt., 5c; oz., 25c; ¼ lb., 85c.

McCullough's Premium Late Flat Dutch A variety for winter market; has no superior. Heads large, round, solid, broad and flat on top. They open white and crisp, are tender and well-flavored. The best variety for keeping. Our stock has been carefully selected for several years. No better strain on the market. Pkt., 5c; oz., 25c; ¼ lb., 85c.



McCullough's Premium Late Flat Dutch

Large Late Drumhead. A favorite winter variety. The heads grow to very large size and heavy weight. They are solid, of good quality and texture, and have few loose leaves. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Autumn King. A fine strain of late Cabbage. It produces regular, even heads of enormous size, with few outer leaves. Pkt., 5c; oz., 25c; ¼ lb., 85c.

Danish Ballhead. (Danish Crown). Heads of good marketable size, averaging about 8 pounds, nearly round, solid and superior quality. The strong growth of this variety enables it to withstand dry weather well. As a keeper it excels all others, the heads taken out in the spring being in every way in as good condition as when stored. Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

Danish "Roundhead." It is slightly larger and produces more weight to the acre than Ballhead. The foliage is rather lighter in color; the handsome hard heads are beautifully white when trimmed. The heads are produced about ten days earlier, and while perfectly globular or round in form are not quite so deep through; that is, not so elongated or balloon-shaped as the Ballhead. It is shorter stemmed than the Short-Stemmed Ballhead, which is sometimes sold as Danish Roundhead. The magnificent hard heads are splendid keepers and bring the highest prices on market in winter. Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

RED CABBAGE

Early Red. Extremely early and valuable for pickling. Pkt., 5c; oz., 40c; ¼ lb., \$1.50.

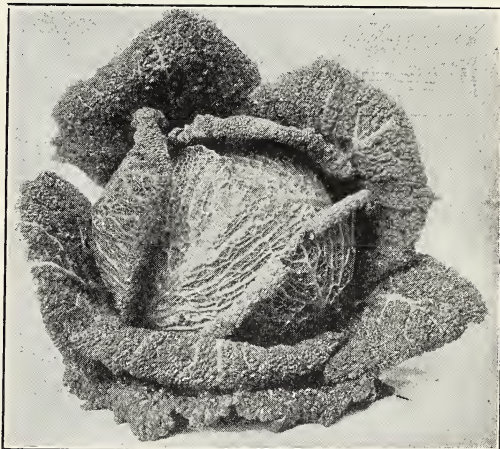
Late Giant Red. A large heading, late variety, fine for pickling. Pkt., 5c; oz., 40c; ¼ lb., \$1.50.

Mammoth Rock Red. The largest and most solid of the red varieties; a sure heading sort and tender. Pkt., 5c; oz., 40c; ¼ lb., \$1.50.

SAVOY CABBAGE

THEY are particularly adapted to private use where quality, rather than quantity is desired. Grown in fall and allowed to be touched by frost, it is one of the most delicious of all vegetables.

Early Dwarf Ulm Savoy. One of the finest flavored sorts. Heads solid and with few outer leaves. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.



Savoy Cabbage

American Drumhead Savoy. Heads large and very finely curled; short stalk and compact grower; an excellent keeper. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

PE-TSAI, CHINESE OR CELERY CABBAGE

THE Seed we offer is the true variety which has been grown in China for many years. This new vegetable is a species of Cabbage with a fine delicate flavor and resembles a stalk of Celery more than a head of Cabbage. It is as tender as Head Lettuce and is rapidly coming into general use for salads or cold slaw. Can also be eaten raw or may be cooked. The many uses to which it can be put as a "high toned vegetable" is bound to make it popular with the public as well as the market gardener. This delicious vegetable may be grown in any soil that will grow good Cabbage, but to attain perfection should be grown in cool, moist and very rich soil.

Seed should be sown about the first of August in rows 24 to 36 inches apart, thinning to 15 inches apart in the rows.

If weather is warm at time of heading tie up like Endive and keep well watered.

As this variety will not stand frost it should be stored in a cool, frost-proof cellar. Early sowing is not recommended. Pkt., 5c; oz., 35c; ¼ lb., \$1.25.

CARROTS

One ounce will sow 200 feet of drill—three and one-half pounds for an acre.

A light sandy loam, well-tilled and manured the previous year, best suits the Carrot. For early crop sow as early as the ground can be worked, in drills 10 inches apart, and thin to 5 inches apart. The Early Market, owing to its extreme earliness, is used for hotbed culture. The late sorts, long and half-long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in row. Keep the hoe at work. Carrot seed is slow to germinate.

Early Market, Stump-rooted. A very choice strain, tender, fine-grained flesh. An enormous producer, handsome, uniform stumped roots. Considered by many to be the best table Carrot, because of its quality and shape; free from core and of a deep golden yellow color. Can be sown thick, and consequently well adapted for frame culture. A most excellent forcer. .Pkt., 5c; oz., 20c; ¼ lb., 60c.

Early Scarlet Horn. An early red summer variety; fine grained and good flavor. .Pkt. 5c; oz., 10c; ¼ lb., 30c.

Chantenay. It is about 6 inches long, thick through and decidedly stump-rooted. In size it is between the Oxheart and Danvers. The flesh is a deep orange red, fine-grained and of a splendid flavor. It is very early and always produces smooth shapely roots. Its fine appearance finds for it a ready market; its splendid table qualities keep it in demand. Our strain of seed is unsurpassed.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Danvers. A cylindrical-shaped Carrot of good size and stump-rooted, rich, dark orange color, grows to a large size, smooth and the flesh very close in texture with little core.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Improved Rubicon. It grows about same length as the Danvers, but thicker and a rich, dark orange color. It is an enormous cropper and a splendid variety for the market gardener.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Oxheart or Guerande. Intermediate length; is fully 3 to 5 inches in diameter; quality extra good. Some sorts require digging, but the Oxheart can be easily pulled. It is especially adapted to shallow soils, where the longer sorts would not thrive as well.Pkt., 5c; oz., 10c; ¼ lb., 30c.



Chantenay

McCullough's Intermediate A large, handsome main-crop variety. It is the connecting link between half-long and long Carrots, with a yielding capacity in deep soils equal to any of the longs. The root, 10 or 12 inches in length, is very broad at the neck, 2 to 3 inches through, and tapers evenly to the small tap-root. It grows smoothly and uniformly and combines with its other merits rich reddish-orange flesh, tender, sweet and entirely free from woody coarseness even at maturity.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Nantes Half-Long Scarlet. A stump-rooted variety, having little or no core. Flesh red and of fine flavor.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Improved Long Orange. A standard late variety; deep orange color. It is of excellent table quality and is highly nutritious for stock.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Improved Giant Short White. The heaviest cropping Carrot grown. The flesh is white, solid, crisp and sweet; the roots are short and heavy at the shoulder, which allows them to be harvested easily. Grown for stock.Pkt., 5c; oz., 10c; ¼ lb., 30c.

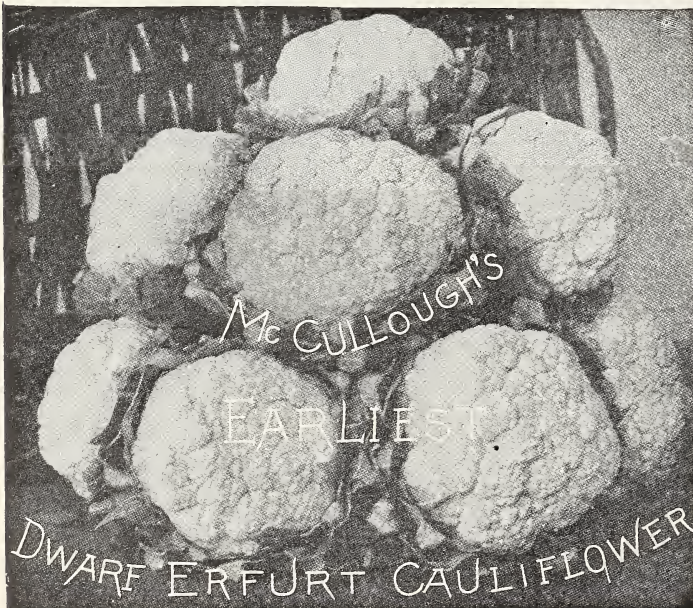
Large White Belgian. The lower part of the root is white; that growing and exposed above ground, green. It is exclusively grown for stock.Pkt., 5c; oz., 10c; ¼ lb., 30c.

Carrot Seed grown for stock requires one-half ounce for 200 feet of drill, one and one-half pounds for an acre.

CAULIFLOWER

One ounce of seed will produce about 2,200 plants.

FOR early use, sow in hotbeds in January and February. When plants are large enough, transplant three inches apart in boxes or other hotbeds until time to plant out. If hardened off they are seldom injured by planting out as early as the ground can be worked, 2½ feet apart each way. When practicable, seed may be sown in rich soil from the middle of September to middle of October, and transplanted in frames; protect during severe weather and give light and air on mild days. The early varieties should be brought to maturity before summer heat sets in. The late sorts mature in the autumn and are cultivated same as winter Cabbages.



McCullough's Earliest Dwarf Erfurt Is beyond question the best for all purposes. It heads where others fail. Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older varieties, as they find our strain of Erfurt to be the surest-heading. On account of its dwarf and compact habit, the plants may be set out 20 to 22 inches each way, so that from 12,000 to 14,000 can be planted on an acre. For pickling it is the standard variety. The compact and solid texture of the snow-white heads, combined with delicious flavor, surpass all others.Pkt., 25c; ¼ oz., \$1.00.

Early Snowball. (True.) An extremely early dwarf variety, producing magnificent white heads, of fine quality. Well adapted to hot-bed culture.Pkt., 20c; ¼ oz., 75c; oz., \$2.50.

Danish Giant. A large heavy sort, maturing soon after Dwarf Erfurt. It is without exception the best and surest heading of all for summer use.Pkt., 20c; ¼ oz., 75c.

Early Paris. Heads large, white, compact and solid; tender and delicious.Pkt., 10c; ¼ oz., 30c; oz., \$1.00.

Lenormand's. A large, late, short-stemmed variety, with well-formed white heads.Pkt., 10c; ¼ oz., 30c; oz., \$1.00.

Autumn Giant. One of the finest late varieties, of robust habit, heads large, compact and thoroughly protected by leaves.Pkt., 10; ¼ oz., 30c; oz., \$1.00.

Special price to market gardeners.

CELERY

One ounce will produce about 25,000 plants.

To grow early Celery, sow the seed late in March in a hotbed or box; and for later crops, as soon as the weather becomes warm, sow in the open ground, cover lightly, or better still, roll or press it in. Shade the young plants for a week of ten days, and do not let the soil dry out. The tops may be shorn off once or twice before planting, so as to insure "stocky" plants, which will suffer less on being transplanted. When from four to six inches high, transplant into broad, shallow trenches, or on the level ground, setting the dwarf sorts into rows three feet apart, and the tall varieties four feet apart and six inches apart in the rows. The soil should be light, highly manured, partially shaded and moist, or near water, as the plants must be freely watered. Earthing up checks growth and should not begin until quite well grown, then earth up gradually, keeping the leaf stalks close together, so that the soil may not fall into the center of the plant, but never earth up in wet weather, nor when dew is on them. That intended for winter and spring use needs little banking; when stored for winter it will naturally blanch beautifully white.

McCullough's Paris Golden Yellow Extra selected stock, unsurpassed. We have been furnishing our customers this strain of Paris Golden Yellow Celery for a number of years and it is pronounced by one and all the finest strain they have ever seen. The color is a rich golden yellow, stalks are very solid and tender, flavor is delicious, has large heart, grows medium height, and is without doubt the best early Celery on the market. The demand for our strain of this variety is increasing every year and we advise our customers to order early, as supply is limited. We are confident you can not obtain anywhere a strain of Paris Golden Yellow Celery superior to our own particular selected stock. . . . Pkt., 10c; oz., 75c.

Golden Self-Blanching. An early, desirable sort, requiring but little labor to blanch. The heart is a rich, golden yellow, with light, yellowish-green outer leaves. Pkt., 5c; oz., 35c; ¼ lb., \$1.25.

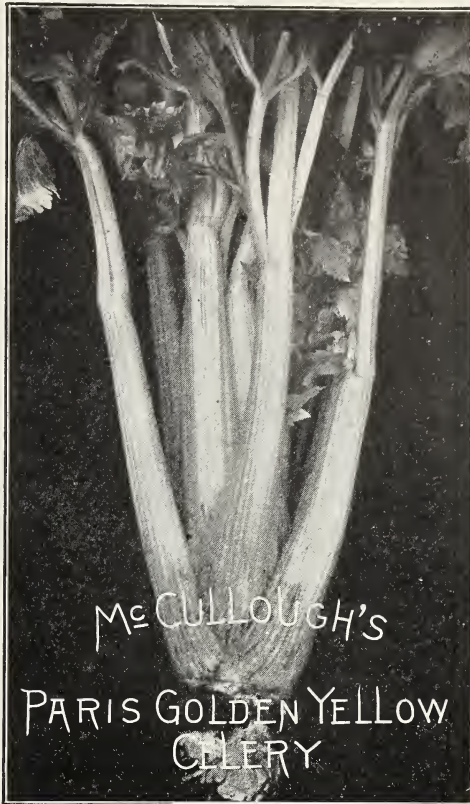
White Plume. Is unsurpassed for fall and early winter use, requiring very little earthing up to blanch it. Pkt., 5c; oz., 25c; ¼ lb., 80c.

Easy Blanching. Stalks thick, brittle and excellent flavor. Adapted to early use as well as storing for winter. Those who have not been successful with other sorts, should give this a trial. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

Giant Pascal. A superior keeping sort. The stalks are very large, thick, solid, crisp, and of rich nutty flavor. It blanches very easily and quickly, and retains its freshness a long time. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Giant White Solid. The best of the large growing sorts. This variety is suitable for Southern sections of the country, as it grows freely in a hot or dry atmosphere. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Golden-Hearted Dwarf. A popular variety. Handsome color, medium size, fine flavor. Pkt., 5c; oz., 20c; ¼ lb., 60c.



McCULLOUGH'S
PARIS GOLDEN YELLOW
CELERY

Snow White. A pure white, self-blanching variety. Vigorous growth, ease of blanching, size, richness of flavor, crispness and purity, makes it an ideal Celery. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

Triumph. The best late Celery. A strong and vigorous grower, with very large but crisp, brittle, tender and fine flavored stalks. . . . Pkt., 5c; oz., 25c; ¼ lb., 75c.

Celeriac, Turnip Rooted Celery

Sow early in spring. Transplant in May into rich, mellow soil in rows eighteen inches apart and six inches in the row. Grown mostly for its bulbous root.

Large Erfurt. When sliced, with vinegar and oil, makes a delicious salad. . . . Pkt., 5c; oz., 25c; ¼ lb., 75c.

CHICORY

Large Rooted or Coffee. Grown for the large, thick roots, which are dried, roasted and ground as a substitute for Coffee. Soil should be light, rich and deeply worked. Cultivation the same as Carrots. Pkt., 5c; oz., 25c.

Witloof Chicory, or French Endive. Seed should be sown in the open ground not later than June in drills twelve to eighteen inches apart, thinning plants so they will stand about three inches apart. The plant forms long, parsnip-shaped roots, which should be lifted in the fall, and after cutting off the leaves store in soil in a cool place until wanted for forcing. To force, plant closely in trenches deep enough to permit covering the roots with soil 8 inches deep. If quicker growth is desired mulch with manure 2 feet deep. Requires four to five weeks to force. The blanched head is the edible portion and should be cut with a portion of the neck attached to it. The principal use of Witloof is as a winter salad, and it is most delicious served with French dressing and eaten like Cos Lettuce. Pkt., 5c; oz., 30c.

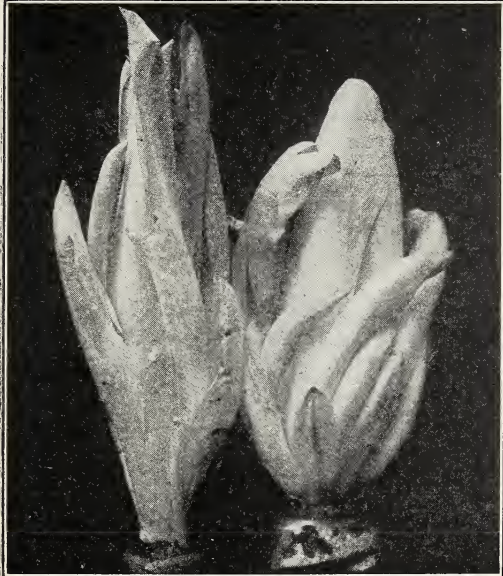
CHIVES

Chives are of the onion type. Are grown early in the spring for giving a mild flavor to various dishes. When planted in small clumps they will grow rapidly and increase so as to render division necessary. If not allowed to flower will produce longer.

Per pkt., 10c. 3 pkts., 25c.
Clumps, 10c each. per dozen, \$1.00.

COLLARDS

A species of Cabbage, forming a mass of leaves on a tall stem, very popular in the Southern States as boiling-greens during the winter months, and also furnishes green forage for poultry and stock during winter. Cultivation same as Cabbage. Pkt., 5c; oz., 15c; ¼ lb., 40c.



Witloof Chicory.

CORN, Sweet or Sugar

One pound will plant 200 hills—10 to 12 pounds per acre.

THE Sweet or Sugar varieties, being liable to rot in cold or wet ground, should not be planted before May or until the ground has become warm, and for a succession continue planting every two weeks until the middle of July, in rich, well manured ground, in hills 3 feet apart each way, covering about half an inch, and then thin out to 3 plants to a hill, or plant in rows 4 feet apart, and to stand 8 inches apart in the rows.

All packets and half pounds of Sugar Corn are sent postpaid; for larger quantities by mail see "Postage" page 1.



The illustration represents a matured ear of our Cincinnati Market or Club Zig-Zag Evergreen Corn. Our patrons can readily infer how juicy this Corn is when the kernels are filled with milk.

McCullough's Cincinnati Market or Club Zig-Zag Evergreen.

This new variety which originated in this market and was introduced by us, has become the best seller on the Cincinnati market. A late Zig-Zag Evergreen Corn, the ear ordinarily being twice the size in diameter of any other sort, while in sweetness and flavor it cannot be excelled.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.75.

Premo. The best extra early variety. It can be planted early, as the young plants will withstand slight frosts. The stalks are strong and vigorous, growing about 5 feet in height, bearing one or two fine ears to a stalk. The ears are large for so early a variety. The grains are of medium size, well filled to each end of the ear, and of a fine sweet flavor.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Early Sheffield. Very early variety. The stalks are strong and vigorous, bearing one or two fine ears to a stalk. The ears are large and entirely free from smut. The grains are of medium size, 10 or 12 rowed, well filled to each end of the ear; juicy, and of a fine sweet flavor.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Kendal's Early Giant. Very early, fit for use 60 days from planting. Ears large, 8 to 10 inches in length, twelve rows to a cob. Kernels pure white, sweet and tender.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Golden Bantam. It is not only the sweetest, but also one of the hardiest. The ears are from 6 to 7 inches long, eight rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It may be planted with perfect safety ten days earlier than other Sweet Corn. One of the best sorts for successive plantings.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Golden Giant Sugar Corn. It excels all the other early varieties of corn in size, productiveness and quality; and all the late varieties in quality and early maturity while equaling them in size.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50.

Mammoth White Cory. An extra early sweet corn. Ears, twelve-rowed; twice the size of the old Cory, white-cobbed and covered with large white grains of extra quality.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Early Minnesota. Very early, ears of fair size and good quality.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Crosby's Early. A great favorite; productive and of excellent quality.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Early Mammoth. A second early variety. The ears are of large size, kernels large and very sweet.

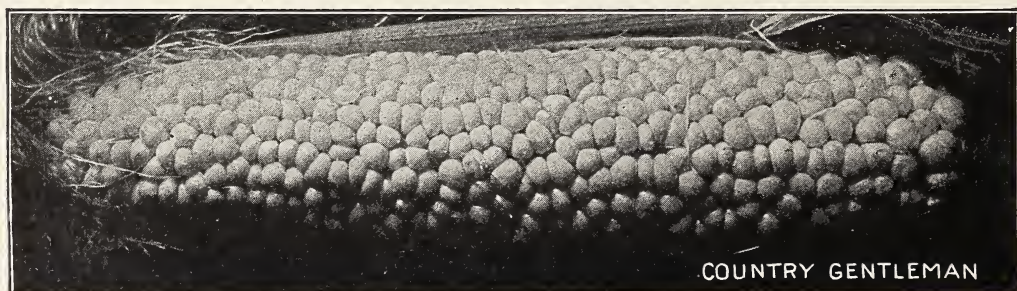
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Early Evergreen. An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.

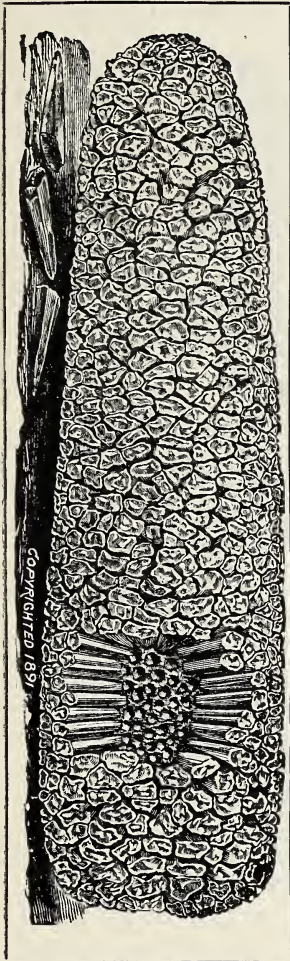
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Country Gentleman. One of the richest flavored of all the late varieties. As a table Corn this variety stands unrivaled, and without doubt is the most luscious of all varieties of Sweet Corn. The plump, pearly-white kernels are of great depth. We have selected this sort for many years and it comes as true to type as any we have ever seen. Ears average 9 inches long by 2 inches in diameter.

Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.



CORN, Sweet or Sugar—Continued



Zig-Zag Evergreen

Long Island Beauty. A most prolific variety; quality extra good. One of the most desirable sorts for late planting. A great favorite with Long Island market growers.
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

Stowell's Evergreen. The standard variety, both for home use and market, and is the general favorite. The ears are of a large size, grains deep, exceptionally tender and sugary, and has the advantage of remaining longer in the green state than any other.
Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Narrow Grain Evergreen. Similar in all respects to Stowell's Evergreen, but has very narrow grains.
Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

White Evergreen. A valuable main crop variety of vigorous growth. The ears are very large and uniformly well filled to the tip with long, slender grains of the purest whiteness and most delicious sweet flavor.
Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Zig-Zag Evergreen. This is one of the sweetest and best late Sweet Corns. The ears are as large as those of the Evergreen, but the kernels are placed irregularly or zig-zag upon the cob, which is always an indication of great sweetness.
Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Mammoth Sugar. A late variety, producing ears of very large size and fine flavor.
Pkt., 5c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Black Mexican. Black-grained variety; sweet, tender; must be picked young to avoid a black appearance when cooked.
Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 15 lbs., \$2.50.

GARDEN CORN

Adams' Extra Early. The hardest and earliest variety for table use, but not a Sugar Corn; can be planted earlier than any other corn.
Pkt., 5c; ½ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 15 lbs., \$1.85.

Adams' Early. While not a Sugar Corn, is a tender white corn for the table; can be planted earlier and will be ready in sixty days.
Pkt., 5c; ½ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 15 lbs., \$1.85.

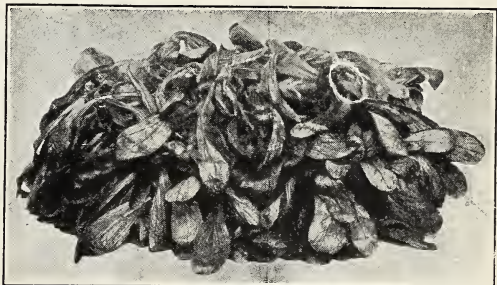
Adams' Improved. A larger variety; recommended for extreme early and late planting.
Pkt., 5c; ½ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 15 lbs., \$1.85.

CORN SALAD, or Fetticus

One ounce will sow 200 feet of row—6 pounds for an acre.

USED as a salad winter and spring. Sow in spring, in drills one foot apart; will mature in six to eight weeks. For winter and early spring use, sow in drills in August and September. Cover with straw on the approach of winter, the same as Spinach.

Large Seeded. The most satisfactory to grow.
Pkt., 5c; oz., 15c; ¼ lb., 40c.



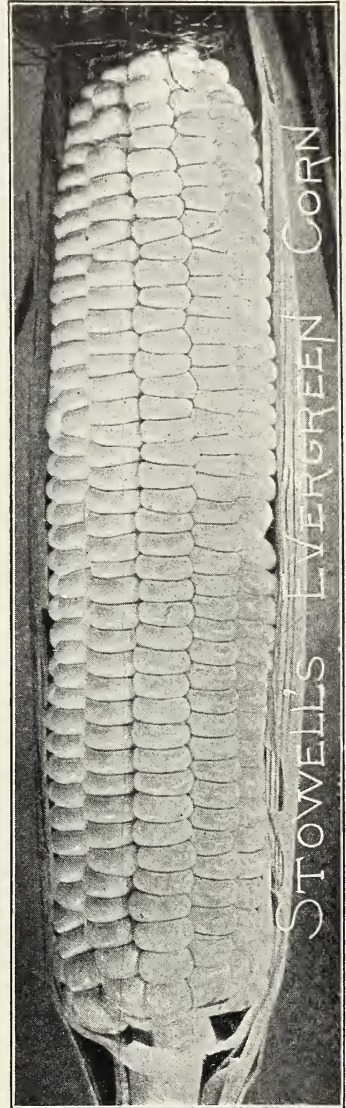
Corn Salad

CRESS, Water and Garden

SOW thickly in shallow drills early in the spring, and at intervals throughout the season for a succession, as it soon runs to seed. Water Cress requires a stream of running water, ditch, or pond, in which it will grow without care, except at first keeping weeds from interfering with it.

Extra Curled or Peppergrass. Fine flavor, and the best sort for dry soils. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Erfurt Water Cress. A most desirable and appetizing salad, thriving best in shallow water on the edge of streams.
Pkt., 10c; ½ oz., 30c; oz., 50c.



CUCUMBERS

Use one ounce of seed to 50 hills, 2 to 3 pounds per acre.

FOR very early Cucumbers, sow April 1st, in a hotbed upon pieces of sod (grass side down), so that they can be readily transplanted to the open ground, in rich soil, when danger of frost is over, or protect by handglasses. For early use, plant, if the weather has become settled and warm, in hills 4 to 6 feet apart each way; thin out to four of the strongest plants to each hill, after all danger from insects is over. They succeed best in a warm, moist, rich, loamy soil. Continue planting at intervals for a succession. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles, plant from June until the middle of July. The yellow-striped cucumber or squash beetle is the most serious insect enemy of this crop.

Bordeaux Arsenate of Lead Mixture is by far the best remedy yet discovered.

Dilute it with water, 3 ounces to the gallon, and spray it on the vines when in danger of the beetle or blight.

McCullough's Special An excellent Cucumber for both forcing and outdoor use. The fruit grows 11 to 15 inches long, slim, slightly pointed, a dark glossy green color, which they keep until ripe. In quality it is very tender, brittle and of fine flavor. A vigorous grower, withstanding blight better than other long sorts. Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Ohio White Spine. This is the best strain of extra early White Spine for the market gardener's out-door growing. It is hardy and an excellent shipper. It is extensively grown in the South for shipping North, early in the season. Fruit grows 7 to 10 inches long, of a deep green color, and full at both ends. Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Early Cluster. A much esteemed early variety; growing in clusters; is extremely productive. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

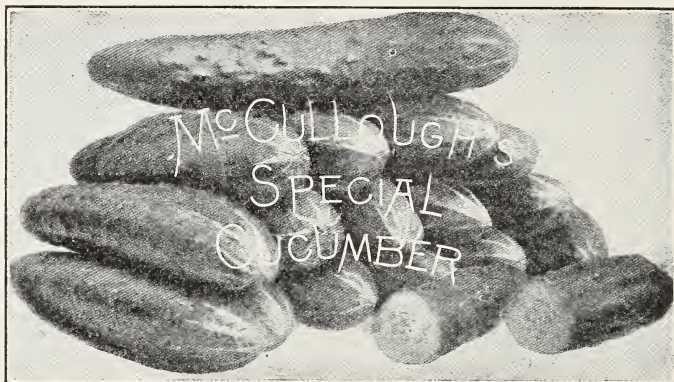
Improved White Spine. The favorite market variety. Largely grown South for Northern Markets, early in the season. The fruit grows from 7 to 10 inches long, is quite smooth, of a deep green color and full at both ends. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00.

Early Frame. A good variety for pickling and table. Medium size. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Green Prolific. One of the best pickling varieties; dark green, tender, and crisp; very productive. Good for table use. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Evergreen. One of the best varieties for slicing, as it is crisp and of good quality; and as it produces fruit of medium size, it is good for pickling purposes. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Jersey Pickle. As a pickling variety is unsurpassed. Its characteristics are its uniform growth and its immense productiveness. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.



Long Green Improved. A standard late sort, fruit 12 to 14 inches long, slender, more or less warted, tapering towards the stem end; color dark green, flesh white and firm. Excellent for table and makes a hard, brittle pickle. Extra selected stock. Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

Davis Perfect. Splendidly adapted for growing either under glass or in the garden. In color, a dark, glossy green; shape, slim and symmetrical, with an average length of 10 to 12 inches. They are as early as the earliest strain of White Spine. Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Early Fortune. The finest type of White Spine. Early and very productive; fruit grows 9 inches long, slightly tapering, flesh white, firm and crisp with very few seeds; color dark green. Quality is excellent, either for the table or pickling. Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Long Green. A standard late sort, crisp and tender, very prolific, excellent for the table and makes a hard brittle pickle. Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Nichol's Medium Green. One of the best for pickling, and excellent for forcing or slicing. Always straight and smooth. In length it is between White Spine and Long Green. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Japanese Climbing. It is suitable for growing either in frames or in the open ground. It is very early and exceedingly productive. The fruit is excellent either for the table or pickling. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Gherkin. A very small prickly variety, used exclusively for pickling, for which purpose they should be gathered while young and tender. Pkt., 5c; oz., 15c; ¼ lb., 50c.

ENGLISH FORCING CUCUMBER

The best for forcing, attaining a length of twenty to thirty inches. They can be grown in hotbeds, where the temperature does not fall below 65 degrees at night.

Duke of Edinburgh. Very large and long, dull green, quite smooth; packet of 10 seeds. 25c.

Telegraph. Free bearing, long and extensively grown; packet of 10 seeds. 25c.

EGG PLANT

One ounce of seed will produce about 2,000 plants.

SEED is of slow germination and requires a moderate amount of heat. Should be started in hotbeds and not checked after starting to grow.

When 2 or 3 inches high they should be potted in 3-inch pots and not set out in the open until nights are warm. Plant about 3 feet apart and keep well watered.

Black Beauty. This new variety is an excellent market sort. It is about the same size and shape as the New York Improved, except a little fuller at the top; is a few days earlier and a heavier yielder. Its color is a rich purplish black, which it retains even after becoming ripe. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

New York Improved. A leading market variety. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.



ENDIVE

One ounce of seed to 300 feet of row.

ONE of the best and most wholesome salads for fall and winter use. Sow in shallow drills in April for early use, or for late use in June or July. When 2 or 3 inches high, transplant into good ground, or thin out to one foot apart. When nearly full grown, they must be blanched. This is done by gathering the leaves together, and tying with yarn or bass, to exclude the light and air from the inner leaves, which must be done when quite dry or they will rot.

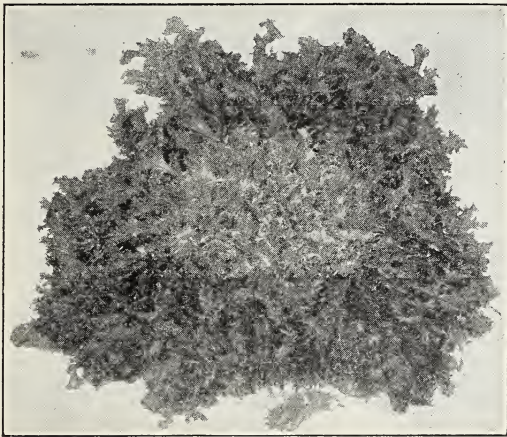
Broad-Leaved Batavian. Leaves broad, light green, nearly plain; used in stews and soups.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

Green Curled. Very hardy, crisp and tender.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

Moss Curled. It is excellent for winter use.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

White Curled. Coarser than Green Curled, but the mid-rib is yellow and the leaves frequently almost white.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

French Endive. (Witloof Chicory.) See Chicory.



Endive

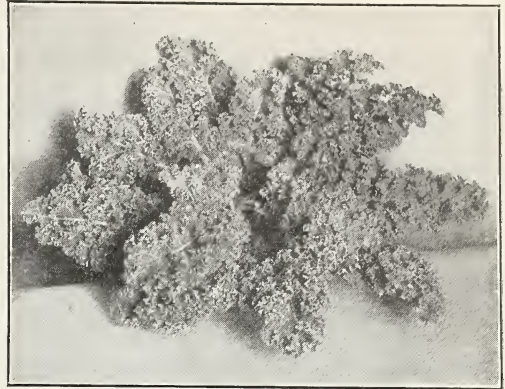
GARLIC

Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the rows, covering 2 inches deep.
Bulbs..... ¼ lb., 20c; per lb., 50c.

HERB SEEDS

Sow early in April or May in a sheltered, well-prepared spot in the open ground, either broadcast or in shallow drills about 7 inches apart. Thin out the plants thus raised and keep clear from weeds.

- Anise. Biennial... Pkt., 10c; oz., 35c.
- Balm, Sweet. Perennial, 1 foot.
Pkt., 10c; oz., 25c.
- Basil, Sweet. Annual, 1 foot.
Pkt., 10c; oz., 25c.
- Caraway. Perennial, 2 feet.
Pkt., 5c; oz., 20c.
- Dill. Biennial, 3 feet.
Pkt., 5c; oz., 15c.
- Fennel, Sweet. Perennial, 6 feet.
Pkt., 5c; oz., 25c.
- Horehound. Perennial, 2 feet.
Pkt., 10c; oz., 40c.
- Hyssop. Perennial, 3 feet.
Pkt., 10c; oz., 25c.
- Lavender. Perennial, 2 feet.
Pkt., 10c; oz., 40c.
- Rosemary. Perennial, 4 feet.
Pkt., 10c; oz., 50c.
- Saffron. Annual, 3 feet.
Pkt., 10c; oz., 25c.
- Sage. Annual, 1 foot.
Pkt., 10c; oz., 60c.
- Sweet Marjoram. Pkt., 10c; oz., 50c.
- Thyme. Annual, 1 foot.
Pkt., 10c; oz., 50c.



Kale or Borecole

KALE OR BORECOLE

One ounce to 500 feet of row—4 pounds to an acre.

THE Kales are more hardy than Cabbage, make excellent greens for winter and spring use, and are improved by frost. Sow from May to June, and cultivate the same as Cabbage. For early spring use, sow in September, and protect during the winter.

McCullough's Market Gardener's Special

A beautiful curled and crimped variety of strong vigorous habit, perfectly hardy, bright green color and very attractive in appearance.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Norwood Dwarf Curled. A beautiful curled and crimped sort, of strong, vigorous habit, attractive appearance and a bright green color. It is superior to all other sorts, and is, undoubtedly, the best for private gardens. It rarely exceeds 12 inches in height, but spreads out under good cultivation to 2 feet in diameter.

Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

Dwarf Curled Siberian. Leaves yellowish-green, finely curled. Sow in September for the early winter and spring use.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Tall Scotch. Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost.

Pkt., 5c; oz., 20c; ¼ lb., 60c; per lb., \$2.00.

KOHL-RABI (Turnip Rooted Cabbage)

One ounce of seed to 400 feet of row.

FOR an early crop, start in a hotbed and treat the same as early cabbage. May also be sown as soon as the ground can be worked in spring. For winter use, sow the middle of June.

The edible part is the bulb, which grows on a stalk a few inches above the ground.

Early White Vienna. The flesh is white and tender.
Pkt., 5c; oz., 30c; ¼ lb., 75c.

Early Purple Vienna. Differs from the above in color.
Pkt., 5c; oz., 25c; ¼ lb., 70c.

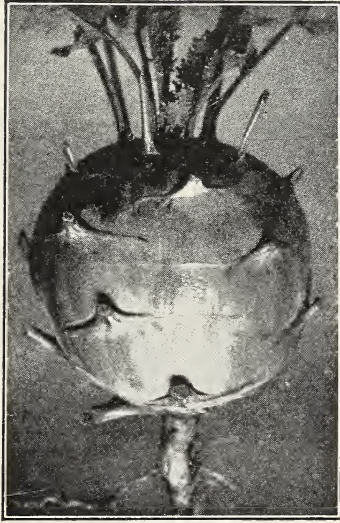
LEEK

SOW early in April, in drills one foot apart, one inch deep. When the plants are six to eight inches high, transplant in a deep, rich soil in rows twelve inches apart and six inches in the rows, as deep as possible, so that the neck may be covered and blanched. Draw the earth to them as they grow. The seed may also be sown in September, and the young plants transplanted in the spring.

Large American Flag. This is by far the best variety. It grows to a good size and is wonderfully uniform.
Pkt., 5c; oz., 20c; ¼ lb., 75c.

London Flag. An old and popular sort; one of the hardiest; best for winter use.
Pkt., 5c; oz., 20c; ¼ lb., 75c.

Large Musselburgh. Of enormous size; leaves large and broad; very mild, pleasant flavor.
Pkt., 5c; oz., 20c; ¼ lb., 75c.



Kohl-rabi

LETTUCE

One ounce will produce about 5,000 plants.

SOW the seed in hot-beds or flats during February or early March, prick the young seedlings out in flats or cold frame 4 inches apart each way, and in spring, transplant the well-hardened plants in rows a foot apart, allowing 8 to 12 inches space between the plants in the row. For succession, sow seed thinly in open ground, and thin the plants to 5 or more inches apart. Sow for succession every few weeks until fall.

Head Varieties



McCullough's
Selected Nonpareil

The finest home garden and market variety. Its beautiful yellowish-green color, crimped, curled and well formed heads, tender quality and sweet flavor, place it at the head of the list for the market gardener or family use. It withstands the heat of summer and retains its sweetness for a long time.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

All Seasons. A large, medium late sort; heart well blanched; leaves broad, smooth and thick; color light grayish-green, never spotted or brownish; quality excellent.

Pkt., 5c; oz., 15c; ¼ lb., 45c.

Iceberg. A large, late, crisp Cabbage-heading variety; heads firm and hard, leaves broad and light green in color, with faint brown tracing on the borders. Quality good.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Big Boston. Heads solid with broad leaves; the best for outdoor or for forcing. Color light green. We have made a specialty of this variety and have a stock that can not be surpassed. . . . Pkt., 5c; oz., 15c; ¼ lb., 50c.

May King. An early, fine variety for spring and fall use in the open garden, also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with light green outer leaves. The inner leaves are blanched to a golden yellow.

Pkt., 5c; oz., 15c; ¼ lb., 45c.

New York or Los Angeles. Plants of extra large growth, producing closely folded heads of immense size. The inner portion is beautifully blanched; outer leaves a deep, rich green. . . . Pkt., 5c; oz., 25c; ¼ lb., 75c.



Wayahead

Wayahead. It is not only earlier than May King, and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, with the inner head finely blanched to a rich buttery yellow. . . . Pkt., 5c; oz., 10c; ¼ lb., 45c.

Hanson. Heads green with white heart. Large size, crisp, tender. . . . Pkt., 5c; oz., 10c; ¼ lb., 40c.

Tennis Ball, White Seeded. Extensively grown for forcing under glass: good size, firm heads.

Pkt., 5c; oz., 10c; ¼ lb., 40c.

Yellow Seeded Butter. A distinct sort, making a compact yellow head, of excellent flavor, withstands heat well and remains crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 40c.

Curled Varieties

Grand Rapids. This is probably the best of the loose-leaved varieties. It never forms a head, but produces an abundant crop of pale green leaves, slightly but closely crimped, which, even when old, retain their characteristic tenderness and brittle character. We strongly urge those who cannot succeed in getting lettuce to head to grow Grand Rapids.

Pkt., 5c; oz., 15c; ¼ lb., 45c.

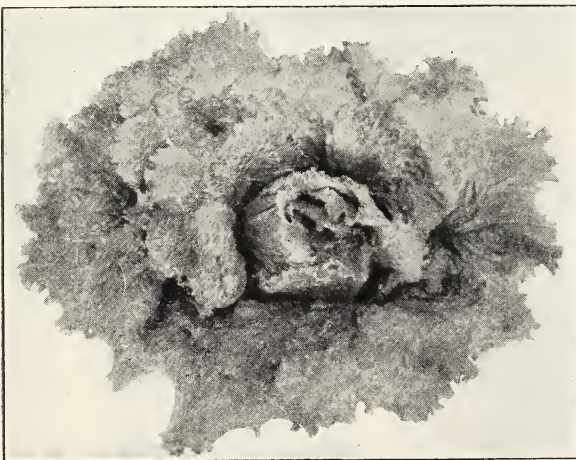
White Star. A crisp, loose-heading variety, leaves broad, crumpled and twisted. Color very light green. . . . Pkt., 5c; oz., 15c; ¼ lb., 45c.

Black Seeded Simpson. One of the most popular sorts. It forms large, loose leaves of ideal color; the leaves are large, thin, very tender and of very good quality. It is one of the best sorts for use under glass as well as for early outdoor planting.

Pkt., 5c; oz., 10c; ¼ lb., 40c.

Early Curled Simpson. Does not head, but forms a close, compact mass of leaves; very early, excellent for forcing. . . . Pkt., 5c; oz., 10c; ¼ lb., 35c.

Early Curled Silesian. Early, loose heads, curled, tender and fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 35c.



Grand Rapids

Prize Head. Produces large, loose heads, finely crimped and fringed leaves, outer portions shaded brown; crisp, sweet and tender. . . . Pkt., 5c; oz., 10c; ¼ lb., 35c.

Oak Leaved. Very distinct, excellent for summer use and for the South. . . . Pkt., 5c; oz., 15c; ¼ lb., 50c.

Romaine, Cos, or Celery Lettuce

These are distinct from the ordinary Lettuce, and much liked on account of their crisp, tender quality and delicate flavor. They produce long, narrow leaves, which are blanched by drawing in the outer leaves and tying.

Paris White Cos. One of the best varieties for blanching; very tender. . . . Pkt., 5c; oz., 15c; ¼ lb., 45c.

Trianan Self-Folding. A self-blanching Cos Lettuce, very crisp and tender, and of excellent flavor.

Pkt., 5c; oz., 15c; ¼ lb., 45c.

MUSK MELONS

One ounce will plant about 50 hills; 2 to 3 pounds in hills per acre.



Tip-Top Muskmelon

In selecting a patch for melons be careful to have it at a safe distance from your Squashes, Cucumbers, Pumpkins, etc., or they will certainly mix. In preparing the hills, fork in plenty of manure, and about the middle of May, when the ground is warm, plant in each hill eight or ten seeds, and cover half an inch deep. After the danger from bugs is over, pull all but three or four of the strongest plants. As soon as the vines have run sufficiently and spread their branches—stop them by pinching the top off the first running bud. This will strengthen the plants and promote their perfecting fruit early. The ground should be kept free from weeds and frequently cultivated.

Acme. Medium size, oval, slightly pointed at end, ribbed, covered when ripe, with coarse netting. Flesh thick, green, very fine flavored and sweet.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Banana. A long, smooth skinned variety, growing something in the shape of long squash. Fruit about 12 inches long; salmon flesh, which is very sweet, luscious and tender. Rather late maturing. Has a delicious odor.....Pkt., 5c; oz., 15c; ¼ lb., 40c.

Burrell Gem. A superior, new, orange-fleshed, shipping melon of splendid flavor, sweet and aromatic; oblong in shape, smoothly rounded ends, closely netted and slightly ribbed, dark green skin. Rind thin, but very tough; flesh exceptionally deep, rich salmon-orange color. Fruit averages 6 inches long by 4 inches deep. Very fine for marketing.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Defender. Medium size, salmon flesh, and delicious flavor; oval shape, slightly ribbed and covered with a slight netting.....Pkt., 5c; oz., 15c; ¼ lb., 40c.

Delicious. The result of several years careful selection. The shape is ideal, being slightly oval and heavily netted over the entire surface. The flesh is as thick at the bloom end as elsewhere, and the flesh of the entire Melon is noticeably thick, fine grained and sweet. The color is green with a gold margin next to the seed cavity. It is attractive, both as to outward appearance and when cut.....Pkt., 5c; oz., 20c; ¼ lb., 60c.

Emerald Gem. Ripens early; medium size; nearly round; flesh a delicate salmon color, very thick, fine grained, and very few melons can compare with it in superb flavor. The rind is thin dark green, ribbed, slightly netted.....Pkt., 5c; oz., 15c; ¼ lb., 40c.

Extra Early Hackensack. A careful selection from Hackensack. Produces melons two weeks earlier than the well-known Hackensack; heavily netted, and has light green flesh of most delicious flavor; a splendid Cantaloupe melon. Its shape and solidity admit of its being packed very closely in crates for shipment, and it will keep in good condition for several days after picking.....Pkt., 5c; oz., 15c; ¼ lb., 40c.

Hackensack. Melons grow to large size and attractive appearance. Flesh green, very sweet and sugary. Outer skin is heavily netted.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Honey Dew. All the claims of the introducer of this delicious Melon have been fully realized. Average size is about six to eight inches in diameter, and they weigh five to six pounds. Skin smooth with little netting, and of creamy yellow color when ripe. Flesh is green, thick, melting, fine grained and can be eaten almost to the rind. Not easily bruised, and stands shipping long distances. Easily pulled when ripe and will keep for several weeks. Matures about ten days later than the Rocky Ford.....Pkt., 5c; oz., 15c; ¼ lb., 50c.

Improved Green Nutmeg. A large melon, nearly round, deeply ribbed; flesh thick, light green, delicious flavor.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Jenny Lind. The earliest variety; netted, of small round size; excellent flavor. The vines do not grow as large as some of the other varieties, but are quite productive, and it is a favorite early variety.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Ohio Sugar. The flesh is an attractive green of fine texture, sugary, juicy, tender and free from stringiness. It is round, inclined to oval, distinctly ribbed, and thickly netted. Handsome and uniform shape; market and home-garden Melon. Because of its firm flesh and solidity, it is a splendid shipper. Produces good melons on a great variety of soils.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Osage, or Miller's Cream. A favorite salmon-fleshed variety. Large oval, slightly ribbed and netted; skin is very dark green. Flesh is very thick and sweet flavored, most delicious to the rind. A great favorite for both market purposes and the home garden.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Rocky Ford. A variety extensively grown in Colorado. The reasons for the widespread popularity of these melons are their superb table and wonderful shipping qualities, which enable them to be carried great distances, and yet arrive in first-class condition for market. The fruit is of medium size, oval shaped, heavily netted and very solid. The flesh is green, thick and juicy. It is early and wonderfully productive.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

Tip-Top. A yellow-fleshed melon of handsome appearance and excellent quality. A medium sized Muskmelon, nearly round in shape, with shallow netting on skin. The flesh is deep yellow and has a rich flavor. The constantly increasing demand for our strain of Tip-Top Melon Seed permanently establishes its superiority.

Pkt., 5c; oz., 15c; ¼ lb., 40c.

W A T E R M E L O N S

One ounce for 15 hills—4 to 5 pounds for an acre.

WHILE a sandy loam is preferable for Watermelons they can be grown on a loamy soil having a clay subsoil, provided it is deeply plowed. When ground is warm, plant 6 to 8 seeds in hills 6 to 10 feet apart each way and cover about 1 inch deep. When well up, thin out to 2 vines in each hill. Do not plant on land where Watermelons were grown before, as the vines exhaust elements in the soil, which makes succeeding crops defective.

Watermelons are slightly less subject to "bug" depredations and disease attacks than Muskmelons. At the same time they are more easily hurt by strong spray mixtures, and caution in the use of such mixtures is advisable.

Excel. Will produce more large, marketable melons under the same conditions than any of the other sorts of the long variety and its carrying and keeping qualities are unsurpassed. Fruit oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tender. Weight, 35 to 60 pounds.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Tom Watson. An extra long melon of attractive appearance, uniform in shape and quality. The luscious crimson flesh is "as sweet as honey" and of superb flavor. The average melon will weigh 30 to 40 pounds and measure about 28 inches long and about 12 inches in diameter. It is very prolific.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Kleckley's Sweet. While the skin is perhaps too thin to admit of the melons being shipped very great distances to market, it is most desirable to plant for home use or local markets. The melons themselves are very large, oblong in form, with dark green skin, thin rind, which is very brittle. Flesh is bright scarlet, with solid heart, deliciously crisp.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00

Irish Grey. The size is uniform and large. Color of rind yellowish-gray and almost as tough as that of the Citron. Ripens earlier than Watson and will keep in good condition for a long time after picking. Very prolific and a good shipper. A fine market sort.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Cole's Early. A very early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Fine for the home garden.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Jumbo or Shakers Blue. Melons grow very large and are a round oval in form, from 16 to 18 inches long by 12 to 15 inches in diameter. The skin is dark green, striped with narrow bands of a lighter green, and when ready for shipping the melons are seemingly of a solid dark green color. Flesh is red, the heart large with no core, and the flavor superb.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

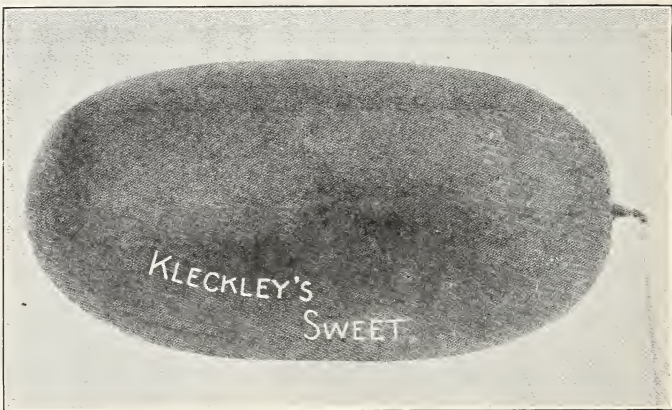
Fordhook Early. The fruits are of good size, rather short and blocky in form, with large diameter. Skin dark green, occasionally with faint stripes of lighter green. Rind quite thin, but skin tough, making an excellent shipping variety. Flesh bright red, crisp, sweet, and of splendid quality.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Kolb Gem. Probably the most extensively grown for long distance shipping of any Watermelon ever originated. The flesh is bright red and of good flavor. Melons large, of very thick, oval, blocky form; skin handsomely marked in stripes of light and dark green.
Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Dixie. A cross between the Kolb Gem and old-fashioned Mountain Sweet, surpassing the former in earliness, productiveness and shipping qualities.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Gray Monarch. Large size; long in shape; the skin is a mottled gray; flesh bright crimson and of sweet, delicious flavor. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Kentucky Wonder. Shape oblong, attaining a good size; skin dark green and beautifully marked. Flesh a beautiful rich scarlet color, crisp, rich, sugary, always firm and solid.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.



Halbert Honey. A very sweet, long, dark green variety. Fruit averages 18 to 20 inches long, has a thin rind and deep red meat of delightfully delicious flavor; seeds white. One of the finest for the home garden.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Florida Favorite. Oblong in shape, growing to large size; rind dark, with light green stripes; flesh light crimson, crisp and deliciously sweet.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Sweetheart. Flesh bright red, solid, and tender.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Dark Icing, or Ice Rind. A very solid sort with a thin rind, and possesses most delicious flavor.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Blue Gem, or Iceberg. Grows large. Flesh a beautiful shade of pink, darker than Kolb's Gem, heart large and flesh extends close to the outer skin, sweet and delicious. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Long Light Icing. The skin is a mottled gray color, shape long, flesh bright crimson and sweet.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Peerless, or Ice Cream. Of medium size; skin light mottled green; flesh scarlet.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Rattlesnake, or Gypsy. Fruit large, oblong, striped; flesh red.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Colorado Preserving Citron. Flesh white and firm.
Pkt., 5c; oz., 10c; ¼ lb., 30c.

MUSTARD

One ounce will sow 100 feet of drill.

A small, pungent salad used like Cress. The seed is also used for flavoring pickles, pepper sauce, etc. For salads sow thickly in shallow drills, 6 inches apart, or in frames or boxes during the winter, where frost can be partially excluded. Successive sowings can be made every week or two. To grow seed, sow in April, in rows 1 foot apart, and thin out to 3 inches apart when 2 inches high.

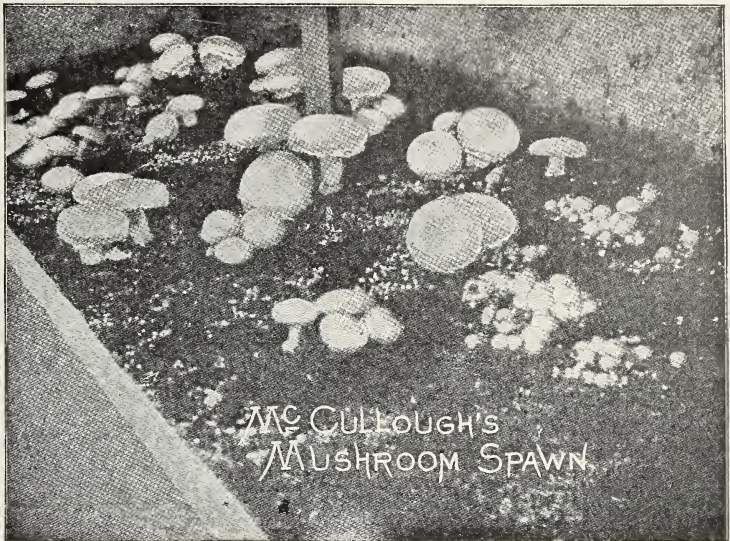
White English. Best for salads.
Pkt., 5c; oz., 10c; ¼ lb., 25c.

Chinese, or Giant Southern Curled. The large leaves, which often measure 14 inches, are ready for use in about six weeks after sowing. Leaves are eaten boiled, like Spinach. Pkt., 5c; oz., 10c; ¼ lb., 25c.

MUSHROOM SPAWN

One pound of Spawn is sufficient for a bed 2 x 6 feet.

MUSHROOMS can be successfully and profitably grown during the winter and spring months in frames under greenhouse benches, in the open fields, or in cellars or out-houses. To cultivate mushrooms successfully does not always require extensive experience. Some care is necessary, however, in the selection of materials, and in forming the beds, but the matter of securing and maintaining the proper temperature in the room and in the beds needs close attention, for success depends very much upon this point. Mushrooms may be grown in a great variety of situations—a dark room, cellar, stable or elsewhere. Any place in which an even temperature of about 50 to 60 degrees can be kept, is suitable. For material for the bed, use fresh horse manure, free from straw or chips, and good loamy soil. Some growers use the manure mixed with loam, after first having well fermented it by alternately piling it and mixing for a few weeks, but it is undoubtedly better not to allow the manure to heat much before forming a bed. Use one-fourth to one-third loam, the rest manure. Mix very



thoroughly and upon a dry, firm bottom make the bed of this mixture, about four feet wide and of any desired length. Build it up evenly, press it down firmly, and leave it about a foot high. It will shortly begin to heat. Use a thermometer to thrust into the bed and note the temperature. When the heat has partially subsided, leaving a temperature of 80 degrees, put in the spawn. Pieces from the size of walnuts to that of eggs are placed in the bed about a foot apart, deep enough to cover them well, and the manure pressed down. Let it remain thus ten or twelve days, then cover with two inches of fresh loam, and make this moderately firm. The bed is finished by covering all with four or five inches of straw or other litter. Watering is not necessary, unless the surface of the bed gets very dry; in this event moisten freely with water at a temperature of about 90 degrees. In gathering the crop, do not cut, but twist them off carefully, filling up the holes carefully with loam to keep insects from the roots. In six or eight weeks from spawning the beds, mushrooms should appear.

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh Spawn of the best manufacture.

English Milltrack Mushroom Spawn. Our celebrated English Milltrack brand (made by the best maker in England specially for our trade) has gained an enviable reputation among critical growers for its uniform good quality, and can be thoroughly relied upon to produce a good crop of the best mushrooms. Commercially, it is more planted than any other Spawn. It comes in pressed bricks weighing about 20 ounces. They are broken into pieces the size of a walnut and put sidewise in the beds 10 to 12 inches apart each way. Prices, by express—customer to pay charges. Per brick, 25c; per lb., 20c; 10 lbs., \$1.75; 100 lbs., \$15.00. By mail, 30c per brick, postpaid.

American Made Pure Culture Mushroom Spawn. A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express—customer to pay charges. Per brick, 30c; 5 bricks, \$1.25; 100 brick, 30c; per lb., 20c; 10 lbs., \$2.00; 100 lbs., \$16.00. By mail, 35c per brick, postpaid.

Mushroom Culture. (Wm. Falconer.) The most practical work on the subject; \$1.60.

Treatise on Mushroom Culture. 10c, or given with an order of 10 lbs. of Mushroom Spawn.

Special prices will be given to those who use Mushroom Spawn in quantity.

OKRA, OR GUMBO

One ounce of seed for 300 plants.

This vegetable is extensively grown for its green pods, which are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Sow the seed thickly in rich ground, about the middle of May, or when the ground has become warm, in drills 3 feet apart, 1 inch deep; thin to 12 inches apart in drills. Culture otherwise much like Corn.

Perkins Mammoth. An exceedingly handsome variety of Okra, which is a great improvement upon other varieties heretofore grown. The pods grow 4 to 5 inches in length and are very tender, long, slim and of a beautiful deep green color. The habit of growth of plant is dwarf, and it is very productive. Pkt., 5c; oz., 10c; ¼ lb., 25c.

White Velvet. Distinct in appearance; the large pods are perfectly round, smooth, an attractive velvety white, of superior flavor and tenderness. Plants dwarf, of compact, branching growth; very prolific. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Dwarf Green. The best of the dwarf sorts. It makes a stocky growth of plant and is very productive. The pods are long, slender and of a light green color. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Long Green. Taller than the preceding, bearing long, ridged pods. Highly esteemed in the South. Pkt., 5c; oz., 10c; ¼ lb., 25c.



Okra or

Gumbo

ONION SEED

One ounce for 300 feet of drill. 3 to 4 pounds for one acre. Onion seed for sets, 20 to 30 pounds per acre.

FOR sets, drill the seed thickly as early as possible in the spring. As soon as the tops dry off in the summer, remove to a dry, airy place. May also be grown to full size the first season by sowing thinly in drills one foot apart and one-quarter inch deep, in March or early April, thinning to three or four inches apart.

By sowing in frames in February or March and transplanting in April, onions of immense size can be obtained. For this purpose the Southport Globe varieties (white and yellow) and Prizetaker are usually preferred. Onions delight in a strong, rich, deep loamy soil, and succeed well if grown successive years on the same ground.

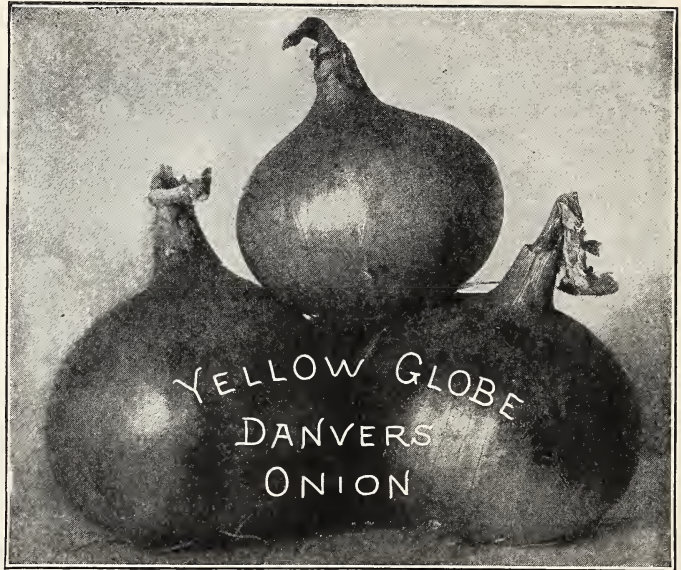
Yellow Globe Danvers. The best onion for general use. A standard sort and one of the most desirable; an excellent keeper and very productive. Our strain of this variety is the true globe shape, and not of the flat type. Onion growers throughout the country prefer this type of onion to all others, and it is with this in view that the bulbs from which our seed is grown are especially and carefully selected as to shape. It is the best paying onion that is grown for general crop, and has been the leading variety for years.
Pkt., 5c; oz., 20c; ¼ lb., 60c.

Prizetaker. The large size and handsome appearance of this Onion makes it equally desirable for the home garden or for market. It is strictly "fancy" and will be found on fruit stands during the fall, where it is sold as Spanish Onion. The true Prizetaker is globe-shaped, has pale-yellow skin and white flesh, which is very mild and of delicate flavor. No sets are required, as the large Onions are grown the first year from seed sown during early spring.
Pkt., 5c; oz., 25c, ¼ lb., 75c.

Southport Yellow Globe. A very large, handsome, globular-shaped, yellow variety, very productive, of mild flavor. The outer skin is beautiful, pale yellow; the bulbs are of a beautiful globe-shape and good keepers. Pkt., 5c; oz., 20c; ¼ lb., 65c.

Yellow Danvers. Bulb of good size and flat, the standard yellow onion for market or home use, being both early and an enormous yielder as well as good keeper.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

Yellow Dutch, or Strasburg. A good keeper and well flavored; bright straw colored skin and somewhat



flattened shape. The Onions grow to a good size and are very mild. This variety is largely grown for sets on account of its excellent keeping qualities.
Pkt., 5c; oz., 15c; ¼ lb., 50c.

Large Red Wethersfield. Grows to full size the first season from seed. The Onions are large, flat in shape, with skin of a purplish-red color and flesh of a purplish-white color, rather strong-flavored; an excellent keeper.
Pkt., 5c; oz., 20c; ¼ lb., 60c.

Southport Red Globe. Beautiful globe-shape; of medium size, a good keeper and of superior quality. This variety is very popular in some sections.
Pkt., 5c; oz., 25c; ¼ lb., 75c.

White Portugal, or Silver Skin. This variety is one of the leading white sorts. The bulbs are flat in shape and mature early. Largely used for growing sets.
Pkt., 5c; oz., 20c; ¼ lb., 65c.

Southport White Globe. Pure white color, mild flavor. A good keeper and very productive. It is best to dry these Onions in a shady place, where they will get plenty of air. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Mammoth Silver King. A large, flat variety. Specimens have been grown to weigh as high as 4 pounds. Skin pure white and flesh tender. Pkt., 5c; oz., 35c; ¼ lb., \$1.15.

White Queen. A rapid-growing variety of mild flavor, pure white, and splendid for pickling.
Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

White Barletta. An extra early small white Onion; similar to White Queen. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

Early White Bunch. Used largely for pulling when young, as a bunch Onion. If left to mature, grows to good size; very showy. Pearly white skin. Flesh of good quality and a good keeper. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

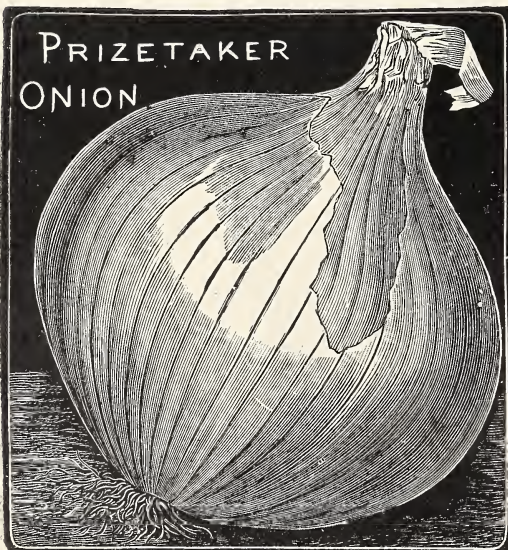
Early White Welsh Onion. The best kind for green onions, forms no bulb. Plants can be propagated from seed or divisions, a great saving in cost over top sets.
Pkt., 5c; oz., 35c; ¼ lb., \$1.25.

ONION SETS

IN private gardens the cultivation of the family supply of Onions from sets has much to recommend it. The amount of labor involved is less, the danger of loss from maggots and other insects is considerably reduced, the crop is surer to grow, and is ready for use weeks in advance of that grown from seed. On a small scale where the cost of sets is not a serious item we urge customers to use them. In fact, the ideal way is to use both sets and seed—the sets for use in the spring and summer, and seed to grow bulbs for winter keeping.

Onion Sets should be planted out as early in the spring as the ground is dry enough to work; plant them in rows 12 inches apart, with sets 2 inches apart in the row. We handle sets of the standard varieties.

Prices subject to market changes.
Lowest market price will be given upon application.



PARSNIP

One ounce for 200 feet of drill.
4 to 5 pounds for an acre.

SOW seed early in spring, in deep, rich soil in drills. Scatter the seeds thinly and cover evenly with a rake. After the appearance of the plant, the soil must be stirred frequently until the leaves cover the ground. The seed is slow to germinate, and is frequently a long time in coming up; will vegetate sooner by steeping 6 to 12 hours in a liquid manure, diluted with water, and mixed with sand before sowing. When well up, thin out to 5 or 6 inches apart in the rows. Unlike Carrots, they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as required.

Large Sugar, or Hollow Crown. The best variety; roots long, very smooth, white, tender, sugary and of excellent flavor. This strain was made by careful selection of roots growing to an ideal shape and having the distinct hollow crown.

Pkt., 5c; oz., 15c; ¼ lb., 50c.

Student, or Guernsey. A good half-long variety, smooth, sweet and of delicate flavor. Pkt., 5c; oz., 15c; ¼ lb., 50c.



Large Sugar, or Hollow Crown



Norwood

PARSLEY

One ounce to 200 feet of drill.

SOW thickly early in April, in rows one foot apart and one-half inch deep; thin out the plants to stand six inches apart in the rows. The seed is of slow germination, taking from three to four weeks to make its appearance, and often failing to come up in dry weather. To assist its coming up quicker, soak the seed a few hours in warm water or sprout in damp earth, and sow when it swells or bursts. For winter use, protect in frame or light cellar.

Norwood. Fine curled leaves of rich, dark green, compact growth; finest quality. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Extra Double Curled. Beautifully crimped and curled. Pkt., 5c; oz., 10c; ¼ lb., 35c.

