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THE
MARKET GARDENERS' SEED CO.

120-122-124-126 East Court Street
CINCINNATI, OHIO

Phone
CANAL 4488

THE MARKET GARDENERS' SEED CO'S. CATALOGUE 1921

INTRODUCTION

THE new Year, we feel, brings to us an added importance and responsibility in serving our many patrons. Conditions demand economy in administration of all business and home affairs. The home garden in its production of fine vegetables, beautiful flowers and added good health is a true economy.

True economy in the garden consists of planting the best seeds procurable. The seeds we offer are carefully grown from selected strains and are produced at a higher cost and with greater care than much that is offered. They may cost you a trifle more than others not so carefully grown; they are worth many times more. You practice economy when you plant such seeds as ours. They are unsurpassed for vigor and trueness to type.

Non-Warranty Sometimes, though not often, our seeds do not come up after planting. This may be due to one or more of several reasons, such as covering too deeply or not deeply enough, too much or too little water, too cold weather or a baking sun which forms a crust too hard for the tender shoots to penetrate. Sometimes insects destroy plants at the surface before they are seen by the gardener. We cannot personally direct the use of our goods after they leave our hands; neither can we fully control anywhere or at any time the operation of natural law as it affects seeds; therefore, we give no warranty, express or implied, as to description, purity, productiveness, or any other matter of any seeds or bulbs 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.

How to Send Money Remittances may be made at our risk by the following methods, viz: Postal Money Order, or Express Company's Money Order.

The rates charged for Postal Money Orders and Express Money Orders are now so low that these are the best ways to remit. We will bear the expense of sending money in either of these ways. Deduct the cost of the order from amount sent. Express Money Orders can be obtained at all offices of the principal Express Companies. They are cheap and absolutely safe.

When Money Orders cannot be obtained, letters containing money should always be registered. Money in ordinary letters is unsafe.

Free of Postage or Express Charges.

Packets, Ounces, Two Ounces, Quarter Pounds, ordered at list prices, will be sent free by mail or express.

The Essentials to
the Production of

Good Vegetables and Beautiful Flowers

Good Soil A rich, sandy loam is the best, but a fair degree of success may be secured from any soil which can be made rich and friable. Vegetables of the best quality cannot be grown on barren sand, a cold, hard, lumpy clay, nor in the shade of orchard or other trees.

Liberal Manuring A soil which does not need enriching in order to produce the best results is rarely found and very often success is in proportion to the liberality with which fertilizers have been used. Well decomposed stable manure where straw bedding has been used is the best; manure where sawdust has been used for bedding is not so good. Often wood ashes at the rate of one peck up to one bushel to the square rod will be of great benefit.

When good stable manure is not available, commercial fertilizers may be used at the rate of four to twelve pounds to the square rod and the more concentrated forms, such as Nitrate of Soda, Guano, Dried Blood, and Potash Salts, at the rate of one to six pounds to the rod, the larger amounts preferably in three or four applications and at intervals of about ten days. A mass or lump of any of the commercial fertilizers, even if it is but a quarter of an inch in diameter, is liable to kill any seed or young plant which comes in contact with it, so it is very important if such fertilizers be used that they be thoroughly pulverized and mixed with the soil.

Thorough Preparation Rich soil and liberal manuring will avail little without thorough preparation. The soil must be made friable by thorough and judicious working; if this is well done all that follows will be easy; if it is neglected, only partial success is possible and that at the cost of a great deal of hard work.

The garden should be well plowed or dug to a good depth, taking care, if it is a clay soil, that the work is not done when it is too wet. If a handful from the furrow moulds with slight pressure into a ball which cannot be easily crumbled into fine earth again, the soil is too wet and if stirred then will be hard to work all summer. The surface should be made as fine and smooth as possible with the

Seeds ordered at list prices, five cents per lb. must be added for transportation and packing and they will then be sent free.

Hundred Pound Lots Where Hundred Pound lots are ordered, we deliver free at depot or express office our city, the freight or express charges to be paid by the party ordering.

Larger Quantities If Seeds, etc., are wanted in larger quantities, write for prices.

Bags To every order for one-quarter bushel and upwards, to the amount of two bushels, 40 cents must be added for a new bag in which to ship.

Seeds in Packets We offer the following inducements to those wishing to purchase seeds in packets before April 1: Select packets to the value of \$1.15 and send us \$1.00; for \$2.35 send \$2.00; for \$3.60 send \$3.00; for \$4.85 send \$4.00; for \$6.15 send \$5.00; for \$12.50 send \$10.00; for \$26.00 send \$20.00. The seeds will be sent by mail, postpaid, but these low rates apply to seeds in packets only and at catalogue prices and not to seeds by weight.

The rates are made to induce early buying before our rush season is on.

Name and Address Frequently we receive unsigned letters. Sometimes they contain money orders. Sometimes

Should Always Be Given too, letters are received in which the name of the town is left out and the postmark blurred. We cannot fill orders unless we know the name and address of the buyer. The easiest way for you is to use our order sheet, filling in the blanks.

harrow or rake. It is generally desirable to plow the whole garden at once and to do this in time for the earliest crops, but the part which is not planted for some weeks should be kept mellow by frequent cultivation.

Good Seeds There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless, or improper sowing of the seed.

Properly Planted A seed consists of a minute plant enclosed in a hard and more or less impervious shell with a sufficient amount of food stowed in or around the germ to sustain it until it can expand its leaves, form roots, and provide for itself. Moisture, heat, and a certain amount of air are necessary to secure germination. The germinating seed first absorbs water and swells. The starchy matters gradually become soluble. The seed-coats are ruptured, the stemlet and bud emerge. The embryo lives for a time on the stored food, but gradually the plantlet secures a foothold in the soil and gathers food for itself. Germination is complete when the plantlet is able to shift for itself.

A dry seed may retain its vitality and remain unchanged for years, but after germination has commenced a check of a day or two in the process may be fatal. There is no time in the life of a plant when it is so susceptible of injury from the over-abundance or want of sufficient heat and moisture as at the period between the commencement of germination and the formation of the first true leaves. It is just then that the gardener should aid in securing favorable conditions. These are:

FIRST—A proper and constant degree of moisture. The soil should always be moist, never wet. To secure this cover the seed as soon as it is planted with well pulverized, freshly prepared earth pressing it firmly over the seed. This firming of the soil is very important as it brings the particles of earth into close contact with seeds and roots, prevents the drying out of the soil and facilitates quick growth. The best results are obtained in small gardens by laying a board on the row and then walking upon the board, or the back of the hoe may be used, but for truck farms and field crops a roller is equally satisfactory.

SECOND—A proper degree of heat, secured by sowing the seed when the temperature of the soil is that most favorable to the germination of the seed of that particular plant. Too high a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experience of the most successful gardeners in your vicinity.

THIRD—Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved the necessary air can readily reach the germinating seed and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches, and peas one to three inches deep.

FOURTH—Such a condition of soil that the ascending stem can easily penetrate it and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground and taking care never to sow fine seeds when the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that the young plants will be killed. In such cases the only remedy is to plant again.

Judicious Cultivation Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better, but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stirring of the surface. The yield and quality of vegetables have often been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns and be in every way more satisfactory than a much larger one poorly prepared and neglected.

How to Build and Manage Hotbeds

For early vegetables, some provision for starting certain plants earlier than can be done in the open air is desirable; for this purpose nothing is better than a good hotbed and its construction is so simple and the expense so slight that every garden should have one. A hotbed proper not only protects the plants from the cold, but supplies bottom heat. By this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition, so far as heat is concerned, which is most favorable for rapid and vigorous growth, and gardeners secure it by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

Heating Material The best heating material that is easily available is fresh horse manure, containing a liberal quantity of straw bedding. Such manure, if thrown into a loose pile, will heat violently and unevenly and will soon become cold. What is wanted in the hotbed is a steady and moderate but lasting heat. To secure this, the manure should be forked over, shaken apart and if dry, watered and allowed to stand a few days and then be forked over again, piled and allowed to heat a second time, the object being to get the whole mass into a uniform degree of fermentation and as soon as this is accomplished it is fit for use.

Sash Some gardeners use sash made especially for hotbeds and glazed with small lights cut from odds and ends and so furnished at very low rates. Such sash can usually be procured in any of our large cities and costs much less than if made to order. For garden use, however, we much prefer a smaller sash that can be easily handled and the use of larger and better glass. We recommend that for home gardens the sash be about two and one-half by four or five feet and that the glass be not less than 10x14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like skylight sash.

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

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

Making the Bed This requires careful attention as future success depends largely upon the manner in which this work is done. Having cleared away snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully shaking out and spreading each forkful and repeatedly treading down the manure so as to make the bed as uniform as possible in solidity, composition and moisture. It is of the utmost importance that this shaking apart and evenly pressing down of the manure should be carefully and thoroughly done; unless it is, one portion will heat quicker than the other and the soil will settle unevenly, making it impossible to raise good plants.

The proper depth of the bed will vary with the climate, season, and the kind of plants to be raised. A shallow bed will quickly give a high temperature which will soon subside; a deeper one, if well made, will heat more moderately, but continue much longer. For general purposes, a bed about two feet deep will be best.

The bed completed, the frame and sash may be put on and fresh manure carefully packed around the outside to the very top (if the weather is at all severe, this outside banking should be replenished as it settles.) The bed should then be allowed to stand with the sash partially open for a day or two to allow the steam and rank heat to pass off.

The earth should then be evenly distributed over the surface of the bed and carefully leveled. The earth should not

be shoveled or dumped in one or more places in the bed and then leveled; if this is done uneven settling of the bed invariably results. Care should be taken that the soil is dry and friable. If wet or frozen soil must be used, it should be placed in small piles until well dried out before spreading. The heat at first will be quite violent, frequently rising to 120 degrees, but it soon subsides and when it recedes to 90 degrees the seed may be planted. The importance of using dry soil and allowing the first rank heat to pass off is very great. Every season thousands of hotbeds fail of good results from these causes and seedsmen are blamed for failure resulting from overheating, or wet, soggy soil.

Management of the Bed The essentials for success are a steady uniform degree of heat and moisture; keeping the soil at all times a few degrees warmer than the air and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these may seem to be, there are many difficulties in the way of securing them, prominent among which is overheating the air under a bright sun.

Without experience one would scarcely believe how quickly the temperature inside of a well built hotbed will rise to 90 or 100 degrees upon a still, sunny day, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open ever so little. A rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again, in cloudy weather, a bed will go several days without watering, but will dry up in an hour when open on a sunny day.

The details of management, however, must be learned by experience, but may be easily acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A Cold-Frame is a simple construction of boards and is useful to protect and harden off plants from the greenhouse or hot-bed before fully exposing them in the open air.

Select a dry, southern exposure, form a frame from four to six feet wide and as long as required. The back should be fourteen to eighteen inches high and the front eight to twelve, with a cross-tie every three feet. The frame may be covered with sash or cloth. Admit air freely on pleasant days, but keep close in severe weather.

Watering The best time to water plants is early in the morning or in the evening. Water may be given to the roots at any time, but should never be sprinkled over the leaves while they are exposed to bright sunshine. If watering a plant has been commenced, continue to supply it as it is needed, or more injury than good will result from what has been given. One copious watering is better than many scanty sprinklings. The ground should always be stirred with a hoe or rake before it becomes so very dry as to cake or crack.

Transplanting In transplanting, the main points to be regarded are: care in taking up the plants so as to avoid injury to the roots, setting out as soon as possible to prevent the air coming in contact with the roots, setting firmly so as to enable the plant to take a secure hold of the soil and shading to prevent the hot sun from withering and blighting the leaves. Where a rank or soft growth of tops has been made in hotbed it is frequently desirable to trim off some of the larger leaves before taking up to transplant so that evaporation later may be retarded.

In transplanting from a hotbed, harden the plants by letting them get quite dry a day or two before, but give an abundance of water a few hours before they are taken out. It is most apt to be successful if done just at evening, or immediately before or during the first part of a rain, about the worst time being just after a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all it should be used freely and the wet surface immediately covered with dry soil.

We have listed on the following pages the varieties we consider the best.

ILLUSTRATED AND DESCRIPTIVE CATALOGUE

OF

VEGETABLE SEEDS

WITH GENERAL DIRECTIONS FOR CULTIVATION

The varieties in each class (for example, Wax Poddè Beans) are usually arranged in their order of earliness. The descriptions of the varieties offered by us are based upon our very careful observations of the types as understood by us after many years of experiences in the seed business. Nevertheless it should always be remembered that many vegetables are much affected in their habit of growth of plant and size, form, and quality of the fruits by conditions of soil, climate, location, and mode of culture which are often beyond our control, and our descriptions are for what may be expected under conditions that are approximately normal and favorable for good development.