Moss Curled. Fine for garnishing. Pkt., 5c; oz., 10c; ¼ lb., 35c.

Plain. A hardy variety having dark green leaves which are not curled. It is a little stronger in taste and much esteemed for flavoring soups and stews, as well as for drying. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Hamburg Turnip Rooted. The fleshy root resembles a parsnip and is used for flavoring soup, stews, etc. Pkt., 5c; oz., 10c; ¼ lb., 35c.

PEPPER

One ounce of seed for 1,500 plants.

SOW early in the spring in hotbeds, if possible, and transplant to the open ground when the weather is favorable, or sow in drills in warm, mellow soil late in the spring, and then thin out so as to stand 18 inches apart.

Golden Dawn. Of same shape and size as Large Bell, but of more delicate flavor; color yellow. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Celestial. Fruit conical in shape, one to two inches long; green from the blossom, turning alternately to lemon, golden and scarlet. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Chinese Giant. Flesh is thick, mild and very sweet. Largest pepper grown. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

Ruby King. Large size, ruby red pods; flesh exceedingly thick, sweet and mild. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Spanish Monstrous. Early and productive; flesh very sweet and mild. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

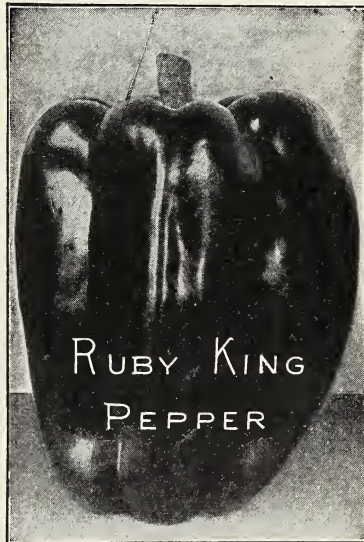
Sweet Mountain. Similar in shape to the Bell, but grows larger; rind thick, tender and fleshy. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Large Bell, or Bull Nose. Large and early; rind very thick; color glossy red; flavor mild and pleasant. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Pimento. The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Long Red Cayenne. From 3 to 4 inches long, bright-red color, very productive and hot. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Small Cayenne, or Red Chili. Pods 1½ to 2 inches long, very hot; used for making pepper sauce. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.



PEANUTS

Shell the nuts and plant in April or May in drills 2 to 2½ feet apart, dropping 2 seeds 12 to 15 inches apart in the drills.

Spanish. The earliest variety grown; pods are small, but remarkably solid and well filled. Pkt., 5c; ½ lb., 20c; per lb., 30c.

Mammoth Virginia. The most profitable variety to grow as a market crop, though not so early as Spanish; more easily cultivated; very erect stems and upright foliage with large pods and kernels. Pkt., 5c; ½ lb., 20c; per lb., 30c.

GARDEN PEAS

One pound will plant about 50 feet of drill—90 to 120 pounds per acre.

PEAES succeed best in light, dry, loamy soil. Early and Dwarf sorts require richer soil than the late varieties. If manure is used, let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early, smooth, round sorts as early in spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if the ground is cold, and must be planted later. From the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew. Discontinue then until August, when a planting of extra early or early sorts will often produce a good crop. Sow the seed in single drills, three feet apart for dwarf sorts and four for tall sorts, or in double drills six or eight inches apart, one inch apart in the drill, and not less than four inches deep, since deep planting prevents mildew and prolongs the season. Cultivate well, and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they will then cease bearing. All kinds of Peas do best when supported with brush or wire.

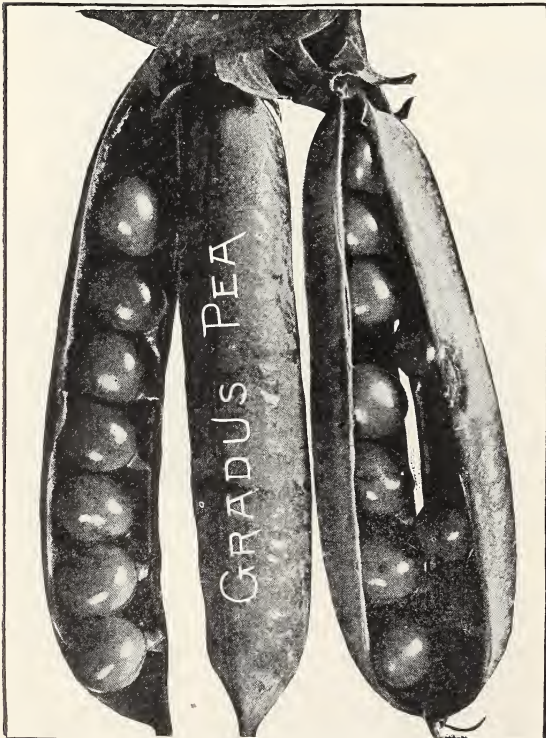
All varieties of Peas, pkt., 10c. All packets and half pounds of Peas are sent postpaid; for larger quantities by mail, see "Postage" page 1.

Early Varieties

McCullough's "Maud S" The earliest and most prolific Pea known. The pod is of a dark green color, of a full, round shape, and of strong texture which especially fits it for shipping long distances. For a late fall crop it has few equals, and is the market gardener's favorite for all seasons. The far northern point at which our Peas are grown renders them almost proof against cold, and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this Pea unequalled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.25.
Market Surprise. This new variety is another addition to the extra early type of Peas, but pods are larger and contain 6 to 8 large peas of excellent quality. The seed resembles the "Maud S" in color, while it is not quite as smooth nor yet is it a wrinkled Pea. We urge all growers to give this variety a trial and as the supply is limited we can only offer in small quantities this season.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.25.
Alaska. A wonderful early, smooth, blue Pea; vines slender; pods very dark green, about three inches long, well filled with small, smooth, blue-green peas. The earliness, uniformity in ripening and deep color render



it a desirable market and canning pea; height, 2 feet.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.
Laxtonian. The pods of Laxtonian are very large, and are produced on a low-growing, sturdy vine, without support of any kind. The flavor is just as rich and good as any of the later varieties. It is ready for use about a week later than the very early sorts, and is incomparably good in quality. Pods and plant are rich, dark green in color.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.
Little Marvel. As early as American Wonder and Nott's Excelsior, the pods are larger and the vines produce a heavier crop. For quality and productiveness it is way ahead of everything in the way of extra early wrinkled peas. It is dwarf, growing about 15 inches high, and the plants are very productive, bearing many twin pods, which are dark green in color.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.
American Wonder. This variety stands unrivaled in point of flavor and quality. It is dwarf and robust in habit, growing from 10 to 15 inches in height, according to the soil.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.
Nott's Excelsior. A dwarf wrinkled Pea of the highest excellence. The pods average three inches in length and are well filled with peas of large size and unusually sweet flavor; height one and one-fourth feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.
Premium Gem. An improved Little Gem Dwarf, green wrinkled, very prolific, fine flavored, large pods, excellent either for market or home use; height, one and one-half feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.
Gradus or Prosperity. This remarkable Pea is not only large and of the best quality, but is within two or three days as early as the small, round, extra early sorts. Gradus is a wrinkled Pea, growing about 30 inches high; the pods are of a bright green color, measuring 4 inches or more in length, as large as Telephone, well filled with luscious peas, 8 or more in a pod. The peas are of the highest table quality and retain, in a remarkable manner, their color and attractive appearance after cooking. Make the earliest sowing in the warmest spot in the garden.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.
Thomas Laxton. A cross between Gradus and one of the extra early sorts. It ripens within a day or two of the earliest round varieties, and is extremely productive. The pods are very large and contain 7 or 8 large-sized wrinkled peas of the finest flavor. It is darker colored than the Gradus and harder in constitution; height, three feet.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.
WE HANDLE PEAS BY THE CARLOAD—Write for Special Prices If You Use Them in Quantity

GARDEN PEAS—Continued

All varieties of Peas, Pkt., 10c. All packets and half pounds of Peas are sent postpaid; for larger quantities by mail, see "Postage," page 1.

Second Early and Main Crop

Buttercup. The pods of this variety are long, rounded or curved at the end and well filled with large peas, which are sweet, tender and of excellent flavor. Vines make a rapid growth to about two feet in height and produce a large crop of pods, ready for use in about 65 days from time of planting.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Dwarf Telephone or Daisy. A midseason variety; vines dwarf and produce large, bright green pods containing peas of finest quality.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Abundance. Pods containing 6 to 8 large wrinkled Peas. It ripens about one week after the earliest kinds. A feature of this variety is its remarkable tendency to branch out at the roots, and for this reason the seed should be planted thinly; height, 1½ feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.25.

Advancer. This Pea is used very extensively by market gardeners on account of its productiveness, the fine appearance of its pods and its exceedingly fine flavor. It is a wrinkled variety, grows about two feet in height, but needs no brushing as it stands up very strong itself. Has broad, long pods, which are abundantly produced and well filled to the end.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.25.

Admiral Dewey. The largest podded Pea yet introduced. Height, 3½ feet; pods a rich, dark-green color, frequently 6 inches long, beautifully shaped. Peas large, tender and of fine flavor.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Improved Stratagem. A favorite with market gardeners and for the kitchen garden. Strong vines, immense pods, large peas, heavy cropper. The vines are strong, vigorous and covered with immense pods, many of which measure 5½ inches in length and containing as high as 10 large, richly flavored, wrinkled peas. Vines very strong and needing but slight support. Height, 2 to 2½ feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Telephone. The favorite late variety; extra large pods. This Pea has proven to be a most valuable introduction. Vines large, leaves coarse, height about 4 feet. The pods are very large and filled with immense peas, which are largest of any. Tender, sweet and of splendid quality and flavor. A valuable feature of this variety is that it continues in bearing for an extremely long time. The stock we offer has been selected with every care, and will give satisfaction to the most exacting grower.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Alderman. A new Pea like the Telephone, only better. The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded, summer varieties. The haulm grows five feet in height and is of a rich, dark green coloring, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Everbearing. A prolific and continuous-bearing Pea, giving it special value for both summer and autumn use; pods 3 to 4 inches long, containing 6 to 8 large, wrinkled peas, of rich flavor, sweet and tender. Three feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.25.

Improved Champion of England. One of the best known of the older varieties; a tall-growing, green, wrinkled marrow; quality unsurpassed; pods medium; peas large. Five feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Long Island Mammoth. A strong grower, producing mammoth pods containing 10 to 12 large peas. When cooked they are a deep, dark green color and fine flavor. Three and one-half feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Dwarf Sugar. Edible pods. Can be used in a green state like string beans. Height, five feet.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.50.

Mammoth Luscious Sugar. This variety grows to a height of five feet and bears profusely, long, broad, light green pods. If picked when about half grown, broken and boiled like string beans and served with butter sauce, they make a luscious dish.
Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25.

Prices subject to market changes.

PUMPKIN

One ounce for 25 hills.

THEY are generally planted in cornfields, but they can not grow as large or fine as if the vines were not shaded. A good plan would be to plant a few seeds in the potato patch, as they are less apt to be injured by the crop of potatoes than the corn.



CALHOUN PUMPKIN

Calhoun. The outside is a creamy brown; the inside flesh is a deep salmon yellow; thick and fine grained, and the seed cavity very small. It cooks very yellow and makes pies of high, rich color.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Small Sugar. Fruit of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange-yellow, flesh very sweet. This should be more generally grown, as it is really one of the best for pies.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Cashaw Crook-Neck Striped. Grows to a medium size; flesh light yellow, and is the best variety for table use.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Golden Cashaw. Beautiful golden-orange color; an improvement on the old Cashaw.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Tennessee Sweet Potato. Medium size, pear-shaped, a little ribbed, color creamy white, sometimes lightly striped with green.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Japanese Pie. Is very productive, ripens early, of medium size, good keeper, and weighs 15 to 20 pounds each. The flesh is a rich salmon color.
Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.50.

Large Cheese. An excellent keeper, color bright orange.
Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Mammoth Tours. A productive French variety, which grows to an immense size.
Pkt., 5c; oz., 15c; ¼ lb., 50c; per lb., \$1.50.

Kentucky Field. Good for cooking purposes and for feeding stock. Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 50c.

Connecticut Field. A large, yellow variety.
Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 70c.

RADISH

One ounce to 100 feet of drill—8 to 10 pounds for an acre.

SOW early and often. In good, warm, fibrous loam; especially if quite sandy, summer Radishes will make a crop in 4 to 6 weeks from sowing. The soil should be well prepared, and fertilizers may be used freely. Have the rows a foot apart, and sow just seed enough so that they will not require thinning. Any little spot that becomes available during summer may be utilized for planting Radishes. The short or turnip-rooted sorts are quickest and easiest to grow, and good for forcing also. On greenhouse bench or in frames the rows need not be more than 4 inches apart. Sow winter Radishes in July and August. They grow best in the cooler Autumn weather. Take them up before severe freezing and store in sand in the cellar or in a pit, where they will keep tender and crisp all winter.

Special prices given to market gardeners.

**McCullough's
Cincinnati Market**

We were the introducers of this remarkable radish, which has proven one of the best long Radishes ever offered. It is largely grown by the Cincinnati market gardeners. The tops are so small that the radishes may stand touching each other in the rows. They grow perfectly straight and smooth and from six to seven inches in length. Their attractive, glossy, scarlet skin is very thin and the flesh crisp and brittle, and of delightful pungent flavor. It is the finest Long Red Radish for forcing and out-sells any other that is put in competition with it on the market. Being long standing, it is also an extra fine sort for the home garden, entirely exempt from any tendency to become pithy or hollow.

Crimson Giant Forcing. This variety is suitable both for forcing or early planting out of doors. A remarkable feature of this Radish is that it will grow double the size of other round red forcing Radishes and still remain solid. The ordinary forcing Radish, after growing to the size of 2 inches in circumference becomes pithy, while the Crimson Giant will grow to 6 inches in circumference, and still remain solid and juicy, free from all signs of becoming soft.

Non Plus Ultra. The smallest topped and earliest forcing Radish. Roots small, round; deep rich scarlet; very crisp and tender, white flesh. . . . Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Rosy Gem. We have a very clean and beautiful strain of this popular sort. It is extremely early, maturing in 25 days, and is largely used for growing both under glass and outdoors. It is round, bright scarlet and has a handsome white tip.

Earliest White Globe Forcing. The earliest white olive-shaped Radish in existence, beautiful, transparent ivory-white, very small root, small top; flesh white, tender and crisp. It is particularly adapted to forcing in greenhouse or hot-bed, also does well in open ground. . . . Pkt., 5c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.



Cincinnati Market



White Icicle

Early Scarlet Globe. One of the earliest and best sorts for forcing; flavor mild; crisp and juicy; also good for garden culture.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Early Scarlet Turnip. A small top variety, of quick growth, mild and crisp. It is a standard sort for early planting in the open ground.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Scarlet Turnip, White Tipped. Bright scarlet color, gradually fading off to pure white at the base, tender and mild in flavor, early.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Early White Turnip. An early, crisp, turnip-shaped Radish of pure white color.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

French Breakfast. A variety of quick growth, mild and tender, and one of the best for forcing. Oval form, scarlet, tipped with white.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Golden Globe. Perfect globe-shape, and golden-colored skin, quick growth, tender and brittle.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

**McCullough's
Norwood Long White** Fine long white Radish, with beautiful shape; skin and flesh pure white.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Long Scarlet, Short Top. Long, of a deep scarlet color; flesh white, crisp and of good flavor.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

White Icicle. The finest long, white Radish; the young Radishes are ready for use in 25 days, and continue to grow, fully retaining their crisp tenderness and mild flavor until quite large. These Radishes are transparent white, have small tops, allowing close planting, and are very crisp and brittle. A feature greatly in its favor is that it remains in good condition while growing for a long time, thus allowing a continuous pulling from the same planting.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

White Strasburg. Oblong, tapering shape, skin and flesh pure white, firm and brittle; fine for winter use.

Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Chartier. Half-long, of quick growth; color deep pink above and gradually blending into a pure waxy white to root. . . . Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

Radish—Winter Varieties

THESE grow to large size, have firm, hard flesh, and can be kept in good condition for use all winter by packing the roots in moist sand or soil in a cold cellar before the ground freezes in the fall. To have them crisp and free from woodiness the seed should not be planted until late in the summer, as if planted too early the roots would be apt to become hard and woody before it is time to put them away in the fall. A good rule to follow would be to sow the seed at the same time as you would plant seed for winter turnips, and where only a small supply is needed the seed could be sown in the same patch with the turnips.

- Black Spanish, Oval Shape.** A black valuable winter sort. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.
- Black Spanish Long.** Differs from the above only in shape. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.
- Celestial.** An all-season white Radish. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.
- Chinese Scarlet.** Half-long, fine winter sort, keeps well. Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.
- Mammoth White Winter.** A giant white-fleshed fall Radish. . Pkt., 5c; oz., 10c; ¼ lb., 30c; per lb., \$1.00.

R H U B A R B

One ounce will produce about 600 plants.

GOOD plants are easily grown in any good garden soil. Sow in April in drills 18 inches apart, and cover the seed with fine soil, pressing it down firmly. When the plants are strong enough, thin out to 6 inches. Keep soil loose and free from weeds. In fall or spring following, transplant to the permanent bed, 4 feet apart each way, in deep, warm and very rich soil. The more manure the better stalks. **Linnaeus.** Best sort for general purposes; early, large and tender. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Sow in April in drills 18 inches apart, and cover the seed with fine soil, pressing it down firmly. When the plants are strong enough, thin out to 6 inches. Keep soil loose and free from weeds. In fall or spring following, transplant to the permanent bed, 4 feet apart each way, in deep, warm and very rich soil. The more manure the better stalks. **Victoria.** Very large; later than Linnaeus. Pkt., 5c; oz., 20c; ¼ lb., 60c.

For Rhubarb Roots, see Vegetable Plants.

S A L S I F Y O R V E G E T A B L E O Y S T E R

One Ounce Will Sow 200 Feet of Drill

COMMONLY called Vegetable Oyster. The cultivation is precisely the same as directed for Parsnips, and it will keep over winter, in the ground where grown, in the same way as Parsnips, but should be taken up before it starts growing in spring. **Long White French.** Roots of medium size, white and smooth.

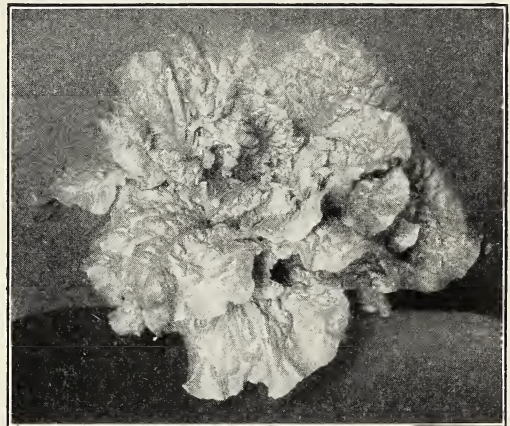
Mammoth Sandwich Island. This variety will average nearly double the size of the White French, and is of excellent quality. The best variety for market gardeners' use. Pkt., 5c; oz., 20c; ¼ lb., 60c.

S P I N A C H

One ounce for 100 feet of drill—10 to 12 pounds for an acre.

FOR spring and summer use, sow either broadcast or in drills as early as the ground can be worked. The fall sowing is the main one with our market gardeners, which is done from August to October and by careful attention they have it in marketable condition throughout the entire winter and spring.

If the land is dry the seed should always be rolled or trampled in, for if the soil is loose the hot air shrivels the seed, so that it will not germinate.



McCullough's Norwood Savoy

This variety is one of the most important for market gardeners, also one of the best for the kitchen garden. A quick-growing, round-seeded variety, producing in abundance, thick, dark green, slightly crumpled leaves; in large demand for either spring or fall sowing. Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 60c.

Bloomsdale Savoy. The hardest large Savoy leaved, curled and crimped, with thick, fleshy leaves; good for family and market purposes. Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 50c.

Longest Season. A distinct hardy variety, with large, thick, fleshy, dark green leaves, which are produced in great abundance in any season. It is slower in running to seed than any other variety now in use. Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 60c.

Victoria. A variety with heavy, broad, dark green leaves. Two or three weeks later than other sorts in going to seed. Valuable for spring sowing. Pkt., 5c; oz., 10c; ¼ lb., 20c; per lb., 60c.

Prickly Seeded, or Fall. The hardest variety, having smaller leaves; is not so productive as the above. Pkt., 5c; oz., 10c; ¼ lb., 25c.

New Zealand. Yields an abundance of the tenderest Spinach during the hottest months of the year, or in dry arid localities where the ordinary Spinach runs to seed. The seed is sown where the plants are to stand, in May, or earlier in a hotbed and transplanted, and the plants will continue to yield a supply of good leaves of excellent quality during the entire summer, requiring scarcely any attention. Pkt., 5c; oz., 15c; ¼ lb., 50c.



SALSIFY



NEW ZEALAND SPINACH

D.M.C.

SQUASH

One ounce of the Bush Varieties for 40 Hills, or of the Large-Seeded Kinds, 15 Hills. Two to Three Pounds of the Bush, and 3 to 4 Pounds of the Large-Seeded for an Acre.

IT IS useless to sow until the weather has become settled and warm. Light soils are best suited for its growth. Prepare hills for the seeds by incorporating 2 or 3 shovelfuls of well-rotted manure with the soil for each hill. Plant the bush varieties, from 3 to 4 feet each way, and the running sorts from 6 to 8 feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their rough leaves, leaving 3 or 4 of the strongest plants, after which cultivate same as Cucumbers.

To repel the Squash vine borer put a handful of tobacco dust close around the plants.

For Yellow-striped beetle and blight, spray early and often with Bordeaux Arsenate of Lead Mixture.

Summer Varieties

Mammoth White Bush. The best early variety for market or shipping. It grows to a large size; scalloped like a patty-pan.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Early Yellow Bush. An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored.

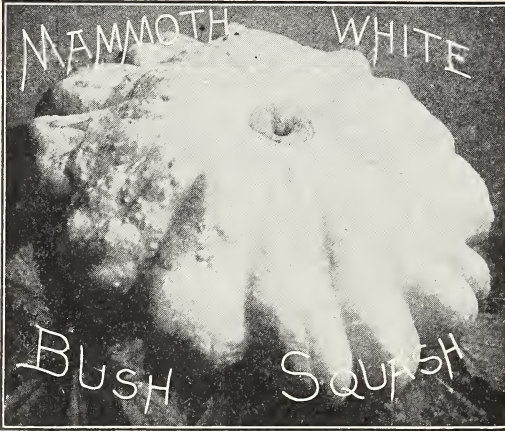
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Summer Crook-Neck. Covered with warty excrescences; color bright yellow; shell very hard when ripe.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Vegetable Marrow. Skin a greenish-yellow, flesh white, grows 9 to 18 inches long.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.



Fall and Winter Varieties

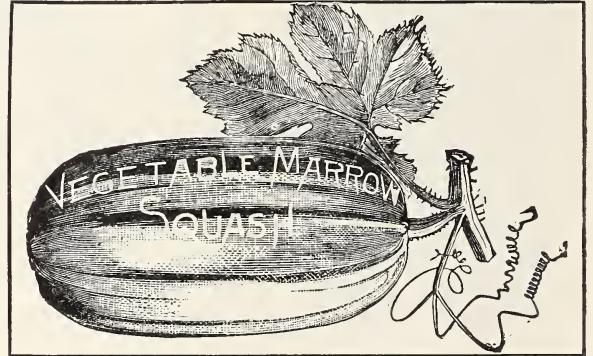
Hubbard. Standard Winter Squash; grown more extensively than any other late variety; color dark green; shell extremely hard; flesh dry, fine grained and sweet; excellent keeper

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Warted Hubbard. This strain without doubt, grows the finest Hubbard in existence. The wartiness indicates a very hard shell, which is one of the features in a long-keeping Squash; it also denotes extra choice quality—the harder and more warty the shell of a Hubbard Squash is the more delicate and sweet the flesh will be found to be.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Golden Hubbard. Fruit is of the same shape as Green Hubbard, and warted, but average one-half to one-third smaller in size. They are earlier in season but keep in fine condition through the winter. Flesh is deep golden-yellow, fine grain'd and delicious.



The skin is deep orange-yellow and very attractive.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Marblehead. Resembling the Hubbard, but of a lighter color, and is remarkable for its sweetness, dryness and delicious flavor, as well as its keeping qualities.

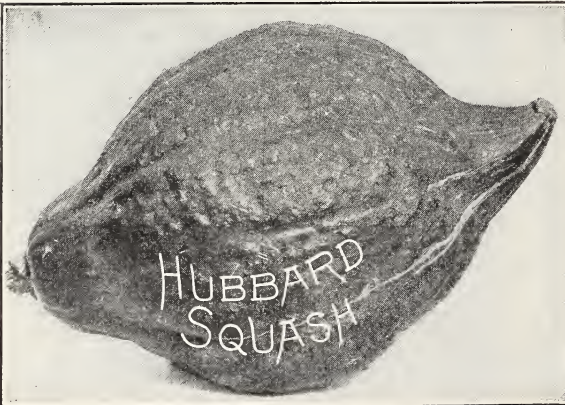
Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Mammoth Chili. Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Boston Marrow. A popular winter variety; quality unexcelled.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

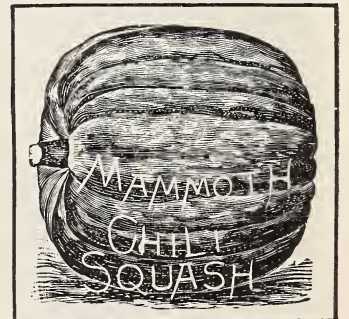


Delicious. Resembles the old Hubbard, having a dark olive-green hard shell, weight from 5 to 10 lbs. For table use it can not be excelled, the flesh being remarkably thick, fine-grained, sweet and of rich flavor.

Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Fordhook. A winter Squash of great merit. Of handsome bright yellow color outside and straw-yellow within. The flesh is dry and sweet.

Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.



TOMATO

One Ounce of Seed Will Produce About 3,000 Plants.

SOW in a hotbed, green-house or window in a sitting room, where night temperature is not less than sixty degrees, about the first week in March, in drills five inches apart and half an inch deep. When the plants are about two inches high they should be set out in boxes three inches deep, four or five inches apart, in same temperature, or removed into small pots, allowing a single plant to a pot.

They are sometimes transplanted a second time into larger pots, by which process the plants are rendered more sturdy and branching. About the middle of May, the plants may be set in the open ground. They are planted for early crops on light, sandy soil, at a distance of three feet apart, in hills in which a good shovel-ful of rotted manure has been mixed. On heavy soils, which are not suited for an early crop, they should be planted four feet apart. Water freely at the time of transplanting and shelter from the sun a few days until the plants are established. For late use, sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost, and ripened under glass. By training the tomato vines on trellises or tying to stakes, they will increase in productiveness, the fruit will ripen better, and be of finer quality.

Acme. Very early and productive; fruit medium sized, and of a dark, rich red, slightly tinged with purple; very solid and smooth. . . Pkt., 5c; oz., 30c; ¼ lb., 85c.

John Baer. An early tomato of recent introduction. Not only produces large, bright red, solid Tomatoes early in the season, but continues bearing until frost. With us the vines grow about six feet high, fruit ripens right up to the stem and has a mild and deliciously sweet flavor. Fruit is solid and makes a good shipping Tomato. Having tried it out we are prepared to recommend it either to the Amateur or Market Gardener. Pkt., 5c; oz., 40c; ¼ lb., \$1.35.

Earliana. The earliest smooth tomato, of good size and flavor. Tomatoes are deep scarlet and grow closely together in clusters of five to eight, all of medium size, averaging 2 ½ inches in diameter, they are smooth and solid, quite thick through and free from rough ribs or cracks. The flesh is deep red, with solid center and small seed cells, slightly acid flavor. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

Detroit. Both the Amateur and the Market Gardener will be interested in this new variety. As a second



John Baer

early purple tomato the Detroit is equal if not superior to any other second early purple tomato yet introduced. This variety matures medium early in season and bears uniformly large, handsome, smooth, globe-shaped fruit of excellent quality through the long season, yielding in the aggregate more marketable tomatoes than any other variety we know. In consequence of its firmness, is also a desirable variety for shipping. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

Bonny Best. Fruit of good size, bright red color, smooth, solid and uniform. A second early and very productive. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

June Pink. This variety closely resembles the Earliana in habit of growth and shape of fruit, but the color is pink. The fruit grows in clusters and begins to mature very early; measures 3 inches in diameter and is of excellent quality. As a rule it continues bearing until vines are killed by frost. . . Pkt., 5c; oz., 35c; ¼ lb., \$1.00.



The plants are strong and vigorous, bearing an abundance of large, smooth fruit of a beautiful purplish crimson color, which is produced in clusters of four to six; is large, of perfect shape, and retains its size until late in the season. The flesh is remarkably thick, firm and solid and of the finest quality, with few seeds. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

Trucker's Favorite. One of the finest large-fruited purple sort. The plants are of strong growth and productive. The tomatoes are of large size, deep through, very smooth and regular, free from cracks, solid, meaty with small seed cells and fine flavor. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

Dwarf Champion. Of dwarf, stiff, distinct, upright growth, scarcely needing support; early and prolific; smooth, medium-sized fruit of pinkish purple color. Pkt., 5c; oz., 35c; ¼ lb., \$1.00.



McCullough's Norwood

Tomatoes—Continued to next page.

TOMATO—Continued

Dwarf Stone. Foliage heavy and a rich dark green. The fruit is produced in clusters of 3 to 5, averaging 4 inches in diameter, and 2½ inches in depth, bright scarlet color, smooth and regular.

Pkt., 5c; oz., 35c; ¼ lb., \$1.00.

Cincinnati Purple. A valuable variety, especially adapted for canning and shipping. It is very large; color a dark purplish red.

Pkt., 5c; oz., 30c; ¼ lb., 85c.

Beauty. Rich, glossy crimson, with a slight purple tinge. The fruit grows in clusters of four to five, is of large size, very smooth, and retains its character until late in the season.

Pkt., 5c; oz., 30c; ¼ lb., 85c.

Globe. A beautiful globe-shaped variety. Large size, smooth, firm fleshed, few seeds. Ripens evenly; color, a beautiful glossy rose, tinged purple.

Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

The Stone. Fruit very large and deep; bright scarlet; smooth; ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed; of finest quality.

Pkt., 5c; oz., 25c; ¼ lb., 75c.

Matchless. A standard main crop, bright red variety, producing enormous crops of finest scarlet fruit.

Pkt., 5c; oz., 25c; ¼ lb., 75c.

Buckeye State. The large tomatoes are borne in immense clusters of four to eight. Color rich, glossy crimson, with a slight purple tinge.

Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

Crimson Cushion or Beefsteak. Is very large, round and regular; bright scarlet skin, solid flesh of best quality, seed cells small. Plants are very prolific and of fine appearance.Pkt., 5c; oz., 40c; ¼ lb., \$1.25.

Ponderosa. One of the largest fruited tomatoes. The fruit is of a purplish pink color, very solid and ripens early; nearly seedless, with firm, meaty, rich red flesh; unequaled and delicious either sliced, cooked or canned; a healthy, luxuriant grower and continuous yielder from early in the season until frost.

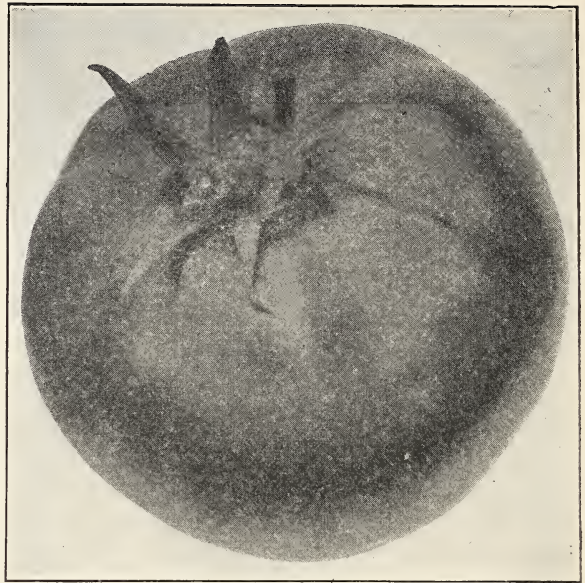
Pkt., 5c; oz., 40c; ¼ lb., \$1.35.

Comet Forcing. Superior red variety for forcing under glass. Rich scarlet-red; fruit is solid, round, smooth; strong grower; exceedingly heavy cropper; medium sized fruit; flavor excellent.

Pkt., 5c; oz., 40c; ¼ lb., \$1.35.

Golden Queen. Large, smooth fruit, of a beautiful golden color; quality excellent; attractive for slicing, and mixing with sliced red sorts.

Pkt., 5c; oz., 30c; ¼ lb., \$1.00.



Cincinnati Purple

Small-Fruited Tomatoes

THE following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:

Pear-Shaped. A small preserving tomato, of pear shape and bright red color.Pkt., 5c; oz., 40c.

Pear-Shaped, Yellow. Similar to the above in shape; but of bright yellow color.Pkt., 5c; oz., 40c.

Red Cherry. Small, round fruit, resembling cherries; used for preserves.Pkt., 5c; oz., 40c.

Yellow Plum. Bright lemon-colored; oval; small sized; used for preserves.Pkt., 5c; oz., 40c.

Strawberry, Winter Cherry or Husk. Low, spreading plants bearing yellow fruit ½-inch in diameter, surrounded by a husk; for preserving.Pkt., 5c; oz., 40c.

Special Prices given to Market Gardeners and Truckers.

TOMATO PLANTS are a specialty of ours.
See Vegetable Plants.

TOBACCO

THE seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring on the ground intended for the seed-bed, then dig and thoroughly pulverize the earth and mix the ashes, after which the seed may be sown and covered very lightly.

Connecticut Seed Leaf. A long leaf, fine in texture.Pkt., 10c; oz., 50c.

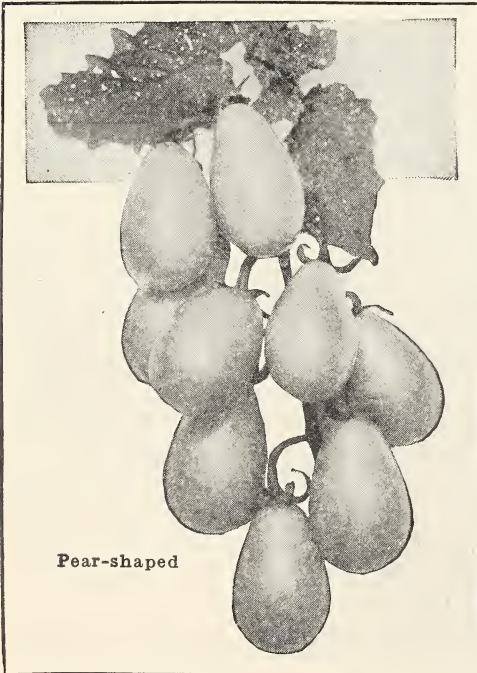
Conqueror. It ripens early, and is easily cured to the brightest color.Pkt., 10c; oz., 50c.

Havana. A medium leaf, fine texture. Commands a high price.Pkt., 10c; oz., 50c.

White Burley. Extra stock, grown largely for the manufacture of fine-cut.Pkt., 10c; oz., 50c.

Stand-Up Burley. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence the name "Stand-up." It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections.Pkt., 10c; oz., 50c.

Zimmer's Spanish. One of the most popular and extensively grown.Pkt., 10c; oz., 50c.



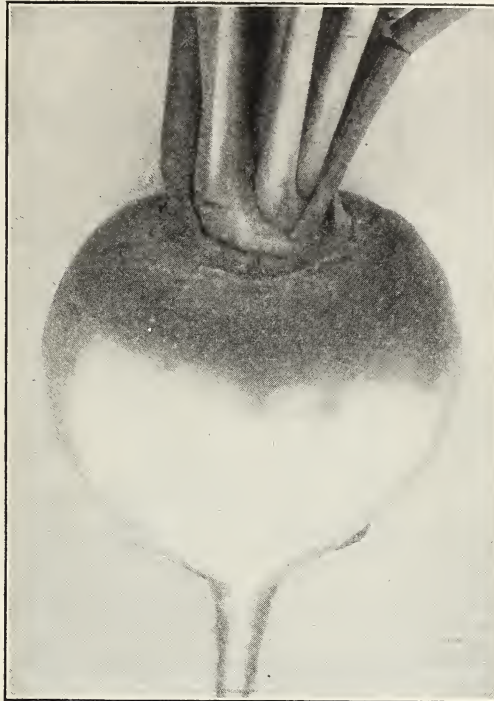
Pear-shaped

TURNIP

One ounce will sow 150 feet of drill: 1 pound to the acre.

THE soil for Turnips should be rich and mellow. For an early crop, sow early in the spring, in drills about a foot apart and thin out. For a general crop, sow from the first of July to the last of August, in drills 18 to 20 inches apart, and thin out the plants to 8 to 10 inches. When sown broadcast, Turnip Seed should be mixed with fine soil, sand or ashes, so as to have the seed more evenly distributed. To destroy the fly, which is very destructive to the Turnip crop, use "Hammond's Slug Shot." Should the crop be destroyed, harrow the ground immediately and sow again.

Purple-Top White Globe. A variety of decided merit. Of globular shape, very handsome and of superior quality, either for the table or stock. It is a heavy producer, early, of rapid growth and an excellent keeper. Pkt., 5c; oz., 10c ¼ lb., 25c; lb., 75c.



Purple Top White Globe

Red or Purple Top, Strap-Leaf. This is the most popular variety grown for table purposes; an early, flat, white Turnip, with purple top; of excellent quality. The best variety for general use.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Early White Flat Dutch. An early white-fleshed variety, of quick growth, mild flavor and excellent quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Large White Globe, Strap-Leaf. Flesh white, firm and crisp; a very desirable early variety.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Snowball. Extra early. A variety of sterling merit, perfectly round, early, pure white, very solid, sweet; short top. Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Extra Early Purple Top Milan. This variety is at least two weeks earlier than any other. It is of a handsome appearance, somewhat flattened, white with purple top; flesh snow-white, fine grained and delicate flavor.

Pkt., 5c; oz., 15c; ¼ lb., 35c; per lb., \$1.25.

Amber Globe. A beautifully formed variety, quite productive, solid flesh and attractive color. It keeps well and is desirable for either table use or for stock feeding.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Golden Ball, or Orange Jelly. A rapid grower, of excellent flavor, globe-shaped, bright yellow color, good keeper; a superior table or stock variety.

Pkt., 5c; oz., 10c; ¼ lb., 25c. per lb., 75c.

White Egg. An egg-shaped variety for spring or fall sowing; flesh white, firm, fine grained, mild and sweet.

Pkt., 5c; oz., 10c; ¼ lb., 25c. per lb., 75c.

Long White, or Cow Horn. Grows quickly, partly above ground; very productive; flesh white, fine grained, sweet; excellent quality for family and market gardeners' use.

Pkt., 5c; oz., 10c; ¼ lb., 25c. per lb., 75c.

Seven Top. Cultivated extensively in the South for the tops, which are used for greens. It is very hardy and will grow all winter. Does not produce a good root.

Pkt., 5c; oz., 10c; ¼ lb., 25c. per lb., 65c.

Purple Top Yellow Aberdeen. A large, globe-shaped Turnip, with yellow flesh of fine quality; a good keeper, popular for table or stock. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Swede or Rutabaga Turnip

FOR Rutabagas, sow seed in seed-bed in spring and transplant to good, warm soil, in rows at least 2 feet apart and 8 to 10 inches apart in the rows, or sow in open ground during June and early July. Take up the roots just before winter, top and store in cool cellar or pit outdoors.

American Purple Top. Very hardy and productive; flesh yellow, solid, sweet; good for stock or table use.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Skirving's Purple Top. An important variety of large size and strong growth; a heavy cropper and one of the best for field culture.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Budlong's Improved. White, very sweet, much milder flavor than any of the other sorts; globe-shaped; skin a cream yellow.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

Long Island Improved Purple Top. A uniform large rooted, quick growing, yellow fleshed sort.

Pkt., 5c; oz., 10c; ¼ lb., 25c; per lb., 75c.

BIRD AND SUNDRY SEEDS

Prices fluctuate considerably throughout the year. The prices now quoted are those ruling as we go to press, and may be higher or lower as the season advances.

Per lb.		Per lb.		Per lb.	
Canary Seed.....	15c	Rape Seed.....	20c	Flax Seed.....	15c
Hemp Seed.....	15c	Sunflower Seed.....	15c	Mustard Seed, white, for pickles.....	50c
Lettuce Seed, for birds.....	20c	Bird Gravel (per pkg.).....	20c	Mustard Seed, black.....	50c
Millet, for birds.....	10c	Cuttle Bone.....	60c	Pumpkin Seed.....	25c
Mixed Bird Seed.....	20c	Celery Seed, for flavoring.....	50c	Watermelon Seed.....	25c

Postage must be added if wanted by mail. See Postal Rates, page 1.

VEGETABLE PLANTS AND ROOTS

We are large growers of Vegetable Plants. Have them fresh every day in season. Special prices given on large quantities.

POSTAGE:—Prices do not include prepayment by mail or express. If wanted by mail, add for postage, 5c per dozen; 25c per 100 on Cabbage, Cauliflower, Celery and Sweet Potato Plants; 10c per dozen on Egg Plants, Pepper and Tomato Plants. Vegetable Plants, when sent via Parcel Post, travel exclusively at buyer's risk.

ASPARAGUS ROOTS

DEEP, warm, rich, loamy soil, deeply and thoroughly stirred, is required for permanent bed. Use manure and fertilizers freely. Make furrows 2 or 4 feet apart and 8 to 10 inches deep. Set the two-year-old roots 18 to 24 inches apart in the bottom of furrows and cover lightly at first. Gradually fill in with soil and old compost. In early spring, fork or plow the bed shallow and carefully, or pulverize the surface by harrowing. Give clean cultivation until fall; then cover with manure or compost. Second season after planting, hill up the rows, especially for blanched "grass," and cut sparingly for use. After that the bed will give full crops. In the fall, as soon as the tops are ripe and yellow, they should be cut and burned.

Ciant Argenteuil. A French variety of large size; green in color. Per doz., 25c; per 100, \$1.50.
Palmetto. A large, dark green variety with pointed tips. Per doz., 25c; per 100, \$1.50.

If wanted by mail, add 5c per dozen, 15c per 100 for postage.

CELERY PLANTS

(Ready June and July.)

McCullough's Paris Golden Yellow, Golden Self-Blanching, Golden-Hearted Dwarf, Giant Pascal, All the above, per 100, 75c.

CABBAGE PLANTS

(Ready about April 1st.)

Early Jersey Wakefield. Per doz., 15c; per 100, 60c.
 Louisville Drumhead. Per doz., 15c; per 100, 60c.
 Premium Late Flat Dutch. Per doz., 15c; per 100, 60c.

CAULIFLOWER PLANTS

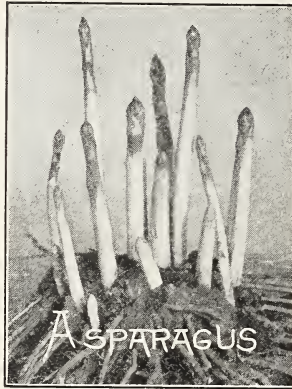
(Ready April 1st.)

Earliest Dwarf Erfurt. Per doz., 30c; per 100, \$2.00.
 Early Snowball. Per doz., 30c; per 100, \$2.00.

CHIVES

(Ready April 1st.)

Good Clumps. 10c each; per doz., \$1.00



EGG PLANTS

(Ready about May 15th.)

Black Beauty. Per doz., 50c.

HORSERADISH SETS

(Ready April 1st.)

Per doz., 15c; per 100, 75c. (By mail—per doz., 25c; per 100, \$1.00—postpaid.)

PEPPER PLANTS

(Ready about May 15th.)

Large Bell, or Bull Nose. . Per doz., 40c.
 Ruby King. Per doz., 40c.
 Long Red Cayenne. Per doz., 40c.

SWEET POTATO PLANTS

(Ready about June 1st.)

Jersey Yellow or Nansemond. Per 100, 75c.

TOMATO PLANTS

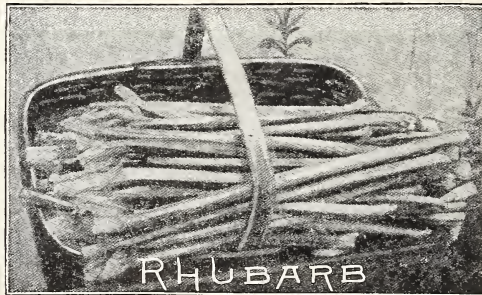
(Ready about May 1st.)

Transplanted plants offer many advantages over seedlings; they produce fruit much earlier and are more easily shipped.

TRANSPLANTED TOMATO PLANTS

Earliana, June Pink, Detroit, Beauty, McCullough's Norwood, Trucker's Favorite, The Stone, Ponderosa, Cincinnati Purple, Dwarf Champion.

All the above—Per doz., 25c; per 100, \$1.75.



RHUBARB ROOTS

(Ready April 1st.)

We specialize on Rhubarb Roots grown from seed. They are far superior to divided clumps.

Linnaeus. The best Pie-Plant. Stalks ripen early and possess a spicy flavor.

Victoria. The stalks of this variety are extra large. Good for canning or cooking.

Small Roots of either variety: Each 10c; per dozen, \$1.00.

Large Roots; Each 25c; per dozen, \$2.50.

If wanted by parcel post, add 5c each or 30c per dozen for postage.

SELECTED SEED POTATOES

NORTHERN GROWN STOCKS

Selected and Grown Specially for Seed Purposes, Superior Both in Quality and Productiveness.

Early Ohio
(Red River Stock)

Early Triumph
Irish Cobbler

Chicago Market
White Star

Early Rose

Burbank

Hoosier Boy

Early Six Weeks

Carman No. 3

Bull Moose

Seed Sweet Potatoes

Yellow Jersey. Write for prices. Ready for shipment about April 1. For plants, see above.

For description of Seed Potatoes, see Field Seeds, etc.

McCullough's Selected Flower Seeds

Every year we carefully revise our list of flower seeds, add a number of new sorts and discard all inferior varieties. Our collection will be found to contain everything really desirable. Our stock of seeds is of the highest possible quality.

YOU will notice that all of our descriptions of flowers are classified as "annual," "hardy annual," "tender annual," "perennial," "biennial," etc. These descriptions, when properly understood, will tell much about planting.

ANNUALS attain full growth from seed, bloom and die in one season. Sow **HARDY ANNUALS** outside late in March or during April, or earlier indoors for transplanting outside. Hardy annuals may also be sown in the fall for earlier spring blooming.

HALF HARDY and **TENDER ANNUALS** should be sown in the house or hot-bed and not be sown or transplanted outside until the weather is settled and warm.

BIENNIALS are plants that bloom the second year from seed, and then die. Many of these will bloom the first year if sown early. Sow under same conditions as perennials.

PERENNIALS are plants that bloom the second year from seed, and the plant lives and blooms for many years. If sown in early spring, many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over. Hardy perennials may be sown in May or June and again in August or September for next year's flowers.

TENDER or **GREENHOUSE** means the plant will not stand the least frost. All such must be planted late in spring, or in a greenhouse.

HARD SHELLED SEEDS like Canna, Brazilian and Japanese Morning Glory, Moon Vine, etc., should be soaked in warm water 36 hours before planting.

HOW TO SOW FLOWER SEED: A common mistake in sowing flower, as well as other seeds, is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsams, Zinnias, etc., half an inch or so is none too much. Such fine seeds as Petunias, Portulacas, etc., need only to be pressed into the soil with a piece of board. Always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier annuals may be sown where they are to grow; but, as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently. Provide some support for all such plants as require it.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

ABUTILON (Flowering Maple)

ELEGANT flowering plants of strong growth and easy cultivation, producing various colored, drooping bell-shaped flowers. Sown indoors any time before April, they will produce plants that will flower outdoors the first season and indoors all winter. *Half-hardy Perennial.*
1—**Fine Mixed.** Of choice varieties and colors... 10c pkt.

ACROCLINIUM

2—**Double Mixed.** An "Everlasting," growing about 15 inches high, bearing white or rosy pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. *Half-hardy Annual.*
¼ oz., 15c; 5c pkt.



ADLUMIA

(Mountain Fringe, Allegheny Vine, or Climbing Fumitory)

3—**Cirrhosa.** A graceful climber, but, as it renews itself year after year, it might be considered perennial. The feathery foliage closely resembles that of the Maiden-hair Fern. The flowers are tube-shaped, flesh-colored, and completely cover the plant. For covering trellises, stumps of trees, etc., it is very desirable. Flowers the first year from seed. *Hardy Biennial.*..... 5c pkt.

AGERATUM (Floss Flower)

ONE of the very best bedding plants, being literally a sheet of bloom from early summer till frost. Unlike many bedding plants, their flowers are not liable to be spoiled by rain, nor do the colors fade out. The blue varieties are without doubt the most satisfactory bedding plants of this color for our trying climate. Easily raised from seed, which is usually started in a hot-bed or window and transferred to the open ground in May. Can also be sown outdoors in May. *Half-hardy Annual.*

4—**Blue Perfection.** This is the darkest colored of all large flowering Ageratums. Color, deep amethyst-blue; compact growth; fine bedder. (See cut)..... ¼ oz., 50c; 5c pkt.

5—**Little Blue Star.** Of dwarf and even growth; the tiny bushes, not over 4 to 5 inches high, are densely covered with bright blue flowers; a fine variety for edging... 3 pkts., 25c; 10c pkt.

6—**Little Dorrit.** Azure blue, 9 inches.... ¼ oz., 40c; 5c pkt.

7—**Album.** White, profuse bloomer, 18 inches..... 5c pkt.

AGROSTEMMA

(Rose of Heaven, Mullein Pink)

AN attractive, free-flowering plant of easy culture, producing flowers on long, slender stems like a single pink. Blooms the first season. Fine for cutting; 1 to 2 feet. *Hardy Perennial.*

8—**Mixed Varieties.**..... 5c pkt.

AFRICAN GOLDEN DAISY. (See *Dimorphotheca Aurantiaca.*)

ALLEGHENY VINE. (See *Adlumia.*)

All 5c Packets of Flower Seeds are 6 Packets for 25c. All 10c Packets are 3 Packets for 25c.

ALYSSUM (Mad-Wort)

PRETTY little plants for beds, vases, baskets, edgings or rockwork, blooming profusely all summer; useful also for winter-flowering. *Hardy Annual.*

9—**Little Gem, or Carpet of Snow.** We know of no other flower which is so particularly well adapted for borders, ribbons, etc. The plants commence to bloom when quite small, and will flower all summer until late in the fall. This habit, with its fragrance, makes it indispensable. Keep the seed pods sheared off the plants and they will bloom until killed by frost. Sow the seeds wherever the plants are to remain. If too thick, thin out. To prevent sowing too thickly, mix the seed with sand before sowing. (See cut.)

¼ oz., 15c; oz., 50c; 5c pkt.

10—**Lilac Queen.** Is of dwarf, compact habit and the deep, lavender-like flowers are borne in profusion.

10c pkt.

11—**Sweet Alyssum.** Of trailing habit; flowers white. The popular old-fashioned sort, the best for broad edges and vases. It begins to bloom early in the season, and blooms until frost. It is a neat, thrifty, healthy grower and should be cultivated by everyone who wants an all around good plant. ¼ oz., 10c; oz., 25c; 5c pkt.

AMARANTHUS

BRILLIANT foliaged plants, easily raised from seed, either by starting them early indoors or sown outdoors in May. Grow from 2 to 4 feet high; are useful in borders of tall plants or for the center of large beds. They thrive best in a hot, sunny location, not too rich soil, and given sufficient room to develop their full beauty. *Hardy Annual.*

12—**Caudatus.** (Love Lies Bleeding.) Blood-red; drooping racemes. 5c pkt.

13—**Tricolor Splendens.** (Joseph's Coat.) 2 ½ feet. The inner foliage is of blackest bronze, tipped with green, while the outer foliage is bright scarlet and gold. The colors are especially brilliant if grown in poor soil. 5c pkt.

ANTIRRHINUM

(Snapdragon)

ANTIRRHINUMS or Snapdragons are one of the best cut flowers which can readily be grown from seed. They succeed best in a rather light soil, in a sunny position. For early flowering, sow in fall, protecting the plants with a covering of leaves through the winter. Sown in spring, they bloom by midsummer, and if the flowers are cut freely the flowering is continuous till fall. If intended for winter flowering in the house, cut them well back in September. The Snapdragon, like most perennials and biennials which bloom the first year, is treated like an annual and sown every year. *Half-hardy Perennial.* (See cut.)

TALL, GIANT FLOWERING

Flowers nearly double the size of the older sorts.

14—**Queen Victoria.** Very beautiful, bearing immense flowers, white shaded cream, with lemon-colored lip. The best white. 10c pkt.

15—**Silver Pink.** Delicate rosy pink, seemingly covered with a silver sheen. 10c pkt.

16—**Brilliant.** Scarlet, gold and white. 10c pkt.

17—**Fire King.** Scarlet with orange. 10c pkt.

18—**Venus.** Light rose, white throat. 10c pkt.

19—**Golden King.** Golden yellow flowers. 10c pkt.

20—**Special Collection.** One packet each of the above 6 varieties. . 50c.

21—**Tall Giant Mixed.** A splendid mixture, containing all the colors; magnificent large individual flowers ¼ oz., 30c; oz., \$1.00; 5c pkt.



SEMI-DWARF GIANT FLOWERING ANTIRRHINUM

Are particularly good for bedding, as they require no staking. The flowers are most wonderful, in many new shades and tints.

22—**Carmine Queen.** Brilliant rose-carmine. 10c pkt.

23—**Daphne.** Blush pink. 10c pkt.

24—**Defiance.** Fiery scarlet. 10c pkt.

25—**Firebrand.** Bright scarlet, yellow lips. 10c pkt.

26—**Golden Queen.** Pure yellow. 10c pkt.

27—**Queen of the North.** Pure white, long spikes 10c pkt.

28—**Special Collection.** One packet each of the above six varieties, 50c

29—**Ruby.** Brilliant red. 10c pkt.

30—**Half-Dwarf Mixed.** Large variety of colors; best for bedding. ¼ oz., 20c; 5c pkt.

AMPELOPSIS

31—**Veitchi.** (Boston or Japanese Ivy.) A *Hardy Perennial* climber from Japan. The best and most popular climber for covering brick or stone walls.

¼ oz., 15c; oz., 50c; 10c pkt.

ARABIS (Rock Cross)

32—**Alpina.** Early spring flowering plant, especially adapted for edging and rockery; plants form a dense carpet completely covered with pure white blossoms in May. 6 inches. *Hardy Perennial.* 5c pkt.

ASPARAGUS

33—**Plumosus Nanus.** (Asparagus Fern.) This graceful climbing Asparagus has fine foliage, and will last for weeks after being cut. It is an excellent house plant. *Greenhouse Perennial.* . . . 10c pkt.

33 ½—**Sprengeri.** (Emerald Feather.) One of the best plants to grow in baskets, for greenhouse or for outdoors in the summer. The fronds frequently grow 4 feet long, and are now considered indispensable in all fine decorations; grows readily from seed. *Greenhouse Perennial.* 10c pkt.

ASTERS

ASTERS are one of the most important summer and autumn flowers, and receive special care at our hands. Our list comprises only such sorts as can be planted with perfect confidence that nothing better is procurable, no matter at what price or from what source.

The early sorts begin blooming in July, followed by the midseason kinds, which flower during August; then the late-flowering varieties, which are at their best through September.

It is quite easy, therefore, with a little care in the selection of the varieties, to have Asters in flower from the first days in July until hard frost.

Asters will thrive in any good soil, prepared in the same way as you would for a crop of vegetables, but it is well to remember that any extra care taken in the preparation of the soil is repaid by finer plants, larger blooms, with longer stems and more profuse flowering. They should have an open, sunny position, and prefer a good, heavy, loamy soil, enriched with a liberal quantity of thoroughly rotted manure, and the addition of wood ashes or air-slaked lime, and we do not advise growing them on the same ground two years in succession. Sow either in the open ground in May, or in March or April sow in cold frame, spent hothed, or pots or boxes in the house, covering the seed with about one-fourth inch of good soil. When the plants are strong enough transplant about 18 inches apart in deeply dug well-prepared beds. *Half-hardy Annual.*

34—McCullough's "Premier" Mixture. This is the finest mixture of Asters in existence, and the most critical lover of this flower will be astonished at the wide range of colors and varieties given in this strain... ½ oz., 40c; ¼ oz., 75c; 10c pkt.



Giant Branching Asters

This superb strain is of American origin and is especially adapted to our climatic conditions.

The plants form strong, branching bushes, 2 to 2½ feet high, bearing on long, strong stems their handsome Chrysanthemum-like flowers, which under ordinary cultivation, average 4 inches across. The form of the flowers, together with the length of the stems, places them at the head of Asters for cutting. They come into bloom from two to three weeks after the average type, usually being at their best during September.

- 35—Crimson 10c pkt.
- 36—Lavender 10c pkt.
- 37—Deep Purple 10c pkt.
- 38—Rose 10c pkt.
- 39—Shell Pink 10c pkt.
- 40—Pure White 10c pkt.
- 41—Collection. One pkt. each of the above 6 varieties. 50c.
- 42—Finest Mixed. Containing many more colors than mentioned above. ½ oz., 25c; ¼ oz., 40c; 10c pkt.

Improved Giant Comet Asters

The finest type of the Giant Comet, or Ostrich Feather Asters. Much larger than the Giant Comet, the petals longer, more curled and twisted, and produced in greater abundance. Borne on long stems.

- 43—Crimson 10c pkt.
- 44—Rose 10c pkt.
- 45—Light Blue 10c pkt.
- 46—Dark Blue 10c pkt.
- 47—Pink 10c pkt.
- 48—White 10c pkt.
- 49—Collection. One pkt. each of the above 6 varieties. 50c.
- 50—Finest Mixed. All colors. 10c pkt.

Royal Asters

(The Early Branching Aster)

The flowers are large and firm; the stems long and stiff and the colors are decided and pleasing. The plants grow about 24 inches high and come into bloom about 10 days before the Giant Branching Aster.

- 51—Lavender 10c pkt.
- 52—Pink 10c pkt.
- 53—White 10c pkt.
- 54—Purple 10c pkt.
- 55—Rose 10c pkt.
- 56—Collection. One pkt. each of the above 5 varieties. 40c.
- 57—Finest Mixed. Many colors. ½ oz., 25c; ¼ oz., 40c; 10c pkt.

King Asters

The habit is similar to the popular Giant Branching, vigorous in growth, long stiff stems. In form the flower is entirely distinct from any other variety; petals somewhat resemble the quilled varieties, but are much larger and broader, those in the center being curled and incurved, completely covering the crown. In shape and size the bloom is round, full and very large.

- 58—Crimson 10c pkt.
- 59—Rose 10c pkt.
- 60—Violet 10c pkt.
- 61—Lavender 10c pkt.
- 62—Pink 10c pkt.
- 63—White 10c pkt.
- 64—Collection. One pkt. each of the above 6 varieties. 50c.
- 65—Finest Mixed. 10c pkt.

Queen of the Market Asters

A first-class early flowering Aster, coming into flower in July, of branching habit; flowers of good size and borne on long stems, making them exceedingly valuable for cutting; one foot.

- 66—Rose 5c pkt.
- 67—Crimson 5c pkt.
- 68—Light Blue 5c pkt.
- 69—Dark Blue 5c pkt.
- 70—Pink 5c pkt.
- 71—White 5c pkt.
- 72—Collection. One pkt. each of the above 6 varieties. 25c.
- 73—Finest Mixed. All colors. ¼ oz., 35c; 5c pkt.

Express Extra Early Asters

Early flowering Asters of great merit, not only for garden purposes but of even more value for early cut flowers; come into bloom in the open ground with us by the middle of July. They are the largest early Asters of which we know, flower 3½ to 4 inches across, of double Comet type; splendid substance and long stems; plants healthy and sturdy, branching habit; 18 inches high; free bloomers.

- 74—Dark Blue 10c pkt.
- 75—Light Blue 10c pkt.
- 76—Rose 10c pkt.
- 77—White 10c pkt.
- 78—Collection. One pkt. each of the above 4 varieties. 35c.
- 79—Finest Mixed. All colors. ½ oz., 30c; 10c pkt.

SPECIAL OFFER

Select 6 packets of Asters, any varieties, for 50c; 13 pkts. for \$1.00.

Beauty Asters

These late-flowering Asters are of recent introduction and are a valuable addition. Plants grow from two to three feet high, of branching habit, commencing to bloom in September and lasting until destroyed by frost.

The large and perfectly double flowers are borne on long, stout stems. Splendid cut-flower variety.

- 80—Carmine Rose. 10c pkt. 83—Pink 10c pkt.
- 81—Crimson 10c pkt. 84—Purple 10c pkt.
- 82—Lavender 10c pkt. 85—White 10c pkt.
- 86—Collection.—One packet each of the above six varieties. 50c
- 87—Finest Mixed 10c pkt.
- 88—China Asters, Mixed. A general mixture of fine sorts and colors. ¼ oz., 25c; 5c pkt.

See McCullough's Collection of "Easy to Grow" Flower Seed. It may save you money.

Illustrated on 4th page of cover.

AQUILEGIA, OR COLUMBINE

CHARMING hardy plants, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders or edges of shrubbery this old-fashioned favorite is one of the best. They thrive well with ordinary garden culture, but do best in partially shaded nooks. Few hardy plants are so easily grown from seed. Will bloom first season if sown very early. *Hardy Biennial.*

89—**Coerulea.** (Rocky Mountain Columbine.) Sepals deep blue, petals white; extra fine, 2 feet. 3 pkts., 25c; 10c pkt.

90—**Coerulea Hybrida, "Rose Queen."** A beautiful variety, producing in great profusion very graceful, large-flowered, long-spurred flowers, shading from light pink to dark rose with white center and yellow anthers. 3 pkts., 25c; 10c pkt.

91—**McCullough's Long-Spurred Hybrids** A beautiful strain, comprising shades and combinations of blue, white, yellow, orange, scarlet and bright rose-pink in large flowers with long spurs; the finest to be had. 3 pkts., 25c; 10c pkt.

92—**Double**, all colors, mixed. ¼ oz., 20c; 5c pkt.

93—**Single**, all colors, mixed. ¼ oz., 20c; 5c pkt.

BALLOON VINE

(Love-in-a-Puff) (Cardiospermum)

94—A rapid growing annual climber; succeeds best in a light soil and warm situation; flowers white; seed vessels look like miniature balloons and are of great interest to children. *Half-hardy Annual.* 5c pkt.



BALSAM

(Lady Slipper, or Touch-Me-Not)

ONE of the oldest and best known summer-blooming annuals, of easy culture. Desirable for garden or pot culture. The soil should be of the richest and best quality. Set about 15 inches apart, and give them plenty of manure water. *Tender Annual*; two feet.

95—**McCullough's "Premier Mixed."** Unrivaled for variety of color and size of flower; includes all the most desirable shades. (See cut.) ¼ oz., 30c; 10c pkt.

96—**Salmon Pink.** Brilliant salmon-rose flowers; very double, of finest camellia flowered type. 10c pkt.

97—**White Perfection.** The finest pure white grown; flowers unusually large, solid and double. 10c pkt.

98—**Scarlet.** Brilliant fiery scarlet. 5c pkt.

99—**Double Camellia Flowered, Mixed.** Of perfect form, beautiful colors. ¼ oz., 20c; 10c pkt.

100—**Choice Double Mixed.** ¼ oz., 15c; oz., 50c; 5c pkt.

BACHELOR'S BUTTON, BLUE-BOTTLE OR RAGGED SAILOR. (See Cyanus.)

BLACK-EYED SUSAN. (See Thunbergia.)

BALSAM, Apple or Pear

VERY curious climbing vine, with ornamental foliage, fruit golden yellow, warty, and when ripe opens, showing the seed and its brilliant carmine interior. Ten feet. *Tender Annual.*

101—**Balsam Pear.** (Momordica Charantia.) Pear-shaped fruit; the fruit is long and used medicinally. Oz., 40c; 5c pkt.

102—**Balsam Apple.** (Momordica Balsamina.) Round, apple-shaped fruit. Oz., 40c; 5c pkt.

BEGONIAS

Ever-blooming Bedding Varieties

THE following are varieties of Begonia Semperflorens, doing equally well in full sunlight, or in positions partially or wholly in shade. They grow about one foot high and form dense bushes, which, from May until frost are completely hidden with flowers. As pot plants for winter flowering they are superb. Easily raised from seed, which should be started indoors or in a hot-bed. *Tender Perennials.*

103—**Gracilis Luminosa.** This differs from Begonia Gracilis in the lustrous reddish-brown color of the foliage, while the flowers measuring 1 to 1½ inches across, are of a fiery dark scarlet. It is very free flowering, and where massed produces a splendid effect. No better sort for groups and bedding has yet been seen. (See cut.) 10c pkt.

104—**Vernon.** Bright orange-carmine flowers, deep red foliage. 10c pkt.

105—**Vernon Grandiflora.** A large-flowering form of the above, with which it is identical in growth, filiferousness and color. The flower is nearly twice the size of the type. 15c pkt.

106—**Semperflorens, Single Mixed.** This mixture contains all the best varieties, ranging in color from pure white to the deepest crimson; splendid. 10c pkt.

TUBEROUS-ROOTED BEGONIAS. (See Bulbs.)

BELLIS (English Daisy)

A FAVORITE perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom from early spring until well on in the summer. The seed we offer is saved from the finest double varieties; easily raised from seed; usually sown in August, but can be sown in spring, and for best results should be sown each year; 4 inches. *Half-hardy Perennial.*

107—**Longfellow.** Large, double, dark pink flowers, with long, stiff stems. 10c pkt.

108—**Snowball.** A beautiful white variety with long stems and very double flowers; fine for cutting. 10c pkt.

109—**Giant Double.** Beautifully and densely imbricated flowers, 1½ inches in diameter. Finest mixed, 10c pkt.

BRACHYCOME (Swan River Daisy)

FREE-FLOWERING, dwarf-growing plants covered during the greater part of the summer with a profusion of pretty, Cineraria-like flowers. Suitable for edgings and small beds or pot culture. *Half-hardy Annual.*

110—**Mixed.** Light blue and white. 5c pkt.

BROWALLIA (Amethyst)

111—Free-flowering plants, covered with bright blue flowers, during summer and autumn. Sow during April and May in good, light, rich soil. *Half-hardy Annual.* Mixed Colors. 5c pkt.