The cultural directions in this catalog are necessarily limited but they are as complete as space permits.

Artichoke

The seed we offer is that of the true artichoke which is an extensively used vegetable in Europe. In it the edible portion is the thickened scales at the base of the flower-heads or buds. The plant is very different from what is known in America as Artichoke or Jerusalem Artichoke, in which the edible portion is the tuber.

In February or March sow and transplant in hotbed so as to give plenty of room until danger of frost is over. Then set in very rich, well drained soil in rows four feet apart and two feet apart in the row. The plants can be raised in seed beds out of doors, but in that case will not be likely to produce heads the first year. Late in the fall cut off the old tops and thoroughly protect the crowns with leaves or straw to prevent severe freezing.

The second year thin the starting shoots to three of the best, which will commence to form heads about July 1. The plants may also be blanched like cardoons. This is done by cutting back the stems close to the ground in July, the rapidly growing shoots which then start up may be tied and blanched like celery. As artichoke plants do not yield satisfactorily after three or four years, it is best to start a new plantation as often as once in three years.

Green Globe The plant of this variety is of medium height with rather deep green leaves. The buds or flower-heads are green, nearly round or somewhat elongated. The scales are rather narrow and spiny, and are moderately fleshy at the base. Pkt. 5c; Oz. 85c. ¼ Lb. \$2.25; Lb. \$8.00.

Asparagus

This is one of the earliest and most delicious of spring vegetables. We strongly urge all those having enough available space to put in a bed for their own use, following carefully the cultural directions given below.

Beds are usually formed by setting roots which can be procured of us. If you wish to grow plants from the seed yourself, pour warm water on the seed and allow it to stand until cool; pour it off and repeat two or three times with fresh warm water. Sow in spring in drills about eighteen inches apart and two inches deep in light, rich soil, planting fifteen to twenty seeds to each foot of row. When the plants are well up, thin to about one inch apart and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set the next spring.

The permanent beds should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer; a moist, sandy soil is best. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or spade. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done, all the shoots, no matter how small, should be cut. After the final cutting, give a good dressing of manure, ashes, and salt. Cultivate frequently until the plants meet in the rows.

In autumn after the tops are fully ripe and yellow, they should be cut and burned. A bed fifteen by fifty feet, requiring about one hundred plants, if well cultivated and manured, should give the following season an abundant supply for an ordinary family and continue productive for eight or ten years.

Palmetto A very early maturing and prolific variety, producing an abundance of very large, deep green shoots of the best quality. **ROOTS**—Best two-year-old. Seed, Pkt. 5c; Oz. 10c; ¼ Lb. 25c; Lb. 75c. **Roots, Postpaid; \$2.00 per 100; \$10.00 per 1,000.**

Columbian Mammoth White This excellent variety, furnishes shoots of exceptionally large size and of superior tenderness and flavor. The color is clear white until four to six inches above the surface. A large proportion of the seeds will produce white shoots and the green ones can be rejected when setting out the permanent bed. **ROOTS**—Best 2-year-old seed. Pkt. 5c; Oz. 10c; ¼ Lb. 25c; Lb. 75c. **Roots, Postpaid; \$2.00 per 100; \$10.00 per 1,000.**

Giant Argenteuil This sort is the largest and most extensively used green variety. Shoots bright green tinged with purple at the top, very tender and of the best quality. This variety is recommended as the best for Market Gardeners. **ROOTS**—Best quality 2-year-old seed. Pkt. 5c; Oz. 10c; ¼ Lb. 25c; Lb. 75c. **Roots, Postpaid; \$2.00 per 100; \$10.00 per 1,000.**

Giant Argenteuil

Plant seeds that you possibly overlooked last season.

BEANS

No crop responds more readily than Beans to good soil and cultivation. A light, rich, well drained loam which was manured for the previous crop is the most desirable. If too rank manure is used it is apt to make the plant run too much to vine.

Beans are very sensitive to both cold and wet and it is useless to plant them before the ground has become dry and warm. The large returns will result from planting in drills from two to three feet apart. Cover the seed one and one-half to two inches deep and thin the young plants three to six inches apart in the row. If planted in hills, make the hills about two feet apart each way. For succession, plant at intervals of two weeks till midsummer. The plants up to the time of blossoming should have frequent shallow cultivation, but any mutilation of the roots by cultivation after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Cultivation should be very shallow and it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

Our growers give careful attention to selecting and improving the different varieties and keeping them pure and we invite the most critical comparison of our stocks with those of any other seedsmen.

The varieties of garden beans we offer have been separated for convenience into five groups: Wax Podded Dwarf or Bush sorts, Green Podded Dwarf or Bush sorts, Dwarf Limas, Pole or Running sorts, and Pole Limas. Nearly all of these sorts, except the Limas, are suitable when young for use as snaps. The low growing sorts are called Bunch beans in some sections. In northern latitudes the term "butter beans" is often applied to low growing wax podded sorts. In the south, however, by "butter beans" is usually meant limas.

Notice—If beans are ordered sent Parcel Post, add 5c for the first lb.; 1c for each additional lb.

Dwarf or Bush—Wax Podded Sorts

Challenge Dwarf Black Wax Continued experience has satisfied us of the great merit of this variety as an early wax podded bean. The plants although small, are compact and erect, bearing pods well up from the ground. The pods are an attractive medium yellow in color, medium sized, about four and one-fourth inches long, roundish oval, considerably curved, fleshy, crisp, tender, and stringless. Seed jet black. We consider this the best early wax bean for the home or market garden. Pkt. 5c; Lb. 30c.

M. G. Seed Co's. Golden Wax

This is one of the earliest and best dwarf sorts for the home market and private gardens. The plants are erect, compact, and very productive. The pods are of medium length, four and one-half to five inches, nearly straight, broad, flat, golden yellow, very fleshy and wax-like. The variety cooks quickly as snaps, shelling well when green, and is of superior quality use in either way. Seed medium sized, oval, white, more or less covered with two shades of purplish red. The amount and shade of color on this and all parti-colored beans will be affected greatly by conditions of soil and ripening. We are convinced that none of the so-called improved strains is equal to the seed we offer of this standard variety. Pkt. 5c; Lb. 30c.

Round Pod Wax

M. G. Seed Co's. Round Pod Wax A very handsome midseason variety, especially desirable for snaps for the home garden. The plants are of strong growth, spreading and very productive. The leaves are large, broad and roughened. The pods are long and round, five and one-half to six inches, slightly curved, light yellow, wax-like, stringless and of the very best quality. Seed long, cylindrical, medium sized, nearly white with a little dark marking about the eye. Pkt. 5c; Lb. 35c.

Pencil Pod Wax This very handsome black wax sort is medium early, fairly hardy and productive. It is one of the very best sorts for home use and for near market where highest quality is desired. The plants are strong growing with roughened leaves. The pods are long, five and one-half to six inches, straight, round, fleshy and of a bright yellow color. They are tender, absolutely stringless and are produced through a long season. Seed long, round, medium sized, solid black. Pkt. 5c; Lb. 35c.

Beans profitable and easy to grow.

BEANS—DWARF OR BUSH

GREEN PODDED SORTS

The green podded dwarf sorts are perhaps the most important class of garden beans and are probably more extensively used for snaps than the wax podded varieties, although the latter are considered by many as the more attractive in appearance. The green podded sorts are as a rule the more productive, being less sensitive to unfavorable conditions of soil and climate and of late years have been less susceptible to bean diseases.

Extra Early Refugee An extremely early, green podded sort furnishing round, fleshy, light green pods which are slightly curved, of medium size, about five inches long and of fine quality. The plants are a little smaller, more upright, and the leaves a little larger than those of the late Refugee, and the seed much the same in shape and color. Our stock is uniform, the vines ripening pods well together and long before those of the Refugee or Thousand to One. Seed long, cylindrical, rounded at ends, drab, nearly covered with dark purple blotches. This is an excellent snap bean for early markets and stands shipment well. Pkt. 5c; Lb. 25c.

Early Yellow Kidney Large, vigorous, long, about six inches, straight, flat, handsome, rather light green and when young are of good quality for snaps. Seed medium sized, long, kidney shaped, light yellow with small brownish circle about the eye. This is early maturing and a fine shipper. It is much used for the home garden and market. Pkt. 5c; Lb. 25c.

Bountiful This excellent dwarf, green podded sort is similar in appearance to Early Yellow Kidney Six Weeks but is of much better quality. The vines are vigorous and productive. The pods are very long, six to seven inches, straight, broad, flat, of handsome appearance and absolutely stringless for snaps. They are tender and brittle much longer than most sorts. The pods are longer, broader, and have longer tips than those of Long Yellow Six Weeks. Seed medium sized, slender, light yellow with brownish circle about eye. Bountiful is a most desirable early sort for snaps for the home garden. Pkt. 5c; Lb. 25c.

Extra Early Round Pod Red Valentine For snaps there is nothing superior to this variety among the dwarf green podded sorts both for the home and market garden and many prefer it to the wax varieties. The plants are of medium size, erect, with dark green leaves. The pods are of medium length, about four and one-half inches, medium green color, curved, cylindrical, with crease in back, very fleshy, crisp, and tender. Where the young plants have to contend with adverse conditions, no other dwarf bean is more certain than the Valentines are to set pods. Seed long, of medium size and unsymmetrical in shape, purplish pink splashed with pale buff. Lack of symmetry in the seed of this variety is an indication of superior fleshiness and good quality in the pods. We know of no stock of Red Valentine which can be compared with that we offer in uniformly high quality of pod. Our strain combines in high degree all the good qualities of the sort. Pkt. 5c; Lb. 25c.

M. G. Seed Co's. Stringless White Valentine This new and excellent dwarf green podded sort is similar to the well known Red Valentine, quality and productiveness just as good, and having the advantage of a white seed so long sought after. The vines are vigorous, very productive, pods six to seven inches long, round, brittle and of excellent quality. This sort has this decided advantage if the market is overstocked with green podded beans; let them ripen and you have an unequaled pure white shell bean for baking. Pkt. 10c; Lb. 40c.

Stringless Green Pod A very desirable dwarf green podded snap sort for the home garden and largely grown for the market. The plants are large, spreading and productive. The pods are medium green, five to six inches long, cylindrical, larger than those of Red Valentine but are quite as fleshy, of equally high quality and remain crisp and tender longer. They mature a little later. Seed of medium size and length, yellowish brown. Pkt. 5c; Lb. 30c.

Giant Stringless Green Pod An exceedingly productive and very handsome sort. The plants are large, vigorous, and spreading. The pods are large and nearly round, and of medium green color. They mature a few days later than those of Stringless Green Pod, average about one-fourth inch longer and more nearly straight. The quality is very good for snaps for home use. The variety is suitable also for the market. Seed is long, slender, yellow. Pkt. 5c; Lb. 25c.

a little later. 6 to 7 inches long. Seed long, large, kidney shaped, variegated, drab, purple, and brown. We consider this variety one of the very best for home use or market. See Novelties and Specialties. Pkt. 10c; Lb. 30c.

Dwarf Horticultural One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a green podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about five to five and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff, splashed with deep red. Pkt. 5c; Lb. 30c.

Bountiful

M. G. Seed Co's. Perfection Stringless A very hardy and productive green podded sort with strong, vigorous vines. The pods are round, more fleshy, very handsome, much longer, straighter than Red Valentine, the plant a little more spreading, and in season

Don't fail to include in your order some of our Novelties which we know to be of merit and worthy of a trial

BEANS—DWARF OR BUSH

GREEN PODDED SORTS—Continued

Refugee or Thousand to One A standard very productive sort, highly esteemed for late planting for snaps and very extensively used for shipping, canning, and picking. The plants are very large, spreading, exceedingly hardy, with many small, smooth light green leaves. The mature pods are about five and one-fourth inches long, cylindrical, slightly curved, medium green when in condition for use as snaps but as they mature becoming light yellow, sometimes splashed with purple. Seed long, cylindrical, light drab, thickly dotted and splashed with purple. Pkt. 5c; Lb. 25c.

The following three Dwarf or Bush sorts are also extensively planted as field beans.

Early Marrow Pea or Dwarf White Navy This sort is a sure cropper and not only more prolific than the common white bean but is also of better quality. The plants are large, and spreading, with small, thin leaves and occasional runners, ripening their crop comparatively early. The pods are light green, straight, short about three and three-fourths inches, but usually containing six beans. The beans are small, oval, white, handsome, and of superior quality for use as dry beans. Pkt. 5c; Lb. 15c.

Large White Marrow or Mountain The plants of this very prolific sort are large, slender, spreading, with short runners and small leaves. The pods are broad, about five and one-half inches long, medium green, changing to yellow. Seed large, ovoid, clear white, cooking very dry and mealy. Pkt. 5c; Lb. 25c.

Fordhook Bush Lima

large beans of exceptionally fine quality. It is much more productive than Kumerle and matures earlier. Seed large, irregularly oval in shape, very thick, with greenish tinge. This sort is popular for home and market use. Pkt. 10c; Lb. 45c.

Royal Dwarf Kidney The plants of this late variety, also called White Kidney, are upright, very large, branching, with large, broad leaves. The pods are coarse, dark green and about six inches long. Seed large, white, kidney shaped, slightly flattened and of excellent quality, green or dry. Pkt. 5c; Lb. 25c.

DWARF LIMAS

The dwarf lima class cannot be recommended too highly. The beans can be grown and gathered much more easily than the pole limas as the vines 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 in drills two to three feet apart, dropping the beans three to four inches apart and 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.

Bush Lima or Dwarf Sieva (Henderson's) A dwarf form of the Small White Lima, valuable on that account, and because of its extreme earliness, hardness, and productiveness. The plants are without runners but continue to grow and set pods until stopped by frost. The pods are medium dark green, short, about two and three-fourths inches, flat and contain two to four beans which are of excellent quality either green-shelled or dry. This is much used by canners, as well as for home and market garden use. Seed small, flat, and white with slight tinge of yellow. Pkt. 10c; Lb. 30c.

Burpee's Improved Bush Lima This is a little the earliest maturing of the large seeded limas. The plants are vigorous and productive. The pods are medium green, very large, about five inches long, thick, and usually contain four beans, which are unusually thick, of largest size and of excellent quality. Seed very large, thick, and usually shows a greenish white tinge which is generally considered an indication of superior quality. One of the best and most extensively used bush limas for the market as well as home garden. Pkt. 10c; Lb. 40c.

Dwarf Large White Lima A bush form of the true Large White Lima and of equally good quality. The plants are uniformly dwarf but very productive. The pods are medium green, are as broad and very nearly as long as those of the pole variety of Large White Lima and are a little more curved. They contain from three to five very large, flat beans of very good quality for home garden or market. Seed very large, flat, white with slight greenish tinge. Pkt. 10c; Lb. 40c.

Fordhook Bush Lima An improved dwarf lima of the Kumerle type. It is sometimes called Potato Bush Lima. The plants are vigorous and erect, bearing well above the ground. The pods, which are produced in large clusters, are green, about four and three-fourths inches long and each contains three to five much more productive than Kumerle and matures earlier. Seed large, irregularly oval in shape, very thick, with greenish tinge. This sort is popular for home and market use. Pkt. 10c; Lb. 45c.

NOTICE

Plan for double crops this year—late crops to follow when the early stuff comes off. Winter cabbage can be put into ground that has borne early peas. Parsnips can be sown up to mid-July. Turnips are a crop for July planting, and there is always a demand for them when the season indicates that other vegetables will be short. Celery, carrots, and cauliflower are suited to meet summer planting.

Reading about beans reminds one of that humdinger, Perfection Stringless Green Pod.

BEANS—POLE OR RUNNING

Although pole beans require considerable care and labor, they are when properly grown usually of longer bearing period than the dwarf sorts and are generally more productive.

Pole beans are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather, set poles four to eight feet long in rows four feet apart and extending north and south, the poles being three feet apart in the row. Let the poles slant slightly toward the north. Set in this way the vines climb better, and the pods are straighter and more easily seen. Around each stake plant five to eight beans one and one-half to two inches deep. When well started thin to four plants, and see that they all climb around the pole in the same way, for they will not grow if tied up in the opposite direction.

Another plan is to plant in rows thickly enough so that there will be one plant to eight or ten inches. Set posts five feet high firmly at each end of the rows and drive stakes made of two by two lumber at intervals of about sixteen feet along the rows. Stretch a wire, size number 10 or 12, between the posts along each row, and fasten it to the tops of the stakes with wire staples. Run a lighter wire or twine along the bottom about six inches from the ground and fasten to the posts and stakes with wire staples. Between these two stretch a wire or twine wherever there is a plant. The vines will run up these until they reach the top wire, when they will care for themselves. Another way is to omit the bottom wire and stick small stakes two to six inches in the soil and fasten to top wire.

Kentucky Wonder Also known as Old Homestead. We believe this variety is the most practically useful of the green podded pole beans suitable for use as snaps. It is an early, very prolific sort, with showy pods which are of most excellent quality. The vines are vigorous, climbing well and very productive, bearing pods in large clusters. The pods are medium light green, very long, often reaching nine or ten inches, curved and twisted, round, and very crisp when young, becoming very irregular as the beans ripen. Seed long, oval, slightly flattened, dun colored. One of the very best pole snap beans for the home garden or market. The quality of our stock is unsurpassed. Pkt. 5c; Lb. 30c.

M. G. Seed Co's. An early maturing, green podded, white seeded pole sort desirable for snaps and green shell beans. The vines are vigorous and very productive. The pods are round, very long, often eight to nine inches, irregular in shape and quite stringless. The beans when shelled green are large, very tender, and white, a very desirable feature when comparison is made with the colored beans of other varieties of this class. Seed medium long, oval, or well rounded, solid white. Many gardeners consider this bean the most desirable pole sort. Pkt. 10c; Lb. 35c.

London Horticultural or Speckled Cranberry One of the best of the Horticultural varieties as a general purpose late green shell bean for home or market. The vines are moderately vigorous with large, light colored leaves. The pods are medium length, four and one-half to five and one-half inches, pale green when young, becoming as they mature yellowish green striped or splashed with red. The beans are large, ovate, flesh colored, splashed and spotted with wine-red and of the highest quality, either green or dry. Many like this sort better than limas. This well-known horticultural pole bean is sold also as Wren's Egg. Pkt. 5c; Lb. 30c.

Lazy Wife One of the best of the later green podded pole beans for snaps or green shell use. The medium green pods, borne in large clusters, are five and one-half to six and one-half inches long, broad, thick, fleshy, and entirely stringless. When young they have a rich, buttery flavor which is retained until they are nearly ripe. The dry beans are excellent for winter use. Seed white, medium size, slightly oval, or nearly round. Pkt. 5c; Lb. 40c.

Dutch Case Knife The vines of this well-known green podded kidney bean for green shell use are of good climbing habit, but twining rather loosely and may be used for a corn hill sort of medium season. It is used for snaps when quite young. The leaves are large and crumpled. The pods are very long, seven to eight inches, flat, irregular, medium green, becoming lighter as they mature. Seed broad, kidney shaped, flat, clear white, and of excellent quality whether used green or dry. Pkt. 5c; Lb. 35c.

Early Golden Cluster Wax A well-known early and very attractive sort. It is one of the best wax-podded snap pole beans. The vines are large, strong growing, vigorous, and hardy, with large light green, crimped leaves. The pods are six to eight inches long, borne in abundant clusters, each containing from three to six pods varying in color from golden yellow to creamy white. The pods are very broad, thick, and fleshy. They are of very good quality and stay in condition for use a long time. Seed medium sized, flattened, oval, dull white. Pkt. 5c; Lb. 40c.

Market Gardeners' White Kentucky Wonder

Are you utilizing all that ground of yours?

POLE LIMAS

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 seed is usually planted one to two weeks later. In firm soils it will be found of advantage to place the beans on edge with the eye down as when planted in this manner they germinate and come up more readily.

M. G. Seed Co's. Early Lima In earliness, ease of shell-
ing, size, beauty, and quality
of the green beans, this variety leads all other early limas for either the home garden or market. The vines are vigorous and remarkably productive. The pods are medium green, large, flat, about five inches long, moderately curved. The green shell beans are very large, very tender, and of finest quality. Seed ovoid, flat with slight greenish tinge. Pkt. 5c; Lb. 30c.

M. G. Seed Co's. Early Leviathan Of superior quality.
Wonderfully produc-
tive. The ideal Pole Lima. Earliness is often obtained at the sacrifice of other valuable features, but in this variety we claim superiority, not only in this respect, but in size of Bean and pod and enormous productiveness. Pkt. 5c; Lb. 35c.

King of the Garden Lima The vines of this standard pole
lima are very vigorous and pro-
ductive. The pods are medium dark green, very large, five to six inches long, broad, flat, filled with four or five very large beans of finest quality. On account of its large pods it is a favorite with market gardeners. It will come into bearing earlier and make larger pods if not more than two vines are left to grow on a pole. Seed very large, ovoid, flat, with slight greenish tinge. Pkt. 5c; Lb. 35c.

Carpinteria Lima A most desirable pole lima for the home and
market garden. The vines are strong grow-
ing and vigorous, producing an abundance of fine, large, medium green pods, five to six inches long, usually closely filled with four beans of largest size, much thicker than the average pole lima. The color is distinctive in having a decided greenish tint, an indication of very finest quality. When cooked the beans are very thin skinned, extremely tender, and of finest flavor. Seed very large, exceptionally thick, retaining the distinctly green tinge. Pkt. 5c; Lb. 35c.

Gigantic Lima This new variety first offered by us last year is the
largest podded variety of any lima yet introduced.
The Gigantic Pods are eight to twelve inches long, broad, dark green color and contain from six to eight beans of the best quality. Vines vigorous strong growing, exceptionally productive and come into bearing medium early. Seed large, rather flat, medium green. Consider this the most productive and best sort for market or home use. Pkt. 10c; Lb. 50c.

Gigantic Pole Lima

Here are some practical suggestions from the United States Food Administration:

1. Do not can vegetables which can be matured and form a more nutritious food mature than canned green. Lima beans and others are examples of this class.
2. Root crops, like beets and carrots, should be stored, instead of canned.
3. Some products, like tomatoes, can be concentrated in purees and pastes and thus take up less space.
4. Fruit pastes, which are concentrated products made of fruit pulp, can also be considered. These are of thicker consistency than jams and fruit butters and may be dried and packed in layers, thus being economical and convenient.
5. Fruit juices for jelly stock and other purposes can be extracted, bottled in various containers, sterilized, and sealed. Larger quantities can thus be economically saved than when finished products demanding more time, fuel, and sugar are made in the summer season. If the jelly is made only as needed, fewer glasses will be required since these containers will be used again and again.
6. Valuable fruit syrups which can be substituted for cane and sorghum syrups can be made from juice of apples, scuppernong grapes, and other fruits. When fuel is plentiful for the boiling processes involved, these are economical because they do not require the use of any sugar. These syrups can also be used instead of sugar when making jams and marmalades of the same fruits.

Have you heard about our Gigantic Pole Lima pictured and described above?

BEET

Crosby's Egyptian Blood Turnip

not so well suited as Extra Early Egyptian Blood Turnip for forcing in hotbeds or for transplanting. Our stock is exceptionally uniform in shape and color, and is earlier than the older strains which are similar in shape but show the purplish red color. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Detroit Dark Red We believe this is the best beet for the market and home garden, and on account of its uniformly deep rich color the most desirable for canning. The tops are small and upright in growth. The leaves are dark green, shaded with red. The roots are medium sized, globular or nearly round, very smooth and of dark blood red color. The flesh is deep vermilion-red, zoned with a lighter shade of the same color. The variety is very desirable for bunching. Careful comparisons with all prominent varieties on the market prove that Detroit Dark Red is the most uniform in shape and size and the most attractive in color. It is unsurpassed in quality. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Early Blood Turnip (Improved) An extra selected stock of Blood Turnip, having larger, coarser tops and root than Detroit Dark Red and requiring a longer time to mature. The roots are dark red and nearly round or slightly flattened. The flesh is deep red, zoned with lighter shade, sweet, crisp, and tender. This is an excellent market and home garden sort for summer and autumn use. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Edmund's Early Blood Turnip A desirable second early market beet, suitable also for the home garden. Tops short, rather spreading; ribs and leaf stalks dark red; blade of leaf bright green, often with wavy edge, roots nearly round or slightly flattened. Exterior color dark red, interior purplish red with little zoning, crisp, tender, sweet, and an excellent keeper. Pkt. 5c; Oz. 15c; ¼ Lb. 30c; Lb. 90c.

Crimson Globe Beet This splendid variety has now been grown quite extensively in many sections of the country and the many good reports received from old customers indicate that it gives most thorough satisfaction. The root is of medium size generally about three inches in diameter, very handsome in shape, being a little deeper than round, with a remarkably smooth surface. It has a very small tap-root. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Early Turnip Bassano or Sugar This second early variety when young is very sweet and tender. It is excellent for the table, being especially adapted for use as greens. The tops are large. The roots attain a large size, are light red in color and flattened turnip-shaped with rather heavy tap. The flesh is pink, zoned with creamy white. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

Swiss Chard (Sea Kale or Spinach Beet) This kind of beet is grown exclusively for the numerous, fleshy, tender leaves and leaf stalks, which are superior to those of other beets for use as greens. Later in the season the wax-like leaf stems are cooked like asparagus or are pickled. This variety we offer has large, broad, undulated leaves of attractive yellowish green color, and remarkably large, broad white stalks and midribs or chards. It is well worthy of a place in the home garden as well as for market use. Swiss Chard is sometimes called Leaf Beet and Silver Beet. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

M. G. Seed Co's. Late Blood A standard late variety of very good quality which keeps well through the winter. The roots are smooth, with few or no side roots but a good tap root. The exterior color of the roots is very dark purple, almost black. Flesh is dark red, tender, and sweet. It is an excellent sort for pickles and holds its top well in the hottest weather. Best late sort for market gardeners. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.00.