BRYONOPSIS

112—**Laciniosa.** A beautiful annual climber of the gourd species, with ivy-like pale green foliage and showy fruit, first green, striped white, turning when ripe to scarlet, striped white. *Half-hardy Annual.* 5c pkt.



Begonia Gracilis Luminosa

CALCEOLARIA

113—**Hybrida Grandiflora.** Unsurpassed for pot culture in the greenhouse or conservatory, producing brilliant flowers in great profusion and variety. *Greenhouse Perennial.* Mixed varieties..... 25c pkt.

CALENDULA (Pot Marigold)

SHOWY free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders, continuing in bloom from early summer until killed by frost; valuable also for pot culture; one foot. *Hardy Annual.* (See cut.)

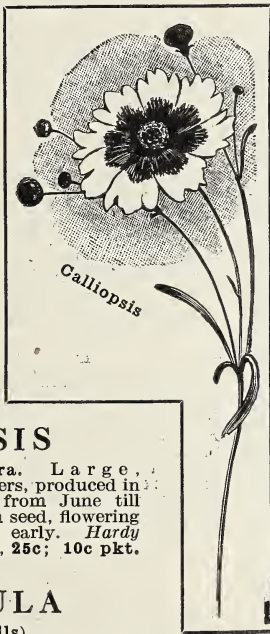
- 114—**Orange King.** The outer petals are slightly imbricated, while those of the center are curved like those of the peony. Color rich, dark orange..... ½ oz., 15c; 5c pkt.
- 115—**Prince of Orange.** This variety surpasses in beauty the well known *Calendula Meteor.* The stripes around each petal are of a deep orange color, making a brilliant appearance..... ½ oz., 15c; 5c pkt.
- 116—**Lemon King.** A grand variety, with double, extra large yellow flowers..... ½ oz., 15c; 5c pkt.
- 117—**Fine Double Mixed.** Contains the choicest sorts. ½ oz., 10c; oz., 15c; 5c pkt.

(See also Marigold)



CALLIOPSIS

SHOWY and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing. It is best to sow them where they are to bloom, thinning out to stand 8 inches to 12 inches apart. By keeping the old flowers cut off the flowering season can be lengthened until late autumn. *Hardy Annual.* (See cut.)



- 118—**Golden Wave.** Bright, golden yellow flowers, with small, dark centers, blooming profusely. ½ oz., 20c; 5c pkt.
- 119—**Finest Mixed.** ½ oz., 20c; 5c pkt.

COREOPSIS

120—**Lanceolata Grandiflora.** Large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. Easily grown from seed, flowering the first year if sown early. *Hardy Perennial.*..... ¼ oz., 25c; 10c pkt.

CAMPANULA

(Canterbury Bells)

THIS old-fashioned flower is a favorite with all. Stately and showy, and of the easiest culture. The seeds should be sown about April, in finely prepared, rich soil. *Hardy Biennial.*

Calycanthem. (Cup and Saucer Canterbury Bells.) They differ from the ordinary type in having an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

- 121—**Pink.** Delicate rosy-pink..... 10c pkt.
 - 122—**Blue.** A fine, clear shade..... 10c pkt.
 - 123—**White.** Pure white..... 10c pkt.
 - 124—**Finest Mixed.** All colors of the Cup and Saucer type..... ¼ oz., 50c; 5c pkt.
- Medium.** (Single Canterbury Bells.) The old-fashioned sort, with beautiful, large bell-shaped blossoms. (See cut.)
- 125—**Single Mixed.** All colors. ¼ oz., 25c; 5c pkt.
 - 126—**Double Mixed.** All the double-flowering medium varieties..... ¼ oz., 40c; 5c pkt.



CANARY-BIRD VINE

(*Tropaeolum Canariense*)

127—A beautiful rapid annual climber, the charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings expanded. *Half-hardy Annual.* Oz., 25c; 5c pkt.

CANDYTUFT

UNIVERSALLY known and cultivated, and considered indispensable for cutting; one foot. *Hardy Annual.*

- 128—**Giant Hyacinth-Flowered.** The finest of all the white varieties, being a complete mass of pure white flowers, in a pyramid of bloom. ½ oz., 25c; oz., 40c; 5c pkt.
- 129—**Little Prince.** Very large heads of pure white flowers; fine for borders and pots; 6 inches..... 5c pkt.
- 130—**Rose Cardinal.** Bright carmine-rose..... 5c pkt.
- 131—**White Rocket.** Pure white..... Oz., 25c; 5c pkt.
- 132—**Dwarf Hybrids Mixed.**..... 5c pkt.
- 133—**Mixed Colors.**..... ½ oz., 15c; oz., 25c; 5c pkt.

PERENNIAL CANDYTUFT. (See Iberis.)

CANNA

(Indian Shot)

SOAK the seeds in warm water until they show evidence of swelling; then sow in sandy loam, and place in a hot-bed; when up to the second leaf, pot off singly. *Half-hardy Perennial.*

134—**Mixed.** Crozy's finest sorts. Oz., 20c; 5c pkt.

CARDINAL CLIMBER

(*Ipomoea Quamoclit* Hybrida)

135—The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardinal red clusters, 15 to 25 feet. *Tender Annual.*..... 10c pkt.

Cardinal Climber Plants. Each, 30c; by mail, each, 35c.

CARNATION

CARNATIONS are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in winter and for the garden in summer. The Marguerite type is best for summer flowering. *Half-hardy Perennial.*

- 136—Earliest French Mixed..... $\frac{1}{4}$ oz., 50c; 10c pkt.
- 137—Malmaison or Giant Mixed..... $\frac{1}{4}$ oz., 50c; 10c pkt.
- 138—Marguerite. These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few weeks from time of sowing, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers. *Half-hardy Perennial.* Finest Mixed. All colors..... $\frac{1}{4}$ oz., 50c; 5c pkt.

CELOSIA, or Cockscomb

GRACEFUL plants, growing best in rather light soil, not too rich, producing beautiful comb-shaped flowers; grown in pots, they are fine for the greenhouse or conservatory. *Half-hardy Annual.*

- 139—Glasgow Prize. Enormous rich, deep crimson combs. 10c pkt.
- 140—Dwarf Mixed. Large solid heads of bloom..... 5c pkt.

Celosia Plumosa (Feathered Cockscomb)

Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets.

- 141—Thompsoni Magnifica Crimson. Of pyramidal growth, attaining a height of 3 feet and producing graceful, feathery plumes of the most brilliant crimson..... 10c pkt.
- 142—Thompsoni Magnifica Yellow..... 10c pkt.
- 143—Plumosa, Mixed..... 5c pkt.

CHILDSI. (See Chinese Woolflower.)

CENTAUREAS

UNDER this name is included such popular annuals as the Cornflowers, Sweet Sultans, etc. They are perfectly hardy, will grow almost anywhere, and are in demand as cut flowers.

Cornflowers (Centaurea Cyanus)

These are also known as Bachelor's Button, Blue Bottle, Ragged Sailor and Bluet. Attractive flowers of easiest culture. Sow early in spring in the beds where they are to bloom. *Hardy Annual.* (See cut.)

- 144—Dwarf Blue. Single blue. $\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.
- 145—Single Mixed. Blue, white, rose, etc. $\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.
- 146—Double Blue. Flowers semi-double..... 5c pkt.
- 147—Double Pink..... 5c pkt.
- 148—Double Mixed..... $\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.

Royal Sweet Sultans (Centaurea Imperialis)

The beautiful sweet-scented, artistic-shaped flowers are borne on long, strong stems, and when cut will stand for several days in good condition. It is best to sow very early in the spring. *Hardy Annual.*

- 149—Rose..... 10c pkt. 152—Purple..... 10c pkt.
- 150—Lavender... 10c pkt. 153—White..... 10c pkt.
- 151—Yellow..... 10c pkt.
- 154—Collection. One packet each of the above 5 varieties, 40c.
- 155—Finest Mixed Colors..... $\frac{1}{4}$ oz., 20c; 5c pkt.



White-Leaved Centaureas (Dusty Millers)

Fine for bedding, vases, hanging-baskets and pots; also extensively used for borders. Sow the seed early indoors and transplant in May. *Tender Perennial.*

- 156—Candidissima. Silvery white; leaves broadly cut. 10c pkt.
- 157—Gymnocarpa. Fine-cut silvery foliage; the kind used most for borders; 1 foot..... $\frac{1}{4}$ oz., 20c; 10c pkt.

CENTROSEMA (The Butterfly Pea)

- 158—Grandiflora. Interesting and beautiful vine of rare and exquisite beauty. It blooms early in June from seed sown in April, and bears in the greatest profusion inverted pea-shaped flowers, from 1 $\frac{1}{2}$ to 2 $\frac{1}{2}$ inches in diameter, ranging in color from a rosy violet to a reddish purple. *Hardy Perennial.*..... 10c pkt.

CHINESE WOOLFLOWER

(Celosia Childsi)

- 159—This new Celosia grows two to three feet high, the bloom starting early with a central head, round and globular, which often reaches an immense size. Scores of branches are thrown out, each bearing a ball of scarlet wool, but not so large as the central one. None of the blooms fade in any way until hit by frost. Start seed if convenient under glass about four weeks before time to transplant to the garden. If the little plants remain too long in pots or seed beds, they will begin to set bloom, which is not desirable. Transplant to the garden as soon as danger of frost is past. *Half-hardy Annual.*..... 2 pkts., 25c; 15c pkt.

CHRYSANTHEMUMS

Hardy Annual Varieties

The hardy annuals are summer-flowering border plants and quite distinct from the hardy perennial varieties.

- 160—Bridal Robe. (Double.) The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers..... 5c pkt.
- 161—The Sultan. (Single.) Crimson maroon..... 5c pkt.
- 162—Evening Star. (Single.) Flowers 3 inches across; of pure golden yellow..... 5c pkt.
- 163—Northern Star. Large, white flowers, with black center... 5c pkt.
- 164—Annual Double Mixed. Yellow, white, etc..... 5c pkt.
- 165—Annual Single Mixed. (Painted Daisies)..... 5c pkt.

SHASTA DAISY

(Chrysanthemum Leucanthemum)

- 166—Alaska. A splendid hardy perennial variety, with flowers rarely less than 4 inches across, of the purest glistening white, with broad, overlapping petals, and borne on long, strong stems; a beautiful cut flower, remaining in good condition a week or more. (See cut.)..... 10c pkt.

CINERARIA

A WELL-KNOWN greenhouse plant, having a range and brightness of color scarcely surpassed. It may be had in bloom through the greater part of the year. *Greenhouse or Tender Annual.*

- 167—Hybrida Grandiflora. This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure 2 $\frac{1}{2}$ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed..... 25c pkt.



CLEOME (Giant Spider Flower)

168—**Gigantea.** Singular-looking, rose-colored flowers; the stamens look like spiders' legs, and present a very attractive appearance; annual, 3 feet. This plant is now used extensively in many of the public parks, planted among shrubbery, and is very effective. *Half-hardy Annual*..... 5c pkt.

COLEUS

169—**Large-Leaved Varieties.** Our strain of hybrid varieties produces the finest colored, most attractive and novel foliage plants for house or garden culture. A most interesting subject to grow from seed. Sow indoors in March or April and transplant to open ground in May. *Tender Perennial*.
2 pkts., 25c; 15c pkt.

Columbine (See Aquilegia)

COSMOS

BEAUTIFUL, autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decoration when other flowers are scarce. Should be sown in spring in the open ground, when danger of frost is past, or the seed may be started under cover and afterwards transplanted. Plant not less than 18 inches apart in rows or in masses in beds. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light, not too rich soil, but do well almost anywhere. *Half-hardy Annual*. (See cut.)

Double Cosmos

One of the best novelties of recent years. These varieties produce full, round, double flowers on sturdy, bushy plants, blooming in late summer and autumn.

- 170—**Double Crimson**..... 3 pkts., 25c; 10c pkt.
- 171—**Double Pink**..... 3 pkts., 25c; 10c pkt.
- 172—**Snowball**, pure white. .3 pkts., 25c; 10c pkt.
- 173—**Finest Mixed**..... 3 pkts., 25c; 10c pkt.

Extra Early Mammoth Flowering

Seeds sown in the open ground produced plants that were covered with bloom two months before the late-flowering kinds.

- 174—**Crimson**. Rich..... ¼ oz., 25c; 5c pkt.
- 175—**Pink**. A pretty shade... ¼ oz., 25c; 5c pkt.
- 176—**Pure White**..... ¼ oz., 25c; 5c pkt.
- 177—**Mixed, Early Cosmos**... ¼ oz., 20c; 5c pkt.

Mammoth Perfection

A magnificent selection, bearing flowers of mammoth size and perfect form.

- 178—**Mammoth Crimson**... ¼ oz., 20c; 5c pkt.
- 179—**Pink "Lady Lenox."** Bears gigantic flowers on very long stems, in color a beautiful deep rosy pink. The plant is of strong, vigorous growth, 6 to 7 feet high. ¼ oz., 25c; 5c pkt.
- 180—**White "Lady Lenox."** Flowers measure four to five inches in diameter, which is about three times larger than the ordinary Cosmos. Habit of plant strong and vigorous, bushes growing to a height of seven feet. ¼ oz., 25c; 5c pkt.
- 181—**Mammoth Perfection, Mixed**. ¼ oz., 20c; 5c pkt.

CYPRESS VINE (Ipomoea Quamoclit)

DELICATE, fern-like foliage, and masses of beautiful, small star-shaped flowers. Sow in May, first soaking the seeds in warm water for a few hours. 15 feet. *Half-hardy Annual*.

- 182—**Scarlet**..... Oz., 40c; 5c pkt.
- 183—**White**..... Oz., 40c; 5c pkt.
- 184—**Mixed**. White and Scarlet..... Oz., 40c; 5c pkt.
- QUAMOCLIT HYBRIDA.** (See Cardinal Climber.)
- CONVOLVULUS.** (See Morning Glory.)

COBAEA SCANDENS

(Cathedral Bells)

185—**Purple Lilac.** A magnificent summer climber, of rapid growth, bearing large, bell-shaped, purple flowers. In sowing, place the seeds edgewise and cover lightly. *Tender Perennial*..... 10c pkt.
Cobaea Scandens Plants. Each, 30c; per doz., \$3.00; (by mail, each, 35c.)

CORN (Ornamental)

186—**Zea Japonica Quadricolor Perfecta.** This grass forms an object of great beauty in mixed beds and borders or isolated in groups on lawns, in sub-tropical gardens, etc.; it thrives in rich, light, warm soils. The leaves are striped in yellow, green, rose and dark red; four feet. *Tender Annual*..... ¼ oz., 15c; 5c pkt.



CYCLAMEN

187—**Giant-Flowered.** (Persicum Giganteum.) A popular pot-plant for winter and spring-flowering. Seedlings bloom in eight to ten months. *Greenhouse Perennial*. Best strains, mixed..... 25c pkt.

DAHLIA

DAHLIAS are easily grown from seed and bloom the first season. The earlier they are started the better, which can be done nicely in a box in a sunny window, or the greenhouse. Protect the roots during winter in a dry cellar in sand. *Half-hardy Perennial*.

Double Flowering

- 188—**Cactus Varieties.** Most popular at the present time, distinct and elegant; petals pointed..... 10c pkt.
- 189—**Double Large-Flowering.** This mixture is composed of the finest large-flowering double varieties. . . 10c pkt.

Single Flowering

190—**Single Giant Perfection.** This strain produces flowers of immense size, averaging 6 inches across, in a great variety of coloring..... ¼ oz., 50c; 10c pkt.

DELPHINIUM (Hardy Perennial Larkspur)

ONE of the most exquisite blue-tinted flowers that we have. Very effective planted in beds, masses or borders. Plant 1½ to 2 feet apart each way. Perennial varieties should be sown in the fall or very early in the spring, transplanting to the open ground. *Hardy Perennial.*

- 191—**New Giant-Flowering Hybrids.** These magnificent Hybrids, the grandest of Delphiniums in existence, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. Colors are beautiful, ranging from pure white through all shades of lavender and blue. (See cut.).....10c pkt.
 - 192—**Belladonna.** (Everblooming Hardy Larkspur.) Free blooming Hardy Larkspur, never being out of flower from the end of June until frost. The clear turquoise-blue of its flowers is not equaled for delicacy and beauty by any other flower.....10c pkt.
 - 193—**Elatum.** (Giant Bee Larkspur.) Clear blue flowers, 3 feet... 5c pkt.
 - 194—**Formosum.** Elegant spikes of the richest dark blue flowers, with a white center; especially fine for cutting; 4 feet..... 5c pkt.
 - 195—**Mixed Chinese Varieties.** This mixture contains a great variety of shades, from pure white to gentian-blue..... 5c pkt.
- ANNUAL DELPHINIUMS.** (See Larkspur.)

DIMORPHOTHECA

(African Golden Daisy) *Half-hardy Annual.*

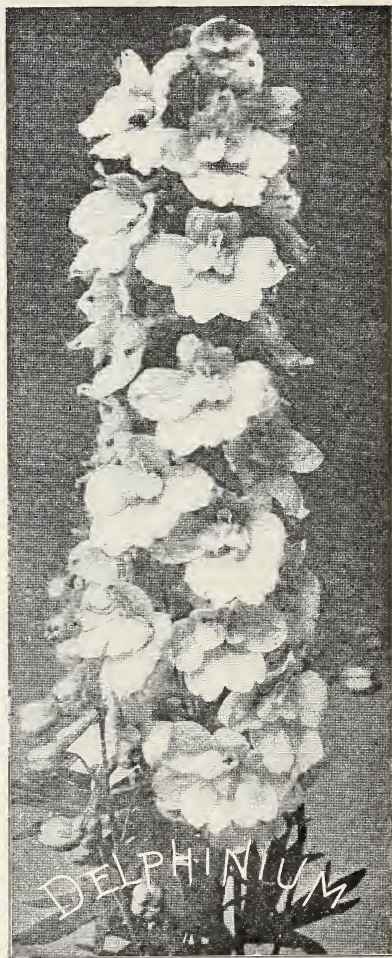
- 196—**Aurantiaca.** The bushy plants grow 12 to 15 inches high. The flowers, which are 2½ inches and over across, are a unique, rich, glossy, orange-gold, with dark disc and halo.....10c pkt.

DIANTHUS, or Pinks

THIS elegant family contains many of the most valuable and popular flowers in cultivation. All the sorts classed as annuals may be sown directly in the garden as soon as danger from frost is past, and will in a short time become a mass of bloom, and so remain all summer. Elegant as cut flowers for bouquets, as the stems are good. Grow about one foot high, and are of easiest culture. *Half-hardy Annual.*

Double Annual Pinks

- 197—**China Pinks.** (Chinensis fl. pl.) Large, double, fragrant flowers. Mixed colors..... 5c pkt.
- 198—**Double Diadem Japan Pinks.** (Heddewigi Diadematis fl. pl.) Densely double flowers in beautiful tints of crimson, lilac and purple, outer edges fringed with white. (See cut.)..... 5c pkt.
- 199—**Double Fringed Japan Pinks.** (Laciniatus fl. pl.) Large double, showy flowers, with fringed edges; various colors and beautifully striped. 5c pkt.
- 200—**Royal Pink.** (Dianthus Heddewigi Nobilis.) The flowers are very large and the petals are frilled and fringed. The colors are of a deep yet very bright blood-red, then shade to carmine and pink and even white. 5c pkt.



- 201—**Snowball.** Large double white, splendid for cutting or as a border..... 5c pkt.
- 202—**Fireball.** Rich blood-red flowers. Makes a striking contrast to the pure white variety. Snowball..... 5c pkt.

Hardy Garden Pinks

This splendid class of Pinks should be in all gardens. They have the delightful clove fragrance. *Half-hardy Perennial.*

- 203—**Double Large-Flowering Grass, or Spice Pinks.** (Plumarius Semperflorens, fl. pl.) One foot high. The flowers, which are beautifully fringed, are much larger and more double than the old varieties, while the colors are far richer. They emit a delightful, sweet-scented, spicy odor. Perfectly hardy, requiring only the ordinary culture of Pinks.....10c pkt.

DIANTHUS BARBATUS. (See Sweet William.)

DIGITALIS (Foxglove)

Handsome and highly ornamental hardy plants of stately growth. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; 3 to 5 feet. *Hardy Biennial.*

- 204—**Gloxineaflorea, Alba.**..... 10c pkt.
- 205— " Purple..... 10c pkt.
- 206— " Rose..... 10c pkt.
- 207— " Yellow..... 10c pkt.
- 208—**Finest Mixed**..... 10c pkt.

DOLICHOS (Hyacinth Bean)

A RAPID-GROWING annual climber, flowering freely in erect racemes, followed by ornamental seedpods; for covering arbors, trellises, etc. *Tender Annuals.*

- 209—**Finest Mixed.** Purple and white..... Oz., 15c; 5c pkt.

ESCHSCHOLTZIA

(California Poppy, Gold Cups)

A SHOWY, free-flowering plant of low-spreading growth, with finely divided foliage, blooming throughout the season. In seed should be sown thinly in shallow drills early in spring. *Hardy Annual.* (See cut.)

- 210—*Californica.* Bright yellow, with orange center. Oz., 25c; 5c pkt.
- 211—*Carmine King.* A beautiful carmine-rose color, as intense on the inside as on the outside of the petals, which gives it an altogether novel and beautiful effect. . . . Oz., 50c; 5c pkt.
- 212—*Golden West.* The flowers measure from 3 to 6 inches in diameter; they have large, overlapping petals, often daintily waved at the edges. Color, light canary-yellow, with an orange blotch at the base of the petals, which often suffuses the whole flower. . . . Oz., 30c; 5c pkt.
- 213—*Hybrida Grandiflora.* New large flowering erect type containing a large percentage of new shades and includes soft pink, scarlet, chrome-copper red, claret and royal purple. . . . 3 pkts., 25c; 10c pkt.
- 214—*Mixed.* Single cup-shaped flowers in shades of bright yellow, deep orange, pink and silvery white. Oz., 25c; 5c pkt.

BUSH ESCHSCHOLTZIA. (See *Hunnemannia*.)

EUPHORBIA

STRONG-GROWING annuals, suitable for beds of tall-growing plants or mixed borders; the flowers are inconspicuous; but the foliage is exceedingly ornamental. *Hardy Annual.*

- 215—*Variiegata.* (Snow on the Mountain.) Attractive foliage, veined and margined with white; 2 feet. . . 5c pkt.
- 216—*Heterophylla.* Annual Poinsettia, Mexican Fire Plant, Painted Leaf. The plant grows 2 to 3 feet high, of branching, bush-like form, with smooth, glossy green leaves, which about mid-summer become a beautiful orange-scarlet, presenting a striking and brilliant appearance. . . . 10c pkt.

EVERLASTING, ETERNAL, or STRAW FLOWERS. (See *Acroclinium*, *Ammobium*, *Gomphrena*, *Helichrysum*, and *Xeranthemum*.)

FEVERFEW. (See *Pyrethrum* and *Matricaria*.)

FLAX, Scarlet. (See *Linum*.)

FORGET-ME-NOT. (See *Myosotis*.)

FOUR-O'CLOCKS. (See *Marvel* of *Peru*.)

FOXGLOVE. (See *Digitalis*.)

GODETIA

- 217—The plants bloom profusely and bear showy flowers of satiny texture in many rich and varied colors. They do best in a rather poor soil. 1 foot. *Hardy Annual.* Finest Mixed. . . . Oz., 30c; 5c pkt.

GOMPHRENA (Globe Amaranth)

- 218—A desirable everlasting, valuable for its handsome globular heads of flowers. *Half-hardy Annual.* Mixed. . . . 5c pkt.



GAILLARDIA (Blanket Flower)

ANNUAL VARIETIES

Splendid, showy annuals; in bloom from early summer till November; excellent for beds, borders or for cutting. *Half-hardy Annual.*

219—*Picta Lorenziana.* Double-flowering mixed. . . 5c pkt.

220—*Picta Mixed.* Single sorts; fine colors. . . . 5c pkt.

HARDY PERENNIAL VARIETY

Thrives in almost any position or soil and requires little or no protection. If sown early, begins flowering in July, continuing a mass of bloom until frost, fine for cutting. *Hardy Perennial.* (See cut.)

221—*Grandiflora.* A compact variety, forming bushy plants 12 to 15 inches high, and bearing its long-stemmed flowers well above the foliage. . . . 5c pkt.

GERANIUM (Pelargonium)

THE heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in winter or for bedding out in summer. *Tender Perennial.*

222—*Zonale, Mixed.* A superb strain of the largest and finest varieties. . . . 10c pkt.

223—*Apple-Scented.* This fragrant, favorite variety can only be grown from seed to form fine plants. . . 10c pkt.

GLOXINIA

A *Green-house Perennial*, producing bell-shaped flowers in a diversity of colors.

224—*Hybrida Grandiflora*, finest mixed. . . . 25c pkt.

GOURDS (Ornamental)

BEING of rapid growth, they are fine to cover old fences, trellises, stumps, etc. Do not plant the seed till all danger of frost is over, and select rich, mellow ground. *Tender Annual* climbers, 10 to 20 feet.

225—*Calabash, or Dipper.* Long, slim handle. . . . 5c pkt.

226—*Dish Cloth.* Clusters of large, yellow flowers. The fruit, when dried, is used as a dish cloth. 5c pkt.

227—*Giant Bottle.* Large and ornamental. . . . 5c pkt.

228—*Hercules Club.* A curious sort, Club-shaped. . . . 5c pkt.

229—*Japanese Nest Egg.* White; facsimile of an egg; not injured by heat or cold. . . . 5c pkt.

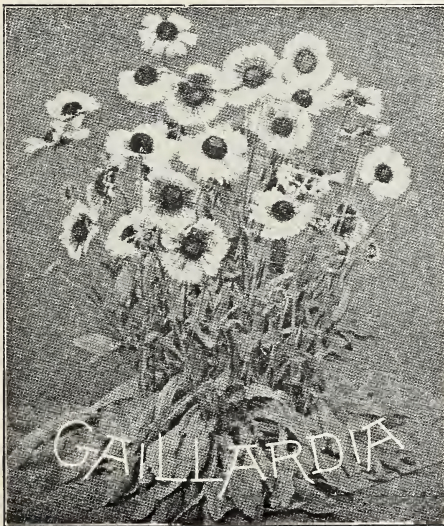
230—*Orange.* The well-known mock orange. . . . 5c pkt.

231—*Pear-Shaped.* Green and white striped. . . . 5c pkt.

232—*Sugar Trough.* Used for buckets. Very large. . . . 5c pkt.

233—*African Pipe.* The stem end of the fruit is used in making pipes. . . 5c pkt.

234—*Mixed Varieties.* Oz., 25c; 5c pkt.



GRASSES (Ornamental)

FOR large beds or groups on lawns nothing gives a finer effect, and they are now largely used in prominent positions in many of the finest public parks, etc. When carefully dried they are useful in making up winter bouquets. Cut when in full bloom, and before the flowers get too old; tie in small bunches and hang up in a dry, dark place, with the heads downward.

- 235—**Bromus Brizaeformis.** A graceful variety, with drooping panicles, flowering the first season. *Hardy Perennial*; 1 foot..... **5c pkt.**
- 236—**Coix Lachrymae.** (Job's Tears.) Broad, corn-like leaves, and hard, shining, pearly seeds resembling tears. *Hardy Annual*; 2 feet..... **Oz., 10c; 5c pkt.**
- 237—**Erianthus Ravennae.** A noble grass with exquisite white plumes; flowers the first season if sown very early. *Hardy Perennial*; 10 feet..... **5c pkt.**
- 238—**Eulalia Japonica.** One of the most beautiful of the tall-growing grasses. *Hardy Perennial*; 5 feet..... **5c pkt.**
- 239—**Gynerium Argenteum.** (Pampas Grass.) The finest ornamental grass in cultivation. *Half-hardy Perennial*; 10 feet..... **5c pkt.**
- 240—**Pennisetum Ruppelianum.** Beautiful and graceful spikes of purple; this is one of the best. *Hardy Annual*; 2 1/2 feet..... **5c pkt.**
- 241—**Finest Mixed.** Used for making winter bouquets. **5c pkt.**

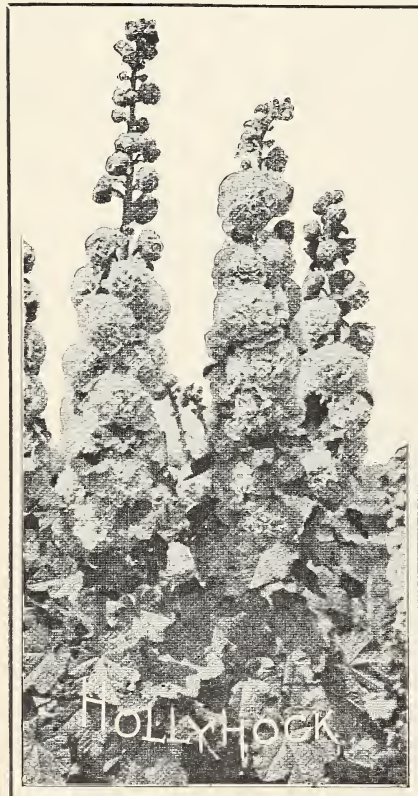
GYPSOPHILA (Baby's Breath)

PRETTY free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.

- 242—**Elegans Grandiflora Alba.** This is an improved large-flowering, pure white form of the annual Baby's Breath. *Half-hardy Annual*..... **Oz., 25c; 5c pkt.**
- 243—**Elegans Carminea.** Bright carmine-rose. **Oz., 30c; 5c pkt.**
- 244—**Paniculata.** White flowers, fine for bouquets; blooms first year if sown early. *Hardy Perennial*; 2 feet. **5c pkt.**

HELICHRYSUM (Straw Flower)

- 245—**Monstrosum.** Everlasting flowers, large and full. Colors, white, yellow and red. Cut before the flowers fully expand. *Hardy Annual.* Mixed..... **5c pkt.**



HELIOTROPE (Cherry Pie)

A HALF-HARDY Perennial, flowering during the whole season; its delightful perfume makes it a most desirable bouquet flower; a splendid bedding plant, or can be trained as a greenhouse climber. Seed started indoors in the spring will make fine plants for summer blooming.

- 246—**Choicest Mixed;** from new varieties..... **5c pkt.**

HIBISCUS (Marshmallow)

SHOWY ornamental perennial plants, for mixed beds or shrubby borders; blooms first year if sown early.

- 247—**Mallow Marvels.** Immense flowers 8 to 10 inches in diameter, in the following colors; fiery crimson, blood red, shell pink and white. Their great beauty surpasses all other perennials in profusion of bloom and brilliancy of color. They come up year after year and are absolutely hardy. *Hardy Perennial.* (See cut.) **10c pkt.**

HOLLYHOCK

ONE of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers it is without an equal. Seed sown any time before mid-summer will produce fine plants for flowering next year. To get results this season it is necessary to get year-old plants. These we offer with other hardy plants under their proper heads. *Hardy Perennial.*

- 248—**Chater's Double Pink**..... **10c pkt.**
- 249—**Chater's Double Rose**..... **10c pkt.**
- 250—**Chater's Double Scarlet**..... **10c pkt.**
- 251—**Chater's Double White**..... **10c pkt.**
- 252—**Chater's Double Yellow**..... **10c pkt.**
- 253—**Chater's Prize, Double Mixed.** This strain stands unrivaled in richness and delicacy of coloring, with magnificent spikes of very double flowers. (See cut.)..... **3 pkts., 25c; 10c pkt.**
- 254—**Choice Double Mixed**..... **5c pkt.**
- 255—**Mammoth Fringed Allegheny.** Mammoth flowers of loosely arranged fringed petals. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high..... **3 pkts., 25c; 10c pkt.**
- 256—**Single.** Many prefer the single flowering. They are usually of freer growth and present a handsome appearance when covered with their artistic blossoms. Finest mixed; all colors..... **5c pkt.**

HONESTY (Moonwort, Satin Flower)

- 257—Greatly admired for its silvery seed pouches, which are used for house ornaments; two feet. *Hardy Biennial*..... **5c pkt.**

HUNNEMANNIA

(Giant Yellow Tulip Poppy, or Bush Eschscholtzia)

- 258—**Fumariaefolia.** This is by far the best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large buttercup-yellow, poppy-like blossoms, and never out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful feathery glaucous foliage. *Half-hardy Annual.* **5c pkt.**

HUMULUS (Japanese Hop)

259—**Japonicus**. A very ornamental and fast-growing climbing plant. The foliage resembles that of the common Hop, is very dense, and in color a lively green. *Hardy Annual*.
 ¼ oz., 20c; 5c pkt.

260—**Variiegatus**. A variegated variety of the Hop. The leaves are beautifully marbled and splashed with silvery-white, light and dark green; very effective for screens, arbors, trellises, etc.
Hardy Annual. ¼ oz., 20c; 5c pkt.

HYACINTH BEAN. (See Dolichos.)

IBERIS (Hardy Candytuft)

261—**Sempervirens**. A profuse white-blooming plant, coming in flower early in the spring; much used for cemeteries, rockeries, etc.; 1 foot. *Hardy Perennial*. 5c pkt.

ICE PLANT

262—**Mesembryanthemum Crystallinum**. Handsome and curious plants for hanging baskets, rock-work, vases and edgings. The leaves and stems are covered with crystalline globules, giving it the appearance of being covered with ice. Succeeds best in a sandy soil and warm situation. *Tender Annual*. 5c pkt.

IPOMEA. (See Cypress Vine, Moonflower and Morning-Glory.)

IMPATIENS (Sultan's or Zanzibar Balsam)

CHARMING plants producing bright, waxy-looking flowers profusely and almost continuously. *Tender Perennial*.

263—**Sultana Hybrida**. Beautiful hybrids. Varying shades of color, from delicate pink to the deepest red. 10c pkt.

“**JACK AND THE BEAN STALK**”. (See Kudzu Vine Seed.)
JOB'S TEARS. (See Ornamental Grasses.)

KENILWORTH IVY

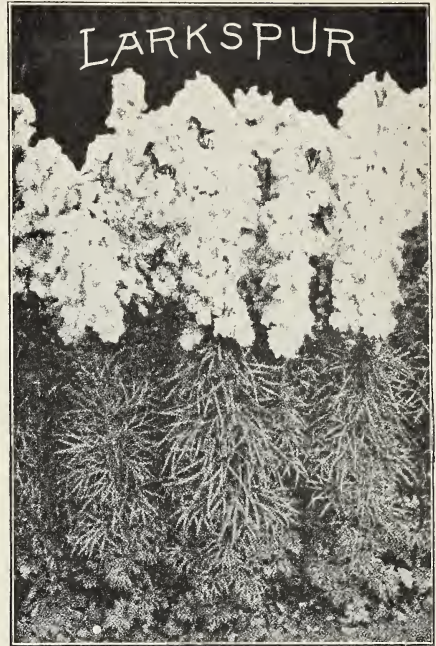
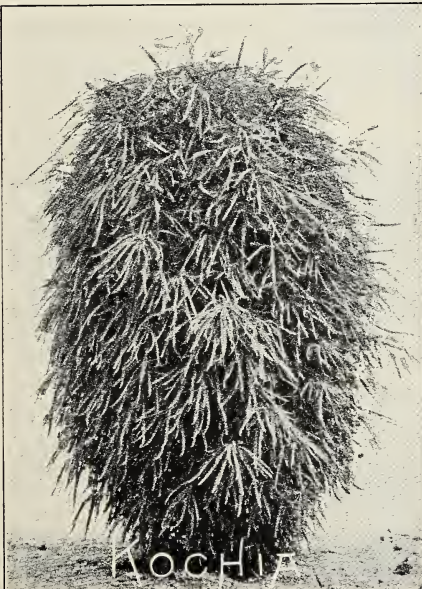
264—**Linaria Cymbalaria**. A trailing plant suitable for vases, etc. Little lavender and purple flowers and an exquisite foliage. *Hardy Perennial*. 10c pkt.

KOCHIA

(Summer Cypress, Belvedere or Burning Bush)

FORMS regular pyramids about 3 feet high, having a cypress-like appearance. The leaves are light green until September, when they change to carmine and blood red. Sow indoors in April and plant out in May, or sow in open ground about May 1. *Hardy Annual*. (See cut.)

265—**Kochia Childsii**. This new variety produces plants that grow three to four feet high, dense, strong and symmetrical. The foliage is green all summer, but at touch of frost it changes to dark claret-red and does not die until Christmas or later. A splendid plant to divide the vegetable from the flower garden or for forming a summer hedge for any purpose. Also desirable as a pot plant. 3 pkts., 25c; 10c pkt.



KUDZU VINE

266—**Pueraria Thunbergiana**. It will grow 8 to 10 feet the first year from seed, and after becoming established will produce vines 50 feet high in a season, sometimes growing 12 inches in a single day. Produces a tuberous root which is perfectly hardy. Unequaled for porches, arbors, trellises, etc. *Hardy Perennial*. 10c pkt.

LANTANA

267—Verbena-like heads of orange, white, rose and other colored flowers; constantly in bloom; 2 to 3 feet. *Half-hardy Perennial*. Mixed colors. 5c pkt.

LAVENDER (*Lavandula Vera*)

268—Well known, sweet-scented *Hardy Perennial*; should be extensively grown in the mixed border; 2 feet. 5c pkt.

LARKSPURS, Annual

THIS is one of the best known of garden flowers. Seeds sown in the open ground before the close of April will produce flowering plants by the beginning of July, and give a continuous succession of flowers from then until frost. *Hardy Annual*.

269—**Double Stock-Flowered**. The finest variety with splendid spikes of beautiful double flowers; 2 ½ to 3 feet. Finest mixed.
 ¼ oz., 15c; oz., 50c; 5c pkt.

270—**Dwarf Rocket**. The flowers are large, double and of various beautiful colors, shadings and markings; long spikes of bloom.
 Oz., 30c; 5c pkt.

(For Hardy Perennial Larkspurs see Delphinium)

(**LADY SLIPPER.** See Balsam.)

LATHYRUS (Everlasting, or Hardy Sweet Pea)

Showy, free-flowering climbers for covering old stumps, fences, etc.; continually in bloom; fine for cutting. *Hardy Perennial*.

271—**Latifolius** “White Pearl.” The finest white variety. . 10c pkt.

272—**Pink Beauty**. Rosy pink. 10c pkt.

273—**Mixed**. All colors. ¼ oz., 15c; oz., 40c; 5c pkt.

LINUM (Flax)

274—**Grandiflorum Rubrum**. (Scarlet Flax.) One of the most effective and showy bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarlet-crimson flowers. *Hardy Annual*; 1 foot. Oz., 25c; 5c pkt.

LOVE IN THE MIST. (See Nigella.)

See McCullough's Collection of
“EASY TO GROW” FLOWER SEED. It may save you money.
 Illustrated on 4th page of cover

LOBELIA

THE following choice varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging baskets, etc., blooming profusely from June to November. *Half-hardy Annual.*

- 275—**Crystal Palace Compacta.** Rich blue; finest for bedding. 10c pkt.
276—**Speciosa.** Dark blue; trailing; fine for vases. 5c pkt.

LUPINUS (Lupine)

- 277—**Annual Mixed.** Free-flowering, easily grown annuals, with long, graceful spikes of rich and various colored pea-shaped flowers; 2 feet. *Hardy Annual.* Oz., 25c; 5c pkt.
278—**Polyphyllus Roseus.** A fine variety of the perennial Lupine, with showy spikes of rose-colored flowers. *Hardy Perennial.* Oz., 50c; 10c pkt.
279—**Perennial Mixed.** *Hardy Perennial* varieties, in pink, blue and white mixed. Oz., 30c; 5c pkt.

MARIGOLD (See also Calendula)

THE African and French Marigolds are free-flowering annuals of easy culture; the former have uniformly large, yellow or orange colored flowers. (See cut.) The latter are dwarfer in growth, with beautifully striped flowers. They succeed best in a light soil, with full exposure to the sun. *Half-hardy Annual.*

African Varieties

- 280—**Orange Prince.** Densely double flowers of a rich, deep golden orange color. ¼ oz., 20c; 5c pkt.
281—**Lemon Queen.** Soft, lemon-yellow flowers, and forming a fine contrast to the preceding. ¼ oz., 20c; 5c pkt.
282—**Finest Mixed African.** ¼ oz., 15c; 5c pkt.

French Varieties

- 283—**Legion of Honor.** Single Dwarf Marigold, forming compact bushes. Flowers golden yellow and brown; blossoms in great profusion. ¼ oz., 25c; 5c pkt.
284—**French Gold Striped.** Very double; 1 foot. ¼ oz., 15c; 5c pkt.

MARVEL OF PERU, or Four O'Clocks (Mirabilis Jalapa)

- 285—A well-known free-flowering garden favorite; does well everywhere; give each plant 12 to 18 inches of room. *Half-hardy Perennial.* Finest Mixed. Oz., 25c; 5c pkt.

MATRICARIA

- 286—**Capensis Alba Plena.** (Double White Feverfew.) Free-flowering plants, producing all season fine, double, white flowers. A fine bedding or pot plant. *Half-hardy Perennial.* 5c pkt.



MAURANDIA

Beautiful, rapid, slender growing climbers, blooming profusely until late in the autumn; also fine for the conservatory or greenhouse. *A Half-hardy Perennial*, flowering the first season if sown early.

- 287—**Finest Mixed.** All colors. 10c pkt.

MIGNONETTE (Reseda)

A well-known favorite. No garden is complete without a bed of Mignonette. *Half-hardy Annual.* (See cut.)

- 288—**Defiance.** One of the finest sorts; excellent for forcing. ¼ oz., 20c; 10c pkt.
289—**Machet.** Dwarf pyramidal growth, with very large, thick spikes, fragrant. ¼ oz., 20c; 10c pkt.
290—**Sweet-Scented.** The old variety, but very sweetly scented. Oz., 15c; 5c pkt.

MIMOSA (Sensitive, or Humble Plant)

- 291—**Pudica.** Curious and interesting annual, with pinkish-white flowers; the leaves close and droop when touched or shaken. *Half-hardy Annual.* 5c pkt.

MIMULUS

Fine for shady situations, blooming the first year from seed if sown early; 1 foot. *Half-hardy Perennial.*

- 292—**Tigrinus.** (Monkey Flower.) Fine mixed spotted varieties. 5c pkt.
293—**Moschatus.** (Musk Plant.) Fine for hanging baskets, etc.; small yellow flowers, fragrant foliage. 5c pkt.

MOON FLOWER (Ipomoea Noctiflora)

Climbers of rapid growth, with beautiful and varied flowers; for covering walls, trellises, arbors or stumps of trees.

- 294—**Cross Bred or Hybrid Moon Flower.** At night and during dull days the plants are covered with an abundance of large, pure-white, fragrant flowers. 5 to 6 inches in diameter. It is a rapid grower, and within a few months will grow as much as 40 feet. To insure germination, take a sharp knife and cut a small nick in shell of each seed, and soak in warm water for about 4 hours before planting. *Tender Perennial.* ¼ oz., 20c; oz., 75c; 5c pkt.
295—**Giant Pink Hybrids.** Similar to the above in habit of growth and bloom with pink flowers. ¼ oz., 20c; oz., 75c; 5c pkt.

Moon Flower Plants. Each, 25c; per doz., \$2.50; by mail, each, 30c.



MORNING GLORIES or Convolvulus

THE Morning Glory is too well known to need a description. Succeeds under almost all circumstances. *Hardy Annual.*

- 296—**Morning Glories.** (Convolvulus Major.) Climbing varieties, mixed. Oz., 10c; ¼ lb., 25c; 5c pkt.
- 297—**Double Mixed.** The flowers are double and semi-double and some are fringed. 5c pkt.
- 298—**Imperial Japanese or Emperor Morning Glories.** The flowers are of gigantic size and their colors range from snow-white to black-purple, with all the possible intermediate shades. ½ oz., 15c; oz., 25c; 5c pkt.

MYOSOTIS (Forget-Me-Not)

The Forget-Me-Nots succeed best in shady, moist situations; *Half-hardy Perennial.*

- 299—**Alpestris Victoria.** Early flowering, of bushy habit, bearing large, bright, azure-blue flowers. 10c pkt.
- 300—**Palustris.** The true Forget-Me-Not; beautiful blue flowers; 6 inches. 10c pkt.
- 301—**Palustris Semperflorens.** A dwarf Forget-Me-Not continuing in bloom from early spring until autumn; blue flowers. 10c pkt.

NICOTIANA

(Sweet Scented Tobacco Plant)

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom, but with a longer tube. The flowers open toward evening and emit a powerful perfume. *Hardy Annual.*

- 302—**Affinis.** Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted, they will bloom all winter. 5c pkt.
- 303—**Sanderae Hybrids.** A showy and profuse flowering, half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1 ½ to 2 inches across and remain open all day. Many colors, mixed. 5c pkt.

NASTURTIUMS

FOR ease of culture, duration of bloom, brilliance of coloring and general excellence, nothing excels Nasturtiums. All they need is a moderately good soil in a well-drained sunny position. The varieties offered below were selected from a very large number of sorts as being the best and most distinct. *Half-hardy Annual.*

Tall, or Climbing Varieties

Elegant and luxurious climbers for verandas, trellises, etc. May be used to cover unsightly railings and to trail over rough ground with fine effect. The seedpods can be gathered while green and tender for pickling; 6 to 10 feet.

- 304—**Chameleon.** Different richly-colored flowers on the same plant.
- 305—**Crimson.** Rich and velvety.
- 306—**Edward Otto.** Lilac-brown.
- 307—**Gold Garnet.** Orange-yellow, with garnet blotches.
- 308—**Jupiter.** Golden yellow; large flowered.
- 309—**King Theodore.** Deep crimson-maroon, dark foliage.
- 310—**Orange.** Pure orange; no markings.
- 311—**Pearl, or Moonlight.** Creamy white.
- 312—**Ruby.** Deep scarlet flowers.
- 313—**Schulzii.** Rosy-scarlet flowers, dark foliage.
- 314—**Twilight.** Bright yellow, marbled salmon-rose.
- 315—**Vesuvius.** Rich glowing salmon color.

Price—Any of the above Tall sorts,
Oz., 20c; ¼ lb., 60c; 5c pkt.
316—**Collection.** 6 varieties. 25c.
317—**Collection.** 12 varieties. 40c.

- 318—**McCullough's "Premier" Mixture of Tall Nasturtiums** Contains all the new Giant Flowering kinds together with many other grand new hybrids, embracing every shade and tint of yellow, rose, scarlet, orange, carmine, violet, purple, lemon, bronze, maroon, ruby, cream and pink, both in solid colors and mottled and striped.
Oz., 20c; ¼ lb., 60c; lb., \$2.00; 5c pkt.
- 319—**Mixed Tall Nasturtiums.** For the low price, this mixture is very choice but will not give as fine flowers as our "Premier" listed above.
Oz., 15c; ¼ lb., 40c; lb., \$1.25; 5c pkt.



Lobb's Nasturtiums

THERE is little difference between these and the tall Nasturtiums. They are rich in the red shades.

- 320—**Finest Mixed.** 5c pkt.

Dwarf, or Bedding Varieties

THEY are suitable for hanging baskets, vases, window boxes, bedding and edging; grow quickly, thrive in the poorest soil and furnish the greatest abundance of long lasting, sweet-scented cut flowers.

- 321—**Beauty.** Yellow, striped red.
- 322—**Chameleon.** This interesting variety produces flowers of different colors on the same plant.
- 323—**Crystal Palace Gem.** Sulphur, spotted maroon.
- 324—**Empress of India.** Crimson flowers, dark foliage.
- 325—**Golden King.** Brilliant yellow.
- 326—**King of Tom Thumbs.** Intense deep scarlet flowers, dark foliage.
- 327—**King Theodore.** Dark maroon, bluish-green foliage.
- 328—**Pearl, or Moonlight.** Creamy white.
- 329—**Prince Henry.** Golden yellow, marbled and spotted with brilliant scarlet.
- 330—**Regalianum.** Deep purplish-crimson.
- 331—**Rose.** Salmon-rose.
- 332—**Vesuvius.** Brilliant salmon-pink.

Price—Any of the above Dwarf sorts,
Oz., 20c; ¼ lb., 60c; 5c pkt.

- 333—**Collection.** 6 varieties. 25c.
- 334—**Collection.** 12 varieties. 40c.

Will give a larger variety of colors in even proportions than any other Nasturtium mixture, for it is put up by ourselves from named sorts, and also contains a large share of the Liliput Nasturtium and of the Dwarf Chameleon which have the richest and most varied combination of colors ever produced, showing odd colors hitherto unknown among flowers.
Oz., 20c; ¼ lb., 60c; lb., \$2.00; 5c pkt.

- 336—**Dwarf Nasturtiums Mixed.** We handle such large quantities of Dwarf Nasturtiums that we are able to offer this especially choice mixture at a very low price. See also our "Premier" mixture listed above.
Oz., 15c; ¼ lb., 40c; lb., \$1.25; 5c pkt

TROPAEOLUM CANARIENSE.

(See Canary Bird Flower.)

NIGELLA

(Love in a Mist, or Devil in the Bush)

- 337—**Miss Jekyll.** Lovely variety giving an abundance of long-stemmed flowers which are of a clear corn-flower-blue, prettily set in slender elegant foliage. The plants are extremely hardy, and an autumn sowing produces the best specimens for flowering in the following summer. Height, 18 inches. *Hardy Annual*..... 10c pkt.
338—**Finest Mixed**..... 10c pkt.

PANSY

PANSY seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. Would advise sowing in shallow drills in seed-bed early in spring when the trees are starting out in leaf, and again in September when the weather becomes cool. Plants from the spring-sown seed flower with great freedom throughout spring, summer and fall, while the stocky young plants grown in fall and winter produce the largest and finest flowers early the following spring. Take care of the weakest looking seedlings, as they usually give the finest flowers. *Half-hardy Perennial*.

Giant Flowered Pansies

- 339—**Blue Perfection.** The best dark blue flowers of immense size..... $\frac{1}{8}$ oz., 50c; 15c pkt.
340—**Bridesmaid.** White shining rose, beautifully blotched..... $\frac{1}{8}$ oz., 50c; 15c pkt.
341—**Bugnots' Superb Blotched.** A French strain of extra large size, choicest colors, with beautiful broad blotches and delicate pencillings. Finest mixed..... $\frac{1}{8}$ oz., 75c; 20c pkt.
342—**Canary Bird.** Giant five-spotted yellow. $\frac{1}{8}$ oz., 60c; 15c pkt.
343—**Cassier's Giant.** A very showy strain saved from large and beautifully blotched flowers. $\frac{1}{8}$ oz., 60c; 15c pkt.
344—**Golden Queen.** Golden yellow, very fine. $\frac{1}{8}$ oz., 50c; 10c pkt.
345—**King of Blacks.** Lustrous jet black flowers of immense size..... $\frac{1}{8}$ oz., 50c; 10c pkt.
346—**Madame Perrett.** Colors dark wine, pink and red, with edges of petals frilled and bordered white. $\frac{1}{8}$ oz., 50c; 10c pkt.
347—**Masterpiece.** The enormous flowers are borne well above the foliage on strong stems. The petals of the flowers are waved or curled and contain the richest colors. Each petal is distinctly marked with a large dark blotch and most of the flowers are margined with a light, white or yellow edge.... $\frac{1}{8}$ oz., 60c; 15c pkt.
348—**Orchid Flowered.** Beautiful light shades, large frilled flowers..... $\frac{1}{8}$ oz., 50c; 15c pkt.
349—**Snowflake.** The finest and largest pure white flowers. $\frac{1}{8}$ oz., 50c; 10c pkt.
350—**Triumph.** A beautiful, showy class, very large frilled flowers, in a great variety of rich colors; extra fine..... $\frac{1}{8}$ oz., 75c; 20c pkt.

The cream of American and European Specialists. In this magnificent mixture of mammoth-flowering Pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; of fine substance, velvety texture, perfect form, and giant size, frequently measuring 3 inches in diameter. The colorings are wonderfully rich and varied; every shade and tint of rose, canary-yellow, black, white, cream, lavender, garnet, sky-blue and orange are produced in endless variation..... $\frac{1}{8}$ oz., \$1.00; $\frac{1}{4}$ oz., \$1.75; 25c pkt.

A superior mixture selected from choice, large flowering strains. This strain is one of great excellence, the individual flowers being superb and include many fine shades in a number of colorings, and is intended to supply the want of a first-class mixture at a moderate price..... $\frac{1}{8}$ oz., 60c; $\frac{1}{4}$ oz., \$1.00; 15c pkt.

Great diversity of colors, free flowering; blossoms are slightly smaller than the Giant sorts. $\frac{1}{8}$ oz., 15c; $\frac{1}{4}$ oz., 25c; 5c pkt.

Violas, or Tufted Pansies

(Also known as Pansy Violets, Johnny-Jump-Ups, etc.)

OUR improved strain produces beautiful Pansy-like blossoms, of most brilliant colors and markings. The plants are more hardy than Pansies, and of vigorous growth, forming deep-rooting, compact, tufted clumps. Planted in masses or lines they form perfect mats covered with myriads of flowers from spring until cold weather.

354—**McCullough's Special Mixture.** $\frac{1}{8}$ oz., 50c; 10c pkt.



PETUNIA

For outdoor decoration or house culture few plants equal the Petunia in effectiveness. Easily cultivated, only requiring a good soil and sunny position. *Hardy Annual*.

Double Large-Flowering

IT IS well known that seed saved from the most carefully hybridized flowers produces but a small percentage of double flowers, the balance being singles of unusually fine quality. The weaker seedlings should be carefully saved, as these invariably produce the finest double flowers.

- 355—**McCullough's Splendid Double Fringed** One of the finest strains in existence. The double flowers are very large, full and beautifully formed, with the edges of the petals elegantly fringed..... 35c pkt.
356—**Large Double Mixed.** Choice strains of fine colors and large flowers..... 25c pkt.

Single Large-Flowering

THE weaker seedlings produce the finest flowers of best colorings. It is best to sow large-flowering Petunias indoors and transplant to the open in May. The Single Bedding kinds can be sown right out of doors in May.

- 357—**McCullough's "Mammoth" Single** This mixture is made by ourselves and includes, besides the Ruffled and California Giants, all the colors of the large-flowering and fringed sorts, and the unsurpassed Superbissima varieties, with their delicately veined throats in various colors and their truly mammoth flowers... 3 pkts., 50c; 20c pkt.
358—**Ruffled Giants.** Very large flowered; ruffled, fluted and fringed, striped and mottled, blotched and solid self-colors..... 2 pkts., 25c; 15c pkt.
359—**Large Flowering Single, Finest Mixed.** Superb strain from show flowers; very large and of great substance..... 2 pkts., 25c; 15c pkt.

Balcony Petunias

A splendid free-flowering type, for bedding, window boxes, vases, hanging baskets, etc.

- 360—**Balcony Blue.** Rich velvety violet. $\frac{1}{8}$ oz., 50c; 15c pkt.
361—**Balcony Purpurea.** Dark red. $\frac{1}{8}$ oz., 50c; 15c pkt.
362—**Balcony Rose.** Brilliant rose-pink, very effective. $\frac{1}{8}$ oz., 50c; 15c pkt.
363—**Balcony White.** Pure white flowers, large and borne abundantly until frost..... $\frac{1}{8}$ oz., 50c; 15c pkt.

PETUNIA—Continued

Single Bedding Petunias

- 364—Alba. Pure white. ½ oz., 25c; 5c pkt.
- 365—Carmen Sylva. Baby blue with white throat. ½ oz., 50c; 10c pkt.
- 366—Howard's Star. A beautiful free-flowering strain, crimson-maroon with a clearly defined five-pointed star of bluish white. ½ oz., 40c; 10c pkt.
- 367—Rosy Morn. Carmine-pink with white throat. ½ oz., 40c; 10c pkt.
- 368—Dwarf Inimitable. A compact growing variety; flowers cherry-red with a white center. ½ oz., 30c; 10c pkt.
- 369—Striped and Blotched. Fine for massing. ½ oz., 25c; 5c pkt.

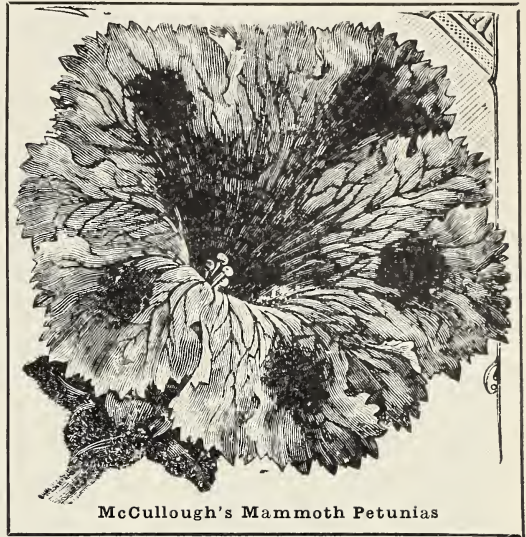
- 370—McCullough's "Selected" Bedding Varieties, Mixed. Superb strain. ¼ oz., 50c; 10c pkt.
- 371—Fine Mixed. Good. ¼ oz., 25c; 5c pkt.

McCULLOUGH'S Annual Phlox

FEW flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. The first sowing should be made as soon as the frost is out of the ground in spring, later ones in May, either where the plants are to bloom or in a seed-bed, as the Phlox transplants readily. (See cut.)

McCullough's Giant Phlox

- 372—Phlox Drummondii, Grandiflora Alba. Pure white.
 - 373—Phlox Drummondii, Grandiflora Brilliant. Rose, with light margins and dark eye.
 - 374—Phlox Drummondii, Grandiflora Coccinea. Scarlet. Each of the above. ¼ oz., 30c; 10c pkt.
- Is a special mixture of Phlox; has very large, perfectly round flowers, and will produce immense trusses of flowers which will surpass every other variety in extreme richness of color and duration of bloom. It grows very compact. To prolong blooming, the seed pods should be removed as soon as they form. A bed of McCullough's Giant Phlox makes a grand display all summer. ½ oz., 30c; ¼ oz., 50c; 10c pkt.
- 376—Phlox Drummondii, Mixed Colors. Flowers not so large as the Grandiflora type offered, but are very free-flowering and effective. ¼ oz., 30c; oz., \$1.00; 5c pkt.



McCullough's Mammoth Petunias

Star Phlox

- 377—Phlox Cuspidata. (Star of Quedlinburg.) Of dwarf habit with very pretty star-shaped flowers. A novel variety; mixed colors. 10c pkt.

Phlox, Large-Flowering Dwarf

- A type combining the size of the individual flower and head of the Grandifloras, but of dwarf, compact growth.
- 378—Defiance, scarlet. ¼ oz., 40c; 10c pkt.
 - 379—Snowball, white. ¼ oz., 40c; 10c pkt.
 - 380—Finest Mixed Colors (Dwarf Varieties). ¼ oz., 30c; 10c pkt.

Hardy Perennial Phlox (P. Decussata)

- Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondii, which are annuals. For best results, should be sown as soon as frost is out of the ground in spring or as soon as gathered in the autumn.
- 381—Mixed. All varieties. ¼ oz., 60c; 10c pkt.

POPPIES

Double Annual Poppies

THEY make a gorgeous show during their flowering period, and are largely used for beds and borders. Should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly. *Hardy Annual.*

- 382—American Flag. Beautiful variety; flowers very large and double, snow white, bordered with scarlet. Oz., 30c; 5c pkt.
- 383—Eldorado. This variety grows about two feet high, is totally distinct and one of the finest recent introductions. The flowers are large, double, semi-double and single, and contain grand shades of soft salmon, orange, orange-scarlet, pink, rose and white, without any dark markings. The substance of the petals in some of the lighter shades is as delicate as China silk. Oz., 50c; 5c pkt.
- 384—Fairy Blush. A double-flowering variety of large size with fringed petals, white near base and tinted rosy-cream on the tips. Oz., 30c; 5c pkt.
- 385—White Swan. Immense double flowers, beautifully fringed and of purest white. Oz., 25c; 5c pkt.
- 386—Carnation-Flowered. Splendid double fringed flowers; mixed colors. 5c pkt.
- 387—Peony-Flowered. Large, showy, double globular flowers, resembling a double Peony; mixed colors. Oz., 20c; 5c pkt.

- 388—McCullough's Special Mixture of Double Poppies. This includes all the above sorts and many others, and will produce charming flowers in an endless variety of colors. ½ oz., 15c; oz., 25c; 5c pkt.

Poppies continued to next page.



PHLOX DRUMMONDII

See Mc-Cullough's Collection of
"Easy to Grow" Flower Seed. It may save you money.
 Illustrated on 4th page of cover

POPPIES—Continued

Single Annual Poppies

ANNUAL Poppies should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly. If they come up too thickly they must be thinned out to stand 3 to 4 inches or more apart if you wish best results. *Hardy Annual.*

389—McCullough's Select Shirley They are single and occasionally semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and striped. In fact, so varied are they that scarcely any two flowers are exactly alike. (See cut.)
 $\frac{1}{4}$ oz., 15c; oz., 40c; 5c pkt.

390—Admiral. A single peony-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet around the top. These two colors form a very striking contrast, and when planted in groups produce a magnificent effect.
 Oz., 40c; 5c pkt.

391—Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silvery-white spot on each petal, forming a white cross.
 Oz., 40c; 5c pkt.

392—Tulip Poppy. (Papaver Glaucum.) One of the most brilliant; the flowers are 3 inches across and closely resemble the brilliant Scarlet Gesneriana Tulip; an elegant and distinct variety. Plants from 16 to 18 inches high, producing well above the foliage fifty to sixty large splendid flowers of the most vivid scarlet imaginable. From a mere description no adequate idea can be gained of its strikingly beautiful effect. The plant commences blooming early in June, and flowers abundantly for a period of from six to eight weeks. $\frac{1}{4}$ oz., 20c; oz., 60c; 5c pkt.

393—The Bride. A beautiful variety with very large, pure white, perfectly-formed flowers.Oz., 25c; 5c pkt.

394—McCullough's Special Mixture of Single Poppies This mixture includes all the above choice Poppies and many other kinds not listed. It is really extra choice.
 $\frac{1}{2}$ oz., 15c; oz., 25c; 5c pkt.

(For Double Flowering Poppies, see preceding page.)

Hardy Perennial Poppies

ORIENTAL and Bracteatum Poppies should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August, appearing again as soon as the weather gets cool. When this fall growth starts is the time they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted with a stake to insure the roots against disturbance during their annual resting period.

395—Bracteatum. Immense orange-scarlet flowers, similar to the Oriental Poppy. $\frac{1}{4}$ oz., 25c; 5c pkt.



396—Orientale. (The large Oriental Poppy.) A charming summer-flowering hardy plant, producing numerous leafy stems about 2 $\frac{1}{2}$ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. $\frac{1}{4}$ oz., 25c; 5c pkt.

Contains the preceding and
397—McCullough's Special Mixture of Orientale Hybrids many more beautiful hybrids of the Oriental Poppy, producing flowers of immense size, 6 inches and over in diameter, and of many novel colors. $\frac{1}{4}$ oz., 50c; 10c pkt.

Iceland Poppies (Papaver Nudicaule)

WHILE these are hardy perennials, they flower the first year from seed, blooming almost as quickly as the annual sorts. They are of graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, for if the seed pods are picked off, they continue in flower the entire season. They remain evergreen throughout the winter, coming into bloom early the following spring. *Hardy Perennial.*

398—Finest Mixed. All colors. $\frac{1}{4}$ oz., 25c; 5c pkt.

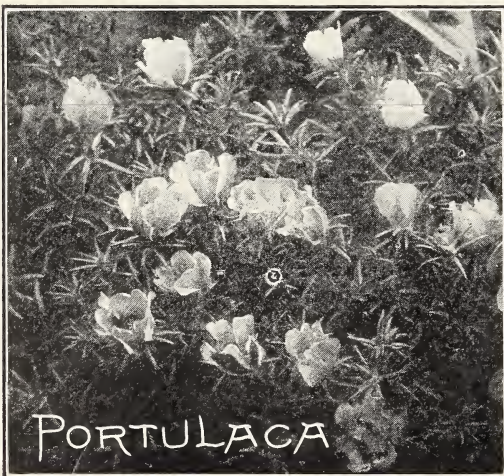
PORTULACA (Sun Plant or Rose Moss)

ONE of our finest *Hardy Annual* plants, of easy culture, thriving best in a light loam or sandy soil, and luxuriating in an exposed, sunny situation; the flowers are of the richest colors, and produced throughout the summer in great profusion; fine for massing in beds, edgings or rock-work; 6 inches. (See cut.)

399—Single Mixed ColorsOz., 60c; 5c pkt.

400—Double Mixed. A large percentage of the flowers will come perfectly double. $\frac{1}{4}$ oz., 75c; 10c pkt.

NOTE: Our list of flower seeds will be found to contain all varieties of real merit. Many times varieties are listed which are of little value in the garden, and others are so difficult to grow that unless one has every facility for propagation, disappointment is sure to follow the purchase of seed. We want our seeds to give satisfaction and our selection of varieties for this catalogue has been made with this purpose in view. Cultural directions will be found on most of our seed packets.



PRIMULA

THE beautiful Chinese Fringed Primroses and Obconica and Forbesi varieties are indispensable for winter or spring decorations in the home or conservatory. They are among the most important winter blooming pot plants. The seed we offer has been saved from the best strains of English and Continental growth. Sow in March, April or May. The hardy varieties are also deserving of wide cultivation.

Primula Chinensis Fimbriata FRINGED CHINESE PRIMROSES

The seed should be sown in light soil, but for final potting a richer soil is necessary, consisting of two parts loam to one each of well decayed manure and leafmould. *Greenhouse Perennial.*

- 401—Alba Magnifica. The finest pure white with bright yellow eye, beautifully fringed.....20c pkt.
- 402—Chiswick Red. Large brilliant scarlet, finely fringed.....20c pkt.
- 403—Coerulea. Fine blue; excellent. 20c pkt.
- 404—Delicata. Delicate rose; finely fringed. 20c pkt.

405—McCullough's Choice Mixed This mixture contains nothing but the finest sorts of Chinese Primroses. (See cut.).....20c pkt.



Primula Obconica

THESE are of the easiest culture in greenhouse or light window of dwelling house, flowering abundantly and continuously with little care, and should be sown during the spring in good, porous loam. They will not germinate well in any compost containing peat or leafmould. To develop the colors to the highest degree, grow in heavy soil, and at a temperature as near 60 degrees as possible. The Grandiflora varieties are the freest flowering, but lack the very large individual blooms of the newer Gigantea type. *Greenhouse Perennial.*

- 406—Primula Obconica Grandiflora. Very large flowers with nicely fringed and toothed petals. The flowers are produced in constant succession, ranging in color from white and red to rose.....10c pkt.
- 407—Primula Obconica Gigantea. This new variety is the finest yet introduced; of strong, vigorous growth with immense heads of large individual blooms. Varies in color from pale lilac to rose, white and red...15c pkt.