M. G. Seed Co's. Sugar A medium early, pink bright turnip shaped beet of very good quality for market and home garden use. The tops are medium sized, with bright green leaves. The roots are thick and slightly top shaped with a medium sized tap. The flesh is light pink, zoned almost white; crisp and tender. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.00.

Detroit Dark Red

NOTICE—Cooking Recipe for Swiss Chard

PLAIN BOILED CHARD—Wash and cut the stalks 1 inch wide; put in sauce-pan and cover with boiling water; boil 30 minutes, or until tender; drain; dust with salt, 1 teaspoon to the quart of chard; garnish with hard-boiled egg. Serve with either lemon juice or vinegar. May also be boiled with smoked bacon.

CREAMED CHARD—Strip the green from the ribs; boil the green alone; drain and cream same as spinach. Cut the ribs in 3-inch pieces; put in saucepan; cover with boiling water and boil 35 minutes, or until tender; drain; dust with salt; pile in center of shallow dish and pour the creamed green around. Garnish with 1 hard-boiled egg chopped fine.

If fond of greens, try Swiss Chard.

Improved Mammoth Long Red
Mangel Wurzel

SUGAR BEET FOR SUGAR MAKING

The Sugar Beets are desirable not only for sugar making but are valuable for stock feeding and when small may be used for the table. The best soil is a rich, friable sandy, or clayey loam. Rich, mucky soils will often give an immense yield of roots which, though excellent for feed, are of little value for sugar making.

Plant early in spring in drills two to two and one-half feet apart, and about one inch apart in the row, covering with about one and one-half inches of fine soil, firmly pressed down. Cultivate frequently. When about three inches high begin thinning and continue at intervals until the roots stand about ten inches apart.

Vilmorin's Improved One of the richest sorts in sugar content. It will do better on new lands than any other, suffers less from an excess of nitrogen and will keep the best. The tops are of medium size, with smooth, bright green leaves. The roots are of medium size, white flesh, and often yield from ten to sixteen tons per acre. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

Klein Wanzleben The roots are a little larger than Vilmorin's Improved and a little harder and easier grown. The tops are rather large and the leaves slightly waved. This sort often yields under careful culture from twelve to eighteen tons per acre. It is probably the best sort for the experimenter to use. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

MANGEL WURZEL

The culture of the Mangel Wurzel, also called Mangel, Cattle Beet and Field Beet, is much the same as for Sugar Beets. The Mangels may be grown in almost any soil, but deep loams are necessary for heavy yields of the long varieties.

M. G. Seed Co's. Improved Mammoth Long Red The roots are very large, uniformly straight and well formed and comparatively thicker than the common sort. The flesh is white tinged with rose. This strain under careful culture is enormously productive. Our stock will produce the largest and finest roots which can be grown for feeding stock and is vastly superior to many strains offered under other names, such as Norbitan Giant, Colossal, Monarch, etc. Pkt. 5c; Oz. 10c; ¼ Lb. 25c; Lb. 75c.

Golden Tankard The tops are comparatively small, with the leaf stalks and veins distinctly tinged with yellow. The neck is small. The roots are large, ovoid, but with bottom usually of larger diameter than top, light gray above ground, deep orange below. The flesh is yellow, zoned with white. Pkt. 5c; Oz. 10c; ¼ Lb. 25c; Lb. 75c.

BROCCOLI The heads resemble somewhat a coarse cauliflower and the culture is the same in all essentials as for that vegetable. Broccoli is well adapted only to those sections where the season is long, cool, and rather moist. One of the most valuable features is that it withstands greater extremes of temperature than cauliflower.

Early Large White French This is considered the best sort for most sections. The plants are very hardy, vigorous, and easily grown. The heads are white, compact, hard, and of good quality. Pkt. 5c; Oz. 60c; ¼ Lb. \$2.00; Lb. \$7.50.

BRUSSELS SPROUTS This vegetable is used in the fall and early winter and by some considered more tender and delicious than any cabbage. The plant resembles the cabbage, the edible part being the numerous very small heads or sprouts an inch or two in diameter formed on the stalk at each leaf joint. The culture is the same in all essentials as for cabbage, except the leaves should be broken down in the fall to give the little heads more room to grow.

Improved Half Dwarf This favorite Paris market sort is probably the most useful variety. The plants are half dwarf, growing about one and one-half to two and one-half feet high. They are very hardy and produce compact, rounded, grayish green sprouts of good size and fine quality.

Pkt 5c; Oz. 30c; ¼ Lb. 90c; Lb. \$2.75.

CABBAGE

For many years cabbage seed has been a leading specialty with us. Our cabbage seeds are all grown from approved stock seeds. We believe there is no seed that is more reliable, nor any that can be more implicitly depended upon to give planters uniformly satisfactory results.

The requisites for complete success with cabbage are: First, good seed. In this crop the quality of the seed used is of the greatest importance. No satisfactory results can possibly be obtained when poor seed is planted. Second, rich, well prepared ground. A heavy, moist, and rich loam is most suitable. Third, frequent and thorough cultivation. The ground should be highly manured and worked deep. Cabbage is grown all over the country and specific directions regarding the time and methods of planting applicable to all localities cannot be given. In general, north of the 40th parallel the early sorts should be sown very early in hotbeds, hardened off by gradually exposing them to the night air and transplanted as early as the ground is in good condition, setting eighteen to thirty-six inches apart, according to size of variety. South of the 40th parallel sow about the middle of September, or later according to latitude, transplanting into cold-frames if necessary to keep through winter and setting in open ground as early as possible in the spring.

The late autumn and winter varieties may be sown from the middle to the last of spring and transplanted when four to six inches high. If the weather and soil are dry the late sowings should be shaded and watered in order to hasten germination, but it is important that the plants should not be shaded or crowded in the seed-bed, or they will run up weak and slender and will not endure transplanting well. Cabbage should be hoed every week and the ground stirred as they advance in growth, drawing up a little earth to the plants each time until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full grown heads.

NOTICE—Prices on Cabbage Seed include Postage.

Are you utilizing all that ground of yours?

Charleston or Large Wakefield

CABBAGE—Continued

To preserve cabbages during the winter, pull them on a dry day and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them in long trenches in a dry situation, covering.

A great many of the varieties of cabbages are simply strains rather than distinct sorts and are really the same as some older and better known kinds. We are confident that every good quality can be found in a greater degree in the varieties we offer than in any other kinds.

Early Jersey Wakefield This most excellent variety is the earliest and surest heading of first early cabbages for the market and home garden. Most gardeners depend upon it for the bulk of their extra early crop. The plants are exceedingly hardy, not only in resisting cold but other unfavorable conditions. They are compact and erect or very slightly spreading, with few outer leaves, which are smooth, thick, nearly oval, and deep green. The stem is short. The heads are of medium size, very solid, uniformly pointed and of excellent quality. Our stock, grown and selected with great care, is of first quality. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.00.

Charleston or Large Wakefield A strain in which the plant is larger and a little later than Early Jersey Wakefield, the head being fully as solid but less pointed and considerably larger. The leaves are rather large, smooth, and comparatively thick. Its exceeding hardness, earliness, and size of head have made it with market gardeners and shippers a popular sort to follow Jersey Wakefield. The plants are medium sized, very vigorous, slightly spreading. The heads are blunt-pointed but very broad at the base. Our stock can be depended upon to produce uniformly fine, marketable heads. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.00.

Henderson's Early Summer An excellent, second early, somewhat flattened cabbage, valuable for the home garden and takes well on the market. It is also well adapted for kraut. The plants are vigorous and strong growing but compact, with numerous but not large, rather spreading outer leaves which are somewhat frilled; stem rather short. The heads are of medium size, round, somewhat flattened and keep longer without bursting than most early sorts. Pkt. 5c; Oz. 30c; $\frac{1}{4}$ Lb. 90c.

Copenhagen Market The earliest large round-headed cabbage yet introduced. The heads are exceptionally large for so early a variety, very solid and of most excellent quality. The plants are vigorous but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. This is a most excellent sort, both for the home garden and market gardening trade. Our strain produces the characteristic large, round heads that for solidity and excellent quality make this variety so valuable. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.25.

All Head Early This excellent second early market sort produces heads that are very large for so early a cabbage and of very good quality. It is desirable not only for general spring planting but by planting late it can be used as a fall and early winter cabbage. The variety is well adapted for kraut. The plants are compact, with few outer leaves which are comparatively smooth and rather thick; stem short. The heads are solid and flat but very deep. Our strain is of special value. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.00.

All Seasons A very desirable large cabbage of intermediate season, adapted for autumn as well as late summer use, and considered one of the most desirable for kraut. The plants are very vigorous and sure heading, with few outer leaves which are large and fairly smooth or slightly wavy. The heads are nearly round or somewhat flattened, very solid and of excellent quality. It is remarkable for its ability to stand the hot sun and dry weather, remaining an exceptionally long time in condition for use. Sometimes sold as Vandergaw. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.00.

Early Dwarf Ulm Savoy An early Savoy cabbage of small size and most excellent flavor. The plants are rather small but vigorous. The outer leaves are medium sized, much crumpled, thick, fleshy, deep green. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.00.

Chinese Cabbage (PE-TSAI) The improved strain we offer resembles when well grown Cos Lettuce rather than Cabbage. It is often called Celery Cabbage on the market. The leaves of the plant when young are crimped at the edges, of light green color and appear like smooth leaved mustard but with much broader and heavier midribs. The plant as it matures becomes more upright and forms heads much like Cos Lettuce. The inner leaves blanch an attractive light yellow or creamy white with very white midribs. It is of distinctive flavor, very mild and pleasant. It is served as a salad like lettuce or cooked like asparagus. The early plantings of Pe-Tsai run quickly to seed in hot weather. Sow in drills fourteen to twenty inches apart and thin seedlings two or three times; or if grown for the market start in boxes and transplant like late cabbage. Pkt. 5c; Oz. 30c; $\frac{1}{4}$ Lb. 90c.

Glory of Enkhuizen This second early variety is very sure heading and of excellent quality. The plants are of vigorous growth, with large, rather spreading outer leaves which are noticeably curved and frilled. The heads are globular or very nearly round, very solid, and of large size for so early a variety. Pkt. 5c; Oz. 35c; $\frac{1}{4}$ Lb. \$1.25.

Early Dwarf Flat Dutch The plants of this valuable second early sort are short stemmed, compact and upright with comparatively few and short leaves. The heads are large for size of plant, are nearly round or somewhat flattened, close, firm, and very solid. They mature a little earlier than Early Summer. This variety is extensively used for home garden and market. Pkt 5c; Oz. 30c; $\frac{1}{4}$ Lb \$1.00.

Market Gardeners Copenhagen Market

Copenhagen Market, most profitable Cabbage for market gardeners.

CABBAGE—Continued

M. G. Seed Co's. Premium Flat Dutch This strain is the result of much care on our part to develop and maintain the good qualities which have made this sort so popular. The plants are very hardy, comparatively slow growing but very sure heading; stem rather short. The plants are exceptionally vigorous, with very large, broad, spreading outer leaves which are moderately smooth or very slightly waved and slightly blistered. The heads are uniformly large, often very large, flat but deep, distinctly flattened on the top, solid, and of excellent quality. This is considered by many as the standard, very large late cabbage for home garden and market. It is an excellent keeper. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.00.

M. G. Seed Co's. Premium Late Drumhead We recommend this sort for markets that require a very large and deep head. It is also much used as a main crop or late sort for the home garden. The plants are large, fairly compact but distinctly vigorous, with medium length stem and large outer leaves, which are upright in growth and moderately waved. The heads are uniformly large, very large when grown in good, rich soil, are flattened on top but very deep, compact, and of excellent quality. The heads can be kept in good condition until late in spring. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.00.

Surehead One of the most reliable main crop or late cabbages for northern latitudes, being very hardy and exceptionally sure heading. In some sections this is used largely as a late home market cabbage and for shipping. The plants are rather upright, with many outer leaves which are waved, thin edged, crimped, and distinctly frilled; stem rather short. The heads are large and broad, thick somewhat flattened, compact, very solid, and of excellent quality. Pkt. 5c; Oz. 30c; ¼ Lb. \$1.00.