Primula, Various Sorts

- 408—Forbesi. (Baby Primrose.) This is the freest-flowering Primula we know of. The little plants throw up tiny rosy-lilac flowers when only a few weeks old. 10c pkt.
- 409—Malacoides. A fine house plant, somewhat like P. Forbesi, but larger in all its parts; flowers delicate lilac. 15c pkt.



Rudbeckia

Hardy Primroses

These are among the best of the early spring-blooming plants. *Half-hardy Perennial.*

- 410—Auricula. Finest mixed. Extra choice; saved from a prize collection.....10c pkt.
- 411—Veris. (Polyanthus.) Splendid colors; extra fine. 10c pkt.
- 412—Vulgaris. True English Primrose; canary yellow, fragrant flowers.....10c pkt.

PYRETHRUM

ONE of the most valuable of our summer flowers. They flower in May and June, and frequently in August and September the second time. *Hardy Perennial.*

- 413—Hybridum Grandiflorum. This large flowering single strain is saved from a fine collection. Bears large Daisy or Cosmos-like flowers, ranging in color from light pink to deep red, with bright yellow centers; blooms in May and June and again in the fall. One of the most graceful and long-lasting cut flowers. 1/4 oz., 50c; 10c pkt.
- 414—Hybridum Fl. Pl. Large semi-double flowers, resembling a China Aster, only more refined; extra choice selected seed; mixed colors.....25c pkt.
- 415—Pyrethrum Aureum. It is the well-known Golden Feather used for edging, carpet-bedding, etc...5c pkt.

RICINUS (Castor Bean)

KNOWN as "Castor Oil Plant" and "Palma Christi." Highly ornamental and stately growing plants of tropical origin, with luxuriant foliage of varied colors and brilliant colored fruit. Sow as soon as the ground is warm. *Half-hardy Annual.*

- 416—Cambodgiensis. The main stem and leaf stalks are of shining ebony black; the leaves are very large and richly colored, changing to different shades; 6 feet.....Oz., 30c; 5c pkt.
- 417—Sanguineus. Blood-red stalks and clusters of red fruit; 8 feet. Oz., 30c; 5c pkt.
- 418—Zanzibariensis. A distinct class, which surpasses in size and beauty all varieties. The plants attain great dimensions, presenting a splendid aspect with their gigantic leaves. The different varieties included in our mixture have light and dark green leaves and some of coppery-bronze, changing to dark green, with reddish ribs. The seeds are quite distinct in color and beautifully marked. 8 to 12 feet.....Oz., 30c; 5c pkt.
- 419—Mixed. All sorts.....Oz., 25c; 5c pkt.

RUDBECKIA (Cone Flower)

- 420—Bicolor Superba. Fine free-flowering annual variety, growing about 2 feet high, forming a dense bush and producing its bright flowers in great abundance on long stems. The disc is brown, the florets golden yellow, with large velvety-brown spots at the base; very effective and useful for cutting. *Half-hardy Annual.*.....10c pkt.
- 421—Newmani. One of the finest of autumn-flowering perennials, bearing large flowers. Bright orange-yellow petals, surrounding a large black cone; a showy flower. *Hardy Perennial.*.....10c pkt.

SALPIGLOSSIS (Painted Trumpet)

THE blossoms are tube shaped much like a Petunia, but rivaling the latter in the beautiful colors displayed. Seed should be sown early in spring in a hot-bed or window and transplanted when weather is settled, or directly out-of-doors after danger of frost is past. *Half-hardy Annual.* (See cut.)

- 422—**McCullough's Special Mixture** This mixture is put up by ourselves from separate varieties and is without doubt the best mixture obtainable 1/8 oz., 25c; 10c pkt.
- 423—**Emperor.** This variety forms only one leading stem, and bears on its summit a veritable bouquet of the most beautiful flowers, each one richly veined with gold. 1/8 oz., 25c; 10c pkt.
- 424—**Finest Mixed.** All colors. . . . 1/4 oz., 25c; 5c pkt.

SALVIA (Flowering Sage)

SEED should be sown as early as possible, either indoors or in a hot-bed, and the young plants transferred to their flowering quarters when the weather has become settled and warm. *Half-hardy Perennial.*

- 425—**America, or Globe of Fire.** A variety of dwarf, bushy, compact growth, uniform in height and shape, and literally aglow with large spikes of brilliant scarlet flowers from early in the season until late in fall. 10c pkt.
- 426—**Bonfire, or Clara Bedman.** Grows in a compact bush about 2 feet high by 2 feet in diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark-green foliage and completely cover the plant. (See cut.) 1/8 oz., 40c; 10c pkt.
- 428—**Patens.** A tender perennial variety; flowers intense bright blue, of large size; a beautiful plant for the border; can be kept as a house plant in a warm room. 20c pkt.
- 429—**Splendens.** (Scarlet Sage.) One of the finest summer and fall plants with magnificent brilliant scarlet flowers; 2 feet. 1/8 oz., 30c; 10c pkt.

SCABIOSA

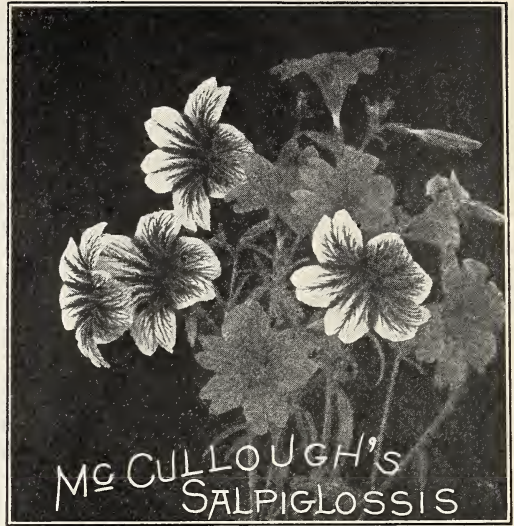
(Mourning Bride, Sweet Scabious, Pincushion Flower)

The beautiful flowers in exquisite shades are borne on long stems, and when cut keep in perfect condition for the best part of a week. *Hardy Annual.*

- 430—**Azure Fairy.** 433—**King of the Blacks.**
- Lavender-blue. 434—**Rose.**
- 431—**Crimson.** 435—**White.**
- 432—**Flesh Pink.**
- Any of the above. 1/4 oz., 20c; 5c pkt.
- 436—**Collection.** One packet each of the above 6 varieties. 25c.
- 437—**Mixed.** All colors of the Improved Large-flowering sorts. 1/4 oz., 15c; oz., 50c; 5c pkt.



Salvia—"Bonfire"



Scabiosa, Hardy Perennial Varieties

- 438—**Caucasica.** (Blue Bonnet.) Especially valuable for cutting, the blooms lasting a long time in water; lilac-blue; 3 feet. *Hardy Perennial.* 10c pkt.

SCARLET RUNNER BEANS

- 439—A great favorite in Europe, not only as an ornamental climber, but for the delicious, edible pods which succeed the bright scarlet, pea-shaped blossoms. *Tender Annual.* Large pkt., 10c; small pkt., 5c.

SENSITIVE PLANT. (See Mimosa.)
SHASTA DAISY. (See Hardy Chrysanthemum.)

SCHIZANTHUS (Poor Man's Orchid, or Butterfly Flower)

THIS is one of the daintiest flowers, especially adapted to bordering beds of taller flowers and those of a heavier growth. The seeds germinate quickly and come into bloom in a few weeks from sowing. The florescence is such as to completely obscure the foliage, making the plants a veritable pyramid of the most delicate and charming blooms. *Half-hardy Annual.*

- 440—**Mixed.** A splendid mixture. Neat pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. . 5c pkt.

SMILAX (Myrsiphyllum Asparagoides)

- 441—Smilax is the most useful climber which adorns the greenhouse or conservatory. *Tender Perennial.* 1/4 oz., 25c; 10c pkt.

SOLANUM

- 442—**Capsicastrum.** (Jerusalem Cherry.) This is a very useful pot plant for winter decoration. It is of dwarf, branching habit, leaves small and oval-shaped, bearing in the greatest profusion bright scarlet globular berries. Very ornamental; 1 foot. *Tender Perennial.* . . 10c pkt.

STOCKS (Gilliflower)

STOCK seed may be sown in the open ground, or in the hot-bed or cold frame, 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 fine perpetual blooming stock, producing one long, sturdy spike, closely set with enormous double flowers. A grand variety. 10c pkt.

- 443—**McCullough's Cincinnati Market**
- 444—**Princess Alice.** (Cut and Come Again.) If sown early it commences blooming in June and continues until frost. It throws out numerous side branches bearing clusters of very double, pure white, fragrant blossoms and is excellent for cutting. 10c pkt.

STOCKS—Continued

Giant Perfection Ten Week Stock

This magnificent strain is without a rival for open-ground planting, attaining a height of 2½ feet. The spikes of bloom are long and the individual flowers are enormous in size and very double. *Half-hardy Annual.* (See cut.)

- 445—Light Blue.....10c pkt.
- 446—Bright Pink.....10c pkt.
- 447—Blood Red.....10c pkt.
- 450—Finest Mixed Perfection. All colors.....10c pkt.
- 448—Purple.....10c pkt.
- 449—White.....10c pkt.
- 451—Dwarf Fine Mixed. For outdoor bedding.....5c pkt.

Mammoth-Flowering Beauty Stock

A magnificent recently developed strain of early flowering Winter Stocks, forming many-branched plants about 2 feet high and having numerous spikes of very large, double, delightfully fragrant flowers. If sown in March will produce plants that will bloom out of doors. *Half-hardy Biennial.*

- 452—Almond Blossom. White shaded carmine, superb.....10c pkt.
- 453—Beauty of Nice. Delicate flesh pink.....10c pkt.
- 454—Lilac. Deep lilac, beautiful color and large spikes.....10c pkt.
- 455—Mont Blanc. Purest white.....10c pkt.
- 456—Queen Alexandra. Soft rosy-lilac.....10c pkt.
- 457—Beauty Stocks, Mixed.....10c pkt.

STOKESIA (Cornflower or Stokes' Aster)

PLANTS grow about 15 to 18 inches high, bearing freely from July to October handsome Centaurea-like blossoms, each measuring from 4 to 5 inches across; it is of easy culture, and one of the most desirable plants for the hardy border, and also for cutting. *Hardy Perennial.*

- 458—Cyanæa. Light blue.....10c pkt.

SUNFLOWER (Helianthus)

REMARKABLE for the stately growth, size and brilliancy of their flowers, making a very good effect among shrubbery and for screens. *Hardy Annual.*

Double Annual Sunflowers

- 459—Chrysanthemum-Flowered. The plants grow 6 to 7 feet and produce a great number of double flowers. Oz., 30c; 5c pkt.
- 460—Globosus Fistulosus. (Dahlia Sunflower.) Flowers large, double, of a rich saffron color, 6 feet. Oz., 30c; 5c pkt.
- 461—Mammoth Russian. Extra large flowers, with an abundance of seed. Oz., 10c; ¼ lb., 25c; 5c pkt.
- 462—Double Varieties, Mixed..... Oz., 25c; 5c pkt.

Hardy Perennial Sunflowers

- 463—Mixed. Contains the finest single-flowering *Hardy Perennial* sorts. Seeds sown early will produce flowering plants the first year; as subjects for the hardy border as well as for cutting, they are of great value. ¼ oz., 65c; 10c pkt.



Single Annual Sunflowers

(Dwarf-Branching "Cut-and-Come-Again")

- 464—Stella. (Improved Miniature Sunflower.) Flowers of the purest golden yellow, with black disc. The plants form bushes 2 to 3 feet high, bearing a continuous succession of flowers from June until frost. They are easily grown, commencing to flower in a few weeks from seed. *Hardy Annual.*..... ¼ oz., 15c; 5c pkt.
- 465—The "Red Sunflower." The plants vary in height from five to eight feet. The flowers are of good form, usually having large, long rays and small discs. The color varies greatly—some plants produce flowers of a rich chestnut-red, others red flowers tipped with yellow, others washed with red..... 3 pkts., 25c; 10c pkt.

SWEET WILLIAM (Dianthus Barbatus)

WE are pleased to see that the merits of this sturdy, old-fashioned flower are being more generally recognized and its cultivation greatly extended. Beautiful, fragrant and easily grown, it is worthy of a place in every garden. The best varieties of Sweet William are of exceedingly beautiful colors, and the large fragrant flowers are borne in trusses of great size. They make a splendid show in the garden or hardy border and last well as cut flowers. Seed may be sown at any time from spring to midsummer. Seed planted early will bloom in the fall. It is better to sow seed every year to have young plants, as they flower more freely. *Hardy Perennial.* Height, 1½ to 2 feet.

- 466—Pink Beauty. An exceedingly pretty variety with beautiful salmon-pink flowers..... 5c pkt.
- 467—Holborn Glory. This strain is a large-flowered selection of the auricula-eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, and the range of color, all showing a clear, white eye, is superb... 5c pkt.

468—McCullough's Selected Single Mixed. A very choice assortment of all the best single-flowering varieties. ¼ oz., 20c; 5c pkt.

- 469—Double Red. Very effective, rich deep red variety..... 5c pkt.
- 470—Double White. Excellent for cut flowers..... 5c pkt.
- 471—Double Mixed. This mixture you will find of very superior quality; containing all colors and shades..... 5c pkt.

SWEET SULTANS. (See Centaurea.)

SNOW-ON-THE-MOUNTAIN. (See Euphorbia.)

SNAPDRAGON. (See Antirrhinum.)



McCULLOUGH'S SELECT SWEET PEAS

It Would be an Easy Matter for Us to Greatly Extend Our List, but We Think it Best to Confine Our Offers to Such Sorts as are Really First-Class.

HOW TO GROW SWEET PEAS.—The principal essential for the best success is a cool, deep, moist soil and a sunny situation. The ground should be prepared deep and rich. Fall preparation, where possible, is preferable, but if done in the spring, use no green manure. Bone meal is good if old rotted manure can not be obtained. Sow early, as Sweet Peas need the cold, moist spring ground to make the root growth. In the latitude of Cincinnati, February is not too early. In the South, sow in the fall. Sow the seed in deep furrows, the bottom of which must be at least 6 inches below the level of the soil; this is to guard against a summer drought. Cover the seeds only one inch, after which the furrow is still five inches deep. When the plants are 2 or 3 inches high, thin out to 2 inches apart and fill in another inch or so of soil around the plants, always leaving a portion of the plant above the surface; do this at intervals until the furrow is nearly full; it should always remain a little hollow to hold the rains, and to allow water to be applied by the bucketful when necessary.

During dry weather they should be watered thoroughly and frequently and given an application of liquid manure once a week. A mulch of hay or rakings from the lawn will be found beneficial during hot weather. The flowers should be picked as often as possible, and all withered blooms should be removed, to prevent the plants from running to seed, which would stop them from blooming.

Early Flowering Spencer Varieties

NOTHING within recent years can approach in importance the introduction of the "Spencer" Sweet Peas. They are distinguished from the standard sorts by the enormous flowers with crinkled and wavy petals, and also from the fact that they usually bear four blossoms on a long stout stem.

In presenting the following varieties of Spencer Sweet Peas, we wish to emphasize the fact that these are the "Early Flowering Spencers" and are separate and distinct from the late or standard Spencer types, as they continue blooming two or three weeks longer than the standard Spencer varieties.

472—Blanche Ferry. The standard is bright rose, the wings being pinkish or blush-white. Vines are strong and vigorous, bearing large, well waved flowers in threes and fours.

½ oz., 40c; oz., 75c; 10c pkt.

473—Harmony. Flowers are a clear lavender of large size and finely waved.

½ oz., 40c; oz., 75c; 10c pkt.

474—Heather Bell. The color is a rich and pleasing mauve, but after standing in water the color becomes a beautiful mauve lavender.

½ oz., 40c; oz., 75c; 10c pkt.

475—Liberty. A rich, deep, sunproof crimson. The flowers are large, well waved and borne in fours and threes. The vines are vigorous.

½ oz., 40c; oz., 75c; 10c pkt.

476—Meadow Lark. Flowers are cream colored, duplexed, well waved and borne in fours and threes very floriferously on strong vines. ½ oz., 40c; oz., 75c; 10c pkt.

477—Morning Star. The color is a deep orange scarlet or flame color in standard, with rich orange-pink wings.

½ oz., 40c; oz., 75c; 10c pkt.

478—Mrs. A. A. Skaach. Finely waved bright pink flowers of large size.

½ oz., 40c; oz., 75c; 10c pkt.

479—Rose Queen. A splendid pink flower; large and of fine form.

½ oz., 40c; oz., 75c; 10c pkt.

480—Snow Flake. This is the best Early Flowering White Seeded Spencer. The blossoms are very large and of the best waved Spencer form. ½ oz., 40c; oz., 75c; 10c pkt.

481—Song Bird. Standard richly flushed with a beautiful distinct shade of pink on a white ground, wings soft light pink.

½ oz., 40c; oz., 75c; 10c pkt.

482—Warbler. The flowers are a rich mauve-purple color, large and beautiful in form.

½ oz., 40c; oz., 75c; 10c pkt.

483—Yarrawa. The color on opening is rose, changing as the flower develops, to a light pink standard, tinted buff, with blush wings.

½ oz., 40c; oz., 75c; 10c pkt.

484—Early Flowering Spencers, Mixed. A carefully composed mixture of the finest standard named varieties, colors properly blended. ½ oz., 30c; oz., 50c; 10c pkt.

Spencer Varieties

485—Dobbies Cream. Deep cream or primrose colored, nicely waved, with an abundance of four-bloom sprays.

½ oz., 20c; oz., 35c; 10c pkt.

486—Dobbies Sunproof Crimson. This beautiful crimson flowering variety does not scorch or burn under intense sunshine. Flowers are freely borne on long stems in threes and fours. ½ oz., 20c; oz., 35c; 10c pkt.

487—Fiery Cross. Color a scorching fire-red, or scarlet. It does not scorch or burn and the beautifully waved and fluted flowers are borne freely in threes and fours, on long stems. ½ oz., 20c; oz., 35c; 10c pkt.

488—Hercules. A magnificent soft rose-pink. The broad and beautifully waved standards frequently measure two and one-half inches in diameter.

½ oz., 20c; oz., 35c; 10c pkt.

489—Hilary Christie. Flowers salmon-orange, edged with fiery orange-scarlet, wings rosy salmon.

½ oz., 20c; oz., 35c; 10c pkt.

490—Jean Ireland. Flowers creamy buff, standards margined carmine-rose. ½ oz., 20c; oz., 35c; 10c pkt.

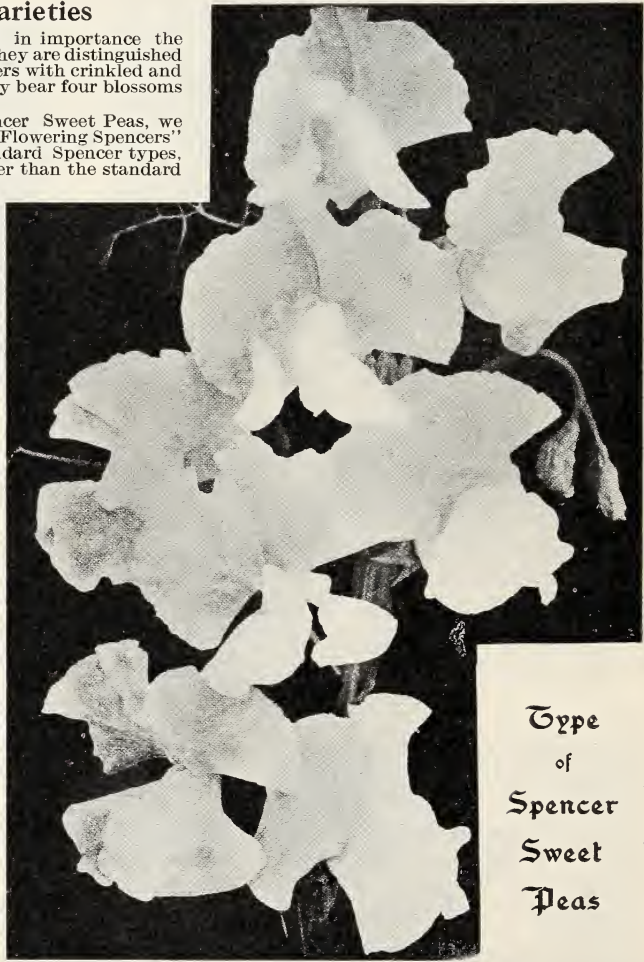
491—King Edward Spencer. The large flowers are waved and crinkled; standard and wings deep rich carmine-scarlet. ½ oz., 20c; oz., 35c; 10c pkt.

492—King White. The grandest of all White Sweet Peas and of the most up-to-date Spencer form. It is the largest of White Spencers and the buds are of unusual size before opening. The stems are long, stout and bear practically always four blossoms.

½ oz., 20c; oz., 35c; 10c pkt.

493—Margaret Atlee. The flowers are a rich glowing pink on cream ground, suffused with salmon in the standard, while the wings are pinkish-rose and salmon. The flowers are exquisitely waved, and freely produced in fours on long stout stems.

½ oz., 20c; oz., 35c; 10c pkt.



Type
of
Spencer
Sweet
Peas

McCULLOUGH'S SELECT SWEET PEAS

SPENCER VARIETIES—Continued

- 494—**Margaret Madison.** The flowers are azure blue, slightly tinted with mauve, of good size, both standard and wings being delightfully waved and frilled.
½ oz., 20c; oz., 35c; 10c pkt.
- 495—**Miriam Beaver.** Light apricot and buff.
½ oz., 20c; oz., 35c; 10c pkt.
- 496—**Mrs. Cuthbertson.** The standard is a clear, rose-pink in color, wings white, slightly flushed light rose.
½ oz., 20c; oz., 35c; 10c pkt.
- 497—**R. F. Felton.** The color is a soft, pleasing shade of lavender suffused rose; wings French gray, flowers large and waved ½ oz., 20c; oz., 35c; 10c pkt.
- 498—**Rosabelle.** A fine large rose-colored flower, and a strong grower ½ oz., 20c; oz., 35c; 10c pkt.
- 499—**Royal Purple.** A rich royal purple, a distinct color and large size ½ oz., 20c; oz., 35c; 10c pkt.
- 500—**The President.** Flowers are scarlet, of largest size, carried on strong, stiff stems, usually in fours, always beautifully waved.
½ oz., 20c; oz., 35c; 10c pkt.

501—**McCullough's Special Mixture of Spencer Varieties** This mixture is made up by ourselves from the cream of this class in all possible color variations, and we are confident many surprises will result, as we have included in this not only the above sorts, but many others which are new and striking in this class . . . ½ oz., 15c; oz., 25c; ¼ lb., 75c; 10c pkt.

502—**Spencer Hybrids.** In splendid mixture.
Oz., 15c; ¼ lb., 50c; lb., \$1.75; 5c pkt.

Grandiflora Varieties

Are considered easier to grow than the Spencers.

The varieties listed below are the cream of all known sorts. All inferior varieties have been discarded.

McCULLOUGH'S SELECTED LIST INCLUDES THE BEST VARIETIES IN ALL COLORS
Oz., 15c; ¼ lb., 40c; 5c pkt.

- 503—**Black Knight.** Pure maroon, self-colored, large size.
- 504—**Blanche Ferry.** Rose-pink standard, white wings.
- 505—**Dorothy Eckford.** The finest pure white. The plant is short-jointed, and grows an enormous mass of bloom.
- 506—**Flora Norton.** Pure bright self-blue; quite distinct.
- 507—**King Edward VII.** A lovely, intense, bright crimson, giant flowering variety with strong stems and growth; does not burn in the sun.
- 508—**Lady Grisel Hamilton.** Beautiful pale lavender; in form it is one of the most advanced giant flowering type.
- 509—**Lord Nelson.** Standard, dark navy blue, wings shaded purple.
- 510—**Miss Wilmott.** Standard, orange-pink, wings rose, tinted orange.
- 511—**Mrs. E. Kenyon.** A most desirable variety having bold, giant flowers of a beautiful primrose color.
- 512—**Mrs. Geo. Higginson, Jr.** A clear, delicate light blue.
- 513—**Nora Unwin.** Giant white flowering variety.
- 514—**Prima Donna.** Bright blush pink; large size and fine form.
Each of the above, oz., 15c; ¼ lb., 40c; 5c pkt.

McCULLOUGH'S "PREMIER" MIXED SWEET PEAS

THE FINEST AND MOST COMPLETE MIXTURE EVER OFFERED

- 515—This mixture contains all the best-named large-flowering varieties and novelties and is undoubtedly a truly superb mixture blended by us with extraordinary care from named varieties of the most approved large-flowering type including recent American and European varieties, as well as a great many Spencer and Unwin sorts and other hybrids insuring a gorgeous color effect.
Oz., 10c; ¼ lb., 35c; per lb., \$1.25; 5c pkt.
- 516—**Fine Mixed.** A very good mixture of over 30 large flowering varieties.
Oz., 10c; ¼ lb., 25c; per lb., 80c; 5c pkt.

All 5c Packets of Flower Seeds are 6 Packets for 25c. All 10c Packets are 3 Packets for 25c.

McCULLOUGH'S Special Collections

EARLY FLOWERING "SPENCER" SWEET PEAS

One (regular size) packet of each of the Thirteen Early Flowering Spencer Varieties for 85c postpaid; or 6 packets for 45c, customer's selection, postpaid.

"SPENCER" SWEET PEAS

One (regular size) packet of each of the Sixteen Spencer Varieties for \$1.00, postpaid.

12 packets for 80c, or 6 packets for 45c, customer's selection, postpaid.

"GRANDIFLORA" SWEET PEAS

Twelve Best Grandiflora or Large Flowering Varieties for only 45c—postpaid.

(One regular size packet of each variety listed)
or 6 packets for 25c, customer's selection, postpaid.

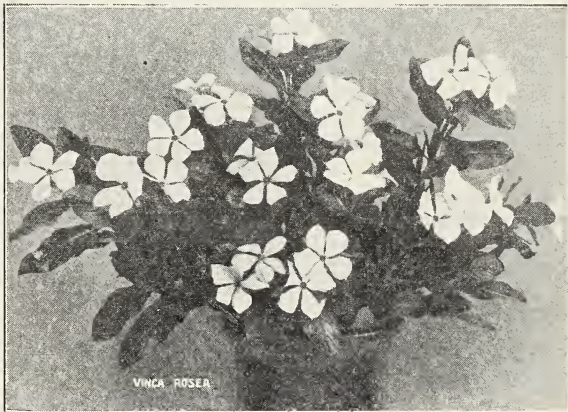
(See also McCullough's "Premier" Mixture.)

THUNBERGIA (Black-Eyed Susan)

517—Beautiful, rapid-growing annual climbers, preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc.; very pretty flowers in buff, white, orange, etc.; with dark eyes; mixed colors.
Half-hardy Annual. 4 feet ¼ oz., 25c; 5c pkt.

TORENIA

518—**Fournieri.** A very fine annual; a splendid plant for vases, hanging-baskets, borders, etc.; covered the entire season with a mass of bloom. Sky-blue, with three spots of dark-blue, bright yellow center. *Half-hardy Annual.* 10c pkt.



VINCA (Madagascar Periwinkle, or Old Maid)

Ornamental, free-blooming plants and one of the most satisfactory flowering bedding plants we have. It is best to start the seed early indoors or in a hot-bed, but they begin blooming in August from seed sown out-of-doors in May, or as soon as the ground is warm, continuing until frost; or they may be potted and kept in bloom through the winter; a fine cut flower, every bud opening when placed in water; 2 feet. *Tender Annual.* (See cut.)

- 519—**Rosea.** Rose, dark eye 10c pkt.
520—**Alba Rosea.** White, crimson eye 10c pkt.
521—**Alba Pura.** Pure white 10c pkt.
522—**Mixed.** ¼ oz., 25c; 5c pkt.

VERBENAS. (See next page.)

See McCullough's "Easy to Grow" Flower Seed. It may save you money.
Illustrated on 4th page of cover

VERBENAS

To have the best results, seeds should be started early in the house and the young plants bedded out by the first of June, and they will make a lavish and showy display of flowers until frost. *Half-hardy Annual.*

- 523—**Gigantea Lucifer.** Flowers intense brilliant scarlet with no eye. ½ oz., 40c; 10c pkt.
- 524—**Gigantea, Mixed.** ½ oz., 35c; 10c pkt.
- 525—**Mammoth Defiance.** Brilliant scarlet; fine for bedding. ½ oz., 35c; 10c pkt.
- 526—**Mammoth Candidissima.** Large trusses of pure white flowers. ½ oz., 35c; 10c pkt.
- 527—**Mammoth Blue.** Bright blue, in various shades. ½ oz., 35c; 10c pkt.
- 528—**Mammoth Pink.** Bright shades of pink; fine. ½ oz., 35c; 10c pkt.

Our mixture contains every desirable color and shade. They bloom most profusely, and for enormous flowers of rich and superb colors, are unsurpassed. ½ oz., 25c; ¼ oz., 40c; 10c pkt.

530—**Fine Mixed.** A very satisfactory assortment, containing many fine colors and shades. ½ oz., 15c; ¼ oz., 25c; 5c pkt.

VIOLET (*Viola Odorata*)

A great favorite, suitable for groups, or borders, and much in demand on account of its profusion of bloom and delightful fragrance. Violet seeds germinate very slowly. *Hardy Perennial.*

- 531—**Finest Mixed.** 10c pkt.
- VIOLAS, or TUFTED PANSIES.** (See Pansies.)

WALLFLOWER (*Goldlack*)

WELL-KNOWN, deliciously fragrant, half-hardy annuals and perennials, blooming early in the spring, with spikes of beautiful flowers. They should be protected in a cold frame in the winter and planted out in April.

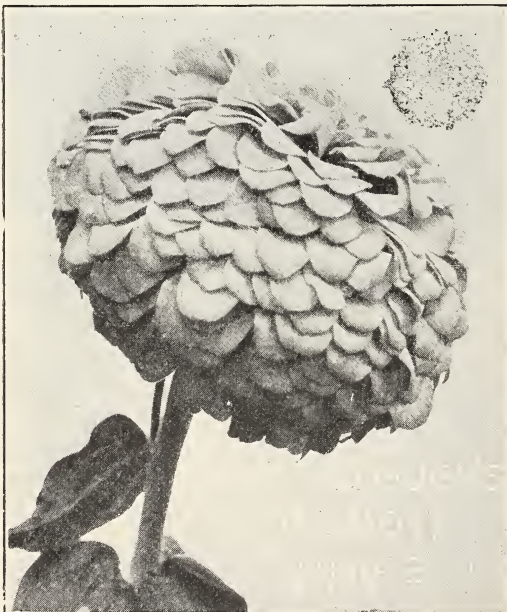
- 532—**Single Mixed.** *Half-hardy Perennial.* All colors. 5c pkt.
- 533—**Double Finest Mixed.** *Half-hardy Perennial.* 10c pkt.

WILD CUCUMBER

(*Echinocystis Lobata*)

THIS is one of the quickest growing climbers on our list. Should be sown late in the fall or very early in the spring. It is thickly dotted over with pretty, white fragrant flowers followed by an abundance of ornamental and prickly seed pods. For a trellis or pillar, no annual vine is more chaste, and it will quickly cover an old tree or an unsightly building. *Hardy Annual.*

- 534. ½ oz., 10c; oz., 15c; 5c pkt.



“WILD GARDEN” FLOWER SEED

EACH package contains about 100 varieties of hardy flower seeds mixed together, and wherever planted will insure something new almost every day. Is suitable for sowing in shrubbery, under trees, and in beds on which no care will be bestowed, or even for sowing in exposed situations, where wildness is preferred to order and precision.

To those who cannot bestow the necessary care required in a neatly laid out flower garden, the “Wild Garden” presents a substitute, which, for its unusual and varied effect, for cheapness and small amount of labor necessary for its construction, has no rival.

- 535—**Dwarf Sorts.** Growing from 12 to 18 inches high. Oz., 25c; 5c pkt.
- 536—**Climbing and Trailing Sorts.** Fine for hiding fences, brush and rubbish heaps. Oz., 25c; 5c pkt.

XERANTHEMUM

(*Everlasting, or Immortelle*)

- 537—**Double Mixed.** Bright and pretty “Everlasting” with silvery foliage and silky flowers in pink, white and purple. *Half-hardy Annual.* ¼ oz., 15c; 5c pkt.

ZINNIAS (*Youth and Old Age*)

THESE attractive and decorative half-hardy annuals are most desirable plants for mixed borders or bedding purposes, and are remarkable for the profusion and duration of their flowers, which are extremely useful for bouquets. The double Zinnias are exceedingly handsome, the flowers being notable for their large size, fine form, brilliancy and diversity of color. The seed can be sown early in the hot-bed or light window and transplanted, or sown later in the open ground. They come into flower early in the summer and keep on blooming until hard frost. *Half-hardy Annual.*

Dahlia Flowered

When in full bloom the flowers often measure 4 inches in depth and 6 to 8 inches in diameter, in form like a perfect decorative Dahlia. When cut from the plant and placed by Dahlias, it is difficult to distinguish one from the other.

We offer the following varieties of the **Dahlia Flowered** Type in separate colors:—

- 538—**Crimson Monarch.** Largest and best red. 15c pkt.
- 539—**Dream.** Lavender turning to purple. 15c pkt.
- 540—**Illumination.** Deep rose. 15c pkt.
- 541—**Meteor.** Dark red. 15c pkt.
- 542—**Oriole.** Orange and gold. 15c pkt.
- 543—**Polar Bear.** Pure white. 15c pkt.
- 544—**Collection.**—One packet each of the above six varieties. 60c
- 545—**Finest Mixed.** ½ oz., 50c; 10c pkt.

Giant Picotee

The flowers are very effective in appearance, as the edges of the petals are all well marked with a distinct color to the body of the flower, making them very attractive as bedders and cut flowers.

- 546—**Golden Pheasant.** Gold ground tipped with maroon. 15c pkt.
- 547—**La France.** Beautiful soft pink, tipped with deep chocolate. 15c pkt.
- 548—**Finest Mixed.** All colors. ½ oz., 50c; 10c pkt.

McCullough's Superb Mammoth Zinnias

This is the finest strain obtainable. The flowers are of enormous size, thickly set with velvety petals. The plants are healthy, robust, vigorous growers, branching freely, and make excellent material for groups or cutting. McCullough's Superb Mammoth will be found very superior to ordinary Zinnias. New colors have been added, depth and size given to blooms and a rich velvety lustre to the petals.

- 549—**Mammoth White.** 553—**Mammoth Crimson.**
 - 550—**Mammoth Yellow.** 553—**Mammoth Scarlet.**
 - 551—**Mammoth Flesh Color.** 554—**Mammoth Violet.**
- Each of the above. 3 pkts., 25c; 10c pkt.
- 555—**Collection.** One packet of each of the above 6 varieties. 50c.

Contains all the colors listed above together with many new shades. Be sure and try this wonderful strain of this grand old favorite flower. ¼ oz., 30c; 10c pkt.

- 557—**Victory Quilled.** The petals are quilled and twisted, the outside is of a copper-golden color and on the underside various shades of rose and lilac. 10c pkt.
- 558—**Red Riding Hood.** Of compact form and covered the entire season with little button-like, intense scarlet flowers not over an inch across; as a border plant it is highly effective. ¼ oz., 30c; 10c pkt.
- 559—**Elegans Double, Finest Mixed.** Semi-dwarf varieties. Many colors. ¼ oz., 15c; oz., 50c; 5c pkt.

McCullough's "Suburban" Lawn Grass Seed

(Trade Mark Registered)



WILL MAKE A BETTER LAWN THAN TURF OR SOD

McCullough's "Suburban"
Lawn Grass Seed

IS a mixture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep green, velvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequaled. The quantity required for making a new

lawn is four bushels (64 lbs.) per acre, or for renovating old lawns, two bushels (32 lbs.) per acre. For a plot 15x20, or 300 square feet, one pound is required for a new lawn, or about one-half pound for renovating.

If it is honestly made, a lawn seed mixture is very much to be preferred to any single grass, because the several varieties of grasses which compose it, mature at different seasons of the year, thus keeping the green sward in good color and condition during the hot weather, not losing its color, as the single variety is liable to do.

How to Make a Lawn.—The matchless beauty of a well kept lawn instantly commands the attention of all lovers of the beautiful in Nature, because a fine lawn is an unfailing mark of intelligence and taste, to obtain which the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture; the surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken, ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels (64 lbs.) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains sufficient height, it should be mown with a lawn mower every week or ten days, according to the season. In dry weather keep the lawn well watered.

General Surface Renovating.—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of our pulverized SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Lawn Grass Seed at the rate of two bushels (32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

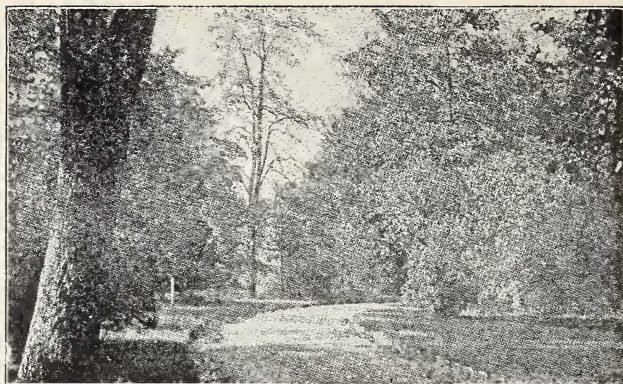
Renovating in Spots or Patches.—Everyone is aware that even in the best-kept lawns unsightly spots devoid of grass will appear, which are caused by root-destroying insects; and as these spots are not protected by a covering of turf during the winter, as a natural consequence, the chemical elements in the soil are leached out by the action of the weather, causing them to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover them with either of the fertilizers mentioned above at the rate of 13 lbs. for each 300 square feet, then dig these spots up, and after raking until no trace of the fertilizers can be seen, sow our "Suburban" Lawn Grass Seed at the rate of 1 lb. to each 300 square feet. Roll thoroughly or pat with the back of a spade. When any weeding is done on the lawn immediately drop a few grains of seed wherever a weed is removed, and while the soil is disturbed press the seed into the soil.

Prices:— $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; $\frac{1}{2}$ bu., (8) lbs., \$2.75; per bu. of 16 lbs., \$5.00.

Postage Must be Added if Wanted by Mail. See Postal Rates, page 1.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

McCullough's "Shady-Place" Lawn Grass Seed



ON nearly all lawns, there are more or less shady places, which result in having bare and unsightly spots on which the owners have difficulty in securing a satisfactory stand of grass. After many years of experimenting with different grasses, both native and foreign, we several years ago developed our present "Shady-Place" Lawn Grass Seed Mixture.

This mixture of grasses is adapted for such places, as it is composed of dwarf-growing grasses which are found naturally growing in shady locations. Should the ground have become "sour" or drainage defective, it is apt to be covered with moss. If such is the case, the moss should first be removed by the use of a sharp rake, then apply our **Lawn Lime** to sweeten it, and after another thorough raking, apply Commercial Fertilizer at the rate of not less than 600 pounds per acre; then sow the seed at the rate of four bushels (64 lbs.) per acre, or 1 lb. to each 300 square feet, after which roll thoroughly.

Prices:— ½ lb., **25c**; 1 lb., **45c**; 5 lbs., **\$2.00**; 8 lbs., **\$3.00**; per bushel of 16 lbs., **\$5.50**.
Postage must be added if wanted by mail. See Postal Rates, page 1.

McCullough's Eden Park Lawn Grass Seed

TO supply the demand for a Lawn Grass Seed that will meet general requirements, it has become necessary to place on the market our "Eden Park." The quality of this lawn grass seed will compare favorably with a majority of the lawn grass mixtures on the market, as it contains practically the same grasses as our "Suburban" but without reseedling.

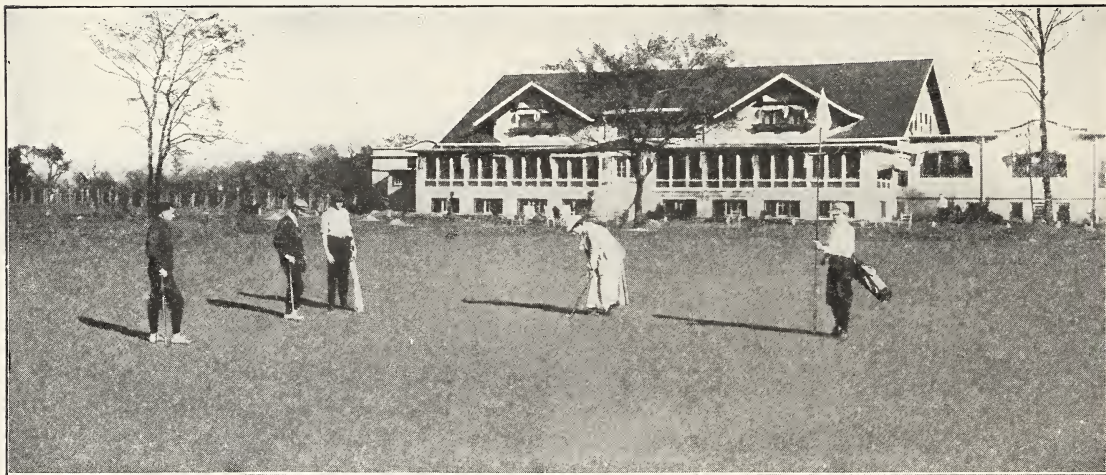
Prices..... ½ lb., **20c**; 1 lb., **35c**; 5 lbs., **\$1.50**; 8 lbs., **\$2.25**; per bushel of 16 lbs., **\$4.25**.

TERRACE MIXTURE

There is nothing more annoying than to have ground washed out. In this mixture, we have put quick-growing and deep-rooted grasses. Of course, it depends a great deal on this being well started before very heavy rains.

½ lb., **25c**; 1 lb., **40c**; 5 lbs., **\$1.75**; 8 lbs., **\$2.75**; per bushel of 16 lbs., **\$5.00**.

Special Mixture For Golf Links and Putting Greens



View of one of the Putting Greens on the Golf Grounds of the Hyde Park Country Club, Cincinnati, Ohio, where our **Putting Green Mixture** has produced a "Green" three weeks from time of sowing the seed.

PUTTING GREEN MIXTURE

HAVING specialized for over three-quarters of a century in all varieties of Grass Seeds and having become familiar with the habits and characteristics of all cultivated grasses, we were prepared to develop the Mixture of Grasses herewith offered by us, after making a careful study of the requirements for producing the most substantial turf for Putting Greens.

The numerous testimonials we have received establishes the fact that our Mixture of Grasses will produce the results desired, because it has given thorough satisfaction wherever used, and produces a thick, tough, beautiful green turf. The varieties comprising this Mixture of Grasses are all the finest-bladed, low-growing and most hardy kinds, and will maintain their rich, velvety green color throughout the season.

½ lb., **35c**; 1 lb., **60c**; 5 lbs., **\$2.50**; 8 lbs., **\$3.50**; per bushel of 16 lbs., **\$6.50**.

Quantity of Seed to Sow. One pound of these mixtures will sow 15 x 20 feet, or 300 square feet. Four bushels should be sown to the acre. For renovating, use one-half of this quantity.

Pulverized Sheep Manure and Pure Bone Meal are the best Fertilizers for Lawns. See Fertilizers.

We wish to emphasize the fact that one of the important essentials for success in building lawns, lies in the abundant use of Fertilizers, which should be applied at the rate of not less than 600 pounds per acre.

GOLF LINKS MIXTURE

WE have given much attention to grasses for golf links. The mixture of grasses we offer is composed of such varieties as will thrive here, and is the result of experiments conducted on our grounds, as well as careful observation for several years of the practical results obtained on those golf links, for which we have supplied the seed. We have always on hand all the natural grasses of Europe and America and we are familiar with the habits and merits of each. We shall be glad to prescribe for whatever the requirements of the links may be; for poor or rich lands, high and dry lands, or low and wet.

Per lb., **35c**; 5 lbs., **\$1.50**; 8 lbs., **\$2.25**; per bushel of 16 lbs., **\$4.25**.

McCullough's Grass Seeds

We specialize in Grass Seeds of all kinds and for every purpose.

FOR many years Grass Seeds have been one of our most important specialties, and our improved and perfected facilities for handling same (at a minimum cost), either in small or car lots, enables us to offer our customers the best possible service, both as to quality and promptness in executing orders.

We have four or five different grades of Grass Seeds, especially of the kinds most in demand, such as Clovers, Timothy, Blue Grass, Red Top, Orchard Grass, etc.

We will be pleased to quote lowest market prices on application.

For best results, we advise the use of our highest grades "XXXX" and "Buckeye."

We are the largest buyers in this section of high-grade Seeds and will always pay the highest market price. Submit samples and name quantity to offer.

Our prices include delivery to freight or express depots here, purchaser paying transportation charges.

We make no charge for burlap bags for Blue Grass, Red Top in Chaff, Orchard Grass, Perennial Rye and other light Grass Seeds.



Kentucky Blue Grass



Orchard Grass

Seamless bags for Clovers, Timothy, Fancy Red Top and other heavy Seeds and Seed Grains are 37c each, extra.

The number of pounds to the bushel, in brackets, is the old way of offering grasses, and is mentioned merely for reference.

We expect to adhere closely to prices quoted in this list, but owing to market fluctuations, it is impossible to guarantee prices.

All orders will be filled at lowest market price on the day of receipt.

Postage Must be Added if Wanted by Mail. See Postal Rates, page 1.

KENTUCKY BLUE GRASS

(*Poa Pratensis*)

ALSO known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture grass. Especially suited to meadows and rich lands. It is the grass of the famous and fertile limestone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn grass. Sow 30 to 40 lbs. per acre for lawn; 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel).

Kentucky Blue Grass Seed, Fancy Cleaned.

Per lb., 45c; 5 lbs., \$2.15; ½ bu. (7 lbs.), \$2.75; 1 bu. (14 lbs.), \$5.00.

Write for special prices on large quantities and other grades.

NOTE.—We wish to call attention to the fact that Cincinnati is the leading market in the world for Kentucky Blue Grass Seed. We export many carloads annually, the words "McCullough's" and "Kentucky Blue Grass" being very familiar to the principal Seed dealers of the world.

ORCHARD GRASS

(*Dactylis Glomerata*)

ROUGH Cocksfoot. Perennial. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account, a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel.) Market price.

RED TOP GRASS

(*Agrostis Palustris* or *Alba*)

HERD'S Grass, Quick Grass. Perennial. Height, 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2½ feet.

Fancy Red Top Pure Seed.

Weight, about 30 lbs. per bushel. Sow 10 to 12 lbs. per acre. Per lb., 35c; 10 lbs., \$3.00; per 100 lbs., \$26.00.

Choice Red Top Seed in Chaff.

Sow, if alone, 40 to 50 lbs. per acre. (14 lbs. per bushel). Per lb., 125c; 7 lbs., \$1.60; per bu. of 14 lbs., \$2.75.

Impossible to quote firm prices on "Fancy Grass Seeds" at time of going to press.

Write for special prices on New Crop Seeds.

Perennial or English Rye Grass

(*Lolium Perenne*)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground and soon forms a compact sward. After being cut it grows up in a very short time and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay, if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre, (24 lbs. per bushel).

Per lb., 25c; 12 lbs., \$2.00; per bushel of 24 lbs., \$3.75.

Pacey's Improved Short Rye Grass

SIMILAR to Perennial Rye Grass, but does not grow so tall, consequently is superior for lawn purposes. (24 lbs. per bushel). Sow if alone, 50 to 60 lbs. per acre.

Per lb., 25c; 12 lbs., \$2.25; per bu. of 24 lbs., \$4.00.

Meadow Fescue (*Festuca Pratensis*)

(Erroneously called English Blue Grass).

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and permanent pasture and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre. (24 lbs. per bushel.) This is the true Evergreen Grass of the South. Price on application.

Awnless Brome Grass (*Bromus Inermis*)

HARDY perennial, standing extremes of heat, cold and drought. In the south it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the spring as the ground can be worked. (10 lbs. per bushel). Sow 25 to 30 lbs. to the acre. Market price.

Bermuda Grass (*Cynodon Dactylon*)

VALUABLE grass for the south and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for price.

GRASS SEEDS—Continued

Canadian Blue Grass (*Poa Compressa*)

ALSO called Flat-Stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. Sow 30 to 40 lbs. per acre. Market price.

Creeping Bent (*Agrostis Canina*)

VALUABLE in mixture with other grasses for lawns, etc. Suitable also for moist localities. (12 lbs. per bushel.) Sow 30 to 40 lbs. per acre. Market price.

Crested Dogstail (*Cynosurus Crystatus*)

AN excellent grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious and relished by all stock. (21 lbs. per bushel.) Sow, if alone, 30 to 35 lbs. per acre. Perennial. Height, 1 to 1½ feet. Per lb., 65c; 10 lbs., \$6.00.

Fine-Leaved Sheep Fescue

(*Festuca Ovina Tenifolia*)

SIMILAR to the Sheep Fescue, except that the leaves are much finer. Sow, if alone, 40 lbs. per acre. (14 lbs. per bushel.) Perennial. Height varies from 8 to 24 inches. Write for prices.

Hard Fescue (*Festuca Duriuscula*)

PERENNIAL. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. Sow, if alone, 30 to 35 lbs. per acre. (12 lbs., per bu.)

Per lb., 65c; 10 lbs., \$6.00.

Italian Rye Grass (*Lolium Italicum*)

BIENNIAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. (18 lbs. per bushel.)

Per lb., 25c; 10 lbs., \$2.00; 100 lbs., \$17.00.

Red or Chewings Fescue (*Festuca Rubra*)

CREeping-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses. 40 lbs. to the acre. (24 lbs. per bushel.)

Per lb., 90c; 10 lbs., \$8.50.

Rhode Island Bent (*Agrostis Tenuis*)

A fine Grass, chiefly used for pastures and lawns, for which it is one of the best. (12 lbs. per bushel.) Sow 25 to 40 lbs. per acre. Write for prices.

Sweet Vernal Grass

For a mixture with pasture Grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor, which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other Grasses.

True Perennial. (*Anthoxanthum Odoratum*.) Market Price.

Annual. (*Anthoxanthum Odoratum Puelli*.) Much smaller than the perennial. Price on application.

Sheep Fescue (*Festuca Ovina*)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. (14 lbs. per bushel.) Sow 30 to 35 lbs., per acre.

Per lb., 65c; 10 lbs., \$6.00.

Tall Meadow Oat Grass (*Avena Elatior*)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre.

Market Price.

Timothy (*Phleum Pratense*)

Herd's Grass. Cat's-tail Grass. This Grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances. Market Price.

Various Leaved Fescue

(*Festuca Heterophylla*)

A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks. 40 lbs. to the acre.

Wood Meadow Grass (*Poa Nemoralis*)

No Grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. Sow 20 to 25 lbs. to the acre. Market Price.

We specialize in Grass Seed of all kinds and for every purpose. For larger quantities—write for Special Prices.

MCCULLOUGH'S MIXED GRASSES For Meadows and Pastures

AFTER years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties, than when only one or two are used. There are always certain Grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our Mixture for Permanent Pastures, grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our Mixture for Permanent Meadow will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of Grasses for light, medium or heavy soils; by light soil we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the Grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice re-cleaned seeds, while in our second quality we use the same seeds, but without re-cleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be used per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

First Quality Mixtures

For Meadows

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

For Permanent Pasture

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

For Pasture and Hay in Orchard and Other Shady Places

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

For Marshy Grounds

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

For Sandy and Rocky Grounds

Per lb., 35c; 8 lbs., \$2.40; bu. of 16 lbs., \$4.50.

Postage must be added if wanted by mail. See Postal Rates, page 1.

We supply SECOND QUALITY MIXTURES of any of the above at a reduction of 25c per bushel.

We specialize in Grass Seed of all kinds and for every purpose.

For larger quantities—write for special prices.

McCullough's High-Grade Clover Seed

Where prices are given on Field Seeds they only represent market values at time of going to press. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels, 65c each, extra. Postage must be added if wanted by mail.



View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati

Alfalfa, or Lucerne (Medicago Sativa)

ALFA LFA is one of the most profitable crops the dairyman or stock farmer can raise, due to the high yield of palatable hay which contains a large percentage of protein. Alfalfa as grown in the United States yields more than twice the digestible nutriment that Red Clover does and more than three times the digestible protein to the acre. Alfalfa and corn make a perfectly balanced ration. Many farmers are using it in their rotation to take the place of Red Clover. This practice is satisfactory where the soil contains a large supply of lime and organic matter and the seed has been inoculated, or the land has been in Alfalfa previously.

Alfalfa is best adapted to steep limestone hillsides and gravelly river bottoms, where the water can get away from the roots. Will grow on acid soils providing the water is drained off and sufficient lime is added to correct the acidity.

Seeding Alfalfa

The ground should be plowed in late fall and worked in spring once or twice to kill the weeds. If the land is acid it should be limed at the rate of three tons ground limestone to the acre. With a Wheat drill sow 20 to 25 lbs. of best grade non-irrigated inoculated Alfalfa seed with one bushel of 60 day Oats as a nurse crop to the acre any time between April 15th and May 10th. Apply 400 lbs. of a good high grade fertilizer, carrying a small per cent of ammonia and high per cent of phosphorus to the acre. If land is to be seeded following early potatoes, work ground up with disc and drag down. Sow seed the same as in spring, omitting the Oats as a nurse crop. Where land is being seeded to Alfalfa for the first time it will pay to inoculate the seed with Edwards' Legume Bacteria for Alfalfa. The bacteria will be present and if there is not enough available nitrogen present they will gather the nitrogen from the air and supply your young plants, thus insuring a good stand.

We offer **American grown seed** raised in the North-west and West on non-irrigated land. It is free as possible from noxious weeds. (60 lbs. per bushel.)

Prices on application.

Montana Alfalfa

A hardy variety from the non-irrigated or dry lands of eastern Montana, where the climate is severe. Under ordinary conditions the seed will serve all purposes where hardness is required and we advise giving the "Montana", a trial wherever it has been difficult to grow other varieties. Sow in spring or fall at the rate of 15 to 20 lbs. per acre. We have secured a supply of strictly high quality seed.

Prices on application.

Grimm Alfalfa

This variety of Alfalfa is being raised all over the United States. It seems to be much hardier than common Alfalfa, which is due to the division of its root system, enabling it to withstand freezing and thawing weather, droughts and other hardships which the common alfalfa will not endure.

We have this season secured a supply of **Genuine Seed** of this variety, grown by specialists in northern Idaho, where the soil and climatic conditions are most favorable for its development, consequently there can be no comparison between the quality of the seed offered by us and that offered from other sources of supply. When comparing prices kindly bear this fact in mind.

To secure a stand the following requirements are essential—good seed bed, limestone soil, or addition of 3 tons of fine ground limestone per acre, inoculation of seed, and plenty of available plant food. Sow in the spring or fall of year at the rate of 15 to 20 lbs. per acre

Prices on application.

Crimson, or Scarlet Clover

(Trifolium Incarnatum)

Crimson, Scarlet or Carnation Clover

THIS Clover is grown in Italy, France, Great Britain and other European countries. Was introduced into this country in 1822 and has proved especially adapted to the light sandy soils of the Eastern and Southern parts of the United States. Largely used as a cover crop in orchards.

If seeded in August it makes an early growth in the autumn, passes the winter in a somewhat dormant but green state, makes a very early spring growth and matures its seed and dies before summer. It makes little or no growth in very hot weather.

Crimson Clover should be seeded shallow on a moist, reasonably fertile, well drained, well settled seed bed. Inoculation is essential when seeding the first time.

Crimson Clover makes a good cover crop to be sowed on potato fields after the potatoes are dug. It makes a good growth in the fall and early spring and may be plowed under for potatoes the following spring.

It may be seeded alone following any farm crop which can be removed from the land by early summer, so that seed can be sown in late summer or very early fall. It may also be seeded for hay in mixture with grain, such as Wheat, Rye, Barley or Winter Oats, which are ready to cut for hay at about the same time as the Clover the following spring.

Apply seed at the rate of 12 to 14 lbs. per acre.

Prices on application.

Price on cheaper grades given on application. For larger quantities—write for special prices.

McCULLOUGH'S HIGH-GRADE CLOVER SEEDS—Continued

Hubam Clover (Annual White Sweet Clover)

The advantage of Hubam over other clovers is its remarkable vigor and its value as a hay, green manure and pasture crop.

It also affords splendid pasturage for bees, as it blossoms early and continues in blossom till the first frosts.

By its use, a full year is saved in the farm rotation.

It will grow on a wide variation of soils and under various climatic conditions, but thrives best in lime-stone soils that are not acid.

Hubam will not benefit the soil upon which it grows without inoculation, except on soil that has previously grown Alfalfa or Sweet Clover.

Hubam may be sown in our latitude about the first of April. If planted in drills 18 to 30 inches apart, use 2 to 4 pounds per acre. If sown broadcast, use 12 to 14 pounds per acre. May be sown in grain, but makes a better yield when sown alone.

Never sow unscarified Hubam Seed, as the germination is low, but when scarified will germinate as high as 90%.

All of our Hubam Seed is scarified, quality is genuine and crop of 1921.

Write for special prices and descriptive circular giving more detailed information.

Bokhara or Sweet Clover

SWEET Clover is a biennial plant, which closely resembles Alfalfa. It requires practically the same soil treatment as Alfalfa, but will grow under a wider variation of soil conditions than Alfalfa.

Three things are essential—lime, inoculation and scarified seed. If the land has raised Alfalfa previously, then the addition of lime may not be necessary. **Inoculation** with Edwards' Legume Bacteria tends to insure a stand, by securing nitrogen for the young plant at a time when it needs it the most. **Scarified** seed is seed that has been so treated as to scratch or crack the hard coating and make it easy for moisture to penetrate and hasten germination, thus insuring a stand.

When Sweet Clover is inoculated it gathers nitrogen from the air and stores it up in the soil for the use of future crops.

Yellow Flowered. (*Melilotus Officialis*.) Is a biennial producing seed the second year, and will reseed itself if left undisturbed. It is the variety which is best adapted for hay, as it blossoms three weeks earlier than the White Sweet Clover, has a finer stem and does not grow so tall. It makes excellent pasture where 10 to 15 lbs. of seed is mixed with 6 lbs. of Timothy sowed in Wheat or Rye, then pastured in the fall.

The following spring the Sweet Clover will be three weeks earlier than any other grass, thus making a fine early pasture. When sowing unhulled seed in the fall with Wheat for hay, apply 10 to 15 lbs. per acre. Do not sow unhulled seed in the spring and expect results the same year.

Yellow Flowered, Unhulled Seed. Prices on application.

Yellow Flowered, Hulled Seed, Scarified. Prices on application.

White Flowered. (*Melilotus Alba*.) Is a biennial producing seed the second year, and will reseed itself if left undisturbed.

The White Sweet Clover is much coarser than the yellow, and is especially well adapted for soiling purposes. Many farmers are taking advantage of this crop in the bottoms where annual flooding prevents the use of Red Clover in a crop rotation, corn being planted year after year with an occasional crop of wheat. Scarified seed which has been inoculated is sown at the rate of 15 lbs. per acre in the corn at the last cultivation. This makes a growth of 10 to 15 inches by the time the corn is husked off of the stalk in the fall, and is plowed under late the following spring for corn.

It is being widely used where farmers wish to shorten their crop rotation and secure a crop of hay. To do this, sow scarified seed which has been inoculated with Edwards' Legume Bacteria in the Wheat, from the middle of April to the 1st of May, at the rate of 15 lbs. per acre. The following September as much as one ton of hay per acre may be cut from this land and the next May the second growth may be turned under for corn. The Sweet Clover, being young and tender, rots early and forms a mulch which holds the water, thus making ideal conditions for a good corn crop. Mr. R. E. Simonds, of Miamitown, Ohio, won the Ohio State Championship in the 10 acre corn growing contest in 1917 with a yield of 102 bushels of



corn per acre by practising this method. Farmers can increase their yield of corn from one-third to one-half by using Sweet Clover as a green manure crop.

White Flowered, Unhulled Seed. Prices on application.

White Flowered, Hulled Seed, Scarified. Prices on application.

Unhulled Seed of both varieties is very slow to germinate. Unhulled Seed (30 lbs. per bushel.) Hulled Seed (60 lbs. per bushel.)

NOTE:—We have installed scarifying machinery and our Hulled Sweet Clover is all scarified, which increases the germination 40 to 50 per cent.

Alsike or Swedish Clover (*Trifolium Hybridum*)

This variety is perennial and on account of its fibrous root system does not winter-kill. Will grow well on poor soil, and will do better on moist land than any other variety of Clover. It is a valuable acquisition to the forage plants of this country and is highly esteemed as pasturage for bees. Sow 6 to 8 lbs. per acre. Market price.

White or Dutch Clover (*Trifolium Repens*)

THIS variety thrives on nearly all soils; is a low close-growing Clover and on account of its earliness and hardness should be used in mixtures for permanent pastures. Is very hardy, spreads rapidly, acts as a binder, and when mixed with other grasses for lawn purposes is very desirable. Is also excellent for bee food. Sow 6 to 8 lbs. per acre. Per lb., 70c; 10 lbs., \$6.50.

Red Clover—Medium

(*Trifolium Pratense*)

SOW 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. In ordering, always state quality desired, otherwise will send the best. Market price.

Japan Clover (*Lespedeza Striata*)

THIS Clover is especially adapted for the South because it occupies the same position in pasture mixtures in the South that White Clover does in the North. Will thrive on poor land, and as it grows thickly, soon furnishes a abundant pasturage. Good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 10 to 12 lbs. per acre. This Clover is a half-hardy annual without any objectionable root system. Sow 10 to 12 lbs. per acre. (25 lbs. per bushel.)

Per lb., 35c; 10 lbs., \$3.00.

Red Clover—Sapling or Mammoth

(*Trifolium Pratense Perenne*)

Also called **English Clover, Cow Grass, Perennial Red Clover.** Sow 10 to 12 lbs. per acre. Market price.

INOCULATION

Those who analyze the matter will be made aware of the fact that inoculation of Clover Seed practically costs nothing, because when inoculated seed is sown the smallest quantity specified will be sufficient; the saving in cost being represented by the saving in seed.

Farm, Field, Forage and Silo Seeds

We give special attention to the quality of our FARM SEEDS and can furnish best [quality of re-cleaned stocks. This fact should be borne in mind when making comparisons of prices.

Trade Marks registered; McCullough's Seeds, XXXX, Buckeye, Suburban Lawn] Grass, Central Park Lawn Grass.

The prices quoted are subject to market fluctuations. When customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time.

Please specify quantities when writing for prices.

Grain Bags, holding two bushels, 37c each, extra.

Postage Must be Added if Wanted by Mail. See Postal Rates, page 1.

SOY, OR SOJA BEANS

The Great Land Renovator

The King of Summer Forage Crops

THIS very valuable farm plant enriches the ground in which it is planted by the free nitrogen gathered from the air and which is deposited in the ground by the roots, leaving it in ideal condition and rich in nitrogen for the next crop. Fodder is relished in either green or dry form by cattle and dairy cows.

The Soy or Soja Bean is an annual. Its character or growth resembles ordinary field beans. During the past few years the United States Department of Agriculture and State Experiment Stations have tested many varieties of Soy Beans and pronounce them forage and grain plants of great promise. They are grown chiefly for hay, grain, silage, soiling, pasture and as a soil renovator; are not hard to grow, not exacting to the character of soil and a valuable plant for forage; some claim they have a higher protein content than Alfalfa. These beans should not be seeded until all danger of frost is past and the ground is thoroughly warmed, and usually sown from the middle of May until July. It is best to plant beans only about one or two inches deep, or as shallow as moisture supply will permit, for the formation of a crust may prevent the beans from growing. If grown for seed or silage, in drills 24 to 30 inches apart, sow about 3 pecks per acre. If grown for hay or soiling, the foliage will be of a finer quality and be consumed with less waste; drilled solid, or sown broadcast, using from 1½ to 2 bushels per acre. For hay, cut when pod begins to form. For grain, cut just before beans are ripe, or, when pods are beginning to take on a brownish or black appearance. For silage, cut as near maturing as possible without dropping the leaves.

Will Quote Prices on Application.

Descriptions of the SOY or SOJA BEANS that we can furnish.

Southern Grown

Early Black. Some times known as Tar Heel or Ebony Black. Matures considerably earlier than Mammoth Yellow and considered superior. Also produces a fine crop of hay, and believe will mature a crop of Beans in this section if sown early.

Early Brown. This is a good variety, producing a large crop of hay, but not quite as early as the Early Black.

Mammoth Yellow. One of the oldest and best known varieties, producing a large hay crop and giving good satisfaction at all times. A fine fertilizer when plowed under.

Northern Grown

Itto San. An early, yellow seeded variety, being 10 to 15 days earlier than the Medium Green; will mature seed in this section, and is a good hay producer.

Mongol. Early variety and of yellowish cast and produces both seed and hay in this section; recommended very highly.

Medium Brown. A few days later than the Medium Green, grows a little taller, has seeds of somewhat larger size and does not shatter as badly. Will give a good yield of seed, also first class hay crop.

Medium Early Green. The earliest and one of the oldest and best known sorts, which has become quite a favorite North of the Ohio River both for seed and forage crop. Grows 24 to 38 inches in height; stems medium stout—¼ to ⅜ inch in diameter. The leaves are very dark green, full and large in center, while the edges are freely curled. Pods of medium size, 1 to 1½ inches long. Color of seeds, bright green. The branches are usually far enough above the ground to permit easy harvesting.



COW PEAS

The Great Soil Improver—Makes Poor Land Rich—Makes Good Land More Productive.

COW-PEAS make one of the largest yielding and most nutritious forage crops grown. There is also no surer or cheaper means of improving and increasing the productiveness of your soils than by sowing the Cow Peas.

There is a wide difference between Cow Peas and Canadian Peas. Bear in mind that the Southern Cow Peas belong to the Bean family, therefore, must not be sown until the ground is thoroughly warm and all danger from frost is past. The value as a fertilizing crop exceeds that of clover, for, in addition to being a larger nitrogen gatherer than the clover, they draw from the subsoil to the surface large amounts of potash and phosphoric acid, thus putting the soil in most excellent condition for following crops. The feeding value of Cow Peas is very high, being considerably above that of Red Clover. The yield of green vines per acre runs ordinarily from 5 to 15 tons.

Sow 1¼ to 1¾ bushels per acre, on land thoroughly pulverized and disc or plow with a cultivator or double shovel plow. If wanted for hay, cut when peas are forming; cure as clover. If peas are for fertilizer, sow same quantity after same preparation as for hay; turn under when peas are in bloom. If farmers will first roll and disc peas they will turn under much easier and be more satisfactory. For a fertilizer, especially to be followed by wheat or corn, they are simply the best.

Will Quote Prices on Application. All orders accompanied with the money will be filled at the lowest market price, upon receipt.

Early Black. Matures quickly, best variety for the extreme northern sections of the country.

Whip-Poor-Will. An early variety, tall, upright, medium yield of vines, large yield of peas, for which they are particularly grown. Highly recommended for "hogging down."

Clay. The leading variety in the South. Large yield of vines and peas, but require longer season to mature than the former-named varieties.

New Era. Seed small, dun colored; earlier than Whip-Poor-Will, but more trailing in habit. A great favorite in many places.

Mixed Cow Peas. These are splendidly adapted for those who merely wish same for feeding purposes, and being mixed, we are able to offer them at a lower price.

SOJA BEANS and COW PEAS very scarce; will quote prices on application.

FARM, FIELD, FORAGE AND SILO SEEDS—Continued

VETCH OR TARES

THIS has been used in Europe for many years as a stock food and green manuring or cover crop. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant with very narrow foliage and elongated flowers of pinkish white in clusters. The height when supported is frequently 4 feet.

Sand, Hairy, or Winter Vetch. (*Vicia Villosa*.) Our stock of this is the true type, which will absolutely live throughout the winter, and buyers should beware when buying that they procure the right article, which is a small, round, black seed; this is far superior to Crimson Clover, as it never winter-kills. Sown from August 1st to October 1st, broadcast, 1 to 1½ bushels per acre, to which we suggest adding half a bushel of winter rye or wheat. In the spring it can be plowed in as green manure, or when in flower cut for hay. All stock relish it keenly. (60 lbs. per bushel.)

Market Price.

Spring Vetch. (*Vicia Sativa*.) The seed of this is larger and of a brownish gray color. It is not hardy and must, therefore, be sown in the spring during May or June, 1 to 2 bushels per acre if broadcast and 1 bushel if in drills, with either spring wheat, spring rye or oats for support. It possesses very much the same desirable features as the Winter Vetch. (60 lbs. per bushel.)

CANADA FIELD PEAS

THESE are sown with oats about April 1st at the rate of 1½ bushel of Peas and 1½ bushel of Oats to the acre either drilled or broadcast. The oats are intended as a support for the peas. They are cut just after the peas flower and fed green; sheep, hogs and cattle relish them keenly. They may be sown successively up to July if one has the available land. Peas may also be sown alone at the rate of 3 bushels per acre and furnish excellent pea hay. For plowing under as green manure, they add a vast amount of nitrogen to the soil, and succeeding crops, particularly wheat, are wonderfully benefited. The dried peas are extensively fed to pigeons, while when ground as meal is an excellent addition to the regular soft food of cows, sheep and horses. (60 lbs. per bushel.)

Per lb., 15c; 10 lbs., 90c; 100 lbs., \$7.00.

Tennessee, or Southern Golden Millet

FAR superior to Western grown. Will grow in any climate or soil, and make a large yield of most nutritious feed. Sow not less than 50 pounds per acre, at any time between May 1st and June 15th. Cover with a single stroke of a light harrow, or roll without harrowing, or it may be sown with a wheat drill, barely covering the seed. Cut the crop while in bloom, before the seed hardens. We have secured a full supply of Tennessee, or Southern Golden Millet (cultivated seed), which we know will give the best satisfaction. Sow one bushel per acre, (50 lbs. per bushel). Write for Special Quotations.

Northern or Western Golden Millet

Does not yield so much hay nor so good hay as the Southern Golden Seed. Sow about a bushel to the acre. (50 lbs. per bushel.)

Write for Special Quotations.

Hungarian Millet (Grass)

A valuable forage plant of the Millet family, but not so coarse. Sown and cultivated same as Millet. Quite a favorite with stockmen. It is of fine growth, and makes an excellent hay. Sow 1 bushel per acre.

Write for prices. (50 lbs. per bushel.)

Hog Millet

Known also as Broom Corn Millet. The name Hog Millet has been applied to emphasize the use to which it is now being put as a valuable food for hogs; also good food for birds and poultry. Sow one bushel per acre.

Price on application. (50 lbs. per bushel.)

Pearl Millet, or "Pencillaria"

When sown broadcast or drilled in rows, 12 to 18 inches apart, 8 to 10 pounds per acre should be used.

Per lb., 40c; 10 lbs., \$3.50.

Japanese Barnyard Millet

SOMETIMES called Billion Dollar Grass. It has proven an enormous yielder in all sections of the United States, producing hay and fodder of most excellent quality and growing on any soil. It grows to a height of 6 to 8 feet and produces from 12 to 30 tons per acre. Cattle and horses eat it greedily and fatten rapidly. It is a remarkable stooler and should not be sown very thickly—15 pounds per acre broadcast being sufficient. In drills 3 pounds per acre. (35 lbs. per bushel.)

Per lb., 20c; 10 lbs., \$1.50; 100 lbs., \$10.00.

Kafir-Corn

A Great Fodder Crop. The Finest Grain for Poultry and Pigeons.

White Kafir-Corn. The stalks keep green, making excellent fodder. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots, which yield the second seed heads. For grain sow in rows 3 feet apart; 5 lbs. of seed to the acre. For fodder sow 5 to 25 lbs., either broadcast or in drills. Price on application. (50 lbs. per bushel.)

Broom Corn

Improved Evergreen. The best variety for general cultivation on account of the color and quality of brush. Ripens early; grows about 8 to 10 feet high; brush of good length, fine and straight, and always of green appearance when ripe. Plant 30 to 35 lbs. to the acre. Per lb., 15c; 10 lbs., \$1.00.

Barley

BARLEY needs a rich land, more sandy and lighter than that adapted to Wheat, and can be grown farther North than any other grain. It should be cut before fully ripe (unless intended for seed), as it is then of better quality and less liable to shell. Sow 1½ to 2 bushels if drilled; 2 to 2½ bushels broadcast. (48 lbs. per bushel.)

Spring Barley. Market price.
Beardless Barley. Market price.

Buckwheat

IN this locality it is sown anywhere from June 1st to July 15th; one bushel of 50 lbs., broadcast, to the acre. It makes a very fine quality of flour; is largely used for poultry food and frequently yields as much as 80 bushels to the acre. (50 lbs. per bushel.)

Japanese. This superior variety is earlier, more prolific and yields double the weight per acre of other sorts. The grains are nearly twice as large as those of Silver Hull, and of fine color.

Pk., 60c; per bushel, of 50 lbs. \$1.85.

Silver Hull. The grain is of light gray color.

Pk., 75c; per bushel of 50 lbs., \$2.50.

Sorghum or Sugar Cane

Plant in drills ¾ to 1 bushel; broadcast, 1 to 1½ bushels to the acre. Sorghum is being used extensively as a green food for cattle, horses and mules. (50 lbs. per bushel.)

Early Orange Cane. A strong grower; much more juicy than any other variety. The stalk is heavier and a little later than the Amber. Write for prices.

Early Amber Cane. This popular and well known variety is the earliest and makes the finest quality of both sugar and syrup. Write for prices.

Sudan Grass (Andropogon Sorghum)

ASWEET heavy-yielding grass, foliage and seed resembles Johnson Grass, but is an annual. Root system is like Oats. Seeds from 300 to 400 pounds per acre from Florida to Montana. Absolutely drought-proof. Grows 6 to 10 feet high. Stems erect, unbranched, very leafy and three to four cuttings, 4½ to 6½ tons per acre of dry, sweet hay that cattle prefer to Cow Pea hay. Ripe for hay cutting in 70 days, and cut every 30 days following. Plant from March to July in 18 to 30 inch rows, 5 pounds to acre, or broadcast 10 pounds. Each seed stools wonderfully—20 to 40 stools per seed.

NOTE:—On account of the similarity of this seed to Johnson Grass Seed, we have gone to a great deal of trouble and expense to procure seed that we have every reason to believe is free from this seed.

There are all kinds of Sudan Grass Seed on the market, and on this account you should be doubly careful. Buy your seed from a reputable house at a reasonable price.

Price on application.

Sunflower (Mammoth Russian)

IMMENSE yielder—125 bushels of seed to the acre has been grown at less expense than corn. Very highly recommended for poultry. Best egg producing food known. Good feed for horses as well. May be grown to great advantage in waste ground, from early spring to the latter part of July. Plant 10 to 12 lbs. per acre.

Per lb., 15c; 10 lbs., \$1.20.

Teosinte (Reane Luxurians)

Stalk can be cut several times during the season. Should not be planted until the soil is perfectly warm in spring. Requires about 4 lbs. of seed per acre.

Per lb., \$1.25; 5 lbs., \$6.00.

Prices Subject to Market Changes.

In Ordering Farm Seeds Always Allow 37 cents for each Two-Bushel Seamless Bag.

For larger quantities—write for Special Prices.

FARM, FIELD, FORAGE AND SILO SEEDS--Continued

SOWING RAPE

A FORAGE plant of highest value. It can be sown in April for an early crop, and for fall crop in July, August and September, and still later further South. In a few weeks from the time of sowing, sheep hogs or cattle can be turned on it. Under favorable conditions Rape is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry 12 to 15 sheep six weeks to two months. When on the Rape they should at all times have access to salt. Pigs and cattle are also very fond of it. Rape has a high feeding value. It is excellent for fattening sheep and swine, produces an abundant flow of milk in cows, and is the ideal pasture for weaning lambs. Its value as sheep pasture has been demonstrated in every State in the Union, and it is recommended by authorities everywhere as of superior value for hogs, furnishing the finest pasturage, or can be fed after cutting. Rape has strong-growing roots which penetrate the ground for a considerable depth. A rich, loamy soil is preferable, but it does well on sandy or stiff clays, and is excellent for sowing after a crop of wheat has been taken off, or when corn has been worked the last time. The plant is a rank grower and should have heavy manuring. Sow the seed by the end of June and the crop can be ready to feed at a season when it is most needed. It does well sown with oats. After oats are cut, the Rape grows rapidly. If the soil is rich and clean, sow broadcast; if not so clean, sow in drills and cultivate as for corn. When sown broadcast, use five to six pounds, and if in drills, two to three pounds to the acre.....Per lb., 20c; 10 lbs., \$1.50.



Postage Must be Added if Wanted by Mail. See Postal Rates, page 1.

SPELTZ OR EMMER

THIS grain resembles wheat but is a much larger yielder, producing frequently as high as 80 bushels of grain per acre, and that on the poorest land. The hay, if cut green is desirable for horse or cattle feed, while the straw after thrashing, is equal to the best wheat straw.

The heads are somewhat similar to two-rowed barley. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of any other grains. Cultivation similar to wheat or oats. Sow at the rate of 50 to 60 lbs. per acre. Prices on application.

WHITE NAVY BEANS

PLANTED in June or July, these usually make a very profitable crop to grow as shelled white beans for market. Plant in rows three feet apart, dropping two or three beans together a foot apart in the rows. Cultivate early, as they grow rapidly, but do not work them while the dew is on the foliage. (60 lbs. per bushel.) Special price on application.

HEMP SEED

We will be pleased to quote market prices upon application. Sow at rate of $\frac{3}{4}$ to 1 bushel per acre. (44 lbs. per bushel.)

FLAX SEED

Northwestern. Sow at rate of $\frac{3}{4}$ to 1 bushel per acre. Market price. (56 lbs. per bushel.)

VELVET BEANS

Velvet Beans make a larger growth of vines than any other known forage plant, far surpassing the Cow Pea in yield. They are usually planted in rows about five feet apart, at the rate of a peck to one and one-quarter pecks per acre. Grown mostly in the South. Write for prices.

CHOICE SEED OATS

Broadcast, $2\frac{1}{2}$ to 3 bushels to the acre. We handle enormous quantities of these and trace the demand to the excellent quality we handle; they are grown especially for us in cool regions, where they grow to perfection. (32 lbs. per bushel.)

Red Rustproof. These are the standard oats of the Southern States, yielding large crops when all other sorts were destroyed by rust. It is a large, heavy, reddish-looking berry.

Winter Turf. Perfectly hardy in the Southern and Middle States. Yields on good land, from 50 to 70 bushels to the acre of fine, heavy grain, weighing from 35 to 50 pounds to the measured bushel.

White, Black and Mixed. Market price.

ROSEN RYE (Michigan Grown)

Grain unusually large and yield surpasses the old standard sorts. Price on Application.

SEED WHEAT Prices on Application.

FIELD CORN

Northern Grown Seed

OUR strains of Corn are not the common kinds usually found in abundance on the market; we pay special attention to the selecting of stocks in all lines of farm seeds. This is particularly true of Field Corn where reselection means the limit of crops with little or no increase in cost. It is amazing to realize that where the old unselected seed is used the average crop per acre is only half, compared to the more intelligent selection of strains. Our stock is selected for size of ear and fodder, which means a considerable increase in production. (56 lbs. per bushel.)

Plant 8 to 10 quarts per acre in hills, sow $2\frac{1}{2}$ to 3 bushels broadcast for fodder. Never use Feeding Corn for Seeding Purposes.

McCullough's Early Prolific The most prolific white Corn. Each stalk bears two to five ears, average length of ears $8\frac{1}{2}$ inches. Stalks range in height from 9 to 12 feet. Ideal for ensilage and matures in 100 days.

McCullough's Champion White Dent The best White Dent Corn. Ears 10 to 12 inches long, well filled at tip and butt; will mature in any corn country and in strong land and good season will make from 100 to 125 bushels per acre.

Boone County White Dent. Ears contain from 18 to 24 rows and are well filled from butt to tip, with deep kernels.

Peerless (White). Will mature in 90 days. Produces generally two large ears to the stalk.

Silver Mine. One of the best yielding White Dent Corns. 18 to 20 rows; kernels deep and cobs small.

Hickory King. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder.

Reid's Yellow Dent. Has from 18 to 24 rows; ear medium in size and of a bright yellow color.

King of the Earliest Dent. An early yellow corn, adapted for high latitudes; will mature in 80 to 85 days.

Gold Mine. Early Yellow Dent, ripening only a few days later than King of the Earliest; ears are of good size.

Leaming Yellow. Ears of good size, cob red and small, ripens quite early—frequently in 100 days from planting. Yields from 75 to 100 bushels per acre. Adapted to rich soils.

Red Cob Ensilage. A Southern type of large, white corn, with deep red cob and strong leafy stalks.

Sugar Corn for Ensilage. There is nothing better for green feed or curing for winter than sweet corn.

SEED POP CORN

Plant Two Quarts to the Acre.
White Rice. A handsome variety, kernels long and pointed, very prolific. Per lb., 15c; 10 lbs., \$1.00.
Queen's Golden. The stalks grow 6 feet high and the large ears are produced in abundance. It pops perfectly white. Per lb., 15c; 10 lbs., \$1.00.
 Postage Must be Added if Wanted by Mail.

Write for Special Prices on Corn and Farm Seeds. Seamless 2 Bus. Bags, 35c Each.

McCullough's Selected Seed Potatoes

Northern Grown Stocks

Selected and Grown Specially for Seed Purposes, Superior Both in Quality and Productiveness.

Prices of Potatoes are unsettled at time our Catalogue is printed. We will always fill orders from customers at our lowest prevailing prices for first-class seed potatoes, or we will cheerfully quote prices at any time upon request.

Any good well-drained, fibrous loam will produce Potatoes under right climatic conditions. A rich clover sod, manured and broken the year before and planted to corn, beans, peas, oats, etc., is in best shape for giving a good yield of nice clean Potatoes. Stable manure had better be applied to the land the year before.

Potatoes are planted early and late. Cut 2 to 3 eyes to a piece. Plant in rows or hills about 3 feet apart and about 15 to 18 inches apart in the hills or rows. Cover the seed four inches, but not so deep in wet, cold land. Just as soon as the bugs appear, use Paris Green or Arsenate of Lead.

One peck will plant about 100 feet of row, or 100 hills. Ten bushels are required to plant an acre.

Early Ohio. (Red River Stock.) The Early Ohio is fully two weeks ahead of the Early Rose, and is a general favorite with potato growers. Maturing early, it brings the highest prices. The tubers grow compact in the hill. Cooks dry and mealy.

Early Rose. It is productive, of most excellent table qualities, and a most satisfactory all-around early variety.

Early Six Weeks. Extra early, oblong in shape; flesh solid; cooks dry and mealy.

Early Triumph. It is from seven to ten days earlier than the Ohio. The Potato is of good size, squared at the ends. Skin is red, flesh is very white and firm. It is productive.

Irish Cobbler. One of the first varieties of Potatoes to be ready for market. The flesh is white and of fine flavor.

Burbank. A white-skinned, medium early variety. The flesh is white, very mealy and of fine flavor. The best Potato for baking.

Carman No. 3. Enormously prolific, averaging nearly a pound apiece; flesh snow-white and of fine cooking qualities.

Chicago Market. Very popular, early, good quality and yields well.

White Star. A medium early variety of fine quality and appearance; large, oblong, uniform-sized tubers, remarkably productive.

Hoosier Boy. A late variety and very productive.

Bull Moose. Late, large, very productive and of excellent flavor.

Seed Sweet Potatoes

Yellow Jersey. Write for prices. Ready for shipment about April 1. For plants, see page 36.



LARGER CROPS IN FIELD and GARDEN

If You Use **NITRAGIN**

Alfalfa, clovers, soybeans, vetches, peas, beans, cowpeas, peanuts and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

Nitragin now comes in **Bushel sizes instead of acre sizes.** This means that it costs you **less per acre** than inferior imitations. If you sow 12 pounds of seed to the acre it will only cost you 20 cents for your Nitragin. It means that

Your Dollar Goes Further With NITRAGIN

Nitragin is an old, reliable inoculator. At the low price of 20 to 33 cents per acre you cannot afford to sow legumes without it. Nitragin is put up in the modern ventilated package: in a rich, soil-like packing medium. The contents are always fresh, living bacteria to feed your plants. Easy to use. Sent by mail or express prepaid.

1/4 Bushel size.....	40c	1 Bushel size.....	\$ 1.00
1/2 Bushel size.....	60c	5 Bushel size.....	\$ 4.75



New Garden Culture for Peas and Beans

Garden size (peas, beans, sweet peas—three in one package).....20c

STATE WHAT CROP YOU WANT THE NITRAGIN FOR



Alfalfa plants from inoculated and uninoculated seed. The ruler is 12 inches long. The bunches of alfalfa are fair average samples from the treated and untreated plots."

EDWARDS' LEGUME BACTERIA

WILL INCREASE YOUR YIELD

OF ALFALFA, CLOVERS, VETCH,
COW PEAS, SOY BEANS

All the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA. Cultures are made and kept in stock for legume crops as follows: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Field or Garden Beans, Lima Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas. **Of this list the same culture can be used for either Alfalfa or Sweet Clover, and likewise, the same culture can be used for Red, Alsike, Crimson and Dutch Clovers.** All the other crops require a different culture for each as named. The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express prepaid, with full directions for use.

EDWARDS' LEGUME BACTERIA cultures are made in three sizes:

To inoculate 30 pounds of seed.....	\$0.60
To inoculate 60 pounds of seed.....	1.00
To inoculate 300 pounds of seed.....	4.50

Trial package for Beans, Garden Peas and Sweet Peas, 30 cents each.

Directions for use on each package.

In ordering, be sure to name crop to be inoculated.

Summer Flowering Bulbs and Roots

AMARYLLIS

PLANT in equal parts sandy loam and leaf mould. When the leaves appear, water carefully and not in too great quantity. The *Formosissima* and *Rosea* planted in May make rich and showy border plants.

- Rosea.** (*Zephyranthus*.) Flowers all summer. Small, delicate pink. Each, **15c**; per dozen, **\$1.50**.
- Belladonna Major.** White, turning to rose. Each, **40c**; per dozen, **\$4.00**.
- Formosissima.** Crimson Each, **30c**; per dozen, **\$3.00**.
- Johnsonii.** Large flower, crimson-scarlet, striped with white. Each, **50c**; per dozen, **\$5.50**.
- Halli, Hardy Amaryllis.** (*Lycoris Squamigera*.) Produces in early spring, attractive green foliage which grows until July, when it ripens off and disappears. About one month later the flower stalks appear and grow to a height of two to three feet, developing an umbel of large and beautiful lily-shaped flowers three to four inches across and from eight to twelve in number, of a delicate lilac-pink, shaded with clear blue. In planting, cover the crown about four inches. Fine bulbs. Each, **40c**; per dozen, **\$4.00**.



Caladium

BEGONIAS TUBEROUS-ROOTED

THEY are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well drained location, and they will give more bloom than any other plant which will grow in such a place. A soil that will grow it to perfection is turfy matter scraped from the bottom of old sod—one part, and one part sand. Mix these well together, and you have a compost that is friable, porous, and well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start. Water very cautiously until active growth begins, then increase the amount. But at no time during its existence will the plant require more than enough to make—and keep—the soil moist all through. Good drainage should be provided to guard against over-watering.

SINGLE FLOWERING VARIETIES

- Single.** Crimson, pink, salmon, scarlet, white and yellow in separate colors. Each, **25c**; per doz., **\$2.50**; per 100, **\$20.00**.
- Single, Mixed.** . . . Each, **20c**; per doz., **\$2.25**; per 100, **\$17.50**.

BEGONIAS, Hardy

Exceedingly useful plants for the garden; good for shady places. Lustrous bronze-green foliage with small pink flowers. Each **25c**; per dozen, **\$2.50**.

For plants see page 75.



CALADIUM ESCULENTUM

(Elephant's Ear)

ONE of the most effective plants in cultivation for the flower border, or for planting out upon the lawn. It will grow in any garden soil, and is of easiest culture. It should be planted in a rich compost, where it will obtain plenty of water. Foliage light green. (See cut.)

Size	Each	Doz.	By Mail
1. Small bulbs	10c	\$1.00	15c each
2. Large bulbs	15c	1.50	20c each
3. Extra large bulbs	25c	2.50	30c each
4. Selected extra large	35c	3.50	45c each
5. Monster bulbs	50c	5.00	60c each

CALLA, SPOTTED

Golden Yellow. (*Richardia Elliottiana*.) This is the best of the yellow Callas, its flowers being as large as the popular white variety, but of a rich lustrous golden yellow of velvety texture; the foliage is dark green, with translucent creamy-white spots, which add much to its beauty. Each, **40c**; per dozen **\$4.00**.

CANNAS

Select Large-Flowering

THEY do well in all sections of the country, and stand pre-eminently at the head of the list, succeeding in any sunny position in any kind of soil, but responding quickly to liberal treatment. Cannas should be planted in good rich garden soil mixed with half of old rotten stable manure, by the end of May, when danger from frost is past. Water sparingly for first two weeks after planting. When growing freely, water liberally. Should be planted about 18 inches apart each way, and if more than one kind is used be careful to plant the taller growing kinds in the center and the dwarf ones along the edge. This applies to planting in beds.

Named Varieties

- Dormant Roots,** as listed. Each, **10c**; per dozen, **\$1.00**; (By mail, per dozen, **\$1.15**).
- Allemania.** Orchid-flowered; bright scarlet, with broad and irregular yellow border, beautifully mottled and variegated; green foliage; five feet.
- Chas. Henderson.** Brilliant crimson-scarlet with flame-yellow throat; green foliage; four feet.
- Crimson Bedder.** Intense crimson of good quality; green foliage; three and one-half feet.
- Eureka.** The best white Canna; the large flowers are freely produced on strong vigorous plants; four feet.
- Express.** Large, broad, bright scarlet-crimson flowers in immense trusses. The best dwarf red Canna; green foliage; two and one-half feet.
- Firebird.** The flowers are borne in immense trusses on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure two and one-half inches across; a clear glistening scarlet without any streaks, spots or blotches; four feet.
- Florence Vaughan.** Bright, rich golden yellow, spotted with red; of large size and perfect form; green foliage; four feet.

Cannas continued to next page.

CANNAS

Named Varieties—Continued

- Humbert.** In this grand Canna, we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter, produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery-bronze; four to five feet.
- Hungaria.** Large flowers, borne in trusses of immense size. Color a pure La France pink with satiny sheen. The most popular pink; green foliage; three and one-half feet.
- Meteor.** The best deep red large-flowered Canna, with massive, erect trusses of deep blood-red flowers; green foliage; five feet.
- Panama.** Color rich orange-red, with a well defined border of golden yellow. Flowers of large size with enormous wide petals having much substance; green foliage; three feet.
- President.** Flowers of immense size of a rich, glowing scarlet, produced on strong, erect stalks well above the green foliage; three and one-half feet.
- Richard Wallace.** In color it is a pleasing canary-yellow with exceptionally large flowers, which are carried well above the bright green foliage; four and one-half to five feet.
- Rosea Gigantea.** Large flowers, borne in such abundance that the mass of color is amazing. A deep rich rose, almost a coral-carmine; green foliage; four feet.
- Wyoming.** A splendid bedder with bright orange flowers on massive purplish-bronze foliage, making a strong contrast; five to six feet.
- Yellow Humbert.** Has the same habit of growth as the King Humbert. Has green foliage and produces yellow flowers, dotted with red; four to five feet.
- Mixed Tall Varieties.** Our selection; dormant roots. Each, 10c; per dozen, 75c; (per dozen by mail, 85c.)
- Mixed Dwarf Varieties.** Our selection; dormant roots. Each, 10c; per dozen, 75c; (per dozen by mail, 85c.)



CANNA PLANTS

CANNA PLANTS of the following varieties. David Harum, Humbert, President, Wyoming, Yellow Humbert.

Large plants, each, 25c; per dozen, \$2.50.

Ready about May 10th. Sent by express only at purchaser's expense.

MADEIRA

or Mignonette Vine

A RAPID growing vine, covering a large space in a short time.

Fleshy, heart-shaped leaves of a light green and numerous racemes of feathery flowers of delicious fragrance. Each, 5c; per dozen, 40c.

DAHLIAS

THE Dahlia is one of the most important summer and autumn flowers. Commencing to flower in July, they are a perfect blaze of bloom until stopped by frost. Especially fine for cut flowers.

One of the most important points in the cultivation of Dahlias is to select a well-drained position where they will receive the full benefit of the sun during the greater part of the day.

As to soil, they are not at all particular, except that in the case of a stiff clay some loose material should be added, such as coarse sand, old mortar, or anything which will make the soil loose and friable. The soil must be deeply dug, if possible to a depth of two spades, and a liberal amount of suitable plant food incorporated. For this nothing is more satisfactory than well-decayed stable manure, but where this can not be conveniently procured, pure bone meal, sheep manure, or any chemical fertilizer rich in ammonia and phosphoric acid will answer as a substitute.

The planting of dormant roots in the latitude of Cincinnati may be done at any time between April 25th and June 15th, the earlier planting being preferable. Plant the bulbs three inches below the surface of the ground, laying the bulb on its side. Do not crowd your plants, but plant at a distance of not less than two and one-half to three feet, and as soon as the shoots appear, remove all but two or three of the strongest, and these, when about a foot high should be secured to stout stakes.

Keep free from grass and weeds, and water regularly in dry weather.

NOTE:—We fill all orders with strong, divided dormant roots.

Dahlias continued to next page.



DAHLIAS—Continued

Cactus Dahlias

Named Varieties. Each, 25c; per dozen, \$2.50.
If wanted by mail, add 15c per dozen for postage.

Attraction. Large flowers of a clear lilac-rose, borne on long, stiff stems.

Countess of Lonsdale. Yellow flowers suffused with salmon-red and overlaid with lavender.

Duchess of Marlboro. Flowers of splendid form with long, narrow twisted petals, color rich, golden-orange, overlaid solferino.

F. W. Fellows. Large flowers of a lively orange-scarlet. Petals long, narrow and incurved.

Floradora. Pure garnet. Splendid free bloomer.

General Pershing. Flowers white with cream shadings at centre. Petals curved and twisted.

Marguerite Bouchon. Centre of flower is pure white, outer petals soft violet-rose, tipped white.

Pierrot. Flowers are deep amber, distinctly tipped white, sometimes solid amber. Long incurved petals.

Prince of Yellows. Soft, golden yellow; profuse bloomer.

Reine Cayeux. The flowers are a rich, glowing cardinal red. An early and profuse bloomer.

Sequoia. Large golden-bronze flowers of fine form, borne on long, stiff stems.

Stormer. The perfect flowers are an intense scarlet with maroon shadings.

Success. Flowers are a clear yellow with long, pointed petals. An early and free bloomer.

Decorative Dahlias

MANY beautiful varieties of Decorative Dahlias have been introduced in recent years, and in the following varieties some will be found with flat petals, others reflexed, while others will be curiously twisted and incurved. (See cultural directions for Dahlias.)

Named Varieties. Each, 25c; per dozen, \$2.50.
If wanted by mail, add 15c per dozen for postage.

Delice. The best pure, bright rose-pink; entirely distinct.

Easton. Beautiful dark ruby-red, almost maroon and very free flowering.

Gustave Doazon. A large-flowering variety with pale red flowers borne on long stems.

Hortulanus Witte. Very large, pure white flowers on good stems, and very free-flowering.

Jack Rose. Brilliant crimson-red.

Mina Burple. Flowers rich cardinal red of fine form produced on long, stiff stems.

Mont Blanc. A splendid large white of beautiful form and great substance.

Mrs. J. Gardner Cassatt. Flowers mauve-pink and of large size; a fine cut flower.

Mrs. Hartong. Soft bronzy buff, very effective bronze.

Oregon Beauty. Intense cardinal red with carmine suffusion; large flowers on long stems.

Perle de Lyon. Splendid pure white flowers.

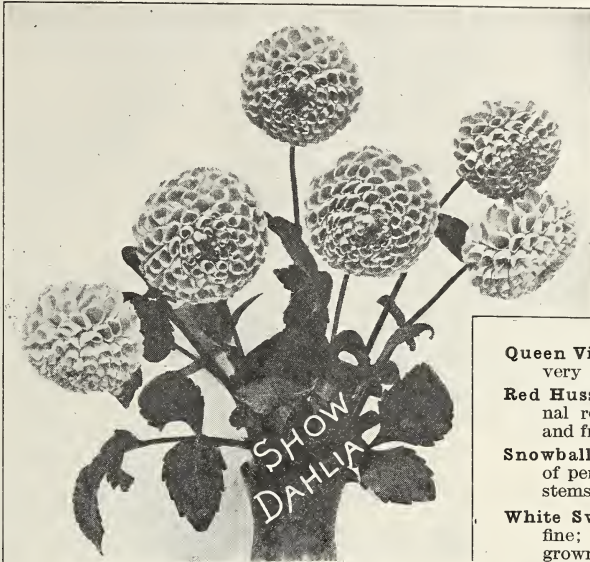
Princess Juliana. A fine pure white of good size on long, stiff stems.

Queen Mary. Flowers large. Color clear, silvery cerise-pink; very fine.

Sebastapool. Deep orange-red flowers of a very bright, peculiar shade.

Sylvia. Deep pink, tinting to flesh-pink at centre; large perfect form on long, stiff stems.

Yellow Le Colosse. Flowers are large and in color a clear lemon yellow.



A. D. Livoni

Show Dahlias

Are a perfectly full, rounded, regular form, cupped or quilled petals and solid color, or tipped darker than the ground color. (See cultural directions.)

Named Varieties. Each, 25c; per dozen, \$2.50.
If wanted by mail, add 15c per dozen for postage.

A. D. Livoni. A clear pink, beautifully quilled, of perfect form and very free-flowering. (See cut.)

Arabella. One of the loveliest; soft primrose, shaded and tipped rose.

Maude Adams. Flowers white overlaid with soft pink. Very early and free bloomer.

Princess Victoria. The earliest and most free-flowering primrose-yellow variety. In bloom early and late. Long, stiff stems.

Queen Victoria. Rich golden yellow; very fine.

Red Hussar. Richest, dazzling cardinal red. Strong vigorous grower and free bloomer on long stems.

Snowball. A large, pure white dahlia, of perfect ball form, on very long stems.

White Swan. Pure white, large and fine; the hardiest and easiest grown; long stems.

Yellow Duke. A splendid primrose-yellow of good form.

Wodan. Flowers old gold at centre, shading to a salmon-rose. A vigorous grower bearing large flowers on long stems.

Collarette, Pompon, Fancy, Peony-Flowered and Single Dahlias

Named Varieties. Each, 25c; per dozen, \$2.50. If wanted by mail, add 15c per dozen for postage.

Amber Queen. (Pompon.) Rich, clear amber, shaded apricot.

Crimson Queen. (Pompon.) Deep crimson shaded purple.

Snowlad. (Pompon.) A snowy white, free bloomer.

Mondscheibe. (Peony.) Rich, primrose-yellow flowers borne on long stems.

Mrs. Chas. Seybold. (Peony.) Flowers are deep rose-pink, edged with white; blooms abundantly, has long stems and is fine for cut flowers.

Rose Pink Century. (Single.) The largest and best deep pink.

Scarlet Century. (Single.) Brilliant scarlet with golden disc.

Twentieth Century. (Single.) Purest white at both base and tips and the center of petals is a delicate blush rose. Very large; 5 to 7 inches in diameter.

White Century. (Single.) Pure white with large, heavy, overlapping petals of good texture.

McCULLOUGH'S MIXED DAHLIAS.

Our mixtures are made from selected varieties.
Double Mixed, Cactus Mixed, Single Mixed and All Varieties Mixed, our selection.

Each, 20c; per dozen, \$2.00.

If wanted by mail, add 15c per dozen for postage.

GLOXINIA

MAGNIFICENT for house culture, producing in great profusion, beautiful flowers of rich and beautiful colors. They succeed best in sandy loam and peat, and require a moist heat.

Large Flowering Varieties. Finest mixed.
Each, 30c; per dozen, \$3.00.

GLADIOLUS

WITH its great diversity of color and splendid spikes of bloom which can be had from July until frost, the Gladiolus is pre-eminently the people's flower. Bulbs can be planted from the middle of April to July and should be set about 3 to 4 inches deep and 8 to 10 inches apart, according to the effect to be produced. Can be planted in succession for different blooming periods.

If wanted by mail, add 5c per dozen for postage. Single bulbs mailed without additional charge.

Gladioli in quantity by Parcel Post. If to be sent by this means, estimate postage at rate of 8 lbs. per 100 bulbs.

America. Conceded to be one of the finest varieties for cutting or bedding ever sent out: color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect.

Each, 7c; per dozen, 60c; per 100, \$4.00.

Augusta. A lovely and useful pure white variety.

Each, 8c; per dozen, 65c; per 100, \$4.50.

Fire King. Long graceful spikes, bearing immense blooms; color, intense fire-scarlet.

Each, 8c; per dozen, 80c; per 100, \$5.00.

Glory. The wide open flowers all face in the same direction and are carried on straight stout stalks. The color is a delicate cream-pink with a most attractive crimson stripe in the center of each lower petal. The ruffling of the petals in this new strain has attracted much attention.

Each, 10c; per dozen, \$1.00; per 100, \$7.00.

Mary Fennell. Beautiful, deep lavender flowers on a tall, slender spike. Lower petals penciled with primrose-yellow.

Each, 20c; per dozen, \$2.25, per 100, \$15.00.

Mrs. Francis King. A magnificent new variety. The large blooms are of a delightful light scarlet and are well placed on the large spikes, bearing six open flowers at one time.

Each, 7c; per dozen, 60c; per 100, \$4.00.

Mrs. Frank Pendleton. Color a lovely salmon-pink, with brilliant deep red blotches in the throat.

Each, 10c; per dozen, \$1.00; per 100, \$7.00.

Niagara. In color the flowers are a delightful cream shade with two lower inside petals or segments blending to canary-yellow. The throat is splashed with carmine, and the lower ends of the outside petals are also blushed with carmine. The stamens are purple and the stigmas pale carmine, this little addition in the coloring relieving the creamy effect of the petals.

Each, 8c; per dozen, 80c; per 100, \$6.00.

Panama. A new seedling of America which resembles the parent variety in every way except that it is a much deeper pink. A grand variety. Spike very long with flowers large and well arranged.

Each, 8c; per dozen, 80c; per 100, \$6.00.

Peace. Tall, graceful spikes of large, pure white flowers with a touch of carmine in the lower petals.

Each, 8c; per dozen, 80c; per 100, \$6.00.

Princepine. An especially fine variety with large flowers of good substance. Color is a brilliant red, marked with a pinkish-white blotch and borne on strong spikes.

Each, 8c; per dozen, 80c; per 100, \$6.00.

Prince of Wales. (Improved Halley.) The large, attractive flowers are a wonderful light salmon-pink, shaded orange.

Each, 10c; per dozen, \$1.00; per 100, \$7.00.

Purity. (Pommert's.) This important novelty is a pure white seedling of America, having the same habit of growth, form of flower and substance. A strong grower and free bloomer with tall, well furnished spikes. After having been tested in our trial grounds for several years, with other white varieties, we do not hesitate to recommend it on account of its free-flowering habit, long spike of large flowers, strong robust growth and freedom from disease.

Each, 15c; per dozen, \$1.25; per 100, \$8.00.

Yellow Bird. A very pleasing shade of yellow, penciled with dark wine color on lower petals.

Each, 8c; per dozen, 80c; per 100, \$6.00.

COLLECTIONS OF CHOICE NAMED GLADIOLUS

1 each of 12 varieties, including Purity	\$0.90
3 each of 12 varieties, including Purity	2.50
6 each of 12 varieties, including Purity	4.50
12 each of 12 varieties, including Purity	8.50

If wanted by mail, add 5c per dozen for postage.



Primulinus Hybrids. Mixed. The flowers of this variety of Gladiolus vary in color from light yellow to orange, apricot and crimson; are of good size, borne on tall graceful spikes and plants are strong and robust. A rather late-blooming variety.

Mixed colors... Each, 6c; per doz., 50c; per 100, \$3.50.

McCullough's Superb Mixed Gladiolus

This superb mixture is composed exclusively of high-grade varieties, including many new and rare kinds. It embraces the greatest possible range of color, and contains the best large-flowering sorts.

Each, 6c; per dozen, 50c; per 100, \$3.50.

Extra Fine Mixed

This mixture contains a very complete range of splendid varieties, and while not as fine as the preceding, the size and coloring of many of the sorts will be found out of the ordinary.

Each, 5c; per dozen, 40c; per 100, \$3.00.

If Gladioli are wanted by mail, add 5c per dozen for postage. Single bulbs mailed without additional charge.

Gladiolus Bulbs weigh about 8 pounds per 100 and, if wanted in quantity by mail, include enough to cover postage in your remittance.

OXALIS (Summer-Flowering)

VALUABLE for edging walks, flower beds, etc. Bulbs planted three inches apart form rounded rows of delicate foliage, about one foot high, and produce flowers in endless succession.

Dieppi Alba. Pure white, very fine.

Lasandria. Fine rose-pink, beautiful cut foliage.

Shamrock. Clover-like foliage, pink blossoms.

Each variety... Per dozen, 15c; per 100, \$1.00.

TUBEROSES

ONE of the most fragrant and beautiful of the summer-flowering bulbs. For flowering in the open border, plant about the first of May.

Excelsior Pearl. Mammoth bulbs. Robust stem and long spikes of flowers, which are more double and twice as large as those of the old sort.

Each, 10c; per dozen, 85c; per 100, \$6.00.

Dwarf Pearl. Large size.

Each, 6c; per dozen, 65c; per 100, \$4.00.

Lilies

NO CLASS of plants capable of being cultivated out of doors possesses so many charms. Rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand out prominently from all other hardy plants, and no herbaceous border, however select, should be without a few of its best sorts. With a well selected collection, Liliiums may be had in bloom from June till October.

Culture.—They should be planted in good, rich, loamy soil, abundantly mixed with very rotten cow manure. Plant about four inches deep, and during the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In spring the manure may either be removed or dug in between the rows.

Pot Culture.—The best soil to use is a rich loam, with the addition of one-third well-rotted manure. Select a large sized pot, say eight or ten inches, so as to allow of deep planting—a most essential matter where there are upper roots to protect. Dust a little charcoal about the bulb to keep it fresh, and cover at least two inches with soil.

After potting, one of the most important things to observe is the proper placing of the pots containing the bulbs. Like all other bulbs, to get the best results in flowering, the pots must be filled with roots before the top starts to grow; and to do this, they must be placed in some cool place and excluded from the light, until, on examination the roots are found to be formed around the ball of earth.

Prices on single bulbs are postpaid. By the dozen or hundred, they will be forwarded at expense of purchaser.



Lilium Auratum



Lilium Longiflorum Giganteum

AURATUM. (Golden-banded Lily). Undoubtedly one of the finest. Its large, graceful, fragrant flowers are composed of six petals of a delicate ivory-white color, thickly studded with chocolate crimson spots, and striped through the centre with a golden yellow band; 3 to 5 feet.

Large Bulbs, 8 to 9 inches, each, **25c**; per dozen, **\$2.50**; per 100, **\$20.00**.

Extra Large Bulbs, 9 to 11 inches, each, **40c**; per dozen, **\$4.00**; per 100, **\$30.00**.

HENRYI, a splendid Lily from the mountains of China. It grows 4 to 5 feet high, producing large panicles of orange-yellow flowers, banded with green. Each, **50c**; per doz., **\$5.00**.

LONGIFLORUM FORMOSUM. The plant grows about 3 feet high and produces beautiful, snow white, trumpet-shaped flowers, 6 to 8 inches long. It is perfectly hardy, blooming in the open in June and July. This Lily is also a very important winter flowering type.

Large Bulbs, 7 to 9 inches, each **40c**; per doz., **\$4.00**; per 100, **\$30.00**.

LONGIFLORUM GIGANTEUM. A splendid type, later flowering than the others but of strong, free, healthy growth, and while it can be forced into bloom for Easter it is just the thing for Decoration Day and later flowering; quite hardy and good for outdoor planting.

Large Bulbs, 7 to 9 inches, each **35c**; per doz., **\$3.50**; per 100, **\$27.00**.

REGALE (The Regal Lily). This grand new species is acknowledged to be the finest Lily in cultivation and is undoubtedly the most popular novelty that has been offered for many years. It is absolutely hardy and is excellent for forcing under glass. The white flowers are long, trumpet-shaped, slightly suffused with pink, with a beautiful shade of canary-yellow at the centre, extending part way up the trumpet. It is delightfully perfumed but without the heavy, oppressive odor of most Lilies. Each, **65c**; per dozen, **\$6.50**.

SPECIOSUM. "Japan Lily." The varieties of this class are magnificent border plants, and also excellent for pot culture. All are perfectly hardy, and are among the most satisfactory Lilies to grow.

SPECIOSUM. ALBUM. Pure white, very fragrant. **Large Bulbs,** 8 to 9 in., each **35c**; per doz., **\$3.50**; per 100, **\$25.00**.
Extra Large Bulbs, 9 to 11 inches, each **40c**; per doz., **\$4.50**; per 100, **\$35.00**.

SPECIOSUM. RUBRUM or ROSEUM. White, suffused and spotted with crimson.
Large Bulbs, 8 to 9 inches, each **30c**; per doz., **\$2.50**; per 100, **\$20.00**.
Extra Large Bulbs, 9 to 11 inches, each **40c**; per doz., **\$4.00**; per 100, **\$30.00**.

TIGRINUM. "Tiger Lily." Orange-salmon, spotted with black. Each, **25c**; per doz., **\$2.25**; per 100, **\$17.50**.

TIGRINUM FLORA PLENO. "Double Tiger Lily." This is a plant of stately habit, bearing an immense number of double, bright orange-red flowers, spotted with black, 3 to 5 feet. August. Each **25c**; per doz., **\$2.50**; per 100, **\$20.00**.

If you contemplate making a Lily bed, kindly give us dimensions of same, and we will be pleased to submit you an estimate, stating suitable varieties and lowest cost.

Roses

ALL the roses we offer this season are strong two-year old field-grown plants, grown on their own roots and will be furnished by us from March 1st to April 15th, (weather permitting) in a dormant state; after April 15th, and continuing throughout the summer, these roses will be furnished in pots.

Everblooming Hybrid Teas

WE especially recommend this collection of Roses to those who wish a supply of extra choice flowers for cutting throughout the summer and fall months. All roses thrive best when well watered and fed either by applications of manure water, or bone meal at the rate of two pounds per square yard.

Prices of all the following roses: Each, \$1.00; Per dozen, \$10.00; 25 for \$20.00; 50 for \$38.75; 100 for \$75.00.

We make no charge for packing, but customers pay transportation charges.

If dormant roses are wanted by mail within the third zone, add 5c each, 30c per dozen for postage. Roses in pots will be sent via express only, at purchaser's expense for transportation.

Alexander Hill Gray. Deep lemon-yellow. Large full flowers with high pointed center, perfect form and strongly tea perfumed.

American Beauty. This well known, large red and fragrant rose should be in every collection.

Augusta Victoria. A superb white rose, does not pink when planted out; splendid large buds and superb blooms. A sturdy grower and steady bloomer.

Bessie Brown. Erect stems; full, deep blooms with large petals; white, flushed with pink.

Columbia. The color is a true pink, deepening as it opens to a glowing pink.

Double White Killarney. Large double white flowers of great purity combined with large foliage and vigorous growth.

Hoosier Beauty. Glowing crimson-scarlet with darker shadings, buds of good length and splendid shape.

Madame Jules Grolez. Clear, deep rose, shaded yellow at base with long, pointed buds.

Maman Cochet. Rich, rosy pink, shaded silvery, rose on outer petals, exquisite in color and delightfully fragrant.

Mrs. Aaron Ward. A striking color; coppery orange in the open bud; golden-orange when fully developed. Color effect of the whole flower is Indian yellow. Flowers large and full, of refined form.

Mrs. A. R. Waddell. Rosy scarlet buds, opening reddish-salmon, large and semi-double flowers.

Ophelia. Salmon-flesh, shaded with rose and with a heart of glowing peach-pink and orange-yellow blendings; large, fragrant and of perfect shape.

Premier. Deep, dark pink flowers and very fragrant.

President Taft. It has a shining, intense, deep pink color possessed by no other rose. Of beautiful, globular form and with handsome, glossy foliage.

Radiance. Brilliant rosy carmine, with beautiful, rich opaline-pink tints in the open flower, which is large, full and of fine form.

Red Letter Day. Velvety, brilliant, glowing scarlet-crimson buds and non-fading flowers; reflex of petals satiny crimson-scarlet.

Rhea Reid. Flower large and double; rich, dark, velvety red. A splendid garden rose.

Richmond. Pure, rich scarlet; very free and continuous flowering. Long pointed buds and beautiful flowers on strong stems.

Sunburst. The color is orange-copper or golden-orange and golden yellow; edge of petals lighter, all intense shades, extremely brilliant in effect. Long stems and long, pointed buds; a vigorous grower.

White Maman Cochet. Creamy-white flowers, faintly tinged with blush, beautifully formed in bud and bloom.

Hardy Hybrid Perpetual Roses

Strong two-year old plants. Each, \$1.00; per doz., \$10.00.

We make no charge for packing, but customers pay transportation charges.

If dormant roses are wanted by mail within the third zone, add 5c each, 30c per dozen for postage. Roses in pots will be sent via express only, at purchaser's expense for transportation.

Frau Karl Druschki. An exquisite flower of the purest white.

General Jacqueminot. The old favorite; velvety-crimson.

Magna Charta. Deep pink, large sweet scented and of fine form; one of the hardiest.

Marshall P. Wilder. A grand rose; large full flowers of a bright carmine-red.

Paul Neyron. An immense rose of a deep rose color.

Ulrich Brunner. Cherry-crimson, large fine form, strong grower and hardy.

Hardy Climbing Roses

Strong two-year old plants. Each, \$1.00; per doz., \$10.00.

We make no charge for packing, but customers pay transportation charges.

If dormant roses are wanted by mail within the third zone, add 5c each, 30c per dozen for postage. Roses in pots will be sent via express only, at purchaser's expense for transportation.

American Pillar. Color is a delightful shade of pink.

Climbing American Beauty. Same as its namesake in size, color and fragrance, with the addition of the climbing habit.

Crimson Rambler. Bright crimson flowers.

Dorothy Perkins. Beautiful shell-pink flowers.

Dr. W. Van Fleet. Rich, flesh-pink flowers.

Excelsa. Double crimson-scarlet flowers in clusters.

Gold Finch. Bright yellow flowers.

Climbing Lady Ashtown. Flowers deep rose, shading to silvery pink.

Silver Moon. Large pure white flowers.



POLYANTHA or Baby Rambler Roses

A CLASS of miniature roses derived from the Climbing Polyantha. They are of dwarf habit and bloom so freely as to cover the entire plant with bloom all through summer and fall. The plants are splendid for bedding, or as edgings for borders. They form shapely, compact, bushy specimens about 18 inches high, producing in great

profusion from early in the season until severe frost, immense trusses of small flowers. Pruning is not necessary; simply remove the past season's flower stems.

Strong two-year old plants. Each, \$1.00; per doz., \$10.00.

We make no charge for packing, but customers pay transportation charges.

If dormant roses are wanted by mail within the third zone, add 5c each, 30c per dozen for postage. Roses in pots will be sent via express only, at purchaser's expense for transportation.

Baby Doll or Tip Top. Color brilliant golden yellow, tipped with clear, bright cerise.

Clothilde Soupert. Color effect is ivory-white, shading to bright silvery-pink at center.

Ellen Poulson. Apple blossom pink, very dwarf.

Golden Baby. Brilliant golden yellow.

Gross-an-Achen. Indian red, blended dark orange-yellow.

Jessie. Very dark red. Best red Baby Rambler.

La Marne. Bright salmon-rose.

Mlle. Cecile Brunner. Color blush, shaded light salmon-pink.

Orleans. Is a huge bouquet of deep cerise or geranium pink with showy center of pure white.

Rosarie. Deep carmine-pink.

Hardy Herbaceous Perennial Plants

THE steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For those of our customers who are not acquainted with the different varieties, we shall be pleased to make suitable selections of the most desirable species, that once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in autumn.

Cannot accept orders for Hardy Perennial Plants totaling less than one dollar.

ACHILLEA (Milfoil or Yarrow)

Boule De Neige. (Ball of Snow.) An improved variety, bearing pure white flowers of perfect form all summer. Fine for cut flowers. Each, **25c**; per dozen, **\$2.50**.

Eupatorium. (Fern Leaved Yarrow.) Produces brilliant yellow heads of flowers all summer, with neat, finely-cut foliage. Each, **30c**; per dozen, **\$3.00**.

Millefolium Roseum. (Rosy Milfoil.) Rosy-pink flowers in dense heads; blooms all summer. Finely cut, deep green foliage; height about 18 inches. Each, **30c**; per dozen, **\$3.00**.

Tomentosa. (Woolly Yarrow.) Handsome cut foliage and bright yellow flowers in a multitude of flat heads during June; height about 12 inches. Each, **30c**; per dozen, **\$3.00**.

AGROSTEMMA (Rose Campion)

Erect growing plants with silvery foliage and showy flowers during June and July.

Coronaria. (Mullein Pink.) Bright rosy-crimson flowers; 2 1/2 to 3 feet. Each, **25c**; per dozen, **\$2.50**.

AJUGA (Bugle)

Reptans Rubra. A fine plant for the rockery and for shady situations. Large spikes of purplish-blue flowers in May. Each, **25c**; per dozen, **\$2.50**.

ALYSSUM (Madwort)

Saxatile Compactum. (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rockery or border, grows 1 foot high and produces broad flat heads of yellow flowers in May. Each, **25c**; per dozen, **\$2.50**.

ANCHUSA ITALICA

Dropmore Variety. Remarkable for its free and continual flowering all summer and the beautiful gentian-blue of its flowers; grows about five feet high. Each, **25c**; per dozen, **\$2.50**.

ANEMONE JAPONICA

(Japanese Wind-flower)

THEY grow two to three feet high and are in bloom from August till mid-November, furnishing abundant cut flowers and a brilliant display.

Alice. This new pink variety has silvery-rose, shell-like petals suffused with carmine. Each, **30c**; per dozen, **\$3.00**.

Queen Charlotte. Very large, semi-double flowers of La France pink. Each, **30c**; per dozen, **\$3.00**.

Whirlwind. Large, semi-double, white flowers. Each, **30c**; per dozen, **\$3.00**.

ANTHEMIS TINCTORIA

The hardy Marguerites are among the most satisfactory summer-flowering perennials, growing about 15 inches. Large golden yellow flowers. Each, **25c**; per dozen, **\$2.50**.

ANTIRRHINUM (Snap Dragon)

THEY are undoubtedly one of the best cut flowers which can be grown, while for beds or borders they are a constant source of pleasure, being in flower all the time. Our collection embraces several colors in mixture. Each, **20c**; per dozen, **\$2.00**.

AQUILEGIA (Columbine)

CHARMING hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. They thrive well with ordinary garden culture, but do best in partially shaded nooks.

Chrysantha. (Golden Columbine.) Golden yellow flowers with long spurs. Each, **25c**; per dozen, **\$2.50**.

Chrysantha Alba. A long spurred white variety. Each, **25c**; per dozen, **\$2.50**.

Coerulea. Flowers often three inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur tipped green. Each, **25c**; per dozen, **\$2.50**.

Long Spurred Hybrids. Beautiful variations from the standard type. Each, **30c**; per dozen, **\$3.00**.

Canadensis. (American Columbine.) A bright red and yellow variety, very attractive. Each, **25c**; per dozen, **\$2.50**.



ARABIS (Rock Cress)

Alpina. A desirable early spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom. Each, **30c**; per dozen, **\$3.00**.

ASCLEPIAS (Butterfly Weed)

Showy native plants about 2 1/2 feet high, blooming during July and August.

Incarnata Rosea. (Swamp Milkweed.) Pretty rose-flesh colored flowers. Each, **25c**; per dozen, **\$2.50**.

Tuberosa. Brilliant orange-colored flowers. Each, **25c**; per dozen, **\$2.50**.

ASTERS (Michaelmas Daisies or Starworts)

THESE are among the showiest of our late flowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past, and for the best effect should be planted in masses of one color. The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom but produced in greater quantity.

Beauty of Colwall. A grand semi-double flowering type of a beautiful lavender shade; height about four feet; September. Each, **30c**; per dozen, **\$3.00**.

Novi-Belgii Climax. The plant is of strong vigorous habit, over 5 feet high, with pyramidal shaped flower stems filled with light lavender-blue flowers, each 1 1/4 inches or more in diameter. August to October. Each, **30c**; per dozen, **\$3.00**.

Novi-Belgii, St. Egwin. Handsome flowers of cherry pink, September and October. Each, **30c**; per dozen, **\$3.00**.

Novae-Angliae. A tall growing species, bearing clear purple flowers; September. Each, **25c**; per dozen, **\$2.50**.

Novae-Angliae Roseus. Similar to the preceding, bearing rose-colored flowers. September. Each, **25c**; per dozen, **\$2.50**.

Novae-Angliae, Mrs. F. W. Raynor. Large deep crimson. September. Each, **25c**; per dozen, **\$2.50**.

Snowflake. Grows to nearly two feet. Flowers pure white. September. Each, **25c**; per dozen, **\$2.50**.

Trinervis. Plant grows three and one-half feet high and produces deep violet-mauve flowers from September to November. Each, **30c**; per dozen, **\$3.00**.

BAPTISIA (False Indigo)

Australis. Grows about 2 feet high with dark green, deeply-cut foliage and spikes of dark blue flowers in June. Each, **25c**; per dozen, **\$2.50**.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

BEGONIA, HARDY

EXCEEDINGLY useful plant, thriving best in a partially shaded, moist situation. Lustrous bronze green foliage with small pink flowers. Blooms all summer. Each, **25c**; per dozen, **\$2.50**.

BELLIS PERENNIS (English Daisy)

Double Flowering, white and pink. Each, **10c**; per dozen, **\$1.00**.

BOCCONIA (Plume Poppy)

Cordata. A splendid plant, growing sometimes six feet high, bearing panicles of creamy-white flowers in July and August; makes a grand effect as a center in a hardy bed or a border background. Each, **25c**; per dozen, **\$2.50**.

BOLTONIA (False Chamomile)

TALL growing, showy plants, with flowers resembling hardy Asters, appearing in September.

Asteroides. Pure white; five to six feet. Each, **25c**; per dozen, **\$2.50**.

Latisquama. Pink, tinted lavender; six feet. Each, **25c**; per dozen, **\$2.50**.

CALLIRHÆ (Poppy Mallow)

Involucrata. A showy trailing plant with finely divided foliage and rosy-crimson flowers with white center; blooms all summer. Each, **25c**; per dozen, **\$2.50**.

CERASTIUM (Snow in Summer)

Tomentosum. Suitable for the rockery or for covering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June. Each, **25c**; per dozen, **\$2.50**.

CAMPANULAS (Bell Flower)

BELL-SHAPED flowers, well known and easily grown, of much variety of form, some being tall and suitable for planting in borders or among shrubbery, while others are dwarf and suitable for edging, rockwork, etc.

Carpatica. (Carpathian Hare Bell.) Ideal for border or rockery planting, being about eight inches high; flowers from June till frost. Blue and white, each color separate. Each, **25c**; per dozen, **\$2.50**.

Glomerata Dahurica. Large heads of purple flowers, fine for the border. 2 feet. Each, **25c**; per dozen, **\$2.50**.

Media. (Canterbury Bells.) We offer this fine old favorite in mixed colors, rose-pink, blue and white. Each, **25c**; per dozen, **\$2.50**.

Persicifolia. (Peach Bells.) Blue flowers during June and July; 2 feet. Each, **30c**; per dozen, **\$3.00**.

Rotundifolia (Scotch Hare Bells.) Very graceful; drooping blue bells, rising from compact tuft of foliage; fine for rockery. June to August. Each, **25c**; per dozen, **\$2.50**.

CHELONE (Shell Flower)

STATELY plant growing about two feet high and bearing numerous spikes of large flower-heads during the summer and fall.

Lyoni. Showy, purplish-red flowers. Each, **30c**; per dozen, **\$3.00**.

COREOPSIS

Lanceolata Grandiflora. A beautiful hardy border plant; grows eighteen inches high, and produces its bright golden yellow flowers in great profusion the entire season. Each, **25c**; per dozen, **\$2.50**.

Rosea. Small pink flowers, blooming in August and September. Foliage dark green, finely divided. Useful in border and rockery; 1 foot. Each, **30c**; per dozen, **\$3.00**.

CHRYSANTHEMUMS (Hardy Pompon)

THESE are becoming universally popular for bedding; as well as for cut flowers. They bloom profusely at a time when so many other flowering plants are destroyed by frost. While they are perfectly hardy they should be planted in a well drained position and protected with a light mulching in winter. As the demand for these plants always exceeds the supply it is advisable to order at once, as all orders are filled in rotation. Ready for delivery about May 1st.

Large Flowering or Aster Varieties

Ashbury. Sulphur white; for cut flowers.

Bradshaw. Silver pink; large, full flowers.

Daisy Anderson. Reddish bronze dwarf.

Eldorado. Bright golden yellow, open center.

Elkton. Light pink, full, large flowers.

Excellence. Pure white, tall grower.

Excelsior. Bright orange-yellow; long stems.

Fred J. Red-orange; for cut flowers.

Gertrude. Pure white; open center.

Irene. Pure white, shaded pink; early.

Jersey. Pearl white, open center.

Julia Lagravere. Crimson-maroon; for cut flowers.

King Henry. Straw white; long stems.

Leila. Bright brick red.

Lorley. Yellow, tinged pink, full flower, long stems.

Mariana. (Hill.) Large snow-white flowers on long stiff stems.

Miss Julia. Orange-red, turning yellow.

Prince of Wales. Snow white, long stems; fine for cutting.

Rev. W. H. Hoffman. Golden-bronze.

Susquehanna. Clear lemon-yellow.

The Hub. Fine white; open center; for cut flowers.

Triumphe de Or. Rich golden yellow.

Viola. Rich violet-rose.

Windless. Rich golden yellow; long stems.

The above varieties, each, **20c**; per dozen, **\$2.00**. By mail, each, **25c**; per dozen, **\$2.30**.



Hardy
Chrysanthemum
Little Red Riding Hood

Small Flowered or Button Varieties

Anna Mary. Creamy white, shading pink.

Hilda Canning. Brilliant bronze, late flowering.

James Boone. Pure white.

Yellow Baby. Smallest yellow.

Yellow Gem. Golden yellow.

The above varieties, each **20c**; per dozen, **\$2.00**. By mail, each, **25c**; per doz., **\$2.30**.

Anemone Flowered Varieties

Golden Lydia Thomas. Golden yellow, heavy center.

May Suydam. Bronze. Semi-dwarf.

The above varieties, each, **20c**; per dozen, **\$2.00**. By mail, each, **25c**; per doz., **\$2.30**.

LITTLE RED RIDING HOOD

The flowers of this variety are the exact size as shown in illustration. Color of flower is a deep blood-red, double to the center, hardy anywhere and in bloom from September to severe cold weather.

Small plants, each, **25c**; doz., **\$2.50**. By mail, each, **30c**; doz., **\$2.80**.

Large clumps, each, **50c**; doz., **\$5.00**. By mail, each, **60c**; doz., **\$5.60**.

Ready for delivery about May 1st and continuing throughout the summer, while stock lasts.

DIANTHUS or HARDY PINKS

Firefly. This beautiful, blood-red variety blooms continuously from May until frost. Should be in every collection. Small plants, each, **25c**; per dozen, **\$2.50**.

By mail, each, **30c**; per dozen, **\$2.80**.

Large clumps, each, **50c**; per dozen, **\$5.00**. By mail, each, **60c**; per dozen, **\$5.60**.

Ready for delivery about May 1st and continuing throughout the summer, while stock lasts.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

DELPHINIUMS (Perennial Larkspur)

THESE are deservedly one of the most popular subjects in the hardy border, bold, attractive, and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all summer. (See cut.)

- Belladonna Hybrids.** The freest and most continuous blooming of all. The clear turquoise-blue flowers are not surpassed by any; 3 feet. Each, 30c; per dozen, \$3.00.
- Formosum.** Dark blue, white center, spikes three to four feet tall; vigorous and free blooming. Each, 30c; per dozen, \$3.00.
- Giant Hybrids.** Unquestionably the finest strain of mixed hybrids ever offered. The original stock came from Europe, and consisted of the best-named varieties. The plants are of strong, vigorous habit, with large flowers on spikes long and over long, the majority running in the lighter shades of blue. Each, 25c; per dozen, \$2.50.
- Chinensis.** A pretty dwarf species, with fine feathery foliage and intense gentian-blue flowers in open panicles. Each, 30c; per dozen, \$3.00.
- Chinensis Alba.** A pure white form of the above. Each, 30c; per dozen, \$3.00.

DICTAMNUS (Gas Plant)

Fraxinella. Of easy culture in ordinary garden soil. Forms clumps about 2½ feet high, with glossy, dark green foliage and rosy-crimson flowers in June and July, which exhale a gas that may be ignited. Each, 25c; per dozen, \$2.50.

DIELYTRA OR DICENTRA

Spectabilis. (Bleeding Heart, or Seal Flower.) An old-fashioned favorite; its long racemes of graceful, heart-shaped pink flowers are always attractive; is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. Each, 50c; per dozen, \$5.00.

DIGITALIS (Foxglove)

THE strong flowerstalks—frequently four to six feet high—rising from rich and luxuriant masses of leaves, always give an appearance of strength to the hardy border.

Gloxiniaeflora. Finely-spotted varieties. White, purple, rose or mixed. Each, 25c; per dozen, \$2.50.

EUPATORIUM

- Ageratoides.** (Thorough Wort.) A border plant of strong, free growth. 3 to 3½ feet high, with small white flowers in dense heads; splendid for cutting. August and September. Each, 25c; per dozen, \$2.50.
- Coelestinum.** Light blue flowers, similar to the Ageratum, blooms from August until frost. Each, 25c; per dozen, \$2.50.

EUPHORBIA (Milk Wort)

- Corollata.** (Flowering Spurge.) Grows about 18 inches high, bearing from June to August umbels of pure white flowers with a small green eye; desirable for cutting. Each, 25c; per dozen, \$2.50.
- Cyparissias.** Grows 10 to 12 inches high with Cypress-like foliage and bears showy trusses of bright yellow flower-like bracts during May; very effective even when out of bloom. Each, 25c; per dozen, \$2.50.

FUNKIA (Plantain Lily)

THE Plantain Lilies are among the easiest plants to manage; their broad, massive foliage makes them attractive subjects for the border, even when not in flower. They succeed equally well in sun or shade.

- Coerulea.** (Blue Day Lily.) Blue flowers and broad green leaves. Each, 25c; per dozen, \$2.50.
- Glauca.** Purplish-white flowers with immense foliage. Each, 25c; per dozen, \$2.50.
- Subcordata Grandiflora Alba.** (White Day Lily, August Lily.) Pure white, lily-shaped, fragrant flowers. Each, 25c; per dozen, \$2.50.
- Undulata Variegata.** Foliage green, striped with white. Each, 25c; per dozen, \$2.50.

GAILLARDIA (Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of bloom the entire summer. Flowers three inches in diameter; center dark reddish-brown; petals orange to crimson. (See cut.) Each, 25c; per dozen, \$2.50.

GYPSOPHILA (Baby's Breath)

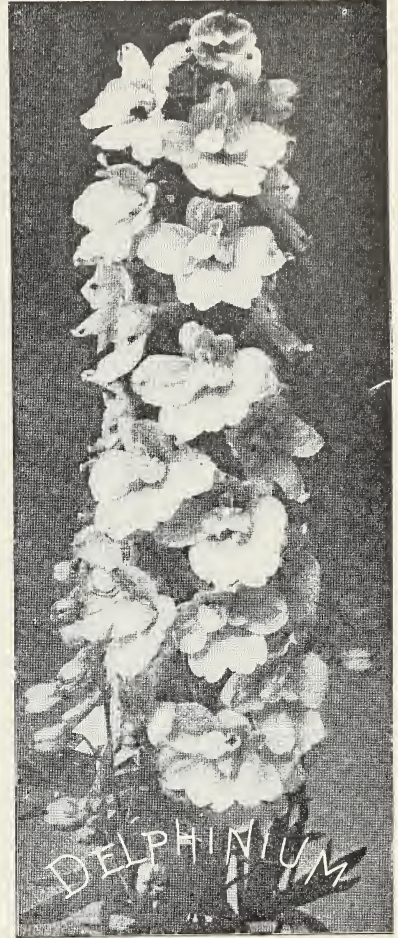
DURING August and September the plant is a mass of delicate feathery blooms. These may be used as fresh cut flowers, also for a semi-everlasting effect.