Mammoth Rock Red The largest and surest heading red cabbage, much better than stock offered as Red Drumhead. The plants are large and vigorous with medium length stem and spreading outer leaves which are dark green with red veining. The heads are late maturing, large, round, very solid and of very attractive deep red color. The variety is much used for cold slaw and pickling. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.25.

Improved American Savoy The best of the main crop and late Savoys for home use or markets. The plants are vigorous, of medium size, with rather short stem, and are very sure heading. The outer leaves are medium large, thick, fleshy, and densely and uniformly crumpled. The heads are large, nearly round, fairly solid, sweet, and tender. The quality is superior to sorts that have been offered as Perfection Green Globe or Drumhead Savoy. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.00.

CARROT

The carrot is one of the most wholesome and nutritious of our garden vegetables and it should be planted in every garden as well as among the field crops. For horses and as winter feed for milch cows, the carrot cannot be surpassed and it should be more largely grown by farmers for this purpose.

While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land is thoroughly and deeply worked will produce satisfactory crops. It is advisable to sow as early in the spring as the ground is fit to work, though good crops may be grown from late sowings. For table use sow the smaller kinds early in rows sixteen to eighteen inches apart. For field culture sow in drills eighteen to twenty-four inches apart, using from one and one-half to three pounds of seed to the acre. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear, use the cultivator or wheel hoe. Thin two to six inches apart in the row, according to the size of the variety. Notice—Prices on carrot seeds include Postage.

Chantenay

Market Gardeners' Forcing The tops of this early half long frame sort are very small and seed may be sown very thickly as the variety is well adapted for forcing. The roots are of medium size, slender, cylindrical with remarkably small neck, handsome deep orange color, tender throughout and of the best quality. They are usually four and one-half to five inches in length, but sometimes grow considerably longer. Pkt. 5c; Oz. 15c; ¼ Lb. 50c; Lb. \$1.25.

Half Long Scarlet Nantes This extensively used, half long early variety has small tops and is excellent for the market or home garden. The roots are cylindrical, smooth and of a bright orange color. The flesh is orange, becoming yellow in center but very tender throughout. This variety is of the finest quality and is one of the most symmetrical and handsome of the medium sized sorts. The mature roots are usually five to six inches long. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Chantenay A most excellent, medium early, half long variety. It is one of the best in quality for the market and home garden, while its great productiveness and the ease with which it can be harvested make it desirable as a field sort. The tops are medium sized with small neck. The mature roots are thick, five to five and one-half to six inches in length, uniformly half long or stump rooted but tapering slightly, smooth, deep orange-red in color. The flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any. The variety is extensively used for bunching. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Guerande or Ox Heart Especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. The tops are comparatively small. The mature roots are four and one-half to five inches long, very thick, ending abruptly in a small tap root. The flesh is bright orange, fine grained and sweet. When young the roots are desirable for table use as a medium early carrot and when mature they are equally good for stock feeding. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

Danvers A half long orange carrot, grown largely on account of its great productiveness and adaptability to all classes of soil. It is a desirable second early carrot for the home garden and is also suitable for field culture. The tops are medium size. The mature roots are of medium length, six to eight inches long, tapering uniformly to a blunt point. The flesh is deep orange, tender, and of good quality. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Market Gardeners' Forcing

Carrots, dear reader, are mighty wholesome and nutritious.

CAULIFLOWER

Erfurt Cauliflower

Notice—Prices on Cauliflower Seeds include postage.

Market Gardeners Greenhouse or Forcing Unquestionably the earliest maturing strain of the true short leaved Snowball type of cauliflower. It is admirably adapted for forcing or wintering over for early crop and is the most popular sort for these purposes, also one of the best sorts for late summer and fall crop. A most desirable sort for the home garden. The plants are compact, with few short, outside leaves and are well suited for close planting. The heads are of medium to large size, solid, compact, round, very white, and curd-like and are developed earlier than those of any other sort. We are in position to supply the most critical trade with seed which can be depended upon as the very best. Pkt. 5c; Oz. \$4.00.

Early Snowball An extremely early variety producing magnificent white heads of finest quality. For market gardeners' use it is one of the most profitable. Excellent for family use. Pkt. 5c; Oz. \$3.00.

Early Dwarf Erfurt A remarkably sure heading early Cauliflower. It is of dwarf habit with short outside leaves and is similar in all respects to Early Snowball, and nearly as early. The heads when ready for market are of medium to large size. The curd is white, exceptionally deep and of finest quality. It will give excellent results either in the home garden or for market use and is superior to most seed sold at higher prices. Where extreme earliness is not the greatest consideration we recommend this strain after having proven it far superior to most stocks offered as Snowball. Pkt. 5c; Oz. \$3.50.

Veitch's Autumn Giant A distinct and valuable late variety with long stems and dark green leaves. The heads are very large, white, firm, and compact and being well protected by foliage, remain a long time fit for use. The plants should be started and transplanted early in the season to insure their full development. Pkt. 5c; Oz. \$1.25.

CELERY

Sow the seed (which is slow to germinate) from about February 20 to April 20 in shallow boxes indoors or sow in a finely prepared seed bed out of doors in April in straight rows so that the small plants may be kept free from weeds. See to it that the seed is not covered too deep and that the bed is kept moist, almost wet, until the seeds germinate, as plenty of moisture is essential to get a satisfactory growth. The seed will not germinate well if planted in a hotbed or where subjected to a temperature above 60° F. When the plants are one to two inches high, thin out and transplant so that they may stand two or three inches apart each way. When they are four inches high, cut off the tops, which will cause the plants to grow stocky. Plants are usually set out when about five inches high. It is well to cut off the lower half of the roots before transplanting.

The crop is usually made to succeed some earlier one, but in order to grow good celery the soil must be made as rich as possible, the essentials to success being very rich soil and plenty of water. If good plants are used, they may be set out as late as the middle of August, but the best results are usually obtained from setting about the middle of June or first of July. The most desirable time will depend upon local climate and is that which will bring the plants to maturity during cool, moist weather. In setting, prepare broad trenches about six inches deep and four to six feet apart, in which the plants should be set six inches apart, cutting off the outer leaves and pressing the soil firmly about the roots. The compacting of the soil excludes the air from the roots until new rootlets are started. The only care now necessary for about six weeks is to keep the plants free from weeds by frequent cultivation.

Special Notice—Read on first page.

Cauliflower, although one of the most delicious vegetables, is but little grown except by professional gardeners because of the erroneous notion that it is so difficult to grow that only skilled gardeners can produce it. Any one will be reasonably sure of success with this most desirable vegetable if the cultural directions given below are carefully followed.

Sow in March or early in April in hotbed and transplant to cold-frame when sufficiently large to handle. As soon as danger of hard freezing is over set in the open ground in rows two and one-half feet apart and eighteen inches apart in the row. The plants will endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better if made richer than is ordinarily used for that crop. Plenty of good manure must be well incorporated with soil and the latter be brought in to the highest state of tilth. No application, however, can be more necessary or more useful than that of cultivator and hoe.

All the cauliflower seed we offer is produced by the most experienced growers in Europe, in such localities as are best suited to its proper development and the greatest care is taken to save seed from perfectly developed plants only.

CELERY—Continued

When the plants are nearly full grown they should be "handled," which is done by gathering the leaves together while the earth is drawn about the plant to one-third its height, taking care that none of it falls between the leaves, as it would be likely to cause them to rust or rot. After a few days draw more earth about them and repeat the process every few days until only the tops of the leaves are visible. Or it may be blanched by pressing the leaves together with two wide boards held in place by stakes or by wire hooks at the top. This is the method commonly used by market gardeners and the rows need to be only about three feet apart, but celery so blanched is not so good in quality and is more likely to become pithy than that blanched with earth. Care should be taken that the plants are not disturbed while they are wet or the ground is damp; to do so increases the liability to injury from rust.

A part of the crop may be simply "handled" and then at the approach of severe freezing weather taken up and set out compactly in a dark cellar or an unused cold-frame, where the temperature can be kept just above the freezing point and it will then gradually blanch so that it may be used throughout the winter. Should the plants begin to wilt, water the roots without wetting the stalks or leaves and they will revive again.

Celery is sometimes grown by what is termed the new process which consists in making a spot as rich as possible and there setting the plants six to eight inches apart each way. If the soil is very rich and there is an abundance of water, the plants will blanch each other and the product will be very white and handsome, but we think it is inferior in quality to that grown by the old method. Notice—Prices on Celery Seed include postage.

M. G. Seed Co's. Golden Yellow Self Blanching This is the standard celery for early use. It is in condition as early in the fall as any and we have yet to find a strain better in quality and appearance than our stock of Golden Yellow Self Blanching. Critical gardeners generally depend upon our stock to produce their finest celery. It is excellent for the home garden. The plants are of medium size, compact and stocky, with yellowish green foliage. As they mature the inner stems and leaves turn beautiful golden yellow so that blanching is effected at a minimum expenditure of time and labor. Its handsome color, crispness, tenderness, freedom from stringiness, and fine nutty flavor have established it as a superior early sort. Pkt. 5c; Oz. 75c; ¼ Lb. \$2.50.

White Plume A handsome, very early variety. The leaves are light, bright green at base, shading nearly white at tips. As the plants mature, the inner stems and leaves turn white and require to be earthed up but a short time before they are in condition for use. Although very attractive, we do not think that it compares favorably with the Golden Yellow Self Blanching either in flavor or solidity, or that it will remain in condition for use as long. White Plume has been much in demand as a market sort on account of its very attractive appearance and requiring a very short time for blanching. It is suitable also for the home garden. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.00.

Easy Blanching This is a green leaved variety developed from the Golden Yellow Self Blanching and we recommend it as being of the very best quality for fall and early winter use for the home garden and market. It blanches to a beautiful yellowish-white color, is very solid and crisp, and of a fine nutty flavor. The stalks are of medium height, very thick, the upper portion nearly round but broadening and flattening toward the base. With high culture this variety will give splendid satisfaction as a growing sort for fall and winter use. In the south it is prized more than almost any other kind. Pkt. 5c; Oz. 75c; ¼ Lb. \$2.50.

Winter Reliance This is considered the most attractive in color and the best in quality of any of the late keeping sorts. The plants are moderately dwarf, compact, with solid heart and habit of growth very well adapted for late keeping. When ready for the late market the color is a very attractive light creamy yellow. The quality is unsurpassed by any variety of its class and is decidedly superior to most of the older, long keeping sorts. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.00.

Celeriac OR TURNIP ROOTED CELERY In this kind of celery, the roots have been developed by cultivation and not the leaf-stalks. The roots, which are the edible portion, keep well for winter use and are excellent for soups and stews. They are also cooked and sliced as a salad.

Sow seed at the same season and give the same treatment as common celery. Transplant to moist, rich soil, in rows two feet apart and six inches apart in row. Give thorough culture. It is not necessary to earth up or "handle" the plants. After the roots have attained a diameter of two inches, they are fit for use. To keep through winter pack in damp earth or sand and put in the cellar or leave out of doors, covering with earth and straw like beets and carrots.

Large Smooth Prague This improved variety produces large roots of nearly globular shape and comparatively smooth surface. Pkt. 5c; Oz. 25c; ¼ Lb. 75c.

Chervil A hardy annual with aromatic leaves resembling parsley and by many considered superior to it in flavor. The young leaves are used in soups and salads and for flavoring and garnishing meats and vegetables.

Sow in early spring in rich, well prepared soil. The seed is slow to germinate, sometimes remaining in the earth four to five weeks before the plants appear. When the plants are about two inches high, transplant or thin to about one foot apart. They are ready for use in six to ten weeks from sowing.

Curled This sort is greatly superior to the old, plain variety, being earlier, handsomer and having fully as fine fragrance and flavor. Pkt. 5c; Oz. 15c; ¼ Lb. 40c.

M. G. Seed Co's. Golden Yellow Self Blanching

Plant seeds that you possibly overlooked last season.

CORN SWEET OR TABLE VARIETIES

A rich, warm, alluvial soil is the best, but excellent sweet corn can be raised on any good, ordinary soil, if it is deeply and thoroughly worked before planting. In the North sweet corn should be planted as early as can be done without risking great loss from frosts or from rotting of the seed in the soil.

If planted in rows, make the rows three to four feet apart, according to the vigor of growth of the variety, and place the seed twelve to sixteen inches apart in the row, covering one inch deep with fine soil firmly pressed down.

If planted in hills, make the hills for the early varieties three feet apart each way and plant six kernels to the hill. For the later sorts the hills should be not less than four feet apart each way. Hoe frequently, and when six inches high thin so as to leave three to four plants in the hill. Give frequent and thorough but shallow cultivation until the tassels appear.