- Paniculata.** Loose, feathery sprays of white flowers, making a mist-like effect; fine for bouquets. Each, 25c; per dozen, \$2.50.
 - Repens.** An elegant trailing plant for the rockery, with clouds of small white flowers in July and August. Each, 30c; per dozen, \$3.00.
- GRASSES, Ornamental.** (See page 81.)

HELENIUM (Sneezewort)

THESE are desirable border plants, succeeding in any soil in a sunny location, useful for cutting.

- Autumnale Superbum.** Flowers are deeper yellow, separate and distinct from Riverton Beauty. Each, 25c; per dozen, \$2.50.
- Riverton Beauty.** Lemon-yellow, with large purplish-black cone. Each, 25c; per dozen, \$2.50.
- Riverton Gem.** Old gold changing to wall-flower red. Each, 25c; per dozen, \$2.50.
- Rubrum.** New bright terra-cotta red variety. Each, 25c; per dozen, \$2.50.



Gaillardia

We do not guarantee or replace plants, shrubs or trees at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

HELIANTHUS (Hardy Sunflower)

THE perennial sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc.

Maximiliana. Flowers in long, graceful sprays during October, when all others have finished flowering; five to seven feet. Each, 25c; per dozen, \$2.50.

Mollis. Large, single lemon-yellow flowers, with downy white foliage; blooms in August and September; four feet. Each, 25c; per dozen, \$2.50.

Sparsifolius. A most gracefully formed single variety of large size, of a deep yellow color, on long stems; splendid for cutting; August to September; six to eight feet. Each, 25c; per dozen, \$2.50.

HELIOPSIS (Orange Sunflower)

Pitcheriana. Very similar to a small sunflower, but blooming earlier; deep golden yellow; all summer, June till frost; three feet high. Each, 25c; per dozen, \$2.50.

Scabra Zinniaeflora. A new double flowering form of the Orange Sunflower, somewhat resembling a Zinnia in shape. Fine for cutting; July and August; two feet. Each, 30c; per dozen, \$3.00.

HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the summer.

Aurantiaca Major. Grows two to three feet high and produces deep, orange-colored flowers during June and July. Each, 30c; per dozen, \$3.00.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July. Each, 25c; per dozen, \$2.50.

Kwanso, Fl. Pl. Large, double orange flowers with darker shadings. July and August; 4 to 5 feet. Each, 25c; per dozen, \$2.50.

Sovereign. Cup-shaped flowers; inside of petals light yellow, outside brown; blooms during July and August. Each, 25c; per dozen, \$2.50.

Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers in July and August. Each, 25c; per dozen, \$2.50.

HEUCHERA (Alum Root)

FOLIAGE remains close to the ground. During July and August the graceful, thin flower spikes, 2 feet high, appear in profusion.

Sanguinea. Bright scarlet. Each, 25c; per dozen, \$2.50.

HIBISCUS (Mallow)

THESE are a mass of bloom during the entire summer, when they produce large flowers in gorgeous colors.

Mallow Marvels, Giant-flowering. Flowers of enormous size, frequently 10 to 12 inches in diameter. Plants grow from 5 to 8 feet high, and bloom from early in July until late in autumn. We offer three distinct colors—red, pink and white—strong roots. One each of the three colors for \$1.00. Each, 35c; per dozen, \$3.50.

Crimson Eye. Blooms of purest white with deep crimson eye, flowering in July; 4 feet. Each, 25c; per dozen, \$2.50.

HOLLYHOCK

FOR planting in rows or in groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Newport Pink. Finest pure pink, double flowering variety. Each, 30c; per dozen, \$3.00.

Double White, Double Rose, Double Yellow, Double Red, Double Mixed. Each, 25c; per dozen, \$2.50.

Single Red, Single Rose, Single Yellow, Single Mixed. Each, 25c; per dozen, \$2.50.

IBERIS (Hardy Candytuft)

Sempervirens. Low growing, with evergreen foliage. In spring and early summer, is completely covered with dense heads of pure white flowers. Each, 25c; per dozen, \$2.50.

LIBERTY IRIS (Flag Iris)

The "Fleur-de-Lis" of France

THE Liberty Iris is one of the most desirable May flowering plants. The flowers are of large size and of exquisite colors. For the best results plant in a well-drained sunny position, barely covering the roots. Avoid fresh manure in preparing your border.

Baron von Humboldt. Dark blue.

Canary Bird. Light yellow or buff.

Coerulea. Sky blue.

Florentina Alba. White.

Florentina Coerulea. Blue, very fine.

King of Yellows. Yellow.

L'Innocence. White, veined with orange purple.

Mme. Chereau. Pure white, border of blue.

Mont Blanc. Pure white.

Purpurascens. Dark purplish blue.

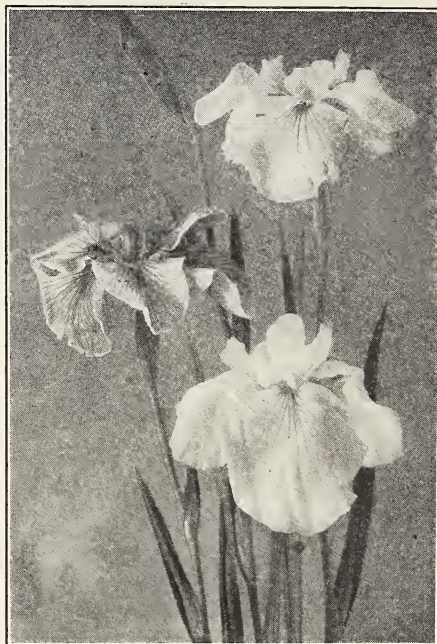
Queen Victoria. Blue, changing to bluish white.

Thorbecke. White and deep violet.

Price of above. Each, 25c; per dozen, \$2.50.

If by mail, add 5c each, 50c per dozen.

We can furnish large clumps of most of the above varieties from 50c to \$1.00 each.



Japanese Iris

JAPANESE IRIS (Iris Kaempferi)

Mixed Varieties

THEY are most effective when planted in groups, and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July. (See cut.)

Our mixed varieties embrace a wide range of colors and markings.

To produce a gorgeous effect they should be planted in groups of twelve or more. Each, 30c; per dozen, \$3.00.

IRIS PALLIDA DALMATICA

This variety is of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender shaded blue; exquisite in every way and fine for massing.

Each, 30c; per dozen, \$3.00.

IRIS SIBERICA

Orientalis. (Yale Blue.) A slender, graceful, tall-growing Iris, with flowers quite similar to those of the Liberty Iris, but smaller and much more numerous. The plants form large, strong, compact clumps and bloom so freely that the deep blue flowers give almost a solid color effect. Each, 25c; per dozen, \$2.50.

Orientalis Alba. A white flowering form of the above. Each, 25c; per dozen, \$2.50.

LIATRIS (Blazing Star, or Gay Feather)

MOST showy and attractive native plants, succeeding anywhere and producing their large spikes of flowers from July to September.

Pycnostacha. Spikes of light, rosy-purple flowers; five feet. Each, 25c; per dozen, \$2.50.

Spicata. Deep purple flowers, in spikes two to three feet high. Each, 25c; per dozen, \$2.50.

LINUM (Flax)

Perenne. A fine plant for the border or rockery; grows 2 feet high, with light, graceful foliage and large blue flowers all summer. Each, 30c; per dozen, \$3.00.

LOBELIA

Cardinalis. (Cardinal Flower.) Very desirable for borders or moist situations, producing numerous spikes of cardinal red flowers; 2 to 3 feet high. August to October. Each, 30c; per dozen, \$3.00.

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

LUPINUS POLYPHYLLUS (Lupine)

EFFECTIVE plants, producing large spikes of flowers. Will thrive in any good garden soil; they grow about three feet high and bloom latter part of May and early June.

- Polyphyllus.** Clear blue. Each, **25c**; per dozen, **\$2.50**.
Albus. A white variety of above. Each, **30c**; per dozen, **\$3.00**.
Moerheimi. Its clean, bold growth always attracts attention. The spikes of flowers are frequently over a foot long, in color superb, being a combination of light and dark shades of pink, without a trace of magenta. Each, **30c**; per dozen, **\$3.00**.

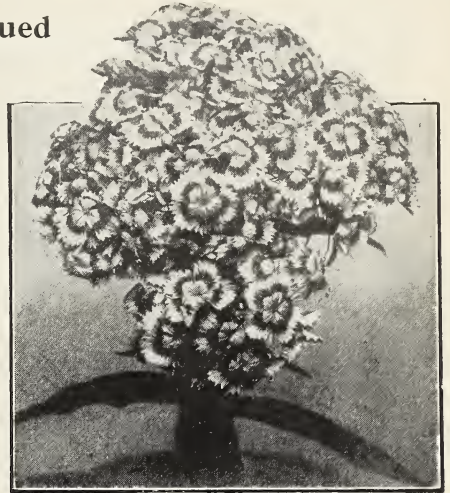
LYCHNIS

Arkwrighti. Produces large circular flowers varying in color through crimson, scarlet, orange, salmon and intermediate shades; blooms all summer and grows about 2 ½ feet high.

- Each, **50c**; per dozen, **\$5.00**.
Chalcedonica. A desirable plant, growing two to three feet high; flowers brilliant orange-scarlet. Each, **25c**; per dozen, **\$2.50**.
Viscaria Splendens. (Catch Fly.) Is a brilliant border plant, the flowers being produced in dense spikes.
 Each, **25c**; per dozen, **\$2.50**.

LYTHRUM

Roseum Superbum. (Rose Loose Strife.) A strong growing plant, three to four feet high, producing large spikes of rose colored flowers from July to September. Each, **25c**; per dozen, **\$2.50**.



Hardy Phlox

MERTENSIA (Blue Bells)

Virginica. An early spring-flowering plant, growing about one to one and one-half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; one of the most interesting spring flowers, blooming in May and June. Each, **25c**; per dozen, **\$2.50**.

MONARDA (Bergamot)

SHOWY plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, and producing their bright flowers during July and August.

- Didyma.** (Oswego Tea.) Flowers bright scarlet.
 Each, **25c**; per dozen, **\$2.50**.
Didyma Rosea. (Bee Balm.) Flowers rose colored.
 Each, **25c**; per dozen, **\$2.50**.

MYOSOTIS (Forget-Me-Not)

- Palustris Semperforens.** A variety that is hardly ever out of flower. Useful in a shady spot in the border.
 Each, **25c**; per dozen, **\$2.50**.
Alpestris Robusta Grandiflora. The large spring-flowering Forget-Me-Not, with intense sky-blue flowers.
 Each, **25c**; per dozen, **\$2.50**.

OENOTHERA (Evening Primrose)

ELEGANT subjects for growing in an exposed, sunny position, either in the border, or on the rockery, blooming all summer.

- Pilgrimi.** Large clusters of bright yellow flowers.
 Each, **30c**; per dozen, **\$3.00**.

PACHYSANDRA

Terminalis. A splendid cover plant for either sun or shade, growing 6 to 8 inches high and forming a mat of glossy, green foliage with small spikes of white flowers in May and June. Each, **25c**; per dozen, **\$2.50**.

PENTSTEMON (Beard Tongue)

Barbatus Torreyi. Spikes of brilliant scarlet flowers from June to August. Grows 3 to 4 feet high.
 Each, **30c**; per dozen, **\$3.00**.

PHLOXES of Sorts

- Amcna.** This variety grows about 4 inches high [forming a carpet of foliage, which in early spring is a sheet of bright pink flowers. Each, **25c**; per dozen, **\$2.50**.
Divaricata Canadensis. This variety is worthy of extensive planting, as it commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high.
 Each, **25c**; per dozen, **\$2.50**.
Subulata. (Moss or Mountain Pink.) An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground or covering graves.
Alba. Pure White. **Rosea.** Bright Rose.
 Each, **25c**; per dozen, **\$2.50**.
Suffruticosa. **Miss Lingard.** This early flowering variety grows about 2 feet high and blooms from May to October. Flowers white with pale pink eye, long, graceful panicles. Each, **25c**; per dozen, **\$2.50**.

HARDY PHLOX (Phlox Decussata)

PROBABLY the most satisfactory of all perennials, and a good space, in proportion to the size of the garden, should always be given to these plants. These are justly esteemed as the finest herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden. (See cut.)

We offer the following collection of extra choice varieties. Each, **25c**; per dozen, **\$2.50**.

- Africa.** Brilliant carmine-red with deeper eye.
Baron Von Dedem. Blood-red scarlet, with salmon shadings, immense trusses.
Beranger. White ground, delicately shaded with pink and distinct red eye.
Bridesmaid. Pure white, with crimson-carmine eye.
Coquilecot. Bright orange-scarlet with crimson eye; extra large, compact flower heads.
Eclairer. Dark crimson, center rose surrounded with white; an excellent variety.
Elizabeth Campbell. Bright, light salmon-pink, with lighter shading and dark red eye.
Etna. Deep, fiery red; dark eye.
Europa. A white variety with decided crimson-carmine eye. The individual flowers and trusses are very large; plant of sturdy, erect habit.
F. G. Von Lassburg. The finest white flowers; very large; strong, vigorous grower.
Frau Anton Buchner. The finest white yet introduced, having the largest truss and largest individual flower.
Independence. An early, pure white.
Mad. Bezanson. A tall growing variety with bright crimson flowers in large trusses.
Mme. Pape Carpentier. This is a dwarf variety, bearing enormous trusses of pure white flowers.
Mme. Paul Dutrie. Delicate lilac-rose, in shade like a soft pink Orchid; flowers very large, borne in immense panicles.
Pantheon. Bright carmine-rose; large and fine.
Richard Wallace. White, with bright crimson center; large flowers in immense panicles.
Rosenberg. Bright, reddish-violet flowers with blood-red eye; individual flowers very large.
R. P. Struthers. Bright rosy-carmine with claret-red eye.
Selma. Large trusses of very large pink flowers, with cherry-red eye; choice.
Sir E. Landseer. Large, bright crimson flowers, borne in immense trusses.
Thebaide. Salmon, with carmine eye; dwarf.
Thor. Deep salmon-pink with aniline-red eye, suffused and overlaid with a scarlet glow.
W. C. Egan. Flowers are of a delicate lilac, illuminated by a large, bright solferino eye, producing a pleasing shade of soft pink. Flowers produced in immense panicles.
 Any of the above varieties, each, **25c**; per dozen, **\$2.50**.
 If wanted by mail, add 5c each, 30c per dozen, for postage.
 We do not guarantee or replace plants, shrubs or trees, at prices quoted.

HARDY HERBACEOUS PLANTS—Continued

PHYSOSTEGIA (False Dragon-Head)

One of the most beautiful of our mid-summer flowering *Perennials*, forming dense bushes three to four feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather.

Virginica. Bright, soft pink. Each, 25c; per dozen, \$2.50.
Virginica Alba. Pure white. Each, 25c; per dozen, \$2.50.

PLATYCODON (Balloon Flower or Japanese Bell Flower)

THE *Platycodons* are closely allied to the *Campanulas*, and form neat, branched bushes of upright habit.

Grandiflorum. Deep blue, cupped, star-shaped flowers, one and one-half feet. Each, 25c; per dozen, \$2.50.

Album. A white-flowered form of the above. Each, 25c; per dozen, \$2.50.

Mariesi. Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants. Each, 25c; per dozen, \$2.50.

PLUMBAGO (Leadwort)

Larpenæ. Of dwarf, spreading habit, growing 6 to 8 inches high, with beautiful deep blue flowers from July to October. Fine for borders and rockeries. Each, 25c; per dozen, \$2.50.

POLEMONIUM (Jacob's Ladder)

Reptans. Useful border plant, grows about 12 inches high, succeeds best in a partially shaded position; deep green, finely-cut foliage and spikes of showy blue flowers in May and June. Each, 30c; per dozen, \$3.00.

ORIENTAL POPPIES (Papaver Orientale)

THESE are the regal representatives of this popular genus, far surpassing in splendor of bloom all the annual and biennial kinds, and for a gorgeous display of rich and brilliant coloring, nothing equals them during their period of flowering in May and June, and whether planted singly or in masses, their large flowers and freedom of bloom render them conspicuous in any position. After flowering, the plants die back, usually reappearing along in early September, or as soon as the weather gets cool. During the resting period, care should be taken in cultivating the beds, that the roots are not disturbed, any disturbance at this time usually resulting in failure. We offer the following distinct varieties:

Mrs. Perry. Beautiful salmon flowers.

Mahoney. Large dark red flowers.

Princess Victoria Louise. Soft lilac rose.

Royal Scarlet. Scarlet flowers, with black center.

The above varieties. Each, 30c; per dozen, \$3.00.

Mixed Varieties. Each, 25c; per dozen, \$2.50.

PEONIES

While these are only suitable for fall planting during the months of September, October and November, we have some demand from those who wish to complete their planting designs. For the convenience of those we will be pleased to submit a list of the sorts we can supply.

HARDY GARDEN PINKS

THESE old-fashioned favorites are absolutely perfect as an edging for the hardy border; as cut flowers they are indispensable.

Her Majesty. A pleasing plant growing to about one foot and bearing large, snowy white flowers. Each, 30c; per dozen, \$3.00.

White Reserve. A pure white variety, possessing a spicy fragrance. Ever-blooming. Each, 30c; per dozen, \$3.00.

Mixed Hardy Garden Pinks. Seedlings grown from a very select strain, which should produce a good percentage of double flowers. Each, 25c; per dozen, \$2.50.

PYRETHRUM

THE large daisy-like blooms appear as early as June and continue in abundance continuously until September. They delight in a rich soil with a natural drainage. They thrive best in the full sunlight. As the flowers die, the old stems should be cut off to encourage new blooms.

Hybridum Fl. Pl. Double flowering, mixed. Each, 35c; per dozen, \$3.50.

Hybridum, Single Flowering. In choicest mixture. Each, 25c; per dozen, \$2.50.

Uliginosum. (Giant Daisy.) Grows four to five feet high, and is covered with large, white, daisy-like flowers three inches in diameter from July to September. Each, 25c; per dozen, \$2.50.



Rudbeckia Purpurea

RUDBECKIA (Cone Flower)

A VARIETY of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention.

Golden Glow. Double canary yellow flowers; six feet; August. Each, 25c; per dozen, \$2.50.

Newmanni. Single dark orange, with deep purple cone center; three feet high; flowers from July to September. Each, 30c; per dozen, \$3.00.

Purpurea. (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and one-half feet high. Each, 25c; per dozen, \$2.50.

SALVIA

Azurea. Grows two to three feet high and produces pretty sky-blue flowers in great profusion during August and September. Each, 30c; per dozen, \$3.00.

Pratense. This variety blooms during June and July; grows about 2 feet high; flowers dark blue. Each, 30c; per dozen, \$3.00.

SEDUM (Stone Crop)

Acre. (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow. Each, 25c; per dozen, \$2.50.

Album. Green foliage, white flowers. Each, 25c; per dozen, \$2.50.

Sexangulare. Dark green foliage, yellow flowers. Each, 25c; per dozen, \$2.50.

Spectabilis. Erect growing; height 18 inches with broad, light-green foliage and immense heads of handsome, showy, rose colored flowers. Each, 25c; per dozen, \$2.50.

Spectabilis Brilliant. Similar to the above with bright, amaranth-red flowers. Each, 25c; per dozen, \$2.50.

Spurium. Grows 6 inches high with attractive pink flowers. Each, 25c; per dozen, \$2.50.

HARDY HERBACEOUS PLANTS

(Continued)

SCABIOSA

- Caucasia.** (Blue Bonnet.) Blooms from June to September. Flowers a soft shade of lavender borne on stems 18 to 24 inches high. Each, **30c**; per dozen, **\$3.00**.
- Japonica.** They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September. Each, **30c**; per dozen, **\$3.00**.

SHASTA DAISY

- L**ARGE, snowy-white flowers, in bloom continuously throughout the summer and fall.
- Alaska.** A decided improvement on the original, very free-flowering, with blooms 4½ to 5 inches across, of pure, glistening white. Each, **25c**; per dozen, **\$2.50**.
- King Edward.** Very large flowers; plant of vigorous growth. Each, **25c**; per dozen, **\$2.50**.

SPIREA (Goat's Beard, Meadow Sweet)

- Filipendula, fl. pl.** (Double Flowered Drop-wort.) Pretty fern-like foliage, with double white flowers on stems 15 inches high during June and July. Each, **30c**; per dozen, **\$3.00**.
- Palmata Elegans.** Pure white flowers with protruding pink anthers during June and July; 3 feet. Each, **30c**; per dozen, **\$3.00**.

STATICE (Great Sea Lavender)

- Latifolia.** Immense heads, 2 to 3 feet across; small, blue flowers from June to September, which last for months if cut and dried. Each, **30c**; per dozen, **\$3.00**.

STOKESIA (Cornflower or Stokes' Aster)

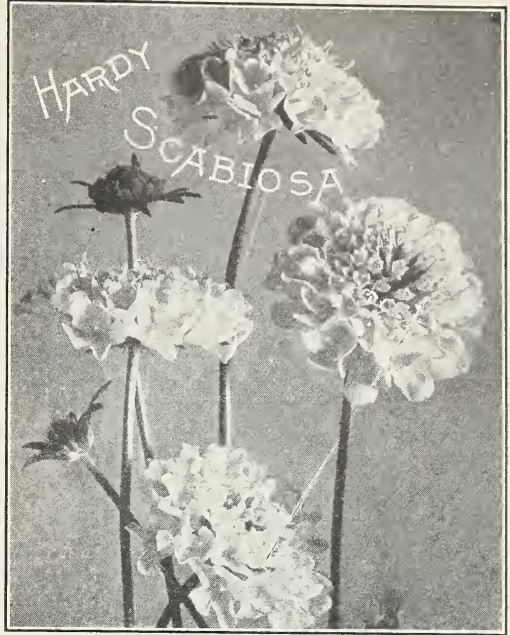
- Cyanea.** Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost. (See cut.) Each, **30c**; per dozen, **\$3.00**.
- Alba.** White flowers and green foliage. Each, **30c**; per dozen, **\$3.00**.

SWEET WILLIAM (Dianthus Barbatus)

- Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts. Each, **25c**; per dozen, **\$2.50**.
- Newport Pink.** Salmon or watermelon-pink flowers. Each, **30c**; per dozen, **\$3.00**.

TRITOMA (Red hot Poker, Flame Flower or Torch Lily)

- Pfitzerii.** (The Everblooming Flame Flower.) In bloom from August to November, a rich orange-scarlet, producing a grand effect, either planted singly in the border or in masses. Each, **30c**; per dozen, **\$3.00**.



VALERIANA

- Coccinea.** Showy heads of reddish flowers, from June to October. Height, 2 feet. Each, **30c**; per dozen, **\$3.00**.
- Officinalis.** (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July, with strong heliotrope odor; 3 to 4 feet. Each, **25c**; per dozen, **\$2.50**.

VINCA MINOR (Periwinkle or Trailing Myrtle)

- Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive. Each, **25c**; per dozen, **\$2.50**.

VERONICA (Speedwell)

- Amethystina.** Grows 2 feet high; bears amethyst-blue flowers in June and July. Each, **25c**; per dozen, **\$2.50**.
- Incana.** Bright silvery foliage, with spikes of amethyst-blue flowers 1 foot high during July and August. Each, **25c**; per dozen, **\$2.50**.
- Longifolia Subsessilis.** A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire summer and fall. Each, **35c**; per dozen, **\$3.50**.
- Spicata.** An elegant border plant, growing about 1½ feet high, producing long spikes of bright blue flowers. Each, **25c**; per dozen, **\$2.50**.
- Virginica.** Long spikes of white flowers in July and August; 3 to 4 feet. Each, **25c**; per dozen, **\$2.50**.

VIOLAS, or TUFTED PANSIES (Viola Cornuta)

- They flower continuously for nearly eight months in the year and while their flowers are not so large as those of the Pansy, their bright colors make them welcome additions to any garden.
- Mixed Varieties.** Each, **20c**; per dozen, **\$2.00**.

YUCCA FILAMENTOSA (Adams's Needle)

- A hardy ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes. Each, **25c**; per dozen, **\$2.50**.

ORNAMENTAL GRASSES

- Eulalia Gracillima.** (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen.
- Eulalia Japonica Variegata.** Leaves striped white and green longitudinally.
- Eulalia Zebrina.** (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light.
- Above, each, **30c**; per doz., **\$3.00**; by mail, **35c** each.
- Cannot accept orders for Hardy Perennial plants totaling less than One Dollar.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

Ornamental Flowering Shrubs



Callicarpa, Purpurea

SHRUBS are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Shrubs have many uses—as a background to a flower border, for hiding an unsightly building, fence or foundation, or they may be planted in a mixed shrubby border, in which case those of short, dense growth should be planted along the front of the border, graduating to the tall-growing kinds at the back.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, unless an immediate effect is wanted—in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf-growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

Stocks of **ORNAMENTAL FLOWERING SHRUBS** have become greatly depleted in the last few years, consequently it is no longer possible to offer two or more sizes, except in a few instances. Our prices contemplate furnishing the largest sizes now obtainable.

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

ALMOND, DOUBLE FLOWERING. A desirable class of early flowering shrubs; erect, slender branches, covered with small double flowers in May.
Pink flowering Each, \$1.50; per dozen, \$15.00.
White flowering Each, \$1.50; per dozen, \$15.00.

AMORPHA FRUTICOSA. (False Indigo.) A handsome shrub growing to 8 feet tall. Foliage bright green and feathery. Indigo-colored flowers borne on stiff stems. May to June. Each, \$1.00; per dozen, \$10.00.

ALTHEA. (Rose of Sharon.) The Altheas are among the most valuable of our hardy shrubs on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants.

Boule-De-Feu. Double red. Each, 75c; per dozen, \$7.50.

Grandiflora Superba. Double blush white, shaded carmine. Each, 75c; per dozen, \$7.50.

Jeanne D'Arc. Double white. Each, 75c; per dozen, \$7.50.

Meehani. Beautiful variegated foliage with satiny, lavender colored, single flowers, open and free blooming. Each, 90c; per dozen, \$9.00.

Single Rose, White and Purple. Each, 60c; per dozen, \$6.00.

Double Rose, White and Purple. Each, 60c; per dozen, \$6.00.

ARALIA SPINOSA. (Hercules Club.) A large shrub with large, bright green leaves. Branches are slender and bear large trusses of creamy flowers, followed by dark purple berries in September. Each, \$1.00; per dozen, \$10.00.

BERBERIS. Thunbergii. (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and the foliage is beautiful at all times, and in the fall turns to a most brilliant crimson color. The plant is covered with bright scarlet berries all the fall and winter. It seldom grows over four feet high.

12 to 15 inches, each, 50c; per dozen, \$5.00.
15 to 18 inches, each, 60c; per dozen, \$6.00.
18 to 24 inches, each, 70c; per dozen, \$7.00.
24 to 30 inches, each, 90c; per dozen, \$9.00.

BUDDLEYA. (Butterfly Shrub or Summer Lilac.) *Variebilis Magnifica.* Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs.

Small plants, each, 35c; per dozen, \$3.50.
Large clumps, each, 75c; per dozen, \$7.50.

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub.) Flowers fragrant, double and of a chocolate color. Blooms in April. Each, 75c; per dozen, \$7.50.

CALLICARPA. Purpurea. A low growing shrub rarely exceeding three feet in height. The numerous curving branches are covered in August with clusters of insignificant pink flowers; these are followed in September by large masses of bright, glossy, violet-purple berries, borne in clusters from the axil of every leaf, remaining on the plant until mid-winter. For planting in borders or in clumps on the lawn these fall berried plants are useful and attractive. Each, 75c; per dozen, \$7.50.

CERCIS CANADENSIS. (Judas Tree or Red Bud.) Very showy and beautiful when in bloom. All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the leaves appear. Each, \$1.00; per dozen, \$10.00.

CLETHRA ALNIFOLIA. (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white, fragrant flowers in August. (See cut.) Each, 75c; per dozen, \$7.50.

CORCHORUS. (Kerria.) Globe Flower or Japanese Rose. **Ja-ponica.** A shrub four to six feet tall. Native of Japan. Leaves bright green, fading in autumn to tones of yellow. Flowers numerous, bright yellow, large and showy. A charming old-fashioned plant. June to October. Each, \$1.00.
Per dozen, \$10.00.



Clethra Alnifolia

CORCHORUS ARGENTEA VARIEGATA. A dwarf variety with small green foliage, edged with white; flowers yellow. One of the prettiest and most valuable dwarf shrubs; two to three feet. Each, 90c.
Per dozen, \$9.00.

White Kerria. (See Rhodotypos.)

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

ORNAMENTAL FLOWERING SHRUBS—Continued

CORNUS FLORIDA. (White Flowering Dogwood.) The flowers, produced in April before the leaves appear, are from three to three and one-half inches in diameter, white and very showy. They begin to appear as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom. Foliage grayish green, glossy and handsome, and in the autumn turns to a deep red; one of the most showy flowering trees. (See cut.)..... Each, \$1.25; per dozen, \$12.50.

CORNUS FLORIDA RUBRA. (Red Flowering Dogwood.) A rare variety, similar to the common type, except in color of the flowers, which are rich rosy-red. The two varieties make a fine contrast. April. Each, \$2.50; per dozen, \$25.00.

CORNUS MASCULA. (Cornelian Cherry.) A small tree-like shrub, producing early in spring, before the leaves appear, clusters of bright yellow flowers, which are followed by red berries... Each, 75c; per dozen, \$7.50.

CORNUS SIBERICA. (Red Siberian Dogwood.) A tall shrub with bright, coral-red branches, making them very conspicuous in winter. Each, 75c; per dozen, \$7.50.

CORNUS STOLONIFERA. (Red Osier Cornel.) A spreading shrub with beautiful, reddish-purple branches. Foliage dark green above and paler beneath. Flowers white, followed by white berries. Each, 75c; per dozen, \$7.50.

CRAB. (Bechtel's Double Flowering.) Most beautiful of all the flowering Crabs; hardy. Trees are covered in early spring with large, beautiful, double, fragrant flowers, resembling small roses of a delicate pink. 3 to 4 feet..... Each, \$2.00; per dozen, \$20.00.

CYTISUS LABURNUM. (Golden Chain.) A large shrub with glossy bright green leaves. The flowers are golden yellow and borne in great profusion. Each, \$1.50; per dozen, \$15.00.

DESMODIUM PENDULIFLORUM. A shrub-like plant that dies to the ground in winter, but comes up vigorously in spring. Bears during September sprays of rose-colored flowers. Each, 75c; per dozen, \$7.50.

DEUTZIA CRENATA FLORA PLENA. Flowers double white, tinged with pink. Each, 75c; per dozen, \$7.50.

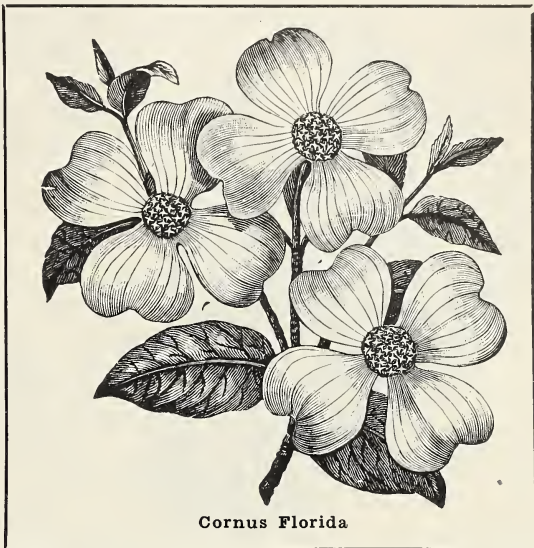
DEUTZIA GRACILIS. A dwarf bush, covered with spikes of pure white flowers in early summer. Each, 75c; per dozen, \$7.50.

DEUTZIA LEMOINEI. Habit dwarf, flowers white. One and one-half to two feet. Each, 75c; per dozen, \$7.50.

DEUTZIA PRIDE OF ROCHESTER. Large double white flowers, slightly tinted with rose. Each, 75c; per dozen, \$7.50.

ELDER, GOLDEN. (Sambucus.) Golden yellow foliage. Each, 75c; per dozen, \$7.50.

ELEAGNUS LONGIPES. Nearly evergreen; foliage silvered on the under surface. Yellowish flowers in May, followed by scarlet-yellow berries during summer. Each, 75c; per dozen, \$7.50.



Cornus Florida

EUONYMUS ELATUS. (Winged Burning Bush.) A handsome shrub with bright green oval leaves and broad corky winged branches. The leaves change in the fall to brilliant crimson. This shrub grows to a height of 6 to 8 feet and makes a conspicuous display of color in the fall. Fine for specimen planting or massing..... Each, \$1.25; per dozen, \$12.50.

FORSYTHIA FORTUNEL. (Golden Bell.) Upright growth and bright yellow flowers in April. Each, 75c; per dozen, \$7.50.

FORSYTHIA SUSPENS. (Weeping Golden Bell.) Willowy growth and yellow flowers. Each, 75c; per dozen, \$7.50.

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow. Each, 75c; per dozen, \$7.50.

HIPPOPHAE RHAMNOIDES. (Sea Buckthorn.) A large shrub with spiny branches. Foliage is gray-green above and silvery beneath; flowers yellow, produced in early spring. Berries orange-red, ripening in fall. Each, 90c; per dozen, \$9.00.

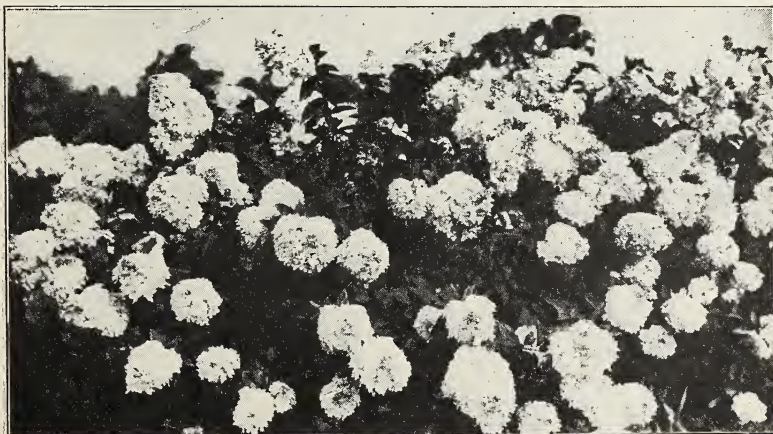
HYDRANGEA ARBORESCENS STERILIS. (Snowball-Hydrangea.) Snowy white blooms; will flower for fully three months; a very showy variety, excellent for borders..... Each, 75c; per dozen, \$7.50.

HYDRANGEA PANICULATA GRANDIFLORA.

The flowers which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks. (See cut.) 18 to 24 inches, each, 75c; per dozen, \$7.50. 2 to 3 feet, each, \$1.00; per dozen, \$10.00.

HYDRANGEA PANICULATA GRANDIFLORA.

Standard or Tree-Shaped Plants. These are four and five years old, trained to tree-shape with about three feet of straight stem and nicely shaped heads. Four to five feet, each, \$2.00; per dozen, \$20.00.



Hydrangea Paniculata Grandiflora

We do not guarantee or replace plants, shrubs or trees at prices quoted.

ORNAMENTAL FLOWERING SHRUBS—Continued



Lilac

MAHONIA AQUAFOLIA. (Holly-leaved Mahonia.) A native species of medium size, with purplish, shining leaves, and showy, bright yellow flowers succeeded by bluish berries.

18 to 24 inches, each, **\$1.50**; per dozen, **\$15.00**.

PRIVET. See Hedge Plants.

PHILADELPHUS OR SYRINGA. (Mock Orange or Orange Blossoms.) A shrub that can always be depended upon to give splendid satisfaction. No insects bother it, and in May and June the bushes are literally covered with flowers.

Grandiflorus. (Large-flowered Mock Orange.) Flowers are pure white and very large.

Each, **75c**; per dozen, **\$7.50**.

Coronarius Aurea. (Golden-leaved Mock Orange.) Fine golden-yellow foliage, contrasting beautifully with the dark leaves of other shrubs.

Each, **\$1.00**; per dozen, **\$10.00**.

PRUNUS PISSARDI. (Purple Leaved Plum.) One of the best of the small red or purple leaved trees, holding much of its color through the summer. Flowers small and pinkish white.

Each, **\$1.25**; per dozen, **\$12.50**.

RHODOTYPOS. Kerrioides. (White Kerria.) Handsome foliage and large single white flowers in the latter part of May, succeeded by numerous black berries.

Each, **75c**; per dozen, **\$7.50**.

RHUS COTINUS. (Purple Fringe, or Smoke Tree.) A low, shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist.

Each, **\$1.25**; per dozen, **\$12.50**.

RHUS TYPHINA. (Staghorn Sumac.) This variety will thrive in dry soil, growing to a considerable height. Leaves are dark green, turning to scarlet, purple and orange in the fall. The crimson fruits remain on all winter.

Each, **75c**; per dozen, **\$7.50**.

ROBINIA HISPIDA. (Rose Acacia.) A very handsome shrub. The leaves are similar to those of the Locust. In June and July long panicles of rose-colored flowers hang from the branches.

Each, **\$1.25**; per dozen, **\$12.50**.

SAMBUCUS. Aurea. (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs.

Each, **75c**; per dozen, **\$7.50**.

HYPERICUM AUREUM. (Golden Hypericum.) A dwarf shrub growing to about 3 feet. Foliage bluish green above and paler beneath. Flowers yellow, nearly 2 inches across. Excellent for massing in front of taller shrubs. July to August.

Each, **75c**; per dozen, **\$7.50**.

ILEX VERTICILLATA. (Black Alder or Winterberry.) This fine shrub is famous for its sprays of scarlet berries which are much used for decorating at Christmas time. Bears white flowers in June.

Each, **90c**; per dozen, **\$9.00**.

LILACS. (True Syringa.) (See cut.) **Purple.** (Syringa Vulgaris.) The common purple species, and one of the best.

Each, **90c**; per dozen, **\$9.00**.

White. (Syringa Vulgaris Alba.) Flowers pure white, very fragrant.

Each, **90c**; per dozen, **\$9.00**.

Price of any of the following named Lilacs.

Fine plants, 2 to 3 feet, each **\$1.00**; per dozen, **\$10.00**.

Fine plants, 3 to 4 feet, each **1.25**; per dozen, **12.50**.

Charles X. Rapid grower, reddish purple flowers.

Madame Lemoine. Double white flowers.

Michael Buchner. Double pale lilac.

LONICERA. (Bush or Upright Honeysuckle.) Handsome upright shrubs. They thrive in almost any soil.

Ledebouri. Very distinct, producing red flowers in May. . . . Each, **75c**.

Morrowi. A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months. . . . Each, **75c**; per dozen, **\$7.50**.

Tartarica (Tartarian Honeysuckle.) A large shrub with numerous upright or spreading branches. Flowers borne in great profusion in late spring. Fruit red or orange, ripening in summer. Red and white. . . . Each, **75c**; per dozen, **\$7.50**.

SPIREA. A large group of showy, free-flowering, hardy shrubs.

Anthony Waterer. Makes nice, round bushes, three feet high and wide; beginning to bloom in summer, continuing until fall. Rose red flowers in large, round clusters all over the bush.

12 to 15 inches, each, **75c**; per dozen, **\$7.50**.

Billardii. Pink flowers in bloom nearly all summer. It is grand for planting in masses.

Each, **65c**; per dozen, **\$6.50**.

Callosa Alba. A white flowering variety of dwarf, bushy, symmetrical form. Blooms all summer.

18 to 24 inches, each, **65c**; per dozen, **\$6.50**.



Spirea Van Houttei

Van Houttei. (Improved Bridal Wreath.) This is without a doubt the most beautiful and useful of shrubs. Always effective if planted singly or in groups on the lawn, in front of the porch, in shrub borders or in a hedge. Handsome throughout the entire season, but when in flower it is a complete fountain of white bloom. Clusters of white florets are set close along the drooping stems. (See cut.)

Two to three feet, each, **50c**; per dozen, **\$5.00**.

Three to four feet, each, **65c**; per dozen, **\$6.50**.

Spireas continued on next page.

ORNAMENTAL FLOWERING SHRUBS—Continued

SPIREA—Continued.

Prunifolia Fl. Pl. (Old Bridal Wreath.) Blooms in May, with pure white, double flowers.

Each, 90c; per dozen, \$9.00.

Reevesii Fl. Pl. Tall, with dark, bluish green foliage, and large, double, pure white flowers in May and June.

Each, 90c; per dozen, \$9.00.

Thunbergii. Of dwarf, graceful form. Branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring.

Each, 90c; per dozen, \$9.00.

STEPANANDRA FLEXUOSA. A low shrub, with numerous gracefully-arching branches giving a spray-like effect. Foliage glossy green, changing to red and purple. Flowers ivory-white, produced in abundance. June.....

Each, 75c; per dozen, \$7.50.

SYMPHORICARPUS. Racemosus. (Snowberry.) A graceful shrub, three to five feet tall, with slender branches. Flowers white or pinkish, in loose racemes, in summer. Berries white, produced in showy, profuse clusters, the branches bending under their weight.

Each, 65c; per dozen, \$6.50.

SYMPHORICARPUS. Vulgaris. (Coral-Berry or Indian Currant.) A grand shrub, producing a wealth of red or purplish berries, which remain on the branches all winter. Flowers greenish red in summer. Berries coloring in early autumn, very showy. Does well in shade.....

Each, 65c; per dozen, \$6.50.

TAMARIX. Africana. (Tamarisk.) Strong, slender tall growing, irregular shrubs, with feathery foliage and small, delicate pink flowers in May.

Each, 65c; per dozen, \$6.50.

TAMARIX. Hispida Aestivalis. A graceful shrub with upright branches, flowers pink, appearing in July and August.....

Each, 65c; per dozen, \$6.50.

VIBURNUM. (Snowballs and High Bush Cranberry.) The Viburnums are one of the most useful shrubs, being very hardy and of good habit. They all have white flowers mostly on flat heads and with a few exceptions are noted for their handsome clusters of berries. (See cut.)



Snowball

Lantana. (Wax-faring Tree.) This is especially suitable for dry situations and limestone soil. The large, white flower clusters open in May and June and are followed by red fruits, changing to black. Each, 75c; per dozen, \$7.50.

Opulus. (High Bush Cranberry.) The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter.

Each, 75c; per dozen, \$7.50.

Opulus Sterilis. (Guelder Rose or Snowball.) Of spreading habit, bearing flat clusters of single white flowers, which afterwards produce brilliant red berries which hang to the plant all winter; very decorative.

Each, 75c; per dozen, \$7.50.

Plicatum. (Japan Snowball.) One of the choicest hardy shrubs, with healthy dark foliage; the perfect buds of pure white flowers are borne in great profusion in May.....

Each, 90c; per dozen, \$9.00.

Tomentosum. (Single Japan Snowball.) A handsome shrub with beautiful, dark green leaves. Flowers white, borne in flat clusters in May. In autumn, foliage turns to a rich crimson.

Each, 90c; per dozen, \$9.00.

VITEX AGNUS-CASTUS. (Chaste Tree.) A tall-growing shrub with extremely showy, dark green, aromatic foliage. Flowers lilac, borne in dense, drooping clusters. A rare shrub and very ornamental for lawn planting. July and August.....

Each, \$1.00; per dozen, \$10.00.

WEIGELIA. (Diervilla.) These shrubs bloom after the lilacs, in June and July. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

Candida. White flowering Weigelia, flowering throughout the summer.....

Each, 75c; per dozen, \$7.50.

Eva Rathke. The finest Weigelia in cultivation. Flowers continuously throughout the summer and autumn; of an entirely distinct color, being a rich, ruby carmine. Should be in every garden.....

Each, \$1.25; per dozen, \$12.50.

Rosea. A beautiful shrub, with rose-colored flowers in May and June.....

Each, 75c; per dozen, \$7.50.

Rosea Nana Variegata. A neat dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; flowers delicate rose and pink; one of the finest variegated-leaved shrubs.....

Each, 75c; per dozen, \$7.50.

ORNAMENTAL TREES

CATALPA BUNGEI. (Umbrella Catalpa.) Grafted on stems 6 to 7 feet high, it makes an umbrella shaped top without pruning. Perfectly hardy. Leaves large, glossy, heart-shaped, deep green, lay like shingles on a roof, always making a symmetrical head. One of the most unique trees; desirable for lawns, park and cemetery planting. 6 to 7 feet, each, \$2.50; selected two-year-old, each, \$3.75.

MULBERRY, TEAS' WEEPING. The most graceful hardy weeping tree in existence. Forms a perfect-shaped head and the slender branches grow downward parallel with the stem, forming an umbrella-like shape. It takes the foremost place among weeping trees; has beautiful foliage and luscious fruit, is hardy, enduring the cold of the North and the heat of the South, safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting.

1 year heads, each, \$3.75; 2 year heads, each, \$4.50.



Weeping Mulberry

We do not guarantee or replace plants, shrubs or trees, at prices quoted.

Shade and Ornamental Trees

FOR LAWN, STREET AND FOREST PLANTING

ASH. American White. A handsome, hardy, broad-headed, quick growing shade tree. Valuable for park and street planting. 8 to 10 feet.....Each, **\$2.25**; per dozen, **\$22.50**.

ASH. European. Smaller in its habit of growth and more spreading than the American. 6 to 8 feet.
Each, **\$2.25**; per dozen, **\$22.50**.

BIRCH. American White. This is a valuable species with white bark. Very effective in landscape work. 6 to 8 feet.
Each, **\$3.00**; per dozen, **\$30.00**.

CATALPA SPECIOSA. A handsome, rapid growing tree, with large, bright green foliage. Valuable for lawn and street planting. 8 to 10 feet.....Each, **\$2.00**; per dozen, **\$20.00**.

CATALPA BUNGEI. (Umbrella Catalpa.) See "Ornamental Trees," page 85, for description. 6 to 7 feet, each, **\$2.50**; selected two year old, each, **\$3.75**.

CLADRANTIS TINCTORIA. (Yellow Wood.) A pretty, low tree with small egg-shaped leaves. Flowers are white and in graceful drooping clusters. 5 to 6 feet.
Each, **\$2.25**; per dozen, **\$22.50**.

ELM. American. A valuable tree for park, avenue and lawn planting. A hardy, rapid grower; resists drought well and is long lived. 8 to 10 feet.....Each, **\$2.00**; per dozen, **\$20.00**.

KOELREUTERIA PANICULATA. (Varnish Tree.) A rare tree growing 25 to 30 feet high bearing long clusters of golden yellow flowers in July. In autumn foliage colors to crimson and gold. 5 to 6 feet.....Each, **\$1.50**; per dozen, **\$15.00**.

LARCH. European. A pyramidal, cone-bearing tree, remarkable for its beautiful, light green feathery foliage in early spring. Fine tree for lawn and ornamental planting. 6 to 8 feet.
Each, **\$2.00**; per dozen, **\$20.00**.

LINDEN. American. A rapid growing tree with large leaves and fragrant flowers. Extensively used as a lawn tree, also for park and street planting. 8 to 10 feet.
Each, **\$3.75**; per dozen, **\$37.50**.

LINDEN. European. This is the broad-leaved Linden of European plantations and probably the largest. 8 to 10 feet.....Each, **\$3.00**; per dozen, **\$30.00**.

LIQUIDAMBER. (Sweet Gum.) A very ornamental tree and beautiful at every stage. Splendidly adapted for street and park planting. 5 to 7 feet.
Each, **\$2.50**; per dozen, **\$25.00**.

MAPLE. Norway. A large, handsome tree with a compact, rounded head of spreading branches. One of the best trees for lawn, park, street or cemetery planting. 8 to 10 feet.....Each, **\$4.50**; per dozen, **\$45.00**.

MAPLE. Rock or Sugar. An excellent shade tree of upright, dense growth. Grows to a large size and is long lived. 8 to 10 feet. Each, **\$3.00**; per dozen, **\$30.00**.

MAPLE. Silver or Soft. Has wide, slender, spreading branches and thrives almost anywhere.
8 to 10 feet.....Each, **\$2.00**; per dozen, **\$20.00**.
10 to 12 feet.....Each, **\$2.25**; per dozen, **\$22.50**.

OAK. Red. A beautiful tree of rapid growth, growing into a large, majestic tree, with broad, round head, the foliage turning dark red in fall. 6 to 8 feet.
Each, **\$3.00**; per dozen, **\$30.00**.

OAK. Scarlet. A noble tree with gradually spreading branches, which form a rather open head. Leaves turn scarlet in fall. 6 to 8 feet.
Each, **\$3.75**; per dozen, **\$37.50**.

OAK. Pin. A handsome tree, especially when young. Tree is fibrous rooted, transplants well and grows rapidly. Foliage turns bright red in fall. 6 to 8 feet.....Each, **\$3.75**; per dozen, **\$37.50**.

POPLAR. Carolina. One of the surest and most rapid growing trees. The leaves are glossy and fresh looking. Valuable for quick effects. 8 to 10 feet.
Each, **\$2.00**; per dozen, **\$20.00**.

POPLAR. Bolleana. Its habit of growth is broader than the Lombardy. Tall growing with cottony leaves. 8 to 10 feet.....Each, **\$1.50**; per dozen, **\$15.00**.



Rock or Sugar Maple

POPLAR. Lombardy. With age this tree becomes picturesque.
8 to 10 feet.....Each, **\$1.25**; per dozen, **\$12.50**.
10 to 12 feet.....Each, **\$1.50**; per dozen, **\$15.00**.

SALISBURIA. (Maiden Hair or Ginkgo.) A tall, sparsely branched, usually slender tree, with leaves similar in shape to the Maiden Hair Fern. Especially valuable for solitary planting to secure picturesque effects. 6 to 8 feet.....Each, **\$3.00**; per dozen, **\$30.00**.

SYCAMORE. Platanus Orientalis. (Oriental Plane.) This is among our largest and tallest growing trees. Very hardy and does well in moist places. Excellent for street, park and lawn planting. Thrives well in smoky cities, making it a good tree for city planting. 8 to 10 feet.....Each, **\$2.00**; per dozen, **\$20.00**.

SYCAMORE. Platanus Occidentalis. (American Sycamore, Buttonwood.) Similar to the Oriental Sycamore in general habit of growth, but more susceptible as to location and sheds its leaves earlier in the fall. 8 to 10 feet.....Each, **\$2.00**; per dozen, **\$20.00**.

TULIP TREE (Liriodendron Tulipifera.) A tall, handsome, hardy, ornamental tree of pyramidal habit and rapid growth. Bears numerous tulip-shaped, fragrant flowers of a creamy yellow and orange color in June. 6 to 8 feet.....Each, **\$2.25**; per dozen, **\$22.50**.
10 to 12 feet.....Each, **3.75**; per dozen, **37.50**.

WEeping TREES

BIRCH. (Cut-leaf Weeping.) A tree of wonderful grace and beauty. Tall, slender, drooping branches and delicately cut leaves. It colors brilliantly in the fall. Its bare white trunk and branches make a beautiful winter picture. 6 to 8 feet.
Each, **\$4.50**; per dozen, **\$45.00**.

MULBERRY. Teas Weeping. See "Ornamental Trees" Page 85.

WILLOW. Babylonica. (Common Weeping Willow.) A large tree with drooping branches. Leaves are small and bright green. Excellent for wet locations, but a credit to any lawn. 6 to 8 feet.
Each, **\$2.25**; per dozen, **\$22.50**.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

Evergreen Trees

ON account of the large demand for Evergreens, we have made arrangements with one of the best Evergreen specialists in the country, whereby we are able to offer the following list of Evergreens. These are largely American stock and the quality is the best that can now be supplied. We have tried to make prices as reasonable as possible and if you contemplate further plantings, would advise placing your order at once while stocks are still fairly complete.

All of our Evergreens are dug with a ball of earth around the roots and burlapped. This protects them in transit and this fact should be borne in mind by purchasers when comparing prices.

ARBORVITAE AMERICAN (*Thuja Occidentalis*)

Well known screen and hedge plant.
2 to 3 feet, each, \$1.50; per dozen, \$15.00
3 to 4 feet, each, \$2.25; per dozen, \$22.50

ARBORVITAE ELWANGERIANA

Low, broad pyramid with slender branches and yellowish foliage.
1 1/2 to 2 feet, each, \$2.50; per dozen, \$25.00

ARBORVITAE GLOBE (*Thuja Occidentalis Globosa*)

Very dwarf and compact; grows naturally into a rounded, almost ball-like form.
1 to 1 1/2 feet, each, \$2.25; per dozen, \$22.50

ARBORVITAE PYRAMIDALIS

(*Thuja Occidentalis Pyramidalis*)

Suitable for tubs and possesses foliage of finer texture and more dense habit than the American Arborvitae.

2 to 3 feet, each, \$3.00; per dozen, \$30.00
3 to 4 feet, each, \$4.00; per dozen, \$40.00

ARBORVITAE SIBERIAN (Var. *Wareana*)

Of dwarf habit and conical outline. Rich, dark green foliage. Will withstand colder exposure than other sorts. 1 1/2 to 2 feet, each, \$2.25; per doz., \$22.50

ARBORVITAE TOM THUMB

Smaller and more compact than the variety *Ericoides*. Suitable for low hedges.
1 to 1 1/2 feet, each, \$2.25; per dozen, \$22.50

BIOTA (Chinese *Arborvitae*)

Light, bright green foliage, which combined with its pyramidal habit of growth, makes this variety especially useful in formal planting and also for growing in tubs.

2 to 3 feet, each, \$ 2.50; per dozen, \$ 25.00
3 to 4 feet, each, 6.00; per dozen, 60.00
4 to 5 feet, each, 10.00; per dozen, 100.00

IRISH JUNIPER (*Juniperus Hibernica*)

Grows erect in a dense column of dark green.
2 to 3 feet, each, \$2.50; per dozen, \$25.00

AUSTRIAN PINE (*Pinus Austriaca*)

A tall tree with spreading branches, heavily plumed with long, stiff needles.
2 to 3 feet, each, \$2.50; per dozen, \$25.00

DWARF MUGHO PINE (*Mughus*)

Usually broader than its height and sometimes almost prostrate. Forms a dark, dome-shaped bush.
15 to 18 inches, each, \$2.75; per dozen, \$27.50

SCOTCH PINE (*Pinus Sylvestris*)

A strong grower with spreading branches and short, stiff needles. 2 to 3 feet, each, \$2.50; per dozen, \$25.00

WHITE PINE (*Pinus Strobus*)

A beautiful ornamental tree, also used for shade and shelter belts. 3 to 4 feet, each, \$2.50; per dozen, \$25.00

COLORADO BLUE SPRUCE (*Picea Pungens*)

The original form of the Colorado Spruce, foliage light green, very hardy.
1 1/2 to 2 feet, each, \$8.00; per dozen, \$80.00

KOSTER'S BLUE SPRUCE

(*Picea Pungens Glauca Kosteriana*)

The finest ornamental Evergreen grown. The foliage is the purest blue. Stocks of this variety are now in very light supply. Will quote prices on request.



Koster's Blue Spruce

NORWAY SPRUCE (*Picea Excelsa*)

A vigorous, rapid growing tree, with dark green foliage. One of the most popular Evergreen trees.

1 1/2 to 2 feet, each, \$1.35; per dozen, \$13.50
2 to 3 feet, each, 2.00; per dozen, 20.00
3 to 4 feet, each, 3.00; per dozen, 30.00

Hedge Plants

CALIFORNIA PRIVET. (*Ligustrum Ovalifolium*). Its

foliage is a rich dark green and is nearly evergreen, remaining on the plant until mid-winter. It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

12 to 15 inches, per doz., \$0.90; per 100, \$ 6.00
15 to 18 inches, per doz., 1.00; per 100, 7.00
18 to 24 inches, per doz., 1.20; per 100, 8.50
24 to 30 inches, per doz., 1.50; per 100, 10.00

AMOR RIVER PRIVET, North. (*Ligustrum Amurense*).

18 to 24 inches, per doz., \$2.00; per 100, \$14.00
24 to 30 inches, per doz., 2.25; per 100, 16.00

IBOTA PRIVET. (Japanese Privet).

18 to 24 inches, per doz., \$2.25; per 100, \$16.00
24 to 36 inches, per doz., 2.50; per 100, 18.00

REGEL'S PRIVET. (*Ligustrum Regelianum*).

18 to 24 inches, per doz., \$5.00; per 100, \$35.00

We do not guarantee or replace plants, shrubs or trees at prices quoted.

Hardy Climbing Plants

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) The best climbing plant for covering brick or stone walls.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper.) For covering walls, verandas and trunks of trees. Each, 50c; per doz., \$5.00; by mail, each, 55c.

ARISTOLOCHIA SIPHO. (Dutchman's Pipe.) Large, heart-shaped leaves. Each, \$1.00; per doz., \$10.00; by mail, each, \$1.10.

BIGNONIA RADICANS. (Trumpet Vine.) Flowers trumpet-shaped, bright scarlet.

Each, 50c; per doz., \$5.00; by mail, each, 55c.

CELASTRUS SCANDENS. (Climbing Bitter Sweet.) Yellow flowers, followed in the autumn with orange fruit. Each, 60c; per doz., \$6.00; by mail, each, 65c.

EUONYMUS RADICANS. This vine is especially adapted for covering low foundation walls. Has deep evergreen foliage and is extremely hardy. Can also be used as an edging plant as it may be clipped same as boxwood. Each, 60c; per dozen, \$6.00. By mail, each, 65c.



CLEMATIS (Large Flowering)

Henryii. Creamy white flowers.

Jackmanii. Intense violet-purple flowers.

Ville de Lyon. Brilliant crimson flowers.

The above named Clematis, each, \$1.00; per dozen, \$10.00; by mail, each, \$1.10.

We send out strong, healthy roots of Clematis and cannot entertain any claims for non-success with these plants.

CLEMATIS (Small Flowering)

Paniculata. (Japanese Clematis.)

Pure white, very fragrant flowers, borne in large clusters.

Each, 60c; per dozen, \$6.00; by mail, each, 65c.

HONEYSUCKLES

Each, 50c; per dozen, \$5.00, except where noted; by mail, each, 55c.

Aurea Reticulata. Foliage variegated yellow and green with yellowish white, fragrant flowers.

Monthly Fragrant or Dutch. Blooms all summer.



Clematis

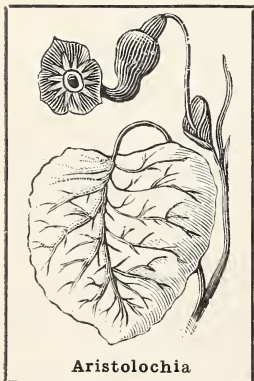
IVY, English. Beautiful, evergreen vine. Each, 50c; per doz., \$5.00. By mail, each, 55c.

KUDZU VINE. (Or Jack-and-the-Bean-Stalk.) A rapid growing vine. Each, 50c; per doz., \$5.00. By mail, each, 55c.

MATRIMONY VINE. The branches may be trained over fences or trellises. Each, 50c; per doz., \$5.00. By mail, each, 55c.

WISTARIA, CHINESE. Delicate, violet-blue blossoms. Each, 60c; per doz., \$6.00. By mail, each, 65c.

WISTARIA, CHINESE WHITE. Pure white flowers. Each, 60c; per doz., \$6.00. By mail, each, 65c.



Aristolochia

Common Woodbine. A strong, rapid grower; flowers red outside, buff within.

Halleana. Nearly evergreen, flowers pure white.

Scarlet Trumpet. Scarlet inodorous flowers.

TENDER CLIMBING PLANTS

CARDINAL CLIMBER. Each, 30c; per dozen, \$3.00.

COBAEA SCANDENS. Each, 25c; per dozen, \$2.50.

MOON FLOWER PLANTS. Each, 25c; per dozen, \$2.50.

If wanted by mail, add 5c each; 50c per doz., for postage.

MADEIRA VINE. Strong tubers. Each, 5c; per doz., 40c. By mail, per dozen, 50c.



Wistaria

BEDDING PLANTS

These cannot be mailed, as we send out strong plants, which travel best by express.

	Each	Per Doz.
Ageratum. Blue.....	15c	\$1.50
Asters. Best varieties, all colors.....	10c	1.00
Cannas. Large flowering kinds.....	25c	2.50
Centaurea. (Dusty Miller).....	15c	1.50
Coleus. Standard sorts.....	15c	1.50
Geraniums. Standard sorts.....	25c	2.50
Lantanas.....	15c	1.50

	Each	Per Doz.
Lobelias. Trailing.....	10c	\$1.00
Pansies. Fancy.....	10c	1.00
Petunia. Double sorts.....	25c	2.50
Petunia. Single sorts.....	15c	1.50
Salvia. Scarlet varieties.....	20c	2.00
Verbenas. Finest.....	15c	1.50
Vincas. Bedding sorts.....	15c	1.50
Vinca. Variegated, trailing.....	20c	2.00

We do not guarantee or replace plants, shrubs or trees at prices quoted.

Fruit Trees

SELLECT thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots, and setting the trees therein, carefully pack the earth about the roots.

By Express or Freight at Expense of Purchaser.

We do not guarantee or replace Trees or Shrubs at prices quoted.

While we make no charge for packing or delivery to freight or express offices here, still on account of increased cost of operation we cannot accept orders for Fruit Trees in smaller quantities than six, either straight or assorted, at prices quoted. In smaller quantities, add 25c per tree or make up a Club Order among your friends that can be shipped to one address.

APPLES, STANDARD

5 to 7 feet high. Each, \$1.50; per dozen, \$15.00.

SUMMER VARIETIES

Early Harvest. (Early June, Yellow Harvest.) Fruit is medium size to large, the skin tender, very smooth, clear, pale, waxy yellow; flesh is white, rather fine, crisp, tender, juicy, at first briskly sub-acid, but eventually becoming milder and more agreeable for dessert. Ripens in July and August.

Red Astrachan. Fruit of good medium size; yellow, largely covered with red, presenting a striped appearance; flesh white, often strongly tinged with red, crisp, tender, juicy, sub-acid and of good quality. One of the most beautiful early market apples. Ripens in August.

Yellow Transparent. (White Transparent. Grand Sultan.) The tree is an upright grower and usually bears fruit the next year after planting. Fruit of medium size, pale, waxy yellow, pleasantly acid, tender and good, splendid for home and market. Ripens in July and August, before Early Harvest.

APPLES, STANDARD

5 to 7 feet high. Each, \$1.50; per dozen, \$15.00.

AUTUMN VARIETIES

Delicious. This is probably the best of the newer varieties, having been satisfactorily tested in many parts of the country. Fruit is brilliant dard red, shading to yellow at the blossom end. Flesh is crisp, fine grained and quite juicy; flavor slightly acid but very pleasing.

Duchess of Oldenburg or Duchess. A variety of great hardness, yielding abundantly in all sections. Fruits are large, rounded, yellow, striped red, tender, juicy and of the best quality for cooking.

Fall Rambo. Fruit mottled and striped red and yellow, of medium size and good flavor; widely cultivated and highly esteemed for eating. Tree is a strong grower and heavy bearer.

Maiden's Blush. Fruit of uniformly good size, smooth, round, beautifully flushed with brilliant red on a yellow ground. Good for table use. One of the most beautiful and productive Fall varieties. Ripens in August and September.

APPLES, STANDARD

5 to 7 feet high. Each, \$1.50; per dozen, \$15.00.

WINTER VARIETIES

Baldwin. A great market apple, very productive; fruit large, deep red, crisp, juicy and rich. December to March.

Banana. The fruit is large, clear, pale yellow with pinkish-red blush; flesh is tender and aromatic with a suggestion of banana flavor. November to February.



WINTER VARIETIES—Continued

Ben Davis. (New York Pippin.) A remarkable keeper and profitable market apple in many sections. Large, handsome, brightly striped with red, variable in flavor. Remarkably vigorous and fruitful. January to April.

Gano. Similar but superior to the Ben Davis, bearing a handsome and better quality of fruit that is large and dark red. Flesh is pale yellow, sub-acid, of good flavor and good keeping qualities. Very productive. December to March.

Grimes Golden. Fruit medium to large of transparent golden yellow and of best quality. Flesh tender, juicy, spicy and rich. November to February.

Jonathan. Fruit is medium sized, pale yellow, heavily flushed with red; the flesh is white, juicy, tender and mild sub-acid. Excellent quality. November to March.

Northern Spy. Fruit large, striped crimson in the sun; juicy, rich and aromatic, retaining these qualities until late Spring or Summer. Valuable as an Aphis-resisting sort. January to June.

Rome Beauty. (Royal Red, Rome, Phoenix.) The fruit is large and handsome, yellow with crimson cheek, tender, juicy, with yellow flesh; uniform in size, fine in appearance and of good quality. November to February.

Stayman's Winesap. Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy very tender and highly flavored. November to April but will keep until May. A favorite apple for cider.

Winesap. Fruit medium large, skin almost entirely covered with dark red; flesh yellow, crisp, with a rich flavor. December to March.

York Imperial. (Johnson's Fine Winter, Shepp.) Fruit medium size, attractive, smooth, clear, waxy yellow, flushed with carmine. The flesh is crisp, firm, sub-acid and retains its flavor to the last. December to February.

CRAB APPLES

5 to 7 feet high. Each, \$1.50; per dozen, \$15.00.

CRAB Apples do well on almost all soils. Trees are hardy and vigorous; come into bearing early and bear almost every year. Excellent for cider, vinegar and jelly.

Cyslop. Bears large crimson fruit in clusters. October.

Transcendent. Largest and best of the Siberian Crabs. Tree is extremely hardy, good grower and usually very productive. Fruit is bright yellow, striped with red and one and one-half to two inches in diameter. Flesh is crisp, juicy and sub-acid. August and September.

Whitney. Tree is a hardy, thrifty, upright grower; comes into bearing young and is very productive. Fruit is green, spotted with carmine. Flesh yellowish crisp, juicy, splendid for eating and cider. August and September.

Yellow Siberian. Color of fruit is amber with red blush and of medium size. September.

SUITABLE DISTANCES FOR PLANTING FRUIT TREES.

Apples, standard, 30 to 40 feet. Pears, standard, 18 to 20 feet. Peaches, 16 to 18 feet. Cherries, sweet, 18 to 20 feet. Cherries, sour, 13 to 18 feet. Plums, 16 to 20 feet. Quinces, 10 to 12 feet.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

FRUIT TREES, Continued

CHERRIES

HEART AND BIGARREAU (Sweet)

4 to 6 feet, first-class, each, \$2.00; per doz., \$20.00.

No home orchard is complete without some cherry trees. They are easily grown wherever the apple succeeds and they bear good crops yearly.

Black Tartarian. A beautiful purplish cherry of large size and superb quality, rich and juicy. Late June and July.

Governor Wood. One of the finest sweet cherries. Fruit is large, light red, juicy and delicious. Tree is healthy and productive. June.

Napoleon. Fruit of large size, white with red cheeks, firm and juicy. One of the best. Early July.

Rockport Bigarreau. Fruit large, round, light red, flesh firm and of fine flavor. Late June.

Yellow Spanish. A large handsome sweet cherry; yellow with light red cheek, firm and delicious. Late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, first-class, each, \$2.00; per doz., \$20.00.

Dyehouse. One of the earliest cherries. Similar to the Early Richmond but ripens about a week earlier and is much sweeter. The fruit is medium sized, soft, red and juicy. Tree is hardy and very productive. June.

Early Richmond or May. Unsurpassed for cooking. The tree is a free grower and reliable producer. The fruit is medium size, dark red, juicy and has an acid flavor. June.

English Morello. Fruit is large, dark red, nearly black, rich, juicy, with acid flavor. Tree is of dwarf growth. Late July.

Windsor. A large, delicious cherry; reddish-brown or liver colored. Valuable for late market or home use. July.

MULBERRIES

4 to 6 feet, each, \$1.00; per doz., \$10.00.

Downing's Everbearing. One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits; hardy.

PEARS

STANDARD AND DWARF

5 to 7 feet, first-class, each, \$2.00; per doz., \$20.00.

Bartlett. One of the most popular sorts, both for home and market. It is large, handsome, waxy yellow with red blush, flesh buttery, rich, juicy and highly flavored. August and September.

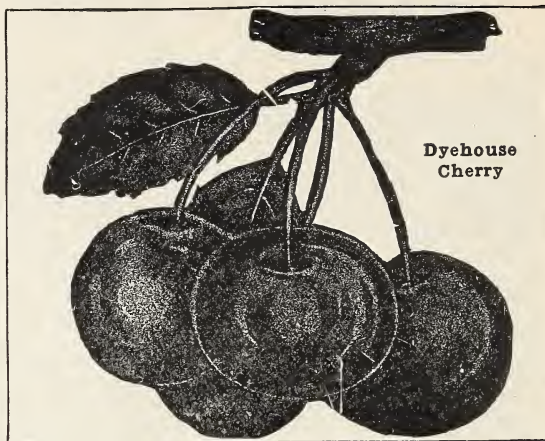
Duchess D'Angouleme. The skin is a dull greenish-yellow; flesh white, melting, juicy and well flavored. Tree is a vigorous grower. October and November.

Flemish Beauty. The fruit is large, the skin pale yellow; the flavor is sweet and melting. September and October.

Kieffer's Hybrid. Large, rich color and good quality. Fine for canning and preserving. October and November.

Seckel. Small, yellowish brown, of rich, delicious flavor, very popular for dessert. August and September.

Sheldon. Of the finest quality, rich and aromatic. Fruit is greenish russet with a red cheek, large size and somewhat flattened shape. September.



PEACHES

4 to 5 feet, each, \$1.00; per dozen, \$10.00.

If living on a farm, plant a small peach orchard for home use or a larger one for commercial purposes. If living on a city lot plant a peach tree in the back yard.

Champion. One of the finest freestone peaches. Large, creamy-white with slight blush. Flesh white, rich, sweet, juicy and of excellent flavor. August.

Crawford's Early. A very large, rich, yellow freestone of the finest quality. Late August.

Crawford's Late. This peach is similar to Crawford's Early, but ripens two or three weeks later. Freestone. Late September.

Elberta. The fruit is large with golden-yellow skin covered largely with crimson; flesh is yellow, firm, juicy and of high quality, very prolific. Freestone. September.

Heath Cling. Fruit very large, creamy white with faint blush. Flesh white to the stone, juicy and sweet with a good aroma. October.

Old Mixon Free. The standard late white peach. A large tender freestone with tender, excellent white flesh. September.

PLUMS

STANDARD ON PLUM STOCKS

5 to 7 feet, each, \$2.00; per dozen, \$20.00.

Plum trees require but little room to grow and are prolific bearers. For dessert, cooking and canning the demand is almost unlimited.

Abundance. Large, beautiful yellow, heavily over-spread with purple-carmine. Flesh yellow, juicy, sweet, firm, with tough skin. July.

Bradshaw. Very large, dark violet red; flesh yellow, juicy and good. Tree an erect, vigorous grower. Middle of August.

Burbank. Fruit very large, color cherry red, mottled; flesh yellow, sweet and firm. Hardy and vigorous grower. August.

Lombard. A favorite for canning. Fruit is medium size, oval and violet red. Flesh is yellow, juicy, pleasant and good. Late August.

Red June. An early ripening plum of good quality. Fruit medium to large, purplish-red; flesh yellow, solid, juicy and of good quality. Early August.

Shippers Pride. Large, showy, dark purple fruit. The flesh is sweet and firm. September.

Yellow Egg. A beautiful yellow, egg-shaped plum of large size; flesh yellow. Excellent for canning. Late August.

QUINCES

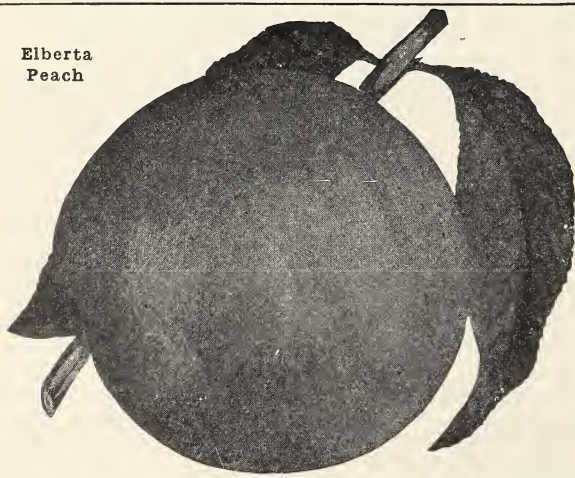
3 to 5 feet, each, \$2.00; per dozen, \$20.00.

Apple or Orange. Large, round, bright golden yellow, cooks quite tender and has an excellent flavor. Valuable for preserving and for market. An abundant bearer.

Champion. The fruit is large, oval, of a rich color and excellent quality. Ripens late and keeps well until January.

We do not guarantee or replace Trees or Shrubs at prices quoted.

Elberta
Peach



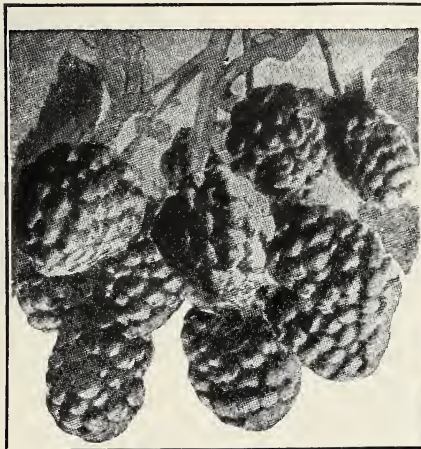
BLACKBERRIES, CURRANTS, GOOSEBERRIES AND RASPBERRIES

By Express or Freight at Expense of Purchaser.

Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

BLACKBERRIES

Per dozen, \$1.00; per 100, \$7.00.
THE Blackberry is one of the most profitable fruits to grow when properly managed as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.
Ancient Briton. Large berries of fine quality.
Blower. Large berries. Very productive.
Early Harvest. Fruit, medium size. The first to ripen.
Eldorado. Large fruit, fine quality, good keeper.
Mersereau. Berries large; good keeper and shipper.
Rathbun. Fruit very large, sweet and luscious.
Snyder. Medium size; sweet and juicy.
Taylor. Medium size fruit of fine flavor; ripens late.
Ward. Fine, large fruit of excellent quality; hardy.



DEWBERRY

Lucretia. One of the low-growing, trailing blackberries. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family.
 Per dozen, \$1.00; per 100, \$7.00.

GOOSEBERRIES

Two-Year-Old Plants

ONE of the hardiest of the bush fruits. The best results are obtained by planting in moist clay loam.
Downing. Large, pale green and of splendid quality for both cooking and table use.
 Each, 40c; per dozen, \$4.00.
Houghton's. Small to medium; roundish oval, pale red, sweet, tender.
 Each, 40c; per dozen, \$4.00.
Industry. The best English variety yet introduced. Berries large, dark red color when ripe.
 Each, 40c; per dozen, \$4.00.
Smith's Improved. Large, pale greenish yellow, skin thin, of excellent quality.
 Each, 40c; per dozen, \$4.00.

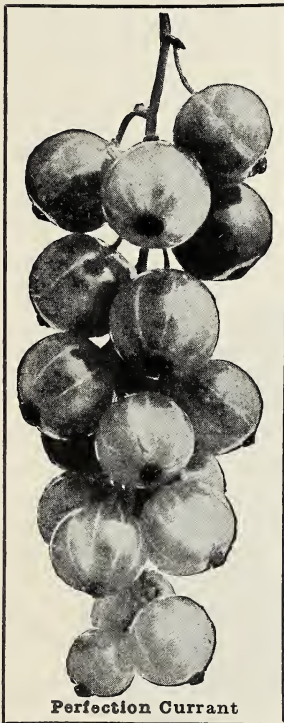
CURRANTS

Two-Year-Old Plants

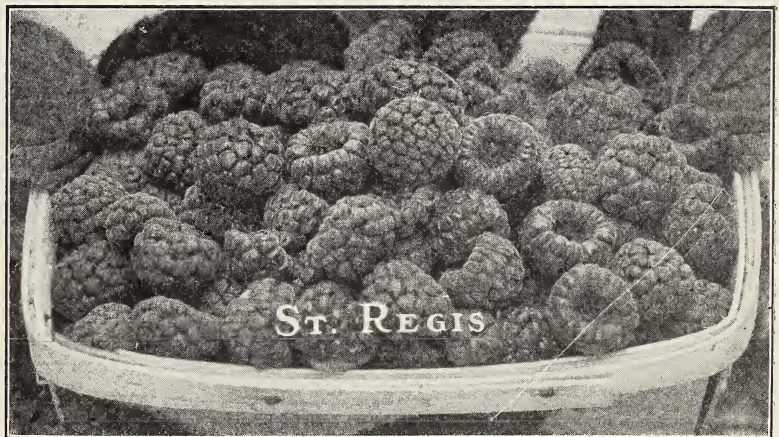
A COOL, moist soil is best adapted to the growth of currants. They should be well cultivated and heavily mulched.
Cherry. Large, bright red berries, with a thin skin and fine flavor.
 Each, 40c; per dozen, \$4.00.
Champion. This is one of the best black currants; fruit is above medium size with fine flavor.
 Each, 40c; per dozen, \$4.00.
Perfection. Color of fruit is a beautiful bright red, of large size and a rich, mild, sub-acid flavor.
 Each, 50c; per dozen, \$5.00.
White Grape. The golden-white berries are borne in large, handsome clusters and have a mild sub-acid flavor. Each, 40c; per dozen, \$4.00.



Industry Gooseberry



Perfection Currant



ST. REGIS

RASPBERRIES

Once the raspberry patch is established it requires very little cultivation. They thrive in good, moist soil. Black caps should be planted in the spring.

St. Regis. It is wonderfully prolific, the first or main crop being far greater than that of any other red variety known. It fruits on the old canes in generous quantities until late in August. By that date, berries begin to ripen upon the young canes, which continue to produce berries in increasing numbers until severe frost. The berries are a bright crimson, of large size and surpassing quality—rich, sugary with full raspberry flavor. They are exceedingly meaty, of firm texture and keep in good condition longer after being gathered than any other red raspberry . . . Per dozen, 75c; per 100, \$5.00.

The following varieties are all, per doz., 75c; per 100, \$5.00.

- Cardinal.** Considered one of the very best purple berries, as they produce a fine quality of dark red or almost purple berries through a long season.
- Cumberland.** The largest black cap.
- Cuthbert.** Large, firm, deep rich crimson.
- Gregg.** A large black cap variety, fruit firm.
- Kansas.** The hardiest black cap; strong, vigorous.

STRAWBERRIES AND GRAPE VINES

By Express or Freight at Expense of Purchaser.
Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

STRAWBERRIES

STRAWBERRIES will do well in any soil that will grow good corn. Soil should be made fine and loose. A generous supply of well rotted manure incorporated in the soil is a great benefit.

Strawberries are naturally shallow-rooted plants and must be encouraged continually to send their roots deep, in order to be sure of a supply of moisture and to feed in a soil of even temperature.

Plant in spring—always the best time—and see that no soil is allowed to remain in the crown of the plant.

Mulching strawberries is done to keep the soil moist and cool in summer, to protect the berries from mud and dirt when ripe and to protect the plants in winter. The winter protection should not be put on until the ground freezes.

Strawberries for garden culture should be planted in rows three feet apart and one foot apart in rows. For field culture plant in rows four feet apart and eighteen to twenty-four inches apart in row.

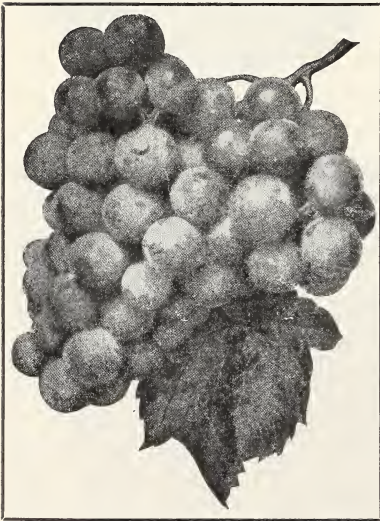
Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out.

Superb. The Ever-bearing Strawberry—Superb is a truly wonderful, fall-bearing variety, and what makes it unusually profitable is the fact that it also produces a heavy yield of choice fruit in the early summer, along with the standard varieties. It continues to give large yields of choice berries throughout August, September and in October up to the time the ground is slightly frozen. Plants of this variety which are set in the spring should have the blossoms removed until the first of July. The blossoms may be left to develop into berries, and a good crop of fruit will thus be secured the same season the plants are set, without injury to the plants. Per dozen, 60c; per 100, \$3.00.



The following varieties are all, per dozen, 50c; per 100, \$1.50.

- Aroma.** One of the finest for long-distance shipping. The large berries are bright red to the center, of conical shape with prominent and attractive yellow seeds.
- Gandy.** One of the best late varieties. Berries large, of fine form and excellent quality.
- Glen Mary.** Large to very large, sometimes flattened; sweet and rich.
- Nick Ohmer.** A fine, fancy market berry and always superb for the table. A giant in size.
- Senator Dunlap.** Exceedingly vigorous. Fruit large, regular and attractive in form, deep red to the center.
- Wm. Belt.** Berries very large, conical, bright red; of good flavor. The plant is strong, healthy and fruitful.



GRAPES

**ALL TWO-YEAR OLD
SELECTED STOCK**

This is one of the most satisfactory crops that can be grown, because it can be depended upon practically every year.

Grape vines will grow almost anywhere, but they should be carefully cultivated and pruned.

BLACK OR PURPLE GRAPES

***Concord.** Large, black grape, hardy and productive; juicy and sweet. Each, 40c; per doz., \$4.00.

Ives' Seedling. Dark purple, sweet. Each, 40c; per dozen, \$4.00.

Moore's Early. Ripens ten days earlier than Concord; bunch and berry round and large. Each, 40c; per dozen, \$4.00.



WHITE OR YELLOW GRAPES

Niagara. Bunch and berries large, light greenish white, slightly ambered. Each, 40c; per dozen, \$4.00.

Pocklington. Bunch and berry very large; attractive, golden yellow color. Each, 40c; per dozen, \$4.00.

Varieties marked with a (*) are best for arbors.

RED GRAPES

***Catawba.** Berries large, round; when ripe a dark copper color; sweet, rich. Each, 40c; per dozen, \$4.00.

Delaware. Small, light red, thin skin; very juicy, sweet, sprightly. Each, 50c; per dozen, \$5.00.

HUBBARD THE NEW BLACK GRAPE

Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes. Berries and bunch large and uniform; ripens ten days earlier than Concord. Supply limited. Each, \$1.50; Per doz., \$15.00.

SUITABLE DISTANCES FOR PLANTING SMALL FRUITS AND GRAPE VINES.

- Blackberries, 5 to 7 feet.
- Currants, 3 to 4 feet.
- Gooseberries, 3 to 4 feet.
- Raspberries, red, 3 to 4 feet.
- Raspberries, black, 4 to 5 feet.
- Strawberries, 1 x 3 feet.
- Strawberries, in beds 1 1/2 x 1 1/2 feet.
- Grapes, 8 to 10 feet.

McCullough's High Grade Fertilizers

All Fertilizers Delivered Free on Board Cincinnati.

Prices Subject to Change Without Notice.

THE benefits arising from the use of Commercial Fertilizers are too well known, and their value too well established, to require any argument or explanation. Soils that have been almost entirely exhausted by successive croppings have, by their use, been restored to their former fertility; in fact, bring larger crops than when the soil is new.

HOW TO APPLY COMMERCIAL FERTILIZERS

For Cereals: Apply 200 to 500 lbs. per acre.
For Vegetables and Fruits: Apply 500 to 1,000 lbs. per acre.
For Meadows and Alfalfa: Apply 300 to 500 lbs. per acre at seeding time, or as a top dressing.
For Corn: Drill 200 to 400 lbs. per acre all over the field before planting. Then apply 100 to 125 lbs. per acre along the row, (not in the hill) at planting.
If your land is sour, we recommend sweetening with lime some weeks before applying fertilizers.

PURE BONE MEAL

THIS pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia 2%; total phos. acid, 27%.
1 lb., 10c; 5 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.15; 50 lbs., \$2.00; per bag of 125 lbs., \$4.00.

SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Strewn over and dug into the vegetable garden or placed directly in drills or hills, it promotes a rapid, steady growth. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 1 lb. carton, 10c; 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.25.

CATTLE MANURE—Shredded

A SUBSTITUTE for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from paved Stock Yards cattle pens—dried and sterilized by a high temperature direct heat process which kills weed seeds, fungus and disease germs. 100 lb. bags only. Per bag of 100 lbs., \$2.25.

LAWN LIME

THE GRASS AND GARDEN TONIC

THIS lime is especially prepared for use on soil, as it is essentially a plant food, useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers.

Lawn Lime will renovate old lawns and cure the acidity of the soil.

If the ground is covered with moss and the grass seems sour and unsightly, sprinkle Lawn Lime freely over the surface and watch the satisfying results.

It is a well-known fact that 90% of the lawns need Lawn Lime, which can be applied at any time with good results.

For renewing old lawns it is unequalled; rake the lawn thoroughly, sow your grass seed, then sprinkle thoroughly with Lawn Lime at the rate of 100 lbs. for each four hundred square feet.

To make a new lawn, after all grading is done and every stone and stick removed, cover with a generous coating of Lawn Lime as indicated above, which should be raked into the soil, then sow the seed and rake in well, after which it should receive a good rolling to bring the seed into close contact with the soil and conserve the moisture.

Per bag of 100 lbs., \$1.25; 5 bags, (500 lbs.), \$5.50; 10 bags, (1,000 lbs.), \$10.00.

HALF AND HALF

IS especially valuable for Field Crops, Potatoes and Grain. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 16%; potash K₂O, 2%.
5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.10; 50 lbs., \$2.00; per bag of 125 lbs., \$3.50.

AGRICULTURAL LIMESTONE

DESTROYS SOIL ACIDITY — LOOSENS UP CLAY SOILS — TIGHTENS UP SANDY SOILS

PUTS soils in better mechanical condition and therefore aids in the development of leguifical soil Bacteria, which acts as a plant food for leguminous crops, such as Alfalfa, Sweet Clover, Red and Crimson Clovers, Soy Beans, Garden Beans and Peas, Cow Peas, Vetches, etc.
Apply at the rate of 2,000 to 4,000 lbs. per acre, and may be applied at any season of the year.

Packed in 100 lb. bags.

Per bag of 100 lbs., \$1.15; 5 bags, \$5.00; 10 bags (1,000 lbs.), \$9.00.

NITRATE OF SODA

CARRIES approximately 20% of ammonia and comes in crystals which vary in size. It is sometimes lumpy and the lumps should be crushed to a powder before the material is applied. Owing to the fact that Nitrate of Soda is a highly concentrated form of plant food, care should be taken in applying the material to plants on the leaf surface.

As a top dressing use at the rate of 100 lbs. per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For Strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water.

1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.

SULPHATE OF AMMONIA

CONTAINS approximately 25% of ammonia and comes in fine crystals which are very nice to apply broadcast.

Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5% more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses five pounds of Nitrate of Soda. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.15; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.50.

CROWN FERTILIZED HUMUS

THIS article is prepared from deposits of decayed vegetable matter. It has been successfully used for years and has proven to be worthy of extensive use. It is desirable for greenhouse and flower garden work, also for lawns and vegetables.

Humus in some form is the most essential element of plant life. It is rich in ammonia, phosphoric acid, potash and lime. 5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.25; 100 lbs., \$1.75; 500 lbs., \$8.00; 1000 lbs., \$15.00.

ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid.

This must be supplied for the purpose of producing a balanced combination of fertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs., \$2.25.

MURIATE OF POTASH

APPLY 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. Excellent for Potatoes, Corn, Grain, etc. 1 lb., 15c; 2 lbs., 25c; 25 lbs., \$2.00; 100 lbs., \$6.50.

HYDRATED LIME

THIS lime is used for sweetening acid or sour soils. 3 lb. package, 15c; bag of 50 lbs., \$1.00; 5 bags (250 lbs.), \$4.50; 10 bags (500 lbs.), \$8.00.

DRIED BLOOD MEAL

THIS is a splendid fertilizer for Roses, Carnations, Chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form. 1 lb., 15c; 25 lbs., \$2.15; 50 lbs., \$3.90; 100 lbs., \$7.00. (Fertilizers continued to next page.)

Write for Special Prices on lots of 500 lbs. or over.

FERTILIZERS—Continued

EXCELSIOR PLANT FOOD

For Ferns and Other House Plants

AN odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers. It is immediately soluble in water, and available to plant life from the moment of application. Small package, 15c; medium size package, 25c; large package, 40c.

STIM-U-PLANT

PLANT STIMULANT TABLET

GROWERS of fine Flowers, Shrubs and Vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-plant, an odorless, highly concentrated plant food, in tablet form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant food exactly when and where and as needed.

Easy to Use. Simply insert tablets in soil near plants or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package. Order Stim-U-plant tablets with your seed and plant order. Price, Trial Size, 15c; Small Size, 25c; 100 tablets, 75c.

ZENKE'S NEW PLANT LIFE

(Liquid)

It is a plant food containing in proper percentage **All Elements** essential to plant growth.

Mix one quart with 50 gallons of water and water plants sufficiently to saturate soil. Use about one quart to one square foot of soil.

It is immediately available to absorption by plants and saves time and labor. 8 oz. can, 25c; gallon, \$3.00. (One gallon is sufficient to make 200 gallons of solution.)

LAND PLASTER

IF applied as a top dressing for grass or clover crops in the spring, it greatly increases the growth and yield of same; sprinkled in stables, poultry houses and on manure piles it will prevent ammonia from vaporizing, thereby greatly increasing the value of farm manure. 100 lb. bag, \$1.50.

MOSS, PEAT AND POTTING SOIL

Moss, Green Sheet. For hanging baskets, etc. Per bale, 50c; large bundle (5 bales), \$2.00.

Moss, Sphagnum. For packing plants and growing orchids, etc. 1 lb., 15c; per bale, \$2.50.

Peat, Jersey. Per bushel, \$1.50; per bag of two measured bushels, \$2.75.

Potting Soil. Peck, 35c; per bushel, \$1.25.

Insecticides and Fungicides

Liquid Insecticides and Poisons cannot be sent by mail.

THE annual loss of Fruit and Vegetables from ravages of insects and fungous diseases is not due to poor material, but is primarily caused by lack of properly identifying the insect or fungous disease affecting the crop and applying the wrong material, or applying the material after it is too late to control the insect or disease.

In general, the following Insecticides and Fungicides are made for the purpose of controlling certain insects and fungous diseases and if the users will follow directions they should obtain good results.

Ant Eradicator (Liquid)

Useful against Ants in lawns, gardens, etc. 8 oz. can, 25c.

Aphine

The Insecticide that kills plant lice of many species. This is a most effective remedy for all sap sucking insects, as the Green, Black and White Fly (the Aphids), Thrips, Soft Scale, and such soft-bodied leaf-eating insects as the Currant and Cabbage slugs.

Aphine is a concentrated liquid, mixing readily with water and is applied at various strengths as per directions on each can. ½ pt., 40c; pt., 65c; qt., \$1.00; gallon, \$3.00.

Arsenate of Lead (Dry Powdered)

For Potatoes use 2 to 3 pounds to 50 gallons of water, applying 50 gallons or more per acre. For all other purposes use 1 to 1 ½ pounds to 50 gallons of water, or one teaspoonful to 1 gallon of water. It is best to reduce to a thin paste by mixing with a small amount of water, before putting into spray tank. On tender foliaged Trees and Plants add about two pounds of lime to each 50 gallons spray liquid. ½ lb. pkg., 25c; 1 lb. pkg., 45c; 5 lb. pkg., \$2.00; 10 lb. pkg., \$3.50; 20 lb. pkg., \$6.50.

"Black Leaf 40"

For Aphids indoors use ¼ pint "BLACK LEAF 40" to 100 gallons of water or 1 teaspoonful to 1 gallon of water, with sufficient soap in water to make good suds. For outside use apply solution double strength. Several formulas for destroying other sucking insects on each package. This is also a contact remedy. 1 oz. bottle, 35c; ½ lb. tin, \$1.25; 2 lb. tin, \$3.50; 10 lb. tin, \$13.50.

Bordo Lead Mixture (Paste)

AN Insecticide and Fungicide combined in one very effective product. Sticks well to the foliage.

Use in the proportion of 5 to 10 lbs. to 50 gallons of water. Weigh the exact amount, place in a pail with water and mix; pour into the sprayer tank and add the necessary water. Agitate thoroughly. 1 lb. can, 40c; 5 lbs., \$1.75; 10 lbs., \$3.00.

Bordo Lead Powder

COMBINED Insecticide and Fungicide. Kills bugs and prevents Blight, Rot, Mildew and Fungus, in one spraying operation. Can be used for wet spraying or dry dusting. 1 lb. makes about 7 gallons—ready to apply.

½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00; 10 lbs., \$3.75.

Bordo Mixture (Dry Powdered)

MANUFACTURED by a new process and will not dry out or deteriorate. Quantity to be used not over one-third the amount used in Bordo Paste Mixture. Mix with the required amount enough water to make a thin paste before putting into the spray tank.

Do not use on Peach, Japanese Plum or other tender foliaged plants, unless diluted to one-half strength. ½ lb. pkg., 20c; 1 lb. pkg., 35c; 5 lbs., \$1.50; 10 lbs., \$2.75.

Bug Death

ESPECIALLY valuable for Cucumbers, Egg Plants, Melons, Rose Bushes, Currants and Potatoes. It drives ants from lawns, and will not injure the grass.

Apply with powder bellows and dust Bug Death evenly over the plant. The best time for applying is early in the morning while the plant is wet with dew, as the powder will adhere more readily. Bug Death will not injure any Plant, Tree or Vine. 1 lb., 20c; 3 lbs., 40c; 5 lbs., 60c; 12 ½ lbs., \$1.40.

Bug Death Alpha

For sucking insects, Lice, Aphids, Flea Beetles and Fungus; also Currant Worms, Rose or Tree Aphid, etc. 12 oz. pkg., 25c; 10 lbs., \$1.50.

Calcium Arsenate (Dry Powdered)

In all garden operations this remedy offers protection against the Potato Beetle, Cabbage and Tobacco Worms and other leaf-eating insects. ½ lb. pkg., 25c; 1 lb., 45c; 5 lbs., \$2.00; 10 lbs., \$3.50.

Cutworm Food

THE worm seeks the Food in preference to the plant. For plants transplanted from indoors apply an even teaspoonful around each plant as soon as set out. Do not mix food with the soil.

One pound will protect 75 to 100 plants. 1 lb., 35c; 5 lbs., \$1.50.

Fish Oil Soap

FOR destroying scale insects on Plants, Trees, Vines, etc., for washing down the bark of Trees, Grape Vines, etc.

Dissolve one pound in one gallon of hot water, then add 9 to 10 gallons of cold water; for trunks and branches of trees use a thicker solution and apply with a brush. This is also a contact remedy. ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.10; in bulk, 25 lbs., \$4.00.

Contact Remedies to be Effective Must Reach the Insects.

INSECTICIDES AND FUNGICIDES—Continued

Zenke's Liquid Fungicide

A POWERFUL, reliable remedy for Leaf Spot, Leaf Rust, Scab, Mildew, Black and Brown Rot and most other Fungoid troubles. Per gallon, **\$3.00**. (Sufficient to make 50 gallons of solution).

Grape Dust

A NON-POISONOUS powder, usually effectual for the remedy and control of most powdery mildews on Grapes, Gooseberries, Roses, etc. Apply with powder bellows and dust evenly over plants. 1 lb., **25c**; 5 lbs., **\$1.00**; 10 lbs., **\$1.90**.

Hellebore Powder

FOR destruction of Slugs, Worms, Caterpillars, etc. Apply with powder bellows and dust evenly over plants early in the morning while plants are wet with dew. ¼ lb., **20c**; ½ lb., **30c**; 1 lb., **55c**; 5 lbs., **\$2.50**.

Zenke's Plant Insecticide

IS a contact remedy (Liquid). Very effective against Plant Lice, Black and White Fly, Mealy Bugs, Scale Insects, Eggs and Larva.

A very effective wash for Palms and Rubber Plants. 8 oz. can, **25c**; per gallon, **\$2.00**. (One gallon is sufficient to make 20 to 35 gallons of solution).

Lime-Sulphur Solution

FOR fall, winter and early spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphis, Blister Mite, any Scale Insects or Bark Lice. 1 gallon will make 8 gallons spraying liquid. 1 qt., **40c**; ½ gal., **65c**; 1 gal., **\$1.00**; 5 gals., **\$3.50**; ½ bbl. (25 gals.), **\$9.50**; 1 bbl. (50 gals.), **\$15.00**.

S. W. Dry Lime-Sulphur

From 10 to 12 pounds of S. W. Dry Powdered Lime-Sulphur should be used with 50 gallons of water, for a dormant spray.

From 2 to 3 pounds to 50 gallons of water in combination with 1 ½ pounds of Dry Powdered Arsenate of Lead should be used for summer spraying on all seed fruits such as Apples, Pears and Quinces, and half this strength on all stone fruits. 1 lb. can, **35c**; 5 lb. can, **\$1.40**; 10 lb. can, **\$2.25**; 25 lb. can, **\$4.50**.

Melrosine

The One Universal Contact Remedy for Rose Bugs, Aphis (Plant Lice of all kinds), Black Flies, Green Flies, Soft Scale Insects, Leaf Hoppers, Saw Flies, Japanese Beetles, Thrips, Red Spiders, Aster Bugs, Mealy Bugs, etc. Dilute with from 20 to 25 parts water.

Qt., **\$1.75**; Pt., **\$1.00**; trial size, **50c**.

By mail or express at customer's expense. Or Trial Size, sufficient to make one gallon when diluted, and care for several plants for the season, postpaid for **60c**.

Nico-Fume Liquid

FOR destroying Aphis, Thrip and Red Spider. Contains 40 per cent nicotine.

Use one to two teaspoonfuls of Liquid to each gallon of water. This is a contact remedy. ¼ lb., **75c**; 1 lb., **\$2.25**; 4 lbs., **\$8.00**; 8 lbs., **\$15.00**.

Hall's Nicotine Fumigator

FOR fumigating greenhouses—12 ½% Nicotine guaranteed. One cone will fill 7,000 cubic feet with deadly Nicotine fumes. Three cones will rid the average size greenhouse (20 by 100 ft.) of Aphids, Thrips and similar soft-bodied sucking insects and the cost will be only 25c. 1 lb. tins, **\$1.25**; 2 ½ lb. tins, **\$2.50**; 10 lb. tins, **\$8.50**.

Paris Green

A POISONOUS Insecticide in powder form for insects that chew. Largely used on Potatoes and Tobacco. Can be used as a spray, or dry and applied with Dry Powder Dusters.

When used as a spray, dilute one pound Paris Green in 150 to 300 gallons of water. When used on Fruit Trees add two pounds lime. ¼ lb., **20c**; 1 lb., **60c**; 5 lbs., **\$2.50**.

Slug Shot

Very effectual in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, etc.

When used on Melon, Squash and Cucumber Vines should be put on lightly. 1 lb., carton **25c**; 5 lbs., **65c**; 10 lbs., **\$1.25**.

Scalecide

SCALECID is more than a Scale Spray—it is a tree invigorator, destroying blight cankers from which fire Blight, Collar Rot, Root Rot, etc. is spread. As a delayed dormant spray when the buds are just starting it controls Aphis without the addition of Nicotine.

Mixes instantly with water and stays mixed.

Add one gallon of "Scalecide" to 15 gallons of water, stir, and you are ready to spray any kind of tree when the leaves are off, provided it is not too cold to be comfortable.

Use a fine spray nozzle and thoroughly wet the tree from the topmost twig down to the ground and around the base of the tree and you can rest assured that you will have accomplished everything you could with any other dormant spray or combination of sprays, and in addition, some things they cannot do.

If used according to directions, will kill every San Jose Scale that comes in contact with it.

1 qt., **60c**; 1 gallon, **\$1.40**; 5 gallons, **\$6.25**; 10 gallons, **\$10.60**; 30 gallons, **\$26.00**; 50 gallons, **\$38.00**.

Sulfocide

This is a powerful Fungicide for many fungous diseases of Apples, Pears, Quinces, Peaches, Plums, Cherries, Grapes and small fruits. Is also very effective for Blight on Potatoes, Beans, Melons and other vegetables; in fact, anywhere a strong fungicidal spray is needed.

1 pt., **50c**; 1 qt., **85c**; 1 gallon, **\$2.25**

Sulphur, Powdered

USUED principally to prevent and cure mildew on Roses and Plants in greenhouses. 1 lb., **15c**; 2 lbs., **25c**; 5 lbs., **50c**; 10 lbs., **90c**.

Thrip Juice (Hammond's)

EFFECTIVE against Thrips and Black Fly, Aphis, Red Spider, White Fly, Soft Scale, Mealy Bugs and certain other insects of this class on Roses, Chrysanthemums, Carnations, Grapes, Cherry and Apple Trees.

This is a contact insecticide concentrated. Diluted for use, 1 part of Thrip Juice with 40 parts of water.

1 pt., **75c**; 1 qt., **\$1.25**; 1 gallon, **\$3.75**.

Tobacco Dust

ASURE remedy for Green Fly, Aphis, Fleas, Beetles, etc. 1 lb., **10c**; 4 lbs., **25c**; 10 lbs., **50c**; 100 lbs., **\$3.50**.

TOBACCO DUST FOR FUMIGATING. 1 lb., **15c**; 3 lbs., **40c**; 10 lbs., **90c**; 25 lbs., **\$2.00**; 100 lbs., **\$6.00**.

Tobacco Stems

USUED for fumigating plants to kill insects, and as a mulch for Roses, Asters, Lettuce, etc. 1 lb., **5c**; bale of about 125 lbs., **\$2.00**.

Tree Tanglefoot

FOR protecting trees against climbing insect pests in a simple, economical and effective way; put a band of Tree Tanglefoot, from 3 to 5 inches wide completely around the tree. A perfect safeguard against Gypsy, Brown-tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 lb., **50c**; 3 lbs., **\$1.45**; 5 lbs., **\$2.25**; 10 lbs., **\$4.25**; 20 lbs., **\$8.00**.

Vermine

THIS is a soil sterilizer and vermicide which will destroy many of the insects and other vermin working in the soil at the roots of plants.

Vermine is applied to planted soil at proportions of one part to four hundred parts water, by thoroughly soaking the soil, whenever roots and plants are attacked by Maggots, Grubs, Worms or Root Lice.

To rid the ground of vermin before planting, Vermine may be applied in more concentrated form, one part to two hundred parts water, following with a thorough drenching of the soil with the hose and permitting the soil to rest for forty-eight hours after applying and before planting.

For potted plants, which are frequently infested with Angle and Eel Worms when confined in the house, a thorough drenching of the soil with Vermine will destroy the worms. ½ pt., **40c**; 1 pt., **65c**; 1 qt., **\$1.00**; 1 gallon, **\$3.00**.

Weed Killer, Key Brand

AHIGHLY concentrated solution which dilutes one part to 50 parts of water. It is effective within 12 hours after application and one application will keep paths and road-ways free from weeds for an entire season.

1 qt., **65c**; 1 gal., **\$1.65**; 5 gals., **\$6.50**.

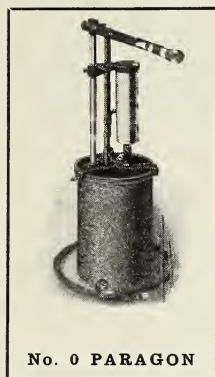
How and When to Spray

PLANT	1st Spray	2nd Spray	3rd Spray	4th Spray	5th Spray
Apple	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime Sulphur or Scalecide. Controls San Jose scale, scurfy scale, aphids eggs and mite eggs.	(Preblossom Spray). When pink shows in cluster buds, before buds open. Apply Bordeaux with Arsenate of lead (add Black Leaf Forty if aphids are present). Controls apple scab, curculio, canker worm and aphids.	(Calyx Cup Spray). Just after petals fall, before calyx closes. Apply Lime Sulphur with Arsenate of Lead (add Black Leaf 40 if aphids are present). Controls apple scab, sooty fungus, curculio, codling moth and canker worm.	Fourteen days after petals fall. Apply Bordeaux and Arsenate of Lead. Controls apple blotch, codling moth and canker worm.	About July 25th apply Bordeaux and Arsenate of Lead. Controls beetle, rot, apple blotch and codling moth.
Pear	Same as apple.	Same as apple.	Same as apple.	Second week of July. Apply Ammoniacal Copper Carbonate instead of Bordeaux and thus prevent russeting fruit. Do not add Arsenate of Lead.	
Peach	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime Sulphur or Scalecide. Controls leaf curl, San Jose scale, aphids, and scab.	Ten days after the petals fall or when the blossom husks are shedding. Apply Arsenate of Lead. Controls rot and scab.	Ten days later than No. 2. Apply commercial Lime Sulphur 1-75 and Arsenate of Lead. Controls curculio, pustular spot, scab, rot and aphids eggs.	Three weeks after No. 3. Apply commercial Lime-Sulphur 1-75. Controls scab and rot.	
Plum	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphur or Scalecide. Controls San Jose scale and aphids eggs.	When buds are swelling. Apply Bordeaux with Arsenate of Lead. Controls rot and curculio.	(European varieties). After calyx drops. Apply Bordeaux with Arsenate of Lead. (American and Japanese varieties). Use Lime-Sulphur 1-75 instead of Bordeaux.	(European varieties). Repeat No. 3 two weeks later. (American and Japanese varieties). Apply Lime-Sulphur 1-75 instead of Bordeaux. Controls rot, curculio and aphids eggs.	
Cherry	(Dormant Spray). With Lime Sulphur on sweet cherries only. Controls San Jose scale.	(Preblossom Spray). Apply Bordeaux with Arsenate of Lead. Controls rot and curculio.	Just after blossoms fall. Apply Arsenate of Lead plus Black Leaf Forty. Controls rot, curculio and aphids.	One week after No. 3. Use Lime-Sulphur 1-75 plus Arsenate of Lead. Controls rot, curculio, leaf spot and mildew.	After the fruit is picked. Apply Bordeaux along with Arsenate if slugs are present.
Quince	(Dormant Spray). Lime-Sulphur or Scalecide. Controls San Jose scale and leaf spot.	After blossoms drop. Apply Bordeaux. Controls leaf spot.	Two weeks after 2nd spray. Apply Bordeaux. Controls leaf spot.	Two weeks after 3rd spray. Apply Bordeaux. Controls leaf spot.	
Grape	Just before the blossoms open. Apply Bordeaux or Grape Dust. Controls mildew and black rot.	Just after fruit sets. Repeat No. 1. Controls black rot and mildew.	Two weeks later. Apply Bordeaux and Arsenate of Lead. Controls beetle and root worm.	1st to 10th of August. Bordeaux and Arsenate with soap as spreader. Apply with plenty of pressure. Controls berry worm and fungous diseases.	
Currant and Gooseberry	(Dormant Spray). Apply Lime Sulphur or Scalecide. Controls San Jose scale, scurfy scale and oyster shell scale.	When the leaves are unfolding. Use Bordeaux. Controls leaf spot and mildew.	After leaves expand, just as the blossoms open. Apply Bordeaux and Arsenate of Lead. Controls leaf spot, mildew and currant worm. If aphids are present use Black Leaf Forty.	Whenever currant worm appears. Dust with Hellebore or Paris Green and Hydrated Lime. Controls mildew and currant worm.	
Raspberry and Blackberry	(Dormant Spray). If bushes are infested with scale. Apply Lime-Sulphur or Scalecide. Controls Rose scale and San Jose scale.	When buds are swelling. Apply Arsenate of Lead. Controls beetle.	While blossoms are open. Apply Arsenate of Lead. Controls beetle, which attacks bloom.	When young canes are 6 inches high. Spray with Bordeaux. Controls anthracnose on young cane.	
Strawberry	When leaves are half grown, before blooming. Apply Bordeaux for leaf spot.	One week later. Apply spray No. 1 on young plants. Omit the spray on old plants. Controls leaf spot.	Last of May to 1st of June. Apply Hellebore for leaf rollers and slugs.	After fruit is picked. Mow the vines close to the ground, rake off tops and burn. Spray new tops with Bordeaux. Controls mildew and fungous diseases.	

Spraying Pumps and Appliances

SPRAYING is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper Insecticide is applied through the medium of an up-to-date spray apparatus.

PARAGON SPRAYERS



No. 0 PARAGON

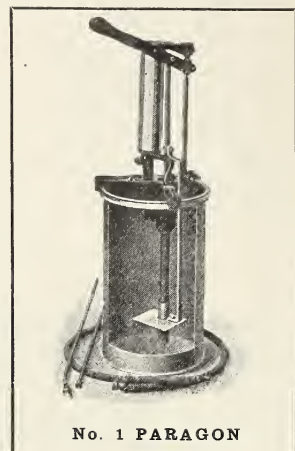
THESE Sprayers are strongly constructed and can be easily operated by one man. They can be brought in close proximity to the work, thereby eliminating the use of a long, expensive hose. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred.

The spray nozzle has only $\frac{1}{8}$ -inch outlet and spreads the liquid well, thereby covering a large surface with a small amount of liquid, making it a very economical sprayer.

All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned.


Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.



No. 1 PARAGON

Price List of Paragon Sprayers

- | | |
|---|---|
| No. 0. Capacity, 3 $\frac{1}{2}$ gallons. Equipment, 4 feet spray hose, 3 feet spray pipe, 1 mist spray nozzle, 1 steel cap for mist nozzle, 1 straight spray. Price. | No. 4. Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. Mounted on two strong 30-inch wheels. Price. |
| \$12.50 | \$39.50 |
| No. 1. Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price. | No. 4. Machine without wheels. Price. |
| \$17.50 | \$29.50 |
| No. 2. Same capacity and equipment as No. 1 but mounted on strong steel truck which can easily be wheeled to any desired place. Truck is easily detached when desired. Price. | No. 5. Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price. |
| \$22.50 | \$45.00 |
| No. 3. Capacity, 12 gallons. Equipment, 10 feet 6-ply hose, 7 $\frac{1}{2}$ feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. Price. | Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for—additional. |
| \$25.00 | \$5.00 |
| No. 3. Machine without truck. Price. | No. 4 Sprayer can be furnished with solid all cast brass pump for—additional. |
| \$21.50 | \$6.00 |
- Send for descriptive circular giving detailed information.



Bamboo Brass Lined Spray Poles

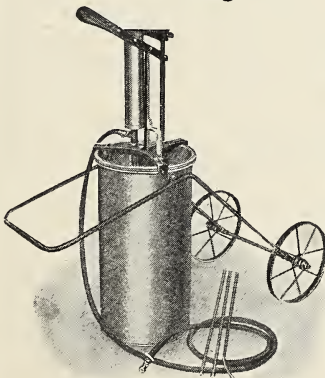
12-foot lengths. Net price.	\$5.00
10-foot lengths. Net price.	4.75

White Wash Formula

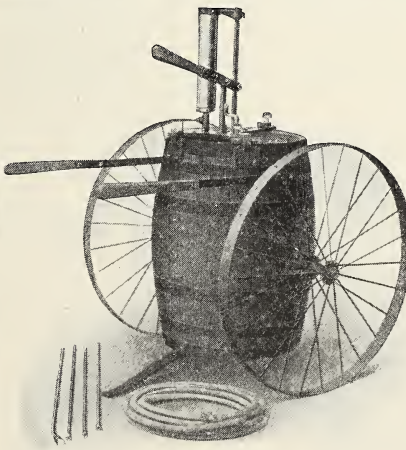
Take good, fresh, unslacked lime, cover well with water and leave it slack over night. Next day add water to thin. Also add five cents worth of ultra marine blue, (buy in paint store) and five cents worth of common salt to every twelve gallons. Add one-fourth pound dissolved ground glue to every two gallons. Dissolve glue in warm water. Mix and stir thoroughly.

When used with a Paragon Sprayer will save time, trouble and expense.

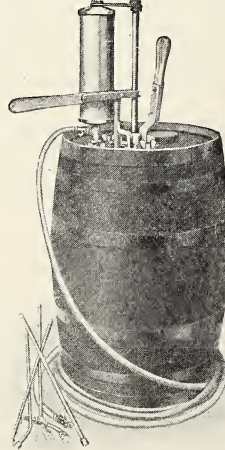
Paragon Sprayers Do Not Clog



No. 3 PARAGON



No. 4 PARAGON

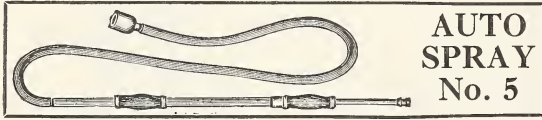


No. 5 PARAGON

SPRAY PUMPS, ATOMIZERS AND BELLOWS—Continued

MYER'S SPRAY PUMPS

- Myer's Lever Bucket Brass Spray Pump. Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle. \$6.00
- Myer's Defiance Brass Spray Pump. Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle. \$5.00
- Myer's Little Giant Brass Spray Pump. Complete with hose and imperial combination, fine, coarse spray and solid stream nozzle. \$4.00
- Four-foot Pipe Extension. 60c
- Bordeaux Nozzle. \$1.00
- Graduating Vermorel Nozzle. 90c



AUTO SPRAY No. 5

THE pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is no chance for leakage. Pump is double acting and will generate a pressure of 180 lbs.

We furnish with this pump 3 1/2 ft. of 3/8 in. suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

The extension is extra and is very useful for spraying field crops. The extension is curved so that the operator can direct the spray up or down while using the pump in a horizontal position. Extension can be used on any of the Auto-Sprayers.

- Auto-Spray No. 5. Pump, hose, nozzle and strainer, complete. \$5.00
- Brass Extension, extra, 60c. Elbow, extra. 40c

PERFECTION COMPRESSED AIR SPRAYER

It is just the thing for general work around the house, in gardens and small farms. Used for potato spraying, white-washing, spraying disinfectants, cold water paints, etc. Seams are all riveted and soldered, giving the great strength necessary for the high pressure it develops, and which is necessary for good results.

Pump. 1 3/4 inches diameter, 15 inches long, seamless brass tubing. The plunger is equipped with Hudson special plunger leathers. The valve is brass.

Tank. 7 1/2 inches diameter, 20 inches long, capacity 4 gallons. Made of first quality galvanized sheets or all brass as ordered.

Package. One in a heavy carton; shipping weight ten pounds.

- No. 110G. Galvanized Steel Tank, 4 Gallons. \$ 6.50
- No. 110B. Brass Tank, 4 Gallons. 9.50

PERFECTION JUNIOR COMPRESSED AIR SPRAYER.

Tank, 6 1/2 inches diameter, 17 inches long; capacity about 2 1/2 gallons. Made of first quality galvanized sheets. Tested under actual working conditions at the factory.

- No. 140—G. Galvanized Tank. Price, each. . . . \$5.00

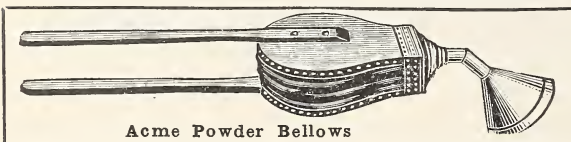
ACME CYCLONE ATOMIZER. Well made of heavy, bright tin plate. Tank 4 by 5 inches, air chamber 14 1/2 inches long, 1 3/4 inches in diameter. Capacity, 5 pints. Price, each. 50c

ACME GLASS TANK ATOMIZER. Tank, standard quart Mason jar, air chamber 1 3/4 inches in diameter, 18 1/2 inches long. Plunger rod copper bessemer of our own special type which will not corrode or rust. If jar is accidentally broken can be replaced at once with a Mason Fruit Jar. Price, each. 75c

ACME FOG ATOMIZER. Strong, durable and satisfactory. Price, each. 50c

MIDGET ATOMIZER. A small, compact, substantial and very efficient Tin Sprayer. Price, each. 35c

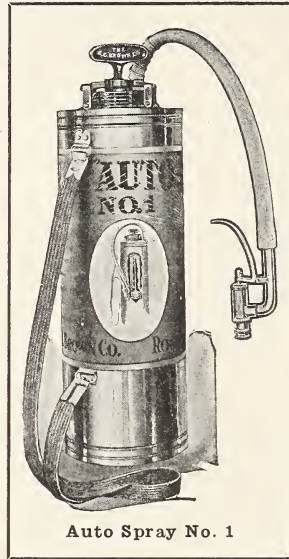
WOODASON'S POWDER BELLOWS. Single cone, small, \$2.50; single cone, large, \$3.75.



Acme Powder Bellows

AUTO COMPRESSED AIR SPRAYER

Can be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.



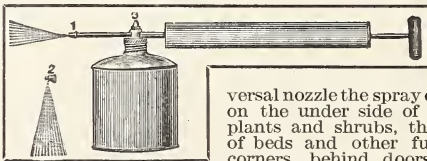
Auto Spray No. 1

- Auto Spray No. 1-B. Brass tank, with Auto-Pop Nozzle. . . . \$9.50
- Auto Spray No. 1-D. Galvanized tank, with Auto Pop Nozzle. \$6.50
- Brass Extension, Two feet, per length. . . . 60c
- Elbow. 40c



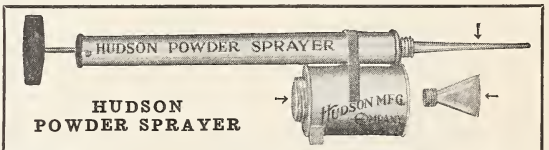
Perfection Compressed Air Sprayer

ROBERTSON COMPRESSED AIR SPRAYER



They give a continuous spray. By means of the universal

nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the under side of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places. Capacity, one quart. Tin Pump with Tin Reservoir, each 90c; Tin Pump with Galvanized Reservoir, each, \$1.15; Brass Pump with Brass Reservoir, each, \$1.65.



HUDSON POWDER SPRAYER

Tank 3 inches in diameter; 4 inches long. A small and effective Powder Sprayer. Price, each. 50c

ACME POWDER BELLOWS. It requires no base of supplies; all you need carry is a can of dry Insecticide and bellows. Without stooping—the elbow does it—it applies any powdered poison on any plant in any desired quantity. The elbow may be detached, if desired. We also furnish a spreader for distributing the blast. Price, each. \$1.50

Horticultural Tools and Sundries

BASKETS, WIRE HANGING. 8-inch, 20c; 10-inch, 25c; 12-inch, 35c; 14-inch, 40c; 16-inch, 50c; 18-inch, 65c; 20-inch, 80c.

BELLOWS, ACME. Well made, with a solid hard wood head block, hard wood handles, best leather for the bellows, and extra elbow is furnished to tilt the funnel for getting under the leaves of plants and shrubs. Each. \$1.50

BELLOWS, WOODASON'S, Single cone, small \$2.50
" " Single cone, large. 3.75

BLUE GRASS STRIPPER. Each. 2.00

CULTIVATOR, NORCROSS. Hand Garden. The Prongs are square spring steel, bent corner-wise with forged shovels at the ends. The Socket Frame and Clamping Bar are made of toughest malleable. Handle, best grade of White Ash. 5 Prong, 4 ft., each \$1.35
3 Prong, short handle, each. 40c



PULL-EASY HAND CULTIVATORS. These tools are designed to save labor, to garden better, and to last longer than the ordinary tools used by most gardeners. 9 Tooth Hand Cultivator, each. \$1.50
No. 4 Jr. Hand Cultivator, each.75

CANES. Six to nine feet long, for plant stakes. Per 100. \$2.00

CANES. Four to six feet long, per 100. \$1.75

CANES. Japanese, green dyed, 3 feet long, per 100. . . \$1.50

DANDELION DIGGER. Made from heavy steel. 25c

DANDELION EXTERMINATOR, LIGHTNING. The only quick, sure and easy way to rid your lawn of dandelions and keep it free. \$1.50

DIBBLE. Iron, with wood handle. For transplanting plants. Price. 60c

EDGING KNIFE. For cutting edges of walks and beds. Price. \$1.00

FORKS, DIGGING OR SPADING. \$1.50 to \$1.75

FORKS, HAND-WEEDING. Small size, 35c; large size, 50c

FRUIT PICKER. Made of galvanized steel wire; attaches to pole of any length. Price, without pole. 75c

GARDEN LINE. Per ball of about 150 feet. \$1.00

GARDEN LINE REEL. The Never Tangle; complete with 100 ft. of garden line. \$1.00

GLASS CUTTER, CRESCENT. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond. Each, 20c; per dozen. \$2.00

GLAZING POINTS, PEERLESS. Will stop your glass from sliding. Made of galvanized steel wire. No rights or lefts. Can be used on either side.

No. 1. For small single-thick glass. Per 1,000. 75c

No. 2. For large single-thick glass. Per 1,000. 75c

No. 2 1/2. For double-thick glass. Per 1,000. 75c

GLAZING POINTS, ZINC CITY. Are positively the best; last forever; a sure preventive of glass slipping. Effective on large or small glass; easy to drive, easy to extract. Per lb. 60c

GRASS HOOKS. American. 50c

GRASS HOOKS. English, riveted back. 75c

GRASS HOOKS. With long handle. \$1.50

GRASS SHEARS. American. 50c

GRASS SHEARS. Imported. \$1.25

GUNS, INSECT POWDER. CYCLONE. 20c

GUNS, INSECT POWDER. JUMBO. 35c

HEDGE SHEARS. American, 8-in., \$2.00; 9-in., \$2.25

HEDGE SHEARS. English, 5-in., \$2.00; 8-in., \$2.75; 9-in., \$3.00.

HOES, STANDARD SOCKET GARDEN. \$1.00

HOES, ONION. One end square; opposite end one prong. 50c

HOES, ONION. One end square; opposite end two prongs. 60c

HOES, GRUBBING. With handle. \$1.00

HOES, SANDUSKY. \$1.00

HOSE, RUBBER. (See Lawn Requisites.)

KNIVES, PRUNING. \$1.25 to \$2.00

KNIVES, BUDDING. 1.00 to 3.50

KNIVES, ASPARAGUS. American. 40c

LABELS, WOOD. For pots, painted:

	Per 100	Per 1,000
4 x 5/8-inch.	\$0.25	\$2.00
5 x 5/8-inch.30	2.50
6 x 5/8-inch.35	2.75
8 x 7/8-inch.85	7.50
10 x 7/8-inch.	1.00	9.00
12 x 7/8-inch.	1.25	11.50

LABELS. Tree, notched, copper wired; Per 100, 35c; per 1,000. \$2.75

LABELS. Tree, copper; No. 1, per 100 \$1.50
No. 2, per 100. \$2.00

LAMP, DEFIANCE FUMIGATING. (For use in greenhouses.) It burns kerosene. It is made of heavy tin throughout. The oil fount is drawn in one piece so it cannot leak. The cup that holds the Nico-Fume (or similar preparation) is also drawn in one piece and cannot leak. No glass about the lamp to be broken. Used by prominent Market Gardeners all over the country. Each, 65c; per dozen. \$6.50

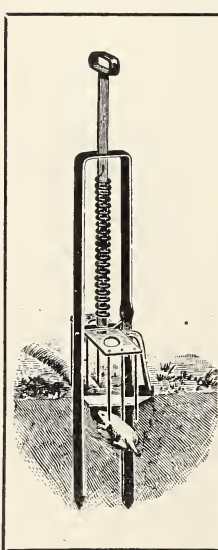
LAWN ROLLERS, LAWN MOWERS, ETC.
See pages 104, 105.

MASTICA. For glazing greenhouses. The use of Mastica avoids the necessity of repeatedly reglazing the house, saving much time and expense. One gallon will cover about 300 running feet (one side). One gallon. . . \$2.75

MASTICA GLAZING MACHINE. \$2.75

MATCH PLANT STICKS, painted green. 12-inch, per 100, 30c; per 1,000, \$2.50. 18-inch, per 100, 40c; per 1,000, \$3.00.

MATS, HOTBED—Strong Burlap. Indestructible, cheap and warm. These are made of strong burlap, warmly lined with waste wool and cotton, which is quilted to hold in position. Warmer than straw, and more easily handled. Do not retain moisture, freeze, rot, mildew, or harbor vermin, as straw does. 76 x 76 in. Price. \$3.00



MATTOCK, LONG CUTTER.
With handle. \$2.00

MATTOCK, CRONK'S GARDEN. \$1.00

MOLE-TRAP, RITTENHOUSE. The best trap on the market. No mole can pass under this trap and live. . \$1.00

OIL, LAWN MOWER. This is a handy can filled with fine oil, manufactured expressly for lawn mowers, bicycles, etc. Per can. 20c

POST HOLE DIGGER.
Hercules. \$2.50

POTATO HOOKS. 4-tine, \$1.50

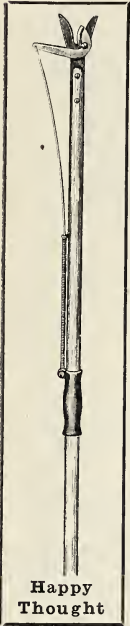
PLANT BED CLOTH. A cheap substitute for glass, answering many uses equally well. Light and easily shipped; made of stout, tarred muslin that sheds water, protects against weather, etc. Medium grade, per yard. 25c
Heavy grade, per yard. 30c
Write for special prices on large lots.

PLANT STAKES, (wood, painted green) 5 feet long, per dozen, \$1.00; per 100, \$6.00; 6 feet long, per dozen, \$1.25; per 100, \$8.00.

PLANT STAKES (wire rods for Roses). 4 feet long, per dozen, 75c; per 100. \$5.00

Continued to next page.

HORTICULTURAL TOOLS AND SUNDRIES—Continued



Happy Thought

PRUNING KNIVES, TREE

Kansas Improved. Will cut any green limb from the very smallest to one that is one and one-quarter inches in diameter. Any length handle can be used, giving the great advantage of standing on the ground to do the work. 6 feet. Price.....\$3.00

Happy Thought. Will cut a limb three-quarters of an inch in diameter. Price, 6 ft.....\$2.00

Detroit. Will cut a limb one inch in diameter, doing the work easily because of the great leverage and the drawing cut. Price, 6 ft., \$2.00

Pruning Shears. Clyde lopping shears; 24-inch handles.....\$3.00



PRUNING SHEARS, HAND

California Pattern, 9-inch.....\$1.00
 Wiss heavy, extra fine quality, 9-inch 3.50
 Wiss, Shear Steel, 9-inch.....1.25
 Ladies' Hand.....1.50

P U T T Y, TWEMLOW'S LIQUID, GLAZING. For bedding glass in sash or for filling cracks or seams in roof joints or frames of greenhouses or hotbeds. It is applied with machine, bulb or brush. One gallon will cover about 600 running feet (one side). Gallon.....\$2.75

P U T T Y, BLACK, PEERLESS GLAZING CEMENT. For glazing greenhouses. Durable and inexpensive. Apply with machine. Gallon, \$1.75; 5 gal. kit, \$8.00

P U T T Y B U L B. A useful tool for applying liquid putty when glazing greenhouses.....\$1.35

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc. Per lb., 50c; 5 lbs., \$2.00.



RAFFIA, COLORED. For making baskets and fancy work in following colors: Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 1 oz., 15c; 1 lb., \$1.25.

RAKES. See page 103.

SAWS, PRUNING. 16-inch, \$1.00; 18-inch.....\$1.25

SAWS, PRUNING, DISSTON SWIVEL. Swiveled in steel frame to cut in any position.....\$2.25

SASH, HOTBED, UNGLAZED. Made from strictly clear cypress lumber. White lead used on the tenons, and iron dowel pins at the corners.
 No. 1. 3 x 6 ft., three rows, 10-inch glass. Each...\$3.00
 No. 2. 4 x 6 ft., five rows, 8-inch glass. Each... 3.25

SCISSORS. Flower gatherer and cutter..... 1.75

SCISSORS. Vine or grape scissors..... 1.25

SCYTHES, AMERICAN..... 2.00

SCYTHES, AMERICAN. Weed or brush..... 2.00

SCYTHES, ENGLISH LAWN. 30-inch, \$2.75; 32-inch, \$3.00; 34-inch, \$3.25.

SCYTHES SATHE, PEERLESS. Each.....\$1.50

SCYTHE STONES, TALACRE. English round.... 40c

SCYTHE STONES, TALACRE. American round... 25c



SEED SOWER, LITTLE GIANT.

For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.; in fact any kind of seed, broadcast. They will save their cost almost daily in saving of seed, to say nothing about saving of time and more even distribution, which will have a great effect on the crop. It weighs but three pounds. Price.....\$2.00

SEED SOWER, TIN HORN. A light, accurate Seeder which will broadcast clean seed from 30 to 40 ft. Length of the tube when extended is 30 inches. Weight only 12 ounces.....\$1.00

SHOVELS, STEEL. Square point..... 1.75

SHOVELS, STEEL. Round point..... 1.75

SHOVELS, STEEL. Long handle, square point..... 1.75

SHOVELS, STEEL. Long handle, round point..... 1.75

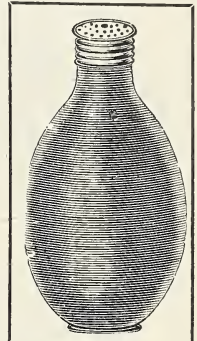
SPADES. Steel polished..... 1.75

SPADES. Ames steel..... 2.50

SPADES, NURSERY. Steel, extra heavy strapped. 3.00



SPRINKLER, RUBBER, SCOLLAY'S. Indispensable for floral work and window gardening. Large size.....\$1.35



THISTLE OR DOCK CUTTERS. Narrow blade, with handle for removing thistles or weeds from lawns, with foot rest...\$1.00

THERMOMETERS, JAPANNED, Tin case. Special Grade, 8-inch, 35c; 10-inch, 50c

Medium Grade..... 8-inch, 60c; 10-inch, 75c

Dairy. 10-inch glass..... 50c

Hotbed or Mushroom..... \$2.50

Incubator. Prairie State..... 1.00

Incubator. Buckeye..... 1.00

Brooder. Prairie State..... 1.00

TROWELS. Maynard steel shank, 6 1/2 inch..... 75c

Solid shank, forged steel, 6-inch..... 60c

Solid steel, 6-inch..... 40c

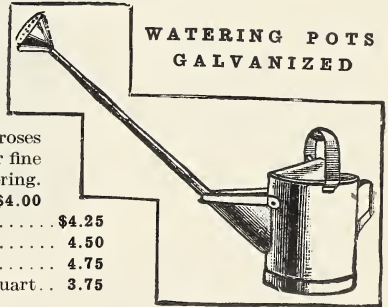
All steel, one piece, 6-inch..... 25c

Ordinary, 6-inch..... 15c

TROWEL, TRANSPLANTING. 6-inch, 20c; 7-inch, 25c

Long Spout. Made from best quality of iron, and heavily galvanized. Two roses with each pot for fine and coarse watering.
 6-quart.....\$4.00
 8-quart.....\$4.25
 10-quart..... 4.50
 12-quart..... 4.75
 Ladies' size, 4-quart... 3.75

WATERING POTS GALVANIZED



WAX, GRAFTING.

1/4-lb..... 15c
 1/2-lb..... 25c
 1 lb..... 40c

WEEDERS.

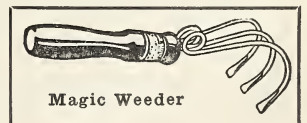
Brown's Easy Weeder..... 25c

Cleveland Lawn, with long handle for removing weeds..... \$1.00

Magic. 3-prong, single handle..... 20c

Excelsior. For weeding seed beds, stirring the ground, etc..... 15c

Lang's. Allows use of hands in working... 25c



Magic Weeder

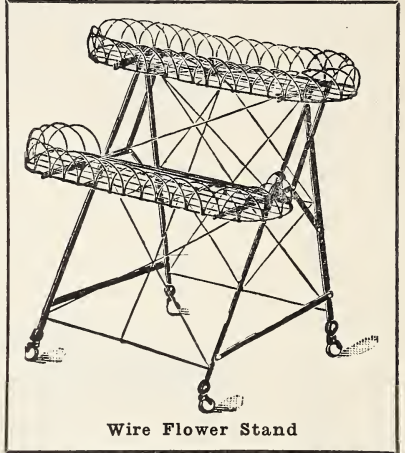
HORTICULTURAL TOOLS AND SUNDRIES—Continued

Wire Folding Plant Stand

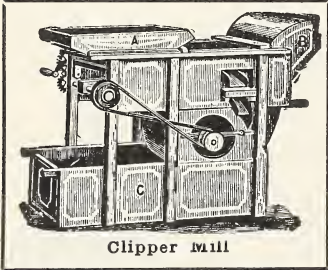
The most compact, strong, durable Plant Stands. They pack closer than any other plant stand for shipment. The ends are made of flat steel and have porcelain castors. Can be opened or folded in a few seconds time by simply spreading the stand apart at the bottom, and dropping the cross bars into their places.

The construction of the shelves or trays is such that there is more room for the pots and foliage than on any other plant stand that takes the same amount of room on the floor.