Notice—If Corn is wanted sent Parcel Post add 5c for the first pound and 1c. for each additional pound.

Golden Honey Dew A New Golden Grain variety that has ears about seven inches long which resembles Golden Bantam in color. Stalks about five feet high, usually twelve rowed and when ready for use is golden yellow in color. Grains longer than Golden Bantam, very sweet and tender and remains fit for table use longer than any yellow variety. Once you try this variety it will become your favorite Sugar Corn. Pkt. 5c; ¼ Lb. 15c; Lb. 50c; 5 Lb. \$2.00.

Golden Bantam This is an early sweet corn with golden yellow grain, very tender and of excellent quality. The ears are eight rowed, six to seven inches long and of the medium size found most suitable for the table. The flavor is exceptionally rich and delicious. The stalks are four to five feet high. Our stock of this splendid home garden and market variety has been very carefully selected and is decidedly superior to much that is offered. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

M. G. Seed Co's. Money Maker We consider this the best extra early corn for the market and home garden. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome, seldom with any opening between the rows at the base. The grain is large, broad, very white, and of remarkably good quality for such an early sort. The size and beauty of this variety give it ready sale even when the market is overstocked. Pkt. 5c; Lb. 40c; 5 Lb. \$1.50.

Kendel's Early Giant Remarkably large in ear for a second early sort and extensively grown in some localities for the market. The stalks are about five and one-half feet high. The ears are about eight to nine inches long, twelve rowed. The grain is very broad and shallow, and the quality very good. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

Mammoth Blue Bantam This corn, when very young, cooks remarkably white, but the tye grain is bluish black. For home use we consider it the best second early sort where tenderness and sweetness are the qualities most desired. It does especially well as a second early variety in the South. The stalks are about six and one-half feet high. The ears are about eight inches long and are usually eight rowed. Pkt. 5c; Lb. 30c; 5 Lb. \$1.25.

Stowell's Evergreen The standard main crop variety, much used for the home garden, market, and canning. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best known of all late sorts. The ears about seven to eight inches long, fourteen to twenty rowed. The stalks are about seven and one-half feet high. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

Country Gentleman This variety has a small, white cob, very long slender, white grains of excellent quality. The ears are seven to nine inches long. The stalks are from six and one-half to seven feet high. It is well adapted for canning as well as the home garden and market, and many consider it as the best of the late varieties. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

Mammoth This variety, also called Late Mammoth, produces the largest ears of any sweet corn. It is noted for the immense size of the ears, which are often twelve inches long, but are sweet, tender, and delicious. They are sixteen or eighteen rowed. The stalks are very large, about eight feet high. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

Zig-zag Evergreen This fine new strain possesses the distinct characteristics which have made Stowell's Evergreen so deservedly the favorite for main crop, but produces ears fit to use from one week to ten days earlier. Rows irregular. Pkt. 5c; Lb. 25c; 5 Lb. \$1.00.

M. G. Seed Co's. Double Nose or Club This late or main-crop variety is a strain of Zig Zag, producing a larger ear than the former, but retaining its productiveness, similar fine quality, and irregular "shoe-peg" arrangement of the crowded, slender, deep grains. The ears, being so much larger than those of the original type, are more desirable in our locality as a market variety. Pkt. 5c; Lb. 30c; 5 Lb. \$1.25.

Early Adams or Burlington An excellent early field variety and often used for table, particularly in the South. The ears are about eight inches long, twelve or fourteen rowed. The kernels are white, rounded, somewhat deeper than broad and indented at the outer end which is whiter and less transparent than the inner. The stalks are about six feet high. Pkt. 5c; Lb. 20c; 5 Lb. 75c.

Zig Zag

Look for list of Field Corn for feeding or ensilage on page 74.

We urge all to try our Golden Honey Dew Corn. You will never regret it.

CUCUMBER

This in one of the vegetables that can be grown to perfection by any one who can control a few square yards of reasonably good soil that is fully exposed to the sun. Every family should be supplied from its own garden, since the fruit is so much better when gathered fresh from the vines as desired for use than it is in the more or less wilted condition in which it is found on the market.

In order to obtain the largest yield of cucumbers, the soil should be well enriched with well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed not over an inch deep in hills four to six feet apart each way, dropping fifteen to twenty seeds in a hill. After the plants begin to crowd and danger from the striped beetle is pretty well over, thin to three plants to the hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable.

In field culture, plow furrows four feet apart and similar one at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure which should be well mixed with the soil, forming a broad, flat hill four to six inches above the surface. Many growers omit every fourth row, thus forming paths for the distribution of manure and gathering the fruit.

In many sections, where earliness is very important, market gardeners start plants in boxes made like the ordinary berry box, but without the raised bottom. The boxes are set in hotbeds or cold-frames, filled with rich, friable soil and the seed planted. When danger of frost is over, the plants are set in the open ground, the boxes being cut away so that the roots are not disturbed at all.

Pick the fruit as soon as it is large enough and before it begins to ripen, as the vines will cease setting fruit as soon as any seed begins to mature. In gathering for pickles, cut the stem instead of pulling the fruit off and be careful not to mar the fruit in any way, for if the skin be broken the pickles will not keep so well.

NOTICE—Prices quoted on Cucumber, Cress and Corn Salad Seed include Postage.

Early Cluster An early and very productive variety. The vines are hardy and very vigorous, bearing fruits in clusters of two or three. The fruits are short, thick, bright green, shading lighter at blossom end, crisp and tender. This sort is planted in many sections for the home garden. It is extensively used for a pickling cucumber as well as for slicing. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

Boston Pickling This is a very productive variety that is extensively grown for pickles. The vines are vigorous. The fruits are bright green, of medium size, very smooth and symmetrical. The flesh is crisp and tender. Our seed is decidedly superior to much that is offered. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Small Gherkin (For Pickles) This is a very small, oval, prickly fruited sort quite distinct from all others and grown exclusively for pickles. It is the smallest of all the varieties and should always be picked when young and tender. The seed is distinctly smaller than that of other cucumbers and is slow to germinate, requiring usually from two to three weeks. Pkt. 5c; Oz. 15c; ¼ Lb. 50c; Lb. \$1.50.

Improved Long Green The stock we offer under this name is in a class by itself. The vines are very vigorous and productive. The fruits are very long, often twelve to fifteen inches when mature, and are sometimes longer. They are uniformly slender and of beautiful dark green color. The large warts and spines are well distributed over the surface instead of being clustered at one end as in inferior stocks. The variety furnishes some fruits early but matures the bulk of its crop rather late. It is a standard sort for slicing and is very largely used for pickles. The fruits are often used for making sweet pickles. This is probably the most extensively used cucumber for the home garden and market. The stock we offer has no equal. Pkt. 5c; Oz. 20c; ¼ Lb. 70c; Lb. \$1.75.

Jersey Pickling This variety is between the Long and the Short Green, forming a long, slender, cylindrical pickle which is very crisp and tender. The vines are very vigorous and productive. The mature fruits are about eight to nine inches in length and are sometimes longer. This sort is desirable for slicing as well as for pickling. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Early White Spine One of the best sorts for table use. The vines are vigorous, fruiting early and abundantly. The fruits are uniformly straight, light bright green, fairly well covered with white spines and when mature are often about seven inches in length and are sometimes longer. The flesh is crisp, tender, and of excellent quality. The variety is much used for the home garden and market. Pkt. 5c; Oz. 10; ¼ Lb. 30c; Lb. 90c.

Klondike A medium early, white spined cucumber of handsome, very dark green color and of excellent quality for slicing. The vines are very hardy and productive. The mature fruits when grown under favorable conditions are often about eight inches in length, and are uniform in size and shape. The color is very dark green, slightly striped at the ends. The dark green color is retained much longer and is affected less by the hot sun than any other sort with which we are familiar. Its uniform size and shape and splendid color are making this variety very popular as a shipping sort. Pkt. 5c; Oz. 15c; ¼ Lb. 30c; Lb. \$1.00.

Extra Long or Evergreen The fruits of this desirable table variety are long, cylindrical, dark green, with

White Spine very white, crisp, and tender flesh. The vines are vigorous and productive and come into full bearing somewhat later than Early White Spine. The mature fruits are about eight to nine inches in length and are sometimes longer. This variety is adapted also for forcing. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.50.

Extra Long or Evergreen White Spine

CRESS

As early in spring as the ground can be worked sow the seed in rich, well prepared soil, in shallow drills about sixteen inches apart, covering with about one-half inch of fine soil firmly pressed down. When the young plants are well started thin four to six inches apart in the row. For succession plant every two weeks, thinning out as required for use. Keep off insects by dusting with Pyrethrum powder.

Curled or Pepper Grass The leaves of this small salad are used for garnishing. It is also desirable with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. The plant is of rapid growth, about one foot high. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

True Water This is a distinct variety of cress with small, oval leaves and thrives best when its roots and stems are submerged in water. A fair growth may be obtained in soil which is kept wet but does best when along moist banks or in tubs in water-covered soil. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. The seed

is usually sown and lightly covered in gravelly, mucky lands along the borders of small, rapid streams. The plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots. When gathered for the market the shoots should be cut, not broken off. In summer it is best to cut them closely, the oftener the better. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.25.

CORN SALAD Feticus or Lamb's Lettuce

This is a small, quick growing salad plant for late fall, winter, and spring use. The leaves are used as a substitute for lettuce and spinach.

During August and September sow the seed in shallow drills about one foot apart, covering with about one-fourth inch of fine soil firmly pressed down. On the approach of severe cold weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in spring and like most salad plants are greatly improved if sown on very rich soil. The seed we offer is extra cleaned. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

Cucumbers have been grown for several thousand years.

Chicory--Large Rooted or Coffee The dried and prepared roots are much used as a substitute for coffee, and the young leaves may be used as a spring salad. Our stock is the improved type, with very much larger, smoother, whiter, and proportionately shorter roots than the old kind.

Sow seed as early in spring as the ground can be prepared, in rather light, moderately rich soil, in drills two to two and one-half feet apart for either garden or field culture. When the plants are sufficiently large, thin to six inches apart in the row. Cultivate well.

Witloof (French Endive.) The leaves and leaf stems of this variety are blanched and used as a salad like Endive or Cos Lettuce. The top will attain the proper size in from four to six weeks. Pkt. 5c; Oz. 30c; ¼ Lb. 75c; Lb. \$2.25.

Chives--Allium Schoenoprasum An onion-like plant used as a salad and for flavoring soups. It also makes an excellent ornamental garden bed edging which may frequently be cut, a new growth of leaves appearing soon after each cutting. The plants grow about ten inches high. One sowing will answer for about three years. Pkt. 5c; Oz. 85c; ¼ Lb. \$2.25; Lb. \$8.00.

Collards This is a tall, loose leaved cabbage-like or kale-like plant grown throughout the South and known in different sections as "Cole," "Colewort," or simply "Greens." It is extensively used for the table as well as for stock feeding in the South where it continues in growth and is usable throughout the entire winter. Collards usually succeed in locations where cabbage cannot be grown to perfection.

Sow the seed thickly in drills, in rich ground, transplanting when about four inches high; or sow in drills where the plants are to remain and when well started thin to two or three feet apart in the row. In the South, seed may be sown from January to May and from August to October.

Georgia, Southern or Creole This is the white or green stemmed variety, growing two to three feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. A frost, if not too severe, will improve rather than injure the quality of the leaves. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.00.

Market Gardeners Seed Co. Improved Large Purple

EGG PLANT

Seed germinates slowly and should be started in hotbed, for in this, as in all semi-tropical plants, it is important to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When plants have two rough leaves transplant three or four inches apart. When the ground is warm and all danger not only from frosts but from cold nights is past, harden off by gradual exposure to the sun and air and decreasing the supply of water, then carefully transplant to open ground, setting two and one-half feet apart. It is desirable to shade the young plants from very hot sun and to protect them from the potato bug which otherwise often destroys them. Some seasons egg plants will fail to set fruit or will not begin bearing until too late to mature, no matter how faithfully they may have been cared for. This is especially likely to happen if the summer is cool and rather moist. We know of no certain remedy for it, although it is a good practice to pinch off the ends of the branches after the plants begin to bloom, so that only two or three fruits will set.

M. G. Seed Co's. This variety is a general favorite both for market and home garden. The plant is spineless, large and spreading with light green foliage. It usually produces four to six large, oval fruits of a splendid dark purple color. The vigor and productiveness of the plants and the large size, earliness and fine quality of its fruits make it a most profitable variety for market gardeners. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50; Lb. \$3.50.

Black Beauty Rich dark purple, large, and symmetrical, maturing a little earlier than our Improved Large Purple but usually not quite as large. Very desirable for the market as the fruit holds its color a long time. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.75; Lb. \$6.50.

DANDELION

Sow early in spring, in very warm, rich soil, in drills eighteen inches apart; thin to five inches apart and cultivate well; they will be fit for cutting the next spring. When grown for the roots, sow in September and cultivate well during the fall and the following summer; the roots will be fit to dig in October.

Cultivated or French Common A decided improvement on the wild dandelion. It is very early and vigorous. Pkt. 5c.

Market Gardeners Seed Co. Yellow Curled

ENDIVE

One of the best salads for fall and winter use. Endive is not only much used for salads and garnishing but is also desirable for greens and for flavoring soups and stews. Plants may be grown at any season of the year but are more generally used late in the fall. For early use sow about April 15; for later supply sow in June or July in drills fourteen to twenty inches apart and when well started thin the plants to one foot apart. When nearly full grown tie the outer leaves together over the center in order to blanch the heart of the plant. By covering fresh plants every few days a succession may be kept up.

M. G. Seed Co's. This beautiful variety does not need blanching to prepare it for use, the midribs being naturally a golden yellow finely cut with curled leaves. Highly esteemed by Market Gardeners. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50; Lb. \$3.50.

NOTICE—All prices quoted on this page include postage.

Are you utilizing all that ground of yours?

ENDIVE—Continued

NOTICE—All prices quoted on this page include postage except where noted.

Large Green Curled A hardy, vigorous growing endive with bright deep green leaves. The midribs of the outer leaves are usually tinged with rose. The dense mass of deeply divided leaves formed in the center blanches very readily to rich creamy white. This sort is highly esteemed for the market and home garden, and is much used for salads. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.25.

Broad Leaved Batavian (*Escarotte*) A variety having broad, more or less twisted and waved bright deep green leaves with thick, nearly white midribs. The inner leaves form a fairly solid, clustering head which blanches beautiful deep creamy white and is crisp, tender, and of fine flavor. This sort is unsurpassed for salads and is much used for the home garden and market. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 30c; Lb. \$1.00.

Kale or Borecole

This is extensively grown, especially in the South during the fall, winter, and spring. The leaves are used principally for greens. A favorite way is to cook them with bacon. The leaves are also used for garnishing.

Where climate permits seed may be sown any time from August to October, broadcast or preferably in drills eighteen inches apart so that the plants when small may be cultivated. The quality is improved rather than injured by frosts if not too heavy. Farther north sow in April or May in rich light soil in rows two to three feet apart and where plants of the largest size are desired thin to two feet apart in row. It is better not to cut or handle the plants while frozen, but if this is unavoidable, thaw them out in cold water. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.

Tall Green Curled Scotch The plant of this variety grows to three or four feet high, bearing long, plume-like, light green leaves which are deeply cut, also finely curled at edges. Very ornamental and so hardy that a moderately heavy frost improves rather than injures its quality. Pkt. 5c; Oz. 20c; $\frac{1}{4}$ Lb. 60c; Lb. \$1.50.

Dwarf Curled Scotch A finely curled, spreading, low growing variety, very hardy and much used for greens. This sort, sometimes called Norfolk, is grown extensively in the South for shipment and is planted largely for the home garden. The leaves are long and attractive bright green.

Early White Vienna

This sort is often used for garnishing. Pkt. 5c; Oz. 20c; $\frac{1}{4}$ Lb. 60c; Lb. \$1.50.

Garlic A bulbous rooted plant of the onion family with a strong, penetrating odor but much esteemed by some for flavoring soups, stews, etc. We frequently receive orders for garlic seed but we can supply bulbs only. Prepare ground the same as for onions, plant bulbs in drills eight inches apart and four inches apart in row covering two inches deep. When the leaves turn yellow take up the bulbs, dry in shade and lay them up in a dry loft as you would onions. **BULBS**, $\frac{1}{4}$ Lb. 20c; Lb. 50c.

Horse Radish Horse Radish rarely produces seed but is grown from pieces of the roots. Mark off the rows two and one-half feet apart in rich, moist, well prepared ground and set the pieces of roots eighteen inches apart in the rows vertically, the small end down and the top one to three inches below the surface. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds. **SMALL ROOTS**—3 for 10c; 25c. per dozen, postpaid. By freight or express at purchaser's expense, 75c. per 100.

HERBS used for flowering purposes

ANISE (*Pimpinella anisum*)
BALM (*Melissa officinalis*)
BASIL, SWEET (*Ocimum basilicum*)
BORAGE (*Borago officinalis*)
CARAWAY (*Carum carui*)
CORIANDER (*Coriandrum sativum*)
DILL (*Anethum graveolens*)
FENNEL, SWEET (*Foeniculum officinale*)
HOREHOUND (*Marrubium vulgare*)
HYSSOP (*Hyssopus officinalis*)
 Pkt. 5c.

LAVENDER (*Lavendula spica*)
MARJORAM, SWEET (*Origanum marjorana*)
ROSEMARY (*Rosmarinus officinalis*)
RUE (*Ruta graveolens*)
SAFFRON (*Carthamus tinctorius*)
SAGE (*Salvia officinalis*)
SAVORY, SUMMER (*Satureia hortensis*)
THYME (*Thymus vulgaris*)
WORMWOOD (*Artemisia absinthium*)

Market Gardeners' Seed Co.'s Curled Winter

M. G. Seed Co's. Curled Winter A very vigorous growing variety of spreading habit, its green foliage having a distinctive bluish tinge or bloom. The leaves are very large, cut and frilled at the edges. The variety is very hardy, a favorite for greens and in some sections is extensively grown for forage. Pkt. 5c; Oz. 10c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.00.

Kohl Rabi The edible part is the turnip-shaped bulb formed of cabbage and turnip. It is tender and excellent when used before fully grown, combining somewhat the flavors of cabbage and turnip. In some sections of this country the Kohl Rabi is also called Turnip-rooted Cabbage. In Europe the name Turnip-rooted Cabbage has been applied to the Ruta Baga, Swedish-Turnip, or Swede.

Seed should be sown in light, rich soil as early in spring as possible in rows one and one-half feet apart and when well established thin to six inches apart in the row. Plantings at intervals of ten days will give a succession of good young Kohl Rabis. Plantings may be made the latter part of July for fall use.

Early White Vienna (*Extra for forcing*) This variety is extremely early with distinctly small tops. The bulbs are of medium size, very light green or nearly white, and are of best quality for the table if used when about two inches in diameter. Pkt. 5c; Oz. 25c; $\frac{1}{4}$ Lb. 80c; Lb. \$2.75.

Leek This belongs to the onion family. The leaves are flat, and the stems are very large, cylindrical, and bulbous. Sow early in spring in drills twelve to fifteen inches apart, covering one-half inch deep. Thin plants to six inches apart in row and draw the earth about them when cultivating. If one desires very white and tender leeks transplant when about six inches high, setting four inches apart in trenches about two feet apart and gradually earth up like celery.

Large American Flag A desirable strong growing, broad leaved leek, hardy and productive. It is a favorite with many market gardeners and is also extensively used for the home garden. Pkt. 5c; Oz. 25c; $\frac{1}{4}$ Lb. 80c; Lb. \$2.75.

Monstrous Carentan The largest variety, when well grown often three inches in diameter, white and tender. It is an exceptionally hardy garden sort. Pkt. 5c; Oz. 25c; $\frac{1}{4}$ Lb. 80c; Lb. \$2.75.

Before going any farther with your seed list add some of our Novelties.

LETTUCE

For early outdoor culture in the latitude of Cincinnati and southward the seed may be planted in the fall, protecting the young plants from severe freezing either with frames or coarse litter which may be removed as soon as danger of severe freezing is over. Lettuce in ground out of doors will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. North of Cincinnati an early crop may be secured by starting under glass from January to March and hardening off well before setting in ground, which should be done as soon as weather will permit.

Lettuce to be at its best should be grown as rapidly as possible, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For winter, sow under glass from November to February and thin out as early in the spring as the ground can be worked, in drills eighteen inches apart and thin the young plants to four inches apart in the row. As the plants begin to crowd thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground. For the cabbage or heading varieties where large heads are desired, the plants should be thinned ten to twelve inches apart in the row.

Varieties marked A are particularly adapted for culture under glass and for early spring use. Those marked B are sometimes grown under glass, but are especially desirable for outdoor, summer culture. Big Boston, Brown Dutch, and California Cream Butter are very hardy and suited for winter outdoor culture in the south.

NOTICE—All prices quoted on this page include Postage.

CABBAGE OR HEADING VARIETIES

May King a. (Seed white) This is a handsome, extremely early, compact, cabbage or heading variety for the home garden and market, forming very firm heads of medium size and excellent quality. The color is light yellowish green, tinged with reddish brown when mature. The inner leaves blanch rich golden yellow, very tender and buttery. The plant is very compact for so large a head. The variety is exceptionally early outdoors, attaining a size suitable for use before other sorts and is also very satisfactory for forcing. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.25.

Early Tennis Ball a. (Seed black) One of the best heading lettuces, especially desirable for early planting outdoors and also suitable for forcing. The plants are large, with thick, bright green leaves. They form very solid heads, the inner leaves blanching to a rich, creamy white, and are crisp, tender and buttery. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.25.

Salamander b. (Seed black) A very extensively used sort of excellent quality for the home garden and market. The variety withstands hot weather remarkably well. It forms a large compact, light green plant. The leaves are broad, thick, somewhat crumpled and closely overlapping so that the inner ones are very finely blanched. It is one of the most satisfactory heading lettuces for growing outdoors. Pkt. 5c; Oz. 15c; ¼ Lb. 30c; Lb. \$1.00.

Mammoth Black Seeded Butter h. A smooth leaved lettuce forming very large, compact, cabbage-like heads of thick, yellowish green leaves, the inner ones beautifully blanched, very crisp, tender, and buttery. It is one of the most largely grown sorts, suitable for the home garden as well as market. Pkt. 5c; Oz. 15c; ¼ Lb. 30c; Lb. \$1.00.

Deacon b. (Seed white) This is an excellent summer variety. The head is of large size, is very firm and remains in condition for use a long time. The plant is very compact, with few outer leaves which are usually very smooth, thick, and of light green color. The inner leaves blanch to a bright, rich yellow and are crisp, buttery, and very well flavored. Pkt. 5c; Oz. 15c; ¼ Lb. 30c; Lb. \$1.00.

May King

Big Boston

M. G. Seed Co's. Big Boston a. (Seed white) This variety is popular for outdoor culture and is also much in demand as a compact, large heading, forcing sort for cold-frames. The plants are large, very hardy, and vigorous. The leaves are broad, comparatively smooth but wavy at the edge, thin, very hard and crisp. In color they are bright light green, the head slightly tinged with reddish brown. The inner leaves blanch to an attractive greenish white, tinged with light yellow. It usually heads up under cold, rather conditions better than any other variety, and is grown extensively in the south for shipment north in the winter. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Brown Dutch b. (Seed black) Outer leaves large, thick, green tinged with brown and covering a solid head which is beautifully blanched, sweet, tender, and well flavored. The variety is desirable because of its hardiness and is well adapted for planting in the south as a winter lettuce. Pkt 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

California Cream Butter or Royal Summer Cabbage b. (Seed brown) A very reliable heading sort, with glossy, deep green leaves, the outer ones slightly spotted or splashed with brown. The inner leaves form a large, very solid head, rich light yellow in color, very thick, tender, and buttery. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Jersey Winter a. (Seed white) A light green, loose heading, medium sized lettuce. The variety is very hardy and when wintered over it has proven to be one of the very earliest to mature its heads. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Hanson b. (Seed white) One of the most desirable later summer lettuces. The plant is compact and forms a large, cabbage-like head which remains in condition longer than most heading sorts. The outer leaves are bright yellowish green, broad, somewhat crumpled and frilled at edge and with distinctive midrib. The inner leaves are white, very crisp, and sweet. Pkt. 5c; Oz. 15c; ¼ Lb. 35c; Lb. \$1.00.

Plant seeds that you possibly overlooked last season.

Lettuce Curled or Loose Leaved Varieties--Continued

NOTICE—Prices quoted on this page include Postage.

Grand Rapids a. (Seed black) As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list, being of quick growth, little liable to rot, and remaining in condition several days after being fit to cut. The plant is upright and forms a loose cluster of large, thin, bright green leaves savoyed, finely crimped at edges. The leaves do not wilt quickly after cutting so that the variety will stand shipping long distances better than most sorts. It is a very attractive variety and is desirable for garnishing. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 40c; Lb. \$1.25.

Black Seeded Simpson a. One of the best for sowing outdoors where an exceedingly tender leaf is desired and for those markets which demand a very large loose clustering sort. The color is an attractive light yellowish green. It is used also for growing under glass or in frames. The leaves are ruffled and blistered and even the large outer ones are very tender. The sort is especially adapted for sowing thickly and cutting when the plants are young. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 40c; Lb. \$1.25.