3 Tray Wire Stand—Trays 7 1/2 inches wide x 30 inches long.....	\$5.00
2 " " " " " 7 1/2 " " " x 30 " "	4.00
1 " " " " " 10 " " " x 33 " "	2.75



Wire Flower Stand



Clipper mill

Clipper Seed and Grain Mills

These mills are especially adapted for cleaning Grain, Clover and Timothy Seed, as the No. 1 B and No. 2 B are equipped with sieves for cleaning Seeds and Grains for Farmers' use.

Descriptive circulars and prices for Hand and Power Mills sent on application.

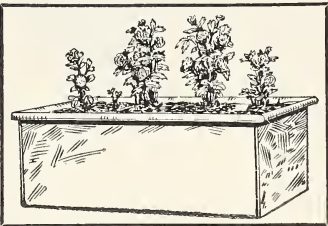
"Best Ever" Flower Boxes (Galvanized Metal)

Specially Designed with Ventilating Subway. Neat and Strong, Green Lustre Weather-Proof Finish

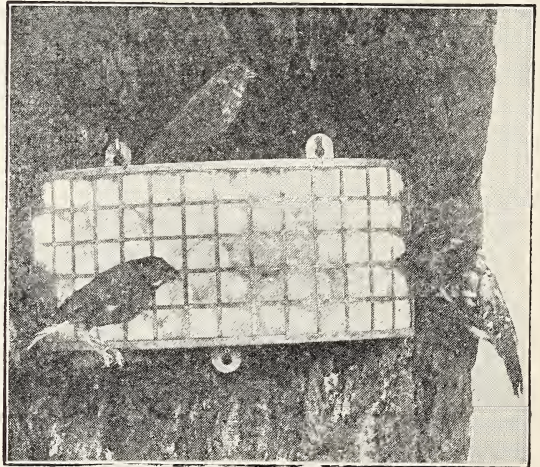
This box embodies attractive appearance, general utility and durability. The heavy roll edge adds greatly to the appearance, a device inside the box permits of the application of water to the plants without the slightest degree of untidiness which frequently arises from watering the plants by sprinkling, and the good quality japan over galvanized metal warrants long life. Made in lengths as follows: 18, 24, 30, 36 and 48 inches.

All boxes 7 1/4 inches wide at bottom and 6 1/2 inches deep. Width at top over curled flange 8 3/4 inches.

Prices:—18 inch, each... \$1.25 24 inch, each... 1.50 30 inch, each... 2.00
36 inch, each... \$2.50 48 inch, each... 3.25



SUET BASKETS



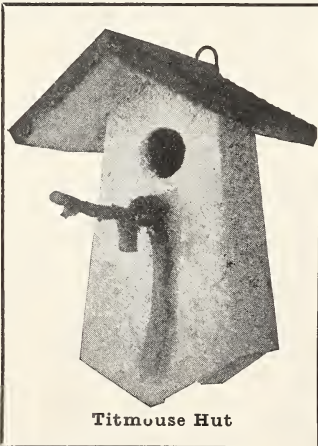
WINTER and summer, you'll find a happy family of wild birds around you, provided you feed them. It has a metal back, curved to fit a tree trunk or post that protects the tree from injury.

The stuffing of the basket portion is the work of an instant. Suet or beef trimmings is the best packing. In spring you can fill a part with hair, twine, feathers and cotton (nesting materials). Place the basket on the shady side in summer, and the sunny side in winter. Weight, 2 lbs. Price, each, \$1.25; postage extra.

STUCCO BIRD HOUSES

THE birds which nest and harbor in cavities and hollows are in most instances the most valuable of our native birds, which love the vicinity of man, seemingly not only to delight him with chirp and song, but are the most diligent to keep plant life free from parasites and devouring insects.

Our model hutlets and cabins which we provide for, these charming entertainers are appreciated by all bird lovers.



Titmouse Hut

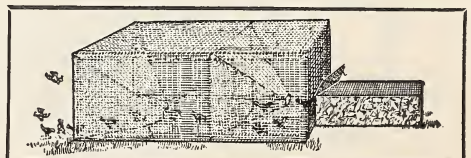
PRICE LIST OF HUTS AND CABINS

Wren Hutlet, each... \$2.50	Bluebird Hut, each... \$2.75
Titmouse, each... 2.50	Chickadee Hutlet, ea. 2.50
Woodpecker and Flicker Hut, each.....	2.75
Martin Houses.....	\$8.00 to \$50.00
Feederies, Small.....	2.50 to 5.00
Squirrel Cabins, each.....	8.00

The Dodson Improved Sparrow Trap

The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size 36 x 18 x 12 inches.

Price, complete with receiving box..... \$8.00

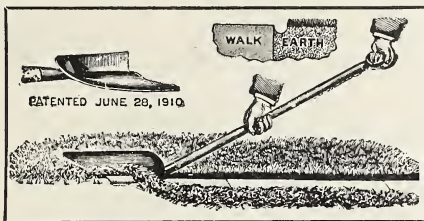


Lawn Requisites

Imperial Lawn Edge Trimmer

Con-
venient
to
Handle

Moderate
in
Price



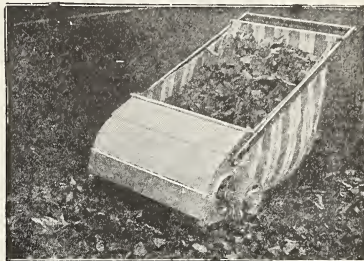
The Imperial Lawn Edge Trimmer trims the rough, straggling, overhanging grass along the walk and gives the lawn the appearance of having been gone over by the "head barber." It plows a clean U shaped trench, and does the work in a fraction of the time required by less efficient tools.....**\$1.50**

Lawn, Hay and Garden Rakes

- Lawn Queen.** Wire: is reversible, and can be used for grass or leaves, 24 teeth.....**\$1.00**
Ole Olsen. Made of best hickory..... **1.00**
Lawn King. Wooden, 22 teeth..... **.75**
Gem Dandelion Rake. For clipping off daisy and dandelion heads..... **2.00**
Rakes, Steel Garden. 10 teeth, 75c; 12 teeth, 90c; 14 teeth, \$1.00; 16 teeth..... **\$1.10**

Pennsylvania Lawn Cleaner

This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes, and greatly benefit the turf—it leaves the grass standing up straight and straightens up crab grass and other running weeds so they will be cut close by the lawn mower and sooner destroyed. In the autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. It combines strength and durability with light construction. Price.....**\$35.00**



We can now supply a brush attachment for the purpose of sweeping worm casts on Putting Greens. This attachment can be readily attached to the cleaner, in place of the rakes now supplied, at an additional cost of **\$8.00**.

Ring Lawn Sprinkler

The simplest lawn sprinkler made. No revolving parts to wear and get out of order or leak. Easily moved about the lawn. Made of polished brass. Light, durable and economical. Each.....**\$1.00**

The Dayton Rotary and Oscillating Sprinkler

THE most practical, durable, efficient machine ever devised for sprinkling lawns, parks, or irrigating truck gardens. It must be seen in action to be appreciated. Saves time, labor, hose wear. It is the nearest approach to natural rain. All the parts of this irrigating machine are made of brass and aluminum (non-rusting or corroding metals.)

A tiny jet of water against an aluminum water-wheel revolves the wheel at high velocity, and through a worm gear (which runs in oil) and a pinion traveling over a toothed plate, carries the irrigating nozzle in a complete circle or oscillates like an electric fan making a half circle.

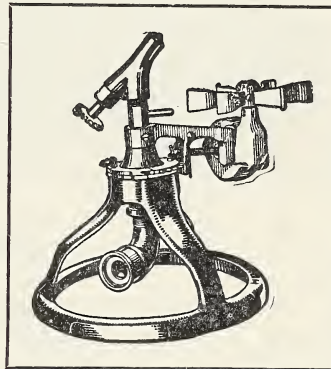
The nozzle used is adjustable for distance of spray and enables an equal distribution of water over any desired area.

Its Durability—The Dayton is closely and substantially made. It is made to gain and maintain a place on every well-kept lawn.

Its Simplicity—It is by far the cheapest, simplest of all overhead irrigating systems. It is simplicity itself.

Appearance—The Dayton is neat and pleasing in appearance, and besides being the best method of sprinkling and cooling off the hot summer evenings, it adds much to the beauty and attractiveness of the lawn.

Every Dayton is guaranteed to give perfect satisfaction. All machines are thoroughly tested and closely inspected before leaving factory.



A FEW FACTS REGARDING TRUCK GARDEN INSTALLATION OF DAYTON ROTARY SPRINKLERS:

Fourteen machines may be operated from a 1 1/2-inch main, with water at 40 lbs. pressure. A 2-inch pipe will carry 20 machines at 40 pounds pressure. Machines should be placed 50 feet apart, 17 machines being required to the acre.

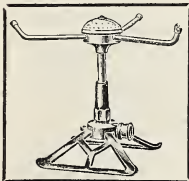
It is desirable to lay the pipe mains under the ground, just below plow depth, with 1/2-inch riser pipes. With such an installation the entire tract can be farmed. Each riser should have a shut-off valve, and a valve should be provided for each line. In this way any part or portion of a tract can be irrigated independently of the whole.

The water consumption of a Dayton Sprinkler, normally adjusted and operating at 40 pounds pressure, approximates 1 1/2 gallons per minute.

Dayton Lawn Sprinklers are fitted with 3/4-inch or 1/2-inch hose connections, as may be desired.

Lawn Type, Style A. Price.....**\$6.50** **Lawn Type, Style B.** Price.....**\$5.00**

Universal Lawn Sprinkler



The Universal, 10 inches high, is a very popular sprinkler for residential use. The combination of vertical spray coming from the perforated central head, together with the stream thrown by the arms, produces an even distribution of water. Price.....**\$2.50**

Square Fountain Lawn Sprinkler

Made of heavy sheet brass and polished. Will sprinkle along the side of your house and into the corners without throwing into the house, or along the front walk and reach the edges without throwing water over the walk. Each.....**.75c**

Crescent Sprinkler

Made of brass and sprinkles a large area. Nothing to get out of order. Nothing to be adjusted. Each.....**.75c**

Handy Sprinkler

Throws all the water away from the hose, giving a beautiful fountain spray. Each.....**.35c**

Bink's Chicago Sprayer

Is made of aluminum. Adapted for watering garden frames, etc. Each.....**\$2.50**

Market Gardener's Sprinkler

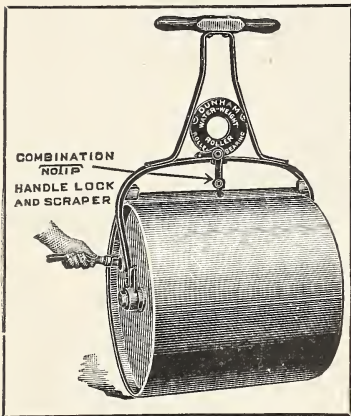
Every Market Gardener, Florist, and others who use a hose for watering hot beds, cold frames, gardens and lawns, should have one of these sprinklers. Simply attach to hose in place of nozzle.

Galvanized Head, each.....**\$1.25**
 Copper Head, each.....**1.50**

LAWN REQUISITES—Continued

DUNHAM WATER-WEIGHT LAWN ROLLERS

Dunham Water-Weight Rollers are electric welded—no rivets used—the drum cannot possibly leak.



IF YOU wish a fine lawn, you must use a Lawn Roller. In no other manner can a smooth compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment.

The Dunham Water-Weight Roller can be made as heavy or as light as

desired by simply putting in the right amount of water. For storing away or for moving, it can be emptied entirely and is light and easy to handle.

W. B. Style. Is equipped with a "No-Tip" lock and scraper. The lock holds the handle upright when not in use.

W. B. No. 3. 1 section, 20 inches long and 14 inches in diameter. Weight, empty, 50 lbs.; weight filled with water, 150 lbs.; weight, filled with sand, 225 lbs. Price..... **\$15.00**

W. B. No. 5. 1 section, 24 inches long and 18 inches in diameter. Weight, empty, 85 lbs.; weight, filled with water, 300 lbs.; weight, filled with sand, 450 lbs. Price..... **\$17.50**

W. B. No. 7. 1 section, 24 inches long and 24 inches in diameter. Weight, empty, 110 lbs.; weight, filled with water, 500 lbs.; weight, filled with sand, 750 lbs. Price..... **\$20.00**

DUNHAM ROLLERS are painted green on body and ends with red handles and always bear the name DUNHAM.

DUNHAM WATER-WEIGHT PONY ROLLER

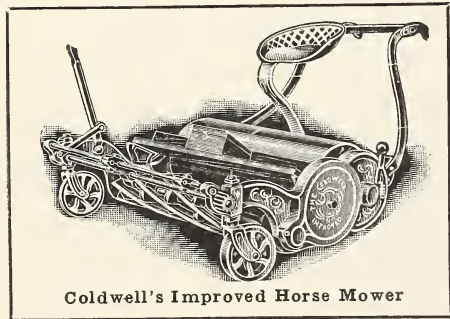
This Roller is useful for lawns, gardens, etc. Is well made, and with care will last a life-time. Built with two drums, each drum 23 1/4 inches in diameter, and 35 inches in width, making a rolling width of 70 inches. Weight of empty roller is 372 pounds; when filled with water 1405 pounds; when filled with sand 2193 pounds. Furnished complete with shafts; also fitted for use with Tractor; each **\$80.00**

GARDEN HOSE AND APPLIANCES

Hose, Rubber, "Non-Kink", best hose on the market, finest quality of rubber being used in its manufacture. Will not kink and will last for years. We can supply in any length.
 1/2-in., per ft., **18c**; 5/8-in., per ft., **20c**; 3/4-in., per ft. **\$0.22**
Hose. For Paragon Spray Pumps. Per ft. **.22**
Hose Reel. Iron..... **\$2.50 to 4.00**

Hose Coupling Bands. Each, **10c**; per dozen... **\$1.00**
Hose Coupling Bands. For Paragon Pump, each... **.10**
Hose Washers. Rubber, 3/4 in., per dozen... **.15**
Hose Menders. Perfect clinching, each... **.15**
 Per dozen... **1.50**
Hose Nozzle. Graduating, each... **.75**

Lawn Mowers Horse and Hand Power



Coldwell's Improved Horse Mower

Coldwell's Improved Horse Lawn Mower

THIS well known standard Mower has side draft attachments, to enable the horse to walk on the cut grass only, and caster rollers, which will not mark the lawn. Evenness of cut is assured by an adjustment which raises or lowers the two sides at the same time by means of a simple lever movement; the same lever serves the purpose of raising the knives from the ground when driving over gravel walks or roads. The Mowers are fitted up with steel shafting and composition split bushings, and great care is taken to have the workmanship perfect.

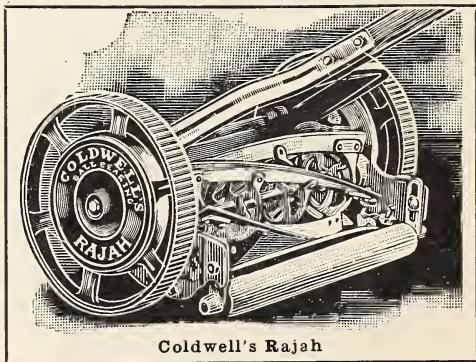
These Mowers are made regularly with four blades in the revolving cutter, but when exceptionally fine cutting is desired, such as on golf links and very fine lawns, we can furnish them with six blades.

We positively guarantee these Mowers to give entire satisfaction.
 30-inch, complete with shaft and seat (4 blades)..... **\$130.00**
 35-inch, complete with shaft and seat (4 blades)..... **150.00**

Coldwell's "Rajah" Ball Bearing Lawn Mower

IS STRICTLY high-grade ball bearing, and made of first-grade material throughout. It has large drive wheels (10 1/4 inches high), thus insuring lightness of draft. The large diameter five-blade revolving cutter makes it an exceptionally good high-class lawn mower, with a very fine cut. It is provided with flat sliding pawl ratchets. The adjustment of the bearings is accomplished with one screw conveniently located at the end of the revolving cutter, by means of which all wear can be taken up, and a locking screw holds them securely in place. This Mower is furnished with our patent terrace mowing arrangement, and reversible channel-shaped bottom knife. It is fully guaranteed in every respect.

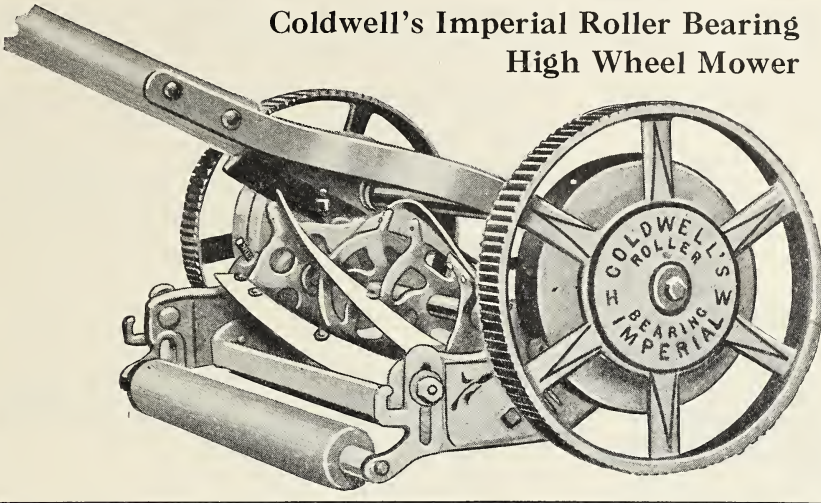
14-inch, **\$17.50**; 16-inch, **\$19.00**; 18-inch, **\$20.00**; 20-inch, **\$21.50**.



Coldwell's Rajah

LAWN MOWERS—Continued

Coldwell's Imperial Roller Bearing High Wheel Mower



THE workmanship upon the Imperial Roller Bearing Mower is superior to that of any other make. The joints are closely fitted, insuring a noiseless, light-working and durable machine. It is nicely balanced, enabling the operator to handle it with ease. Furnished with five blades in revolving cutter.

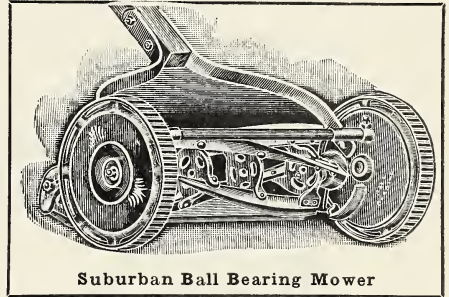
Specially designed to meet the demands of park and cemetery superintendents. Durable, light running, easy to push and requiring minimum of attention to adjustments. Roller bearings enclosed in dust-proof housings. When packed with light grease will need no further oiling for the season. Best Lawn Mower on the market for hard service in parks, cemeteries, etc.

14-inch.....	\$17.50
16-inch.....	19.00
18-inch.....	20.00
20-inch.....	21.50

Suburban Ball Bearing Mower

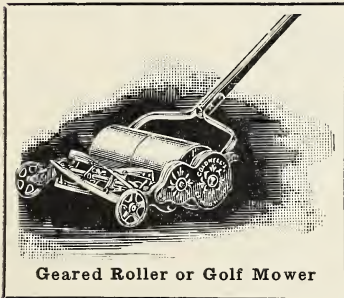
IS MADE to meet the demand for a good ball bearing machine, which can be purchased at a price within the reach of all. It is made throughout of best grade material. The driving wheels are 8 inches in diameter. The revolving cutter has four blades, which insure fineness and evenness of cut. It has sliding pawl ratchets, and the adjustment of both bearings and bottom knife is the simplest and most effective ever made. One screw only is required to adjust the bearings, by means of which all looseness in the revolving cutter bearings can be taken up.

14-inch.....	\$9.00
16-inch.....	9.75



Suburban Ball Bearing Mower

Geared Roller or Golf Mower



Geared Roller or Golf Mower

THIS Mower is made to meet the demand for a machine that will more perfectly cut borders, edges, etc., and yet retain all the other features necessary in a mower for general work. Coldwell's Roller Mower has brass bushings and triple pawl ratchets. The roller tends to make a smooth and even soil, and rolls down upheavals caused by dampness and

worms. Furnished with 6 blades in revolving cutter.	
16-inch, including grass box.....	\$27.00
18-inch, including grass box.....	29.00

Motor Lawn Mower and Roller

MODEL "L"

For use on private lawns, parks, cemeteries, public grounds, golf links and the like. The great flexibility of this Mower permits cutting of grass in ditches and hollows and on hills with the same ease and neatness as when on level ground. Will climb a 35% grade and cuts a swath 25 inches wide. What has been needed for a long time is a practical motor-driven hand-controlled Lawn Mower, with great flexibility, making it possible to cut close up to and around trees, shrubbery, walks and driveways, while at the same time, having a mowing capacity of four to six acres per day. The Motor Lawn Mower exactly fulfills these requirements and it means not only a better lawn, but a better lawn at less cost. Consumes about one gallon of gasoline per 5 acres.

Price.....\$295.00

Send for descriptive circular.



Cadet Lawn Mower

IS a good Lawn Mower to sell at a medium low price and I give the purchaser full value for his money.

14-inch.....	\$6.50	16-inch.....	\$7.25
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Coldwell's Lawn Edger

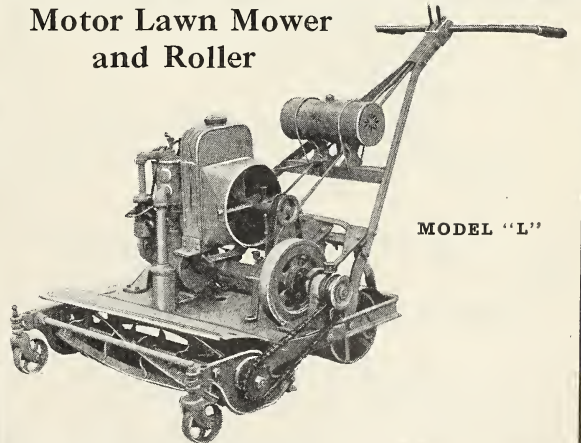
IT IS equipped with fine cut gears, sliding-pawl ratchet, the best tool steel bottom knife and is made to meet the demands for a really first-class lawn trimmer.

Price.....\$9.00

Nox All Grass Catchers

No. 500. Made to fit mower, 12 to 16 inches.....	\$1.00
No. 510. Made to fit mower, 16 to 22 inches.....	1.25

Motor Lawn Mower and Roller



MODEL "L"

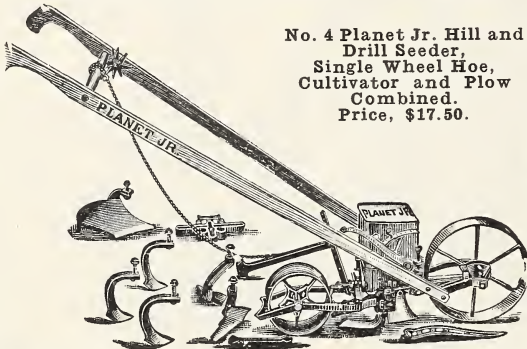
Send for descriptive circulars of Coldwell Lawn Mowers.

"Planet Jr." Farm and Garden Tools

PLANET Jr. means, on a farm or garden tool the world over, that it is the latest improved, lightest, strongest, most useful and economical tool of its kind. With Planet Jrs. come less work, bigger crops, more money. The Planet Jr. Catalogue is an instructive handbook of short cuts to best results for farmers and gardeners. It illustrates fifty-five latest improved Planet Jr. tools, showing many in use. Seventy-two helpful pages. Write for it at once.

The Planet Jr. Seed Drills

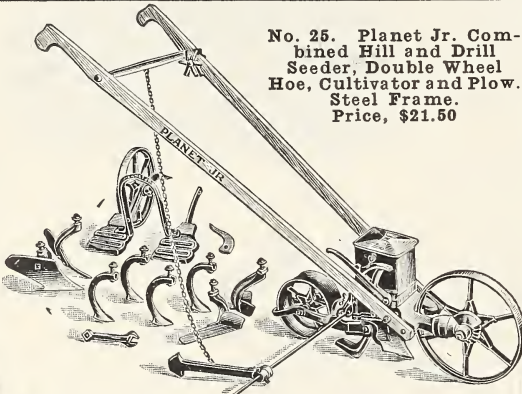
No. 4 Planet Jr. Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow Combined. Price, \$17.50.



PLANTS all garden seeds accurately in hills, 4, 6, 8, 12 or 24 inches, or in drills any thickness. Hoes, cultivates and plows quickly and thoroughly. Popular with farmers and gardeners everywhere.

No. 4D. Planet Jr. as a Hill and Drill Seeder only. \$14.00

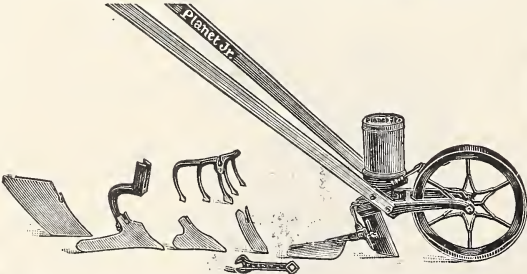
No. 25. Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow. Steel Frame. Price, \$21.50



THIS combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

No. 31. Planet Jr. New Combined Drill and Single Wheel Hoe. Price, \$12.00.

No. 31D. As a Drill Only. Price, \$9.50.

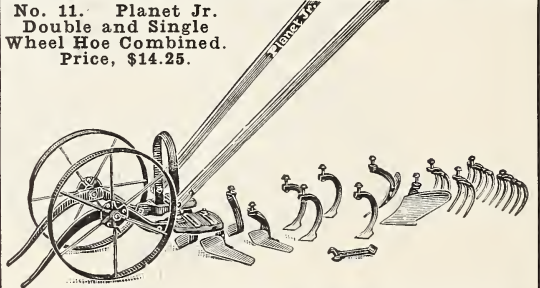


THIS is a new combined tool of great value to thousands of gardeners who have never felt able to own either a seed drill or a wheel hoe. It is thoroughly well made and offered at a price that makes it pay the smallest gardener.

The Planet Jr. Double Wheel Hoes

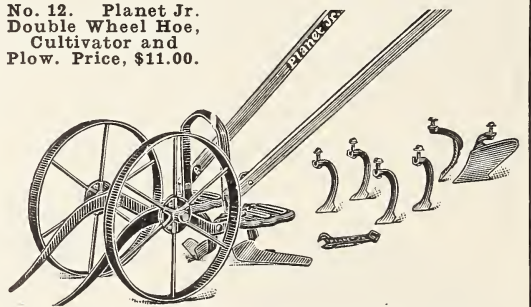
ARE the greatest cultivating tools for the onion, and for every grower of garden crops from drilled seed. They do more and do it better and easier than can possibly be done in any other way. Works both sides of plants thoroughly and rapidly at one passage until crops are 20 inches high. Indestructible steel frame and steel leaf lifters.

No. 11. Planet Jr. Double and Single Wheel Hoe Combined. Price, \$14.25.



Has one pair of 6-inch hoes, one pair 4 1/2-inch hoes, two pairs hollow steel cultivator teeth, one pair plows, two 3-tooth rakes, two 5-tooth rakes and two leaf lifters.

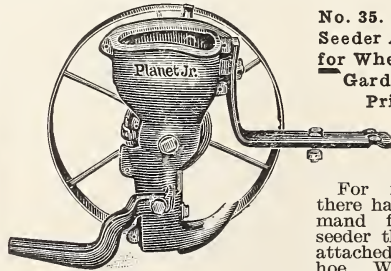
No. 12. Planet Jr. Double Wheel Hoe, Cultivator and Plow. Price, \$11.00.



Equipment: One pair of 6-inch hoes, four steel cultivator teeth, one pair of plows, two leaf lifters.

Discs, per pair.....	\$3.00
3-prong cultivator teeth, per pair.....	2.00
Plows for Double Wheel Hoes, per pair.....	1.35
Handles for Single or Double Wheel Hoe, per pair....	1.25

No. 35. Planet Jr. Seeder Attachment for Wheel Hoes and Garden Plows. Price, \$5.50.



For many years there has been a demand for a small seeder that could be attached to a wheel hoe. We are now prepared to furnish this seeding attachment which can be attached to any Planet Jr. Single or Double Wheel Hoe or Garden Plow.

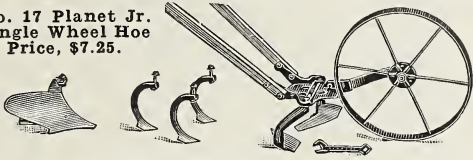
It is quickly attached by a single bolt and will sow in a continuous row practically any garden seeds, accurately, in straight, even rows, at a uniform depth, and cover them.

Everyone raising his own table vegetables should have this attachment; it is efficient, economical, and saves valuable time when needed in the busy days of spring.

PLANET JR. SINGLE WHEEL HOES AND ATTACHMENTS

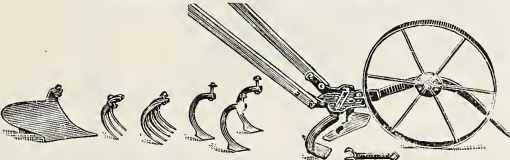
WE offer these Single Wheel Hoes as the highest type of their class. They have a great variety of tools which adapt the implements to a large variety of work, and there is scarcely any garden culture of which they are not capable.

No. 17 Planet Jr. Single Wheel Hoe
Price, \$7.25.

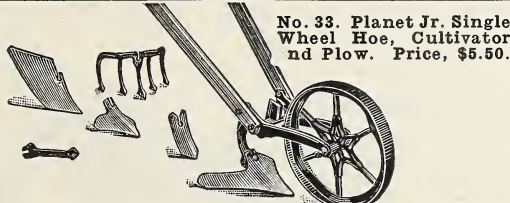


You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The Hoes exchange sides to work to or from the row, and change of wheel regulates the depth. The Cultivating Teeth are oil tempered and work admirably, are changeable for pitch and are useful for marking out rows. The Plow is large and capable of heavy work.

No. 16. Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow. Price, \$8.75.

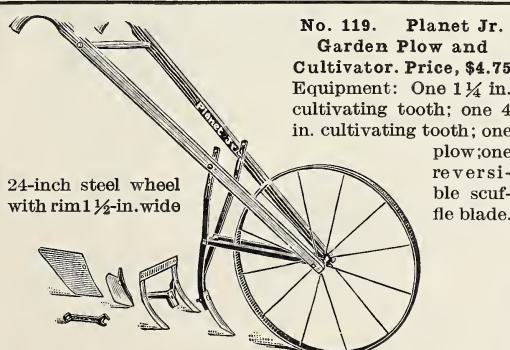


It is light, handy and adapted to almost every garden use. The Steel Wheels are particularly well made, with heavy steel spokes; they run easily and are made up true. The Frame is steel and practically indestructible. The wheel arm and leaf guard are steel also. The handles are adjustable in height. The Plow is of superior design, complete with land-side; is large and capable of heavy work. It is generally the first attachment to be used in the spring.



No. 33. Planet Jr. Single Wheel Hoe, Cultivator and Plow. Price, \$5.50.

No. 33 is the Single Wheel Hoe portion of No. 31 Combined Seeder and Wheel Hoe. This tool has one large garden plow, one 5-inch sweep, one 10-inch sweep, one 2-inch cultivator tooth, one 5-tooth prong hoe.



No. 119. Planet Jr. Garden Plow and Cultivator. Price, \$4.75
Equipment: One 1 1/4 in. cultivating tooth; one 4 in. cultivating tooth; one plow; one reversible scuffle blade.

24-inch steel wheel with rim 1 1/2-in. wide

This new number of the "Planet Jr." family will appeal to all those who prefer a high wheel for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy running tool. The handles are strong and are provided with "plow handle" grip. They are adjustable for height to suit adult or child.

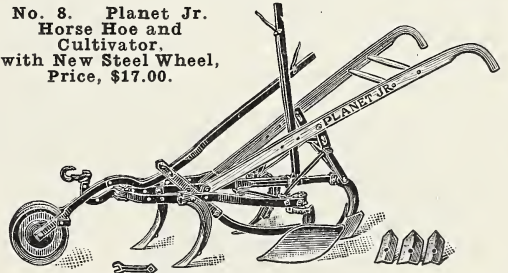
- No. 19. Planet Jr. Garden Plow and Cultivator.** Equipment: One 2-inch cultivating tooth, one 10-inch sweep, one plow, one 5-prong cultivating attachment, 15-inch steel wheel. . . . \$5.25
Planet Jr. No. 2 Edger. With this tool you can edge either straight or curved work, paths, drives, open borders or flower beds, rapidly and beautifully. . . . \$1.75

ATTACHMENTS

- Double Mouldboard Plow for Single Wheel Hoe.** . . . \$2.00
Steel Cultivator Teeth and Bolt.35
Hoes, complete, 4 1/2-inch, per pair. 1.10
Hoes, complete, 6-inch, per pair. 1.20
Plow for Single Wheel Hoe, each. 1.35
Rakes, 3-teeth, each 55c; 5-teeth, each.75
Onion Harvester, 8-inch, each. 1.40

THE PLANET JR. ONE-HORSE TOOLS

No. 8. Planet Jr. Horse Hoe and Cultivator. with New Steel Wheel, Price, \$17.00.

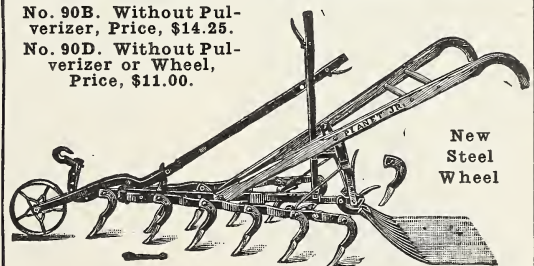


It does more kinds of work better, quicker and easier than any other cultivator. Indispensable on the up-to-date farm.

- No. 7. Planet Jr. Horse Hoe and Cultivator.** Same as No. 8, without the depth regulator. With new steel wheel. \$16.25
No. 9. Planet Jr. Horse Hoe and Cultivator. This tool has a plain wheel instead of the lever wheel. With steel wheel. \$15.00
Without wheel. 13.00

No. 90. Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer. Price, complete, \$17.00.

- No. 90B. Without Pulverizer,** Price, \$14.25.
No. 90D. Without Pulverizer or Wheel, Price, \$11.00.



Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer is invaluable in strawberry, truck patches and the market garden. Its twelve chisel-shaped teeth and pulverizer leave the ground in finest condition without throwing dirt on plants.

- No. 91. Planet Jr. 12-Tooth Harrow, with Steel Wheel.** \$13.00
No. 4. Planet Jr. Plain Cultivator is equipped with four 3 x 8 in. cultivator steels and one 4 x 8 in. cultivator steel. Has extra high frame, round throated, hollow steel standards with patent beveled steel teeth, and patent expanders, which make an extra stiff tool, yet allow of quick adjustment for width, and one side may be closed while the other is left open. Price with new steel wheel. \$11.00

Poultry Appliances and Supplies

PRAIRIE STATE SAND TRAY INCUBATORS

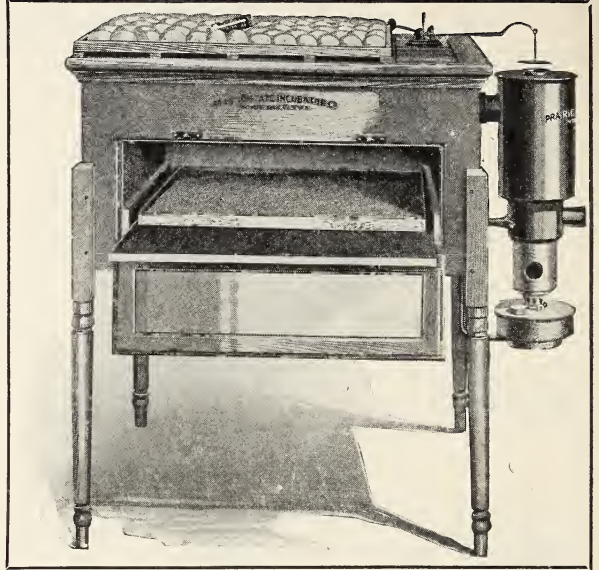
If you are in search of the best Hot Air Incubator manufactured, the one that will hatch the largest number of strong, vigorous chicks, the Prairie State is the machine to buy. Send for Descriptive Catalogue.

THE Prairie State Incubators are built in four sizes, ranging from 100 to 390 eggs. All Prairie States are equipped with Sand Trays, Egg Trays, Nursery Mats, Thermometers, Egg Testers, Lamps and everything complete ready to operate.

PRICE LIST OF PRAIRIE STATE Sand Tray Diffusion Incubators

Standard No. 0, 100 hen eggs; 135 lbs. crated	\$30.00
Standard No. 1, 150 hen eggs; 160 lbs. crated	37.50
Standard No. 2, 240 hen eggs; 240 lbs. crated	52.50
Standard No. 3, 390 hen eggs; 325 lbs. crated	67.50

Egg capacity considered, the Prairie State Incubators are now the lowest priced high-grade machines on the market.



Prairie State Junior Portable Hover

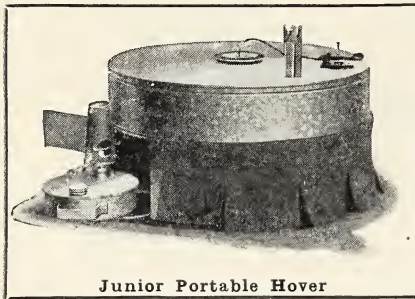
THIS hover is galvanized sheet steel throughout, and in size, substantial construction, chick capacity and economy of operation it is the equal of any lamp brooder on the market. Diameter of top, 23 inches. Capacity, 50 to 100 chicks. Price \$10.00

The Home Hover

Built on the same general lines and same construction as the Junior Portable Hover. Diameter of top, 18 inches. Capacity, 25 to 50 chicks. Price \$6.00

PRAIRIE STATE INCUBATOR AND BROODER THERMOMETERS

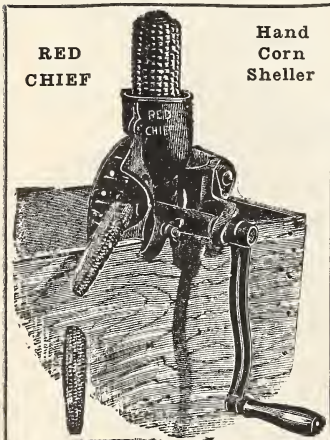
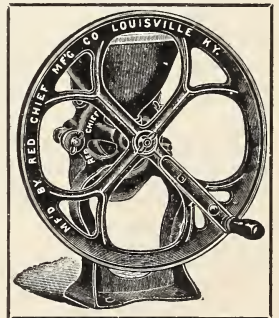
Incubator Thermometer, Incline, with holder	\$1.00
Brooder Thermometer for Prairie State Brooders	1.00



Junior Portable Hover

“RED CHIEF” Rapid Grinding Feed and Grist Mills

- No. 1—Just the mill for small poultry raisers. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity $\frac{3}{4}$ to 1 bushel per hour. Price \$3.60
- No. 2—This is the best \$5.00 Mill made for grinding all kinds of grain. The feed can be regulated for very fine grinding. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity 1 to 1 $\frac{1}{2}$ bushels per hour. Price \$5.00
- No. 5—This Mill also clamps or bolts to box and has hooks on which to hang a bucket. It is also equipped with fly wheel instead of crank which makes it run steady with least possible power. Capacity 2 to 4 bushels per hour. Price \$7.00
- No. 10—Mounted on stand (See cut). This will grind Coffee, Spices, Chicken Feed, Cracks Peas, etc. Capacity 2 to 4 bushels per hour. Price \$8.50



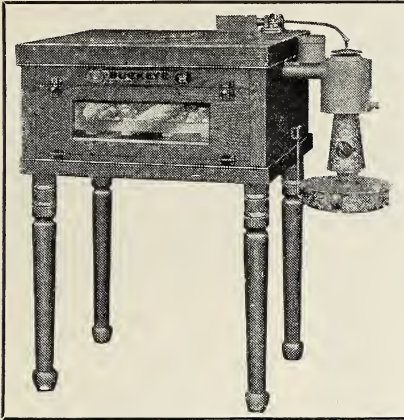
RED CHIEF Hand Corn Sheller

- No. 12—Mounted on stand. We consider this the finest hand mill made. Steel axles, bronze boxes and a heavy fly wheel. Capacity 3 to 4 bushels per hour. Price \$14.50
- No. 15—For engine three-quarters horse-power or over. It has bronze boxes, steel axles, in fact, all of the good features of the No. 20, except that it has no loose pulley and the capacity is not so great. It can be run with a crank when engine is not running. Capacity 5 to 8 bushels per hour. Price \$14.50
- No. 20—For grinding Corn Meal, Graham Flour, Stock Feed, etc. With a speed of 300 to 450 revolutions per minute, will grind 10 to 20 bushels of feed per hour. Power required 1 $\frac{1}{2}$ to 2 horse-power engine. Patent tension for regulating size of ground material, making change of burrs unnecessary. Tight and loose pulley, 10 inches in diameter, 2 $\frac{1}{4}$ inch face. Reversible belt shift. Feed Regulator. All bearings, bronze bearing metal. Weight, crated, 100 lbs. Price \$20.00. Stand, extra, \$3.60. Separator, extra, \$6.30.

“RED CHIEF” Hand Corn Sheller

Only sheller safe to use for shelling seed corn. Shells clean, taking off less chaff than any other sheller. Throws the cobs outside every time. Clamps on barrel or tub as well as on box. Malleable Iron Crank screws on. Requires no wrench. Tension directly on cob, not on hopper, which makes sheller run easy, no force being required to expand the hopper. Price \$2.70

Pop Corn Attachment, for shelling Pop Corn, 40c extra.



BUCKEYE INCUBATORS

We offer these Incubators as the best Hot Water Incubators on the market. These Incubators are built in several sizes to meet all requirements both in size and price. Send for Descriptive Catalogue.

No. 14. (Style E).	Capacity, 65 eggs.....	\$16.50
No. 16. (Style E).	Capacity, 110 eggs.....	27.50
No. 17. (Style E).	Capacity, 210 eggs.....	36.75
No. 1. (Standard).	Capacity, 110 hen eggs, or 85 duck eggs.....	37.50
No. 2. (Standard).	Capacity, 175 hen eggs, or 140 duck eggs.....	44.50
No. 3. (Standard).	Capacity, 250 hen eggs, or 200 duck eggs.....	57.75
No. 4. (Standard).	Capacity, 350 hen eggs, or 280 duck eggs.....	68.00
No. 5. (Mammoth Standard).	Capacity, 600 hen eggs, or 480 duck eggs.....	107.00
	Buckeye Incubator Thermometer.....	1.00
	Wire Holder for Thermometer.....	.15

The Newtown Coal Burning Colony Brooder

WITH the certainty that the highest prices ever known will prevail next season for poultry and eggs, no poultryman can afford to run another month without a modern

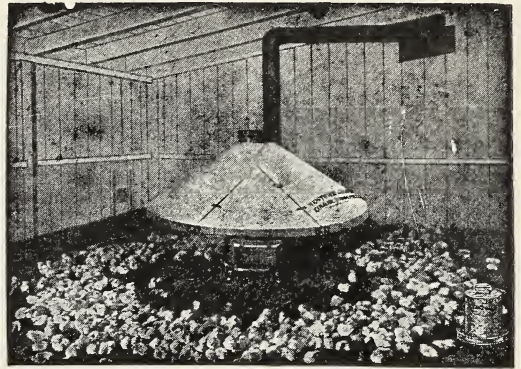
NEWTOWN COLONY BROODER

This is true whether you have no Brooder or an inferior make of machine, because no one ever made money by using a non-dependable, half worn out, "cheap" brooder.

The Newtown "raises the most chicks and the best chicks with the least labor and at lowest cost." Burns Coal, the cheapest fuel—is self-feeding, self-regulating, free from fire danger—broods any number of chicks up to 1200 in one flock, according to the size of the stove and size of the building—reduces labor. It was the first brooder of this type ever put on the market—has been longer in use than any other and is endorsed by the most successful poultrymen in every state of the Union and nine foreign countries—almost in every nook of the world where poultry is raised the Newtown is used.

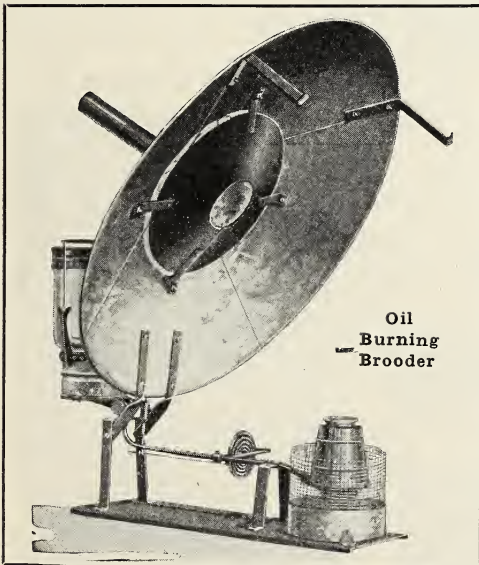
There can surely be no good reason to delay the purchase of a Newtown another week. See them on display at our store and we know you will buy a Newtown. Made in four sizes:

No. 6.	Capacity, 200 chicks or less.....	\$23.75
No. 7.	Capacity, 250 chicks or less.....	26.50



No. 11.	Capacity, 500 chicks or less.....	\$34.25
No. 12.	Capacity, 1200 chicks or less.....	42.00

The Newtown Oil Burning Colony Brooder



Oil
Burning
Brooder

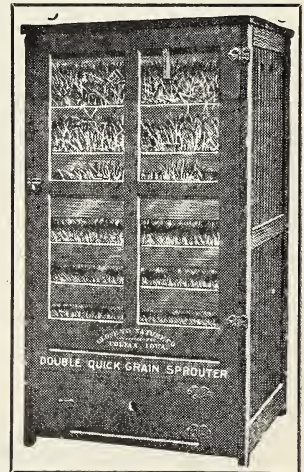
ONE of the big faults of oil burning brooders has been their inability to produce and properly distribute over a large floor space sufficient quantity of heat to make possible the successful brooding of large flocks of chicks in cold weather. This is overcome in the Newtown Oil Burning Colony Brooder, because its construction is simplicity itself. It consists of the heater and deflector. The heater includes the blue flame wickless burner, automatic oil feeder and oil fount all securely mounted on a heavy metal base, and the heat radiator which is bolted within the deflector.

Each brooder is shipped with everything complete in one crate, ready to operate. A thermometer and full instructions for operating are furnished with each brooder.

No.	Diameter of Hover	Price
218	36 inches	\$21.00
225	52 inches	28.50

Double Quick Oat Sprouter

No. 1.	1/4 bushel, 2 trays, 25 to 37 hens, 18x14x23 inches, 25 pounds.....	\$10.00
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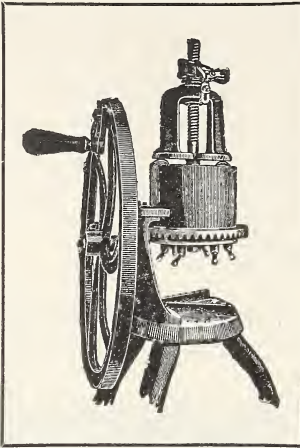


No. 2.	1/2 bushel, 4 trays, 50 to 75 hens, 18 x 14 x 30 inches.	35 pounds.....	\$13.00
No. 3.	1 bushel, 5 trays, 100 to 150 hens, 21 x 17 x 40 inches.	55 pounds.....	19.00
No. 4.	2 bushels, 6 trays, 200 to 300 hens, 25 x 20 x 44 inches.	75 pounds.....	26.00
No. 5.	4 bushels, 12 trays, 400 to 600 hens, 39 x 25 x 45 inches.	125 pounds.....	41.00
No. 6.	8 bushels, 16 trays, 800 to 1,200 hens, 52 x 27 x 60 inches.	200 pounds.....	64.00

Prices on all Poultry Feeds and Appliances subject to change without notice.

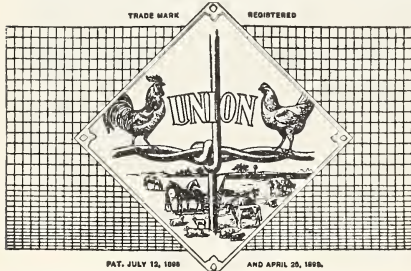
Mann's Green Bone Cutters

- No. 5-C. For flocks of 25 to 50 hens. Weight 35 lbs. Price, \$10.00
- No. 5-B. For flocks of 25 to 50 hens. Weight 60 lbs. Price, \$13.25
- No. 5-B, M. For flocks of 25 to 50 hens. Weight 85 lbs. Price, \$17.00
- The No. 5-C, No. 5-B and No. 5-B, M, do not have the split hinged cylinder.
- No. 7. For flocks of 75 to 150 hens. Weight 107 lbs. Price, \$19.50
- No. 7½. Capacity, 50 to 100 lbs. per hour. Weight 150 lbs. Price, \$26.75
- No. 9. For flocks of 200 to 300 hens. Weight 170 lbs. Price, \$29.75
- No. 11. Capacity, 100 lbs. and upwards per hour. Weight 215 lbs. Price, \$40.00
- No. 12. Capacity, 150 lbs. per hour. Weight 260 lbs. Price, \$50.00



Union Lock Poultry Fencing

As all of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfectly. Because of its strength and construction this fence requires no top or bottom rail and no more posts than the ordinary woven stock fence, or about one-half the number needed in ordinary poultry netting. Union Fence is especially adapted for use where a light, attractive and neat appearing fence is required.



- 12-inch, bale of 10 rods \$2.00
- 18-inch, bale of 10 rods 3.00
- 24-inch, bale of 10 rods 3.60
- 36-inch, bale of 10 rods \$4.35
- 48-inch, bale of 10 rods 5.00
- 60-inch, bale of 10 rods 5.50
- 72-inch, bale of 10 rods \$6.00

Moe's Round Baby Chick Feeder

The most convenient and commodious feeder on the market. Can also be used for water. Manufactured in two sizes.

- No. 11. Small, each, 20c
- No. 12. Large, each, 30c



Moe's Single Feeding Trough

For chicks and growing stock. Accurately stamped with dies. No rough edges, and can be hung on the wall. Sliding top.

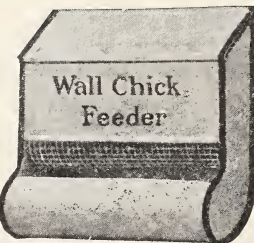
- No. 55. Length 12 inches, each, 40c
- No. 56. Length 18 inches, each, 45c
- No. 57. Length 24 inches, each, 60c



Moe's Double Feeding Trough

Double trough, with sliding top, easily filled and cleaned. Accurately stamped with dies. No rough edges.

- No. 58. Length 12 inches, each, 50c
- No. 59. Length 18 inches, each, 65c
- No. 60. Length 24 inches, each, 75c

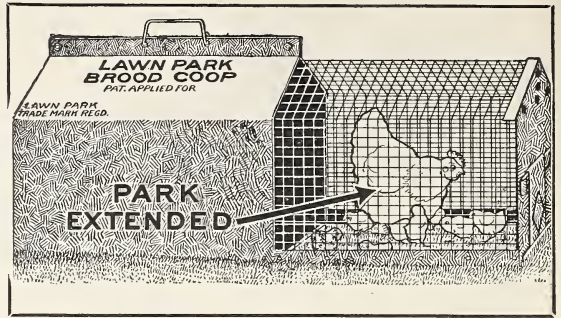


Wall Chick Feeder

Wall Chick Feeder

Wire screen keeps chicks from wasting the food. Sloping top prevents roosting.

- 10-inch, each, 75c; 20-inch, each, \$1.25



Lawn Park Coop

For successful chicken raising it is necessary to protect the young brood from rats, cats and other pests. The Lawn Park is the most successful coop on the market.

Size, closed, 18 x 24 inches; with park extended, 18 x 48 inches. Height, 24 inches. Price, \$5.00

Up-To-Date Square Coop

Made in one size only, 18 x 24 inches and 18 inches high. Price, \$3.00

Moe's Eclipse Feeding Trough

For chicks and growing stock. No seams, rivets or solder.



Sliding top easy to fill and keep clean.

- No. 27. Length 10 inches, each, 30c
- No. 28. Length 20 inches, each, 45c

Aluminum Feeding Trough

Excellent for feeding Buttermilk, as the aluminum is not affected by the acids of sour milk and similar feeds. The same design as shown above, with sliding top. Easy to clean and will never rust.

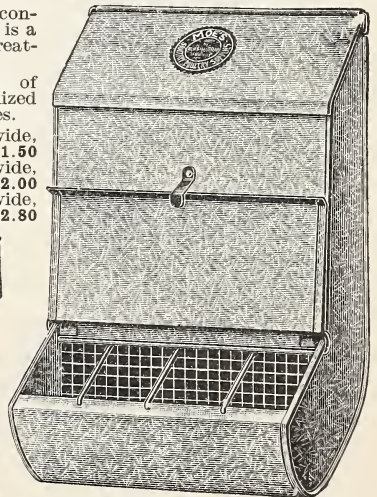
- No. 69. Length 10 inches, each, 55c
- No. 70. Length 20 inches, each, 95c

Moe's Dry Mash Hopper

A trial will convince you that it is a Hopper of the greatest merit.

Manufactured of heavy galvanized iron in three sizes.

- No. 35—8½ in. wide, each, \$1.50
- No. 36—12 in. wide, each, \$2.00
- No. 37—24 in. wide, each, \$2.80



MOE'S NEVER CLOG AND WASTE PROOF HOPPER



RAISE COVER AND FILL FROM TOP

Patent Pending
This hopper does away with all trouble of feed clogging, no matter how coarse. Manufactured in 2 sizes.



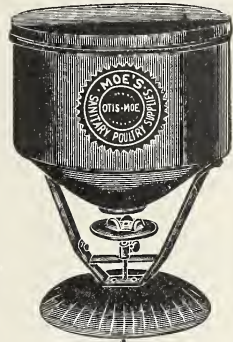
WHEN FILLED FEED CAN NOT CLOG AND ALL WASTE IS PREVENTED

- No. 36. 18-quart capacity, each..... \$1.00
- No. 37. 36-quart capacity, each..... 1.50

Moe's Feeder and Exerciser

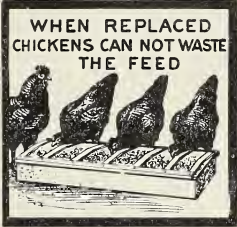
The exercise afforded by using this device keeps your hens in prime laying condition at all times.

- Manufactured in three sizes:
- No. 52. 8-qt. capacity . . \$1.45
- No. 53. 1/2 bu. capacity. 2.00
- No. 54. 1 bu. capacity. . 2.50



Fowls Pecking the Grain at it Operates the Spreader

Moe's Sanitary Feeding Trough



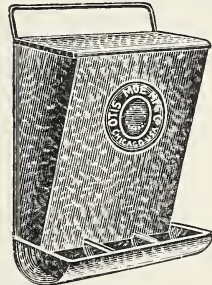
WHEN REPLACED CHICKENS CAN NOT WASTE THE FEED

Can be used for feed, wet mash or water.

- No. 21. 12 in. long..... \$0.45
- No. 22. 18 in. long..... .65
- No. 23. 24 in. long..... .90

Moe's Grit and Shell Boxes

- No. 9. Moe's Grit Box; capacity about 1/4 bushel. . \$1.00
- No. 90. Four compartments..... 1.35
- No. 45. Two compartments..... .45



Round Bottom Dry Food Hopper
Dry mash and meat scrap feed readily. Each..... \$0.90

Prairie State Meat Scrap Hopper
Capacity 10 pounds scrap. Each..... \$0.75

Felker's Wall Feeder

Practical dry mash feeder designed to hang on the wall.
No. 12 Feeder. 12 inches long. Each..... \$0.50

Atsatt's Poultry Feeder

A splendid mash feeder, 18 inches long, each . . . \$0.50

Egg Carriers

- Humpty Dumpty. 6 dozen size, each, 50c; 9 dozen size, each, 55c; 30 dozen size, each, \$1.00.
- Moe's Regal. No. 14—15 eggs, each, 20c; No. 15—30 eggs, each, 40c; No. 16—50 eggs, each, 70c; No. 17—100 eggs, each, \$1.25; No. 18—12 duck or turkey eggs, each, 25c.

Nest Eggs

- Lice Expelling. Each, 10c; 3 for 25c; per dozen, 75c.
- Porcelain. 3 for 15c; per dozen, 40c.
- Lime. 3 for 15c; per dozen, 40c.

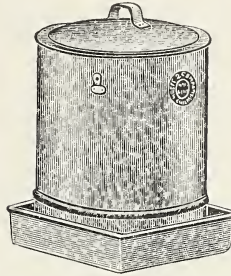
Egg Boxes

- Paper Carton. 1 dozen size, per dozen, 20c; per 100, \$1.50.
- Continental Safety Carton. 1 dozen size, per dozen, 25c; per 100, \$2.25.

Prices on all Poultry Feeds and Appliances subject to change without notice.

McCullough's Sanitary Glass Chick Fountain

Best Fountain made for Chicks. Each 25c.



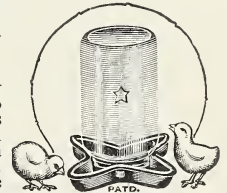
Moe's Improved Top Fill Fountains

Provides pure, fresh water at all times. The double wall construction retards freezing, and keeps water cool in summer. Fills from the top, easily cleaned, and feeds automatically.

- No. 1. Capacity 1 Gallon, each..... \$1.75
- No. 2. Capacity 2 Gallons, each..... 2.40
- No. 4. Capacity 4 Gallons, each..... 3.25

Moe's Star Fountain and Feeder

Made of a single piece of heavy metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks can not drown. Fits any Mason jar in 1 Pint, 1 Quart, and 2 Quart sizes. No. 32 (Glass jar not included) 15c



Drop Bottom Fountain

Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

- 2-qt. capacity, each..... \$0.90
- 1-gal. capacity, each..... 1.15
- 2-gal. capacity, each..... 1.35

Peerless Drinking Fountain



Easy to clean and fill and fowls cannot injure their combs when drinking. Simple in construction, durable and practical. 5-quart size, each..... \$1.00

The Duplex Fountain

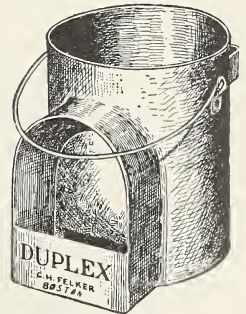
Top section slides into bottom section.

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- Key Ring. (Celluloid). For American, Asiatic and Mediterranean Breeds. 10 colors—black, white, dark blue, pink, light blue, red, garnet, green, yellow, purple. Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
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Poultry Feeds and Supplies

SPECIAL NOTICE

Prices quoted represent market values at time of going to press only.

Market fluctuations prevent us quoting firm prices on Feeds in our Catalogues, but we are always prepared to quote firm prices upon receipt of an estimate of your wants.

None of our Feeds contain grit.

Prices quoted include delivery to Express or Freight depots here, purchaser paying transportation charges. Postage must be added if wanted by mail.

See Parcel Post, page 1.

"GLOBE" CHICK MASH, WITH BUTTERMILK. 3 lbs., 25c; 25 lbs., \$1.60; 50 lbs., \$2.80; bag of 100 lbs., \$4.80.

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"GLOBE" CHICK FEED. 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.15; bag of 100 lbs., \$3.50.

"GLOBE" DEVELOPING FEED. 4 lbs., 25c; 25 lbs., \$1.25; 50 lbs., \$2.10; bag of 100 lbs., \$3.40.

"GLOBE" SCRATCH FEED. 5 lbs., 25c; 25 lbs., \$1.15; 50 lbs., \$1.90; bag of 100 lbs., \$3.00.

"GLOBE" EGG MASH. 4 lbs., 25c; 25 lbs., \$1.40; 50 lbs., \$2.40; bag of 100 lbs., \$4.00.

WHITE CROSS STOCK FEED. 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; bag of 100 lbs., \$2.55.

SPRATT'S CHICK MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

SPRATT'S POULTRY MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

SPRATT'S TURKEY MEAL, GAME MEAL AND PHEASANT MEAL. 2 lbs., 30c; 25 lbs., \$3.40; 50 lbs., \$6.40; bag of 100 lbs., \$12.00.

PINHEAD OATS. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.70; bag of 100 lbs., \$4.55.

HULLED OATS. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.70; bag of 100 lbs., \$4.55.

SUNFLOWER SEED. 2 lbs., 25c; 25 lbs., \$2.50; 50 lbs., \$4.55; bag of 100 lbs., \$8.25.

ALFALFA MEAL, Fine. 5 lbs., 25c; 25 lbs., \$1.10; 50 lbs., \$1.80; bag of 100 lbs., \$2.70.

ALFALFA MEAL, Coarse. 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; bag of 100 lbs., \$2.60.

MEAT SCRAPS, 50% Protein. 3 lbs., 25c; 25 lbs., \$1.80; 50 lbs., \$3.25; bag of 100 lbs., \$5.65.

DIGESTER TANKAGE, 60% Protein. 25 lbs., \$1.50; 50 lbs., \$2.60; bag of 100 lbs., \$4.40.

BLOOD MEAL, 80% Protein. 2 lbs., 25c; 25 lbs., \$2.05; 50 lbs., \$3.70; bag of 100 lbs., \$6.60.

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CHARCOAL. Furnished in four sizes; fine, chick, medium and coarse. 5 lbs., 25c; 25 lbs., \$1.15; 50 lb. bag \$1.50.

CRUSHED OYSTER SHELLS. Furnished in two sizes; fine for Chicks and Pigeons, coarse for Poultry. 5 lbs., 15c; 25 lbs., 70c; 50 lbs., \$1.00; bag of 100 lbs., \$1.50.

MICA CRYSTAL GRIT. Furnished in three sizes; fine for Chicks, medium for Pigeons, coarse for Poultry. 5 lbs., 15c; 25 lbs., 70c; 50 lbs., \$1.00; bag of 100 lbs., \$1.25.

No charge for bags on any of the above Feeds.

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"GLOBE" PIGEON FEED. No corn—no grit. 3 lbs., 25c; 25 lbs., \$1.70; 50 lbs., \$2.95; bag of 100 lbs., \$5.10.

KING PIGEON FEED. Special, with whole flint corn. 3 lbs., 25c; 25 lbs., \$1.55; 50 lbs., \$2.65; bag of 100 lbs., \$4.45.

CANADA PIGEON PEAS. 3 lbs., 30c; 25 lbs., \$2.10; 50 lbs., \$3.75; bag of 100 lbs., \$6.70.

HEMP SEED. 3 lbs., 30c; 25 lbs., \$2.10; 50 lbs., \$3.75; bag of 100 lbs., \$6.70.

PIGEON MILLET. 4 lbs., 25c; 25 lbs., \$1.20; 50 lbs., \$1.95; bag of 100 lbs., \$3.10.

McCULLOUGH'S HEALTH GRIT. 7 lbs., 25c; 25 lbs., 90c; 50 lbs., \$1.40; bag of 100 lbs., \$2.00.

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ROCK SALT. Small lots; per lb., 5c; 25 lbs., 75c; 50 lbs., \$1.00; bag of 100 lbs., \$1.45.

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TOBACCO STEMS. Per bale, about 125 lbs., \$2.00.

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BARLEY, for Feed. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.55; bag of 100 lbs., \$2.30.

BRAN. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.55; bag of 100 lbs., \$2.30.

BUCKWHEAT, for Feed. 5 lbs., 25c; 25 lbs., \$1.15; 50 lbs., \$1.85; bag of 100 lbs., \$2.90.

CORN MEAL. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.60; bag of 100 lbs., \$2.35.

CRACKED CORN. 5 lbs., 25c; 25 lbs., \$1.00; 50 lbs., \$1.55; bag of 100 lbs., \$2.35.

CORN, SHELLED, Yellow. 6 lbs., 25c; 25 lbs., 95c; 50 lbs., \$1.45; bag of 100 lbs., \$2.10.

KAFIR CORN, White. 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.15; bag of 100 lbs., \$3.50.

MIDDLINGS. 5 lbs., 25c; 25 lbs., \$1.05; 50 lbs., \$1.70; bag of 100 lbs., \$2.55.

MILO MAIZE. 4 lbs., 25c; 25 lbs., \$1.30; 50 lbs., \$2.15; bag of 100 lbs., \$3.50.

No charge for bags on any of the above Feeds.

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Require no preparation, no trouble, no cooking, and are adapted for all breeds of dogs.

SPRATT'S PATENT DOG CAKES. 2 lbs., 30c; 25 lbs., \$3.65; 50 lbs., \$6.90; 100 lbs., \$13.00.

SPRATT'S PATENT PUPPY CAKES. 2 lbs., 35c; 25 lbs., \$3.80; 50 lbs., \$7.15; 100 lbs., \$13.50.

Pure Seeds for Birds

CANARY SEED, re-cleaned. Per lb., 15c

RAPE SEED, re-cleaned. Per lb., 20c

HEMP SEED, re-cleaned. Per lb., 15c

MIXED BIRD SEED. Per lb., 20c

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MILLET SEED, re-cleaned. Per lb., 10c

LETTUCE SEED, re-cleaned. Per lb., 20c

CUTTLE BONE. 10c per oz. Per lb., 60c

BIRD GRAVEL. Package. 20c

Pratt's Buttermilk Baby Chick Food

2 1/2 lb. pkg., 25c; 5 1/2 lb. pkg., 50c; 14 lb. bag, \$1.25; 25 lb. bag, \$2.00; 50 lb. bag, \$3.50; 100 lb. bag, \$6.00.

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A DEODORIZER, ABSORBANT, DISINFECTANT, ECONOMICAL AND LABOR SAVING

O. K. POULTRY LITTER is imported and is especially adapted as a litter in Scratching Pens and for catching droppings under perches. Many prominent Poultry Raisers have used it for years.

One bale will cover about 80 square feet, 3 inches deep. Per bale, \$4.50; per bushel, \$1.25.

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FRENCH'S POULTRY MUSTARD. 1 1/2 lbs., 55c; 3 lbs., \$1.00; 5 lbs., \$1.65; 10 lbs., \$3.25; 25 lbs., \$7.80; 100 lb. drum, \$20.00.

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BLATCHFORD'S CALF MEAL. 25 lbs., \$1.70; 50 lbs., \$3.00; 100 lbs., \$5.25.

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DARLING'S MEAT CRISPS. 3 lbs., 35c; 6 1/2 lbs., 70c; 25 lb. pail, \$3.50.

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10 gallon keg, \$6.00.

Carbola

A Disinfecting Germ-Killing White Paint.

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