Simpson's Early Curled b. (Seed white) A very extensively used early loose leaved, or clustering variety. The leaves are light green in color, slightly frilled, and much blistered, crisp, sweet, and tender. The sort is especially adapted for sowing thickly and cutting when the plants are young. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.00.

Early Prize Head b. (Seed white) A large, clustering, non-heading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. The leaves are finely curled and crumpled, bright green tinged with brownish red, and are very crisp, tender, and sweet. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.00.

COS LETTUCE (Romaine) This kind of lettuce is distinguished by its long, narrow, spoon-shaped leaves, folding into loose, sugar-loaf shaped heads which blanch better by having the outer leaves drawn about them and tied. The quality is distinct from that of the Cabbage Lettuces and by many is considered very superior. Sow seed early in spring in rich, well prepared soil, in rows eighteen inches apart, covering one-half inch deep. When plants have two or three leaves thin to three or four inches apart. As the plants begin to crowd thin and use as required. If large heads are desired plants should be thinned ten to twelve inches apart. Pkt. 5c; Oz. 15c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.00.

Black Seeded Simpson

MUSK MELON

After danger of frost is past, the ground being warm and in good condition, plant in rich soil, preferably sandy loam, in hills about four to six feet apart according to the vigor of the variety. Put ten or twelve seeds in a hill, covering with about an inch of fine soil firmly pressed down. When the plants begin to crowd and the striped beetles are pretty well gone thin to four of the most vigorous plants in a hill. Give frequent but shallow cultivation, until the plants make runners so long that this is impracticable. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted and thoroughly mixed with the soil.

The quality of melons of all varieties is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produces fruit of comparatively poor flavor.

After the plants have four to six leaves it is considered a safeguard against blight to spray with Bordeaux Mixture at intervals of about ten days, adding either Paris green or arsenate of lead for the eating insects.

GREEN FLESHED VARIETIES

Extra Early Hackensack

Extra Early Hackensack This early green fleshed variety is popular in many sections as a market melon and is also extensively used as a home garden sort. The fruits are nearly two weeks earlier than Hackensack, medium to large sized, nearly round, or somewhat flattened, evenly and deeply ribbed and with very coarse netting. The skin is green, slightly tinged with yellow as the fruits mature. The flesh is green, a little coarse but juicy and sweet. Pkt. 5c; Oz. 10c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.25.

Netted Gem or Rocky Ford This has become one of the most popular of small or crate melons and is shipped in large quantities from Colorado and Arizona. It is also a desirable medium early sort for the home and market garden. The vines are vigorous and productive. The fruits are oval, slightly ribbed, densely covered with fine netting. The flesh is green, very sweet, and highly flavored. We offer an exceptionally fine stock of this early sort, the fruit being very uniform in shape and quality and of the even size that is so desirable in a shipping melon. Pkt. 5c; Oz. 10c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.25.

Baltimore or Acme The fruits of this mid-season, green fleshed sort are medium sized, oval or longoval, slightly pointed at stem end, slightly ribbed, and are covered when ripe with coarse netting. The flesh is thick, green, well flavored, and sweet. This variety is a very productive, sure cropper of good quality. It is extensively grown in some sections for the market, also as a home garden melon. Pkt. 5c; Oz. 10c; $\frac{1}{4}$ Lb. 35c; Lb. \$1.25.

NOTICE—Prices quoted on this page include Postage.

Musk Melon

(Continued)

Orange Fleshed Varieties

Tip Top A well-known very productive market sort in some sections. The fruits are large, nearly round, slightly ribbed and fairly well covered with shallow netting. The skin is light yellow when the fruit is mature. The flesh is deep yellow, rich, and highly flavored. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.25.

Petoskey or Paul Rose A well-known yellow fleshed sort, suitable for the home and market. The vines are vigorous and productive. The fruits are oval, slightly ribbed and densely netted. In general appearance they are much like Netted Gem but larger. The flesh is orange-yellow, very thick, firm, sweet, and highly flavored. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.25.

Admiral Togo A small oval musk melon with the very thick, orange flesh and splendid quality of the Defender and possessing the characteristic netting, shape, size, and shipping quality of Netted Gem or Rocky Ford. Combining all the good qualities of these two fine varieties we believe the Admiral Togo is an ideal table melon. This is a desirable medium early sort for the home and market garden. Our stock is carefully bred in size and shape. It is densely netted. The flesh is very thick, ripening clear to the skin. We believe the seed we offer will meet the demands of the most discriminating buyers. We consider it the best small shipping melon yet introduced. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.25.

M. G. Seed Co's. Defender One of the best yellow fleshed melons. It is excellent for shipping and is a desirable, intermediate sort for the home garden. The fruits are medium sized, oval, slightly ribbed, covered with gray netting. The flesh is firm, fine grained, and of highest flavor.

WATER MELON

abundance of well rotted manure—hen manure, guano, or other forms rich in nitrogen, being most desirable. Over this highly manured soil put an inch or more of fresh earth and plant the seed on this, covering them about an inch deep. It is important that the seed should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. Put ten or twelve seeds in a hill. When the plants have formed the first pair of rough leaves, they should be thinned so as to leave two or three of the strongest and best to each hill.

Frequent watering of the plants with liquid manure will hasten the growth, thus diminishing the danger from insect pests. If the striped beetle appears use tobacco dust freely. The best protection against blight and insect pests is to maintain a vigorous and continuous growth. It is desirable to change the location as often as practicable.

Harris' Earliest An extra early melon of excellent quality. The fruits are exceptionally large for so early a variety, slightly oval with irregularly mottled broad stripes of light and dark green. The flesh is bright red, sweet, and tender. Seed black. The vines are vigorous and productive. One of the best varieties for northern latitudes. We have carefully observed this splendid variety for several seasons and are convinced that it is the very best first early melon for the home garden. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Harris' Earliest

M. G. Seed Co's. Defender.

The color is rich, deep orange-yellow. The flesh extends to the rind and retains its color and quality quite to the outer shell which, though thin, is very hard and firm so that one can remove the edible portion with a spoon, leaving a rind no thicker than that of an orange. The vines are very vigorous and productive. The fruit because of the hard, firm rind, keeps and bears shipment remarkably well. This splendid variety was originated and introduced in 1901. We believe it is identical with the melon introduced in 1907 and sold largely as Burrell's Gem. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

Honey Dew Melon Fruits are of medium size, round or slightly oval, five to six inches in diameter and weigh about six lbs. each. The skin is smooth with an occasional net and when fruits are ripe is creamy yellow in color. Flesh light emerald green, fine grained and of very sweet, sugary flavor. Rind thin but very firm and the fruits stand shipping remarkably well. If picked shortly before fully mature the fruits will keep for several weeks. Matures about two weeks later than Rocky Ford. Pkt. 5c; Oz. 15c; ¼ Lb. 50c; Lb. \$2.00.

To make certain of raising good Watermelons, it is essential that the plants have a good start and to this end it is important to prepare hills about eight feet apart, by thoroughly working into the soil an abundance of well rotted manure—hen manure, guano, or other forms rich in nitrogen, being most desirable. Over this highly manured soil put an inch or more of fresh earth and plant the seed on this, covering them about an inch deep. It is important that the seed should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. Put ten or twelve seeds in a hill. When the plants have formed the first pair of rough leaves, they should be thinned so as to leave two or three of the strongest and best to each hill.

Peerless Sometimes sold as Ice Cream. One of the best early sorts for the home garden and for market gardeners who deliver direct to consumers. The vines are moderately vigorous, hardy, and productive. The fruits are medium sized, oval, but somewhat uneven in shape, bright green, finely veined with a darker shade. The rind is thin. The flesh is bright scarlet, solid, crisp, and very sweet. Seed white. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Monte Cristo or Kleckley's Sweets This most excellent variety is unsurpassed for home use or near markets. The vines are vigorous and productive. The fruits are medium to large, oblong, tapering slightly towards the stem end, dark green, often showing fine russetting. The flesh is very bright, rich red, and is exceedingly sweet. The variety is so crisp and tender that it will not stand shipping, the fruit bursting open if subjected to even a slight jar, or when the rind is penetrated with a knife. Seed white. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

Sweet Heart This variety, introduced in 1894, is much used for shipping as well as for the home garden. The vines are vigorous and very productive, ripening their fruit evenly. The fruits are of largest size, oval, and very heavy. The rind is thin but firm. The color is very light green, very slightly veined with a little darker shade. The flesh is bright red, firm but very tender and sweet. The fruit remains in good condition a long time after ripening. Seed black. Our stock will be found very uniform in shape, size, and color. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

For Goodness sake, plant some Defender Melons.

WATER MELON---Continued

NOTICE—Prices quoted on this page include Postage.

Tom Watson

A large, long melon similar in shape, color, and splendid quality to Monte Cristo but averaging larger in size and with a tougher rind, making it especially adapted for shipping to distant markets. The vines are vigorous and productive. The flesh is rich red, sweet, and tender. Seed white, more or less marked with brown. Wherever grown in the South it has become very popular as a shipping sort. There has been an increasing demand of late for a better quality of shipping melon and this demand has been met in most exceptional degree by the Tom Watson. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Citron

The fruits are medium sized, uniformly round and are used only for preserves or pickles. The color is dark green, distinctly striped, and marbled with light green. The flesh is white and solid but not at all suitable for eating raw. Seed red. The fruits mature late in the fall and in this condition can be kept a long time. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Iceberg

Introduced in 1902. In general shape, size, and appearance this is similar to Kolb's Gem, but is distinctly darker and the skin where the melon rests on the ground is rich yellow instead of white. It has a

ONION

Although onions are often raised from sets and from division, by far the best and cheapest mode of production is from seed. The facility with which seed is sown and the superior bulbs it produces, recommend it for general use.

As early in spring as ground can be worked, sow in rich soil, thoroughly pulverized and leveled, in rows fifteen inches apart, covering one-half inch deep. When the plants are well up cultivate, thin out as desired and keep free from weeds. When grown for bunching the rows need to be only about one foot apart and the plants thinned about one inch apart in the row. For very early crop in northern latitudes sow seed in cold-frame in February and transplant when large enough to handle readily. The same location may be used for a succession of years if the ground is kept rich by applications of well rotted manure or other suitable fertilizer and is thoroughly worked at proper intervals. Where climate permits seed may be sown early in winter.

Yellow Danvers

A productive and very extensively used early or main crop variety of medium size. The skin is light coppery yellow in color. The flesh is creamy white, mild, and of excellent flavor. The bulbs are flattened yet quite thick with small necks, ripen down quickly and very evenly and keep very well. This is still a standard, general crop, yellow onion for the home garden and market where a strictly globe shaped bulb is not demanded. Pkt. 5c; Oz. 20c; ¼ Lb. 60c; Lb. \$1.75.

White Portugal or

American Silverskin

This is a medium sized onion of mild flavor and with beautiful, clear white skin. The variety is a favorite with many for use when young as a salad or bunching onion and for pickles. It usually matures about ten days earlier than White Globe and is fine for fall and early winter use. It is an excellent medium early sort for gardeners who do not care to plant more than one variety. The bulbs are nearly round when of bunching size, somewhat flattened when mature. This is the best flattened white onion for northern latitudes. Pkt. 5c; Oz. 20c; ½ Lb. 70c; Lb. \$2.50.

Large Red Wethersfield

This is the standard red variety and a favorite onion in the east, where immense crops are grown for shipment. It is very extensively grown for home garden use as well as the market. The bulbs are large and are flattened yet quite thick. The skin is deep purplish red. The flesh is light purplish white, moderately fine grained, rather strong but of pleasant flavor. The variety is

very firm, hard rind and is as good a shipper as Kolb's Gem but the flesh is deeper colored, extends nearer to the rind and is more tender and sweet. Sometimes sold as Blue Gem. Seed black. The best dark colored round shipping melon. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Cassaba Melon

The cassabas are primarily for the winter use. They require a long season for maturing but the fruits are exceptionally good keepers. The skin of the fruits is usually furrowed and they possess little or none of the common musk melon odor.

Seed may be planted in April or May. Cultivate same as other musk melons but do not water too freely after first setting of fruit is fully grown. The fruits may be picked when the light streaks have become quite yellow. Store the fruits so they do not touch each other, in a cool dark place. When the rind becomes slightly softened and moist, they are ready to eat.

Golden Beauty

One of the best cassabas. It is a variety grown extensively for shipment from Southern California. The fruits are nearly globular, bright yellow with golden tint, with wrinkled skin, six to eight inches in diameter. The flesh is white, very thick, juicy and sweet. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

very productive, one of the best keepers and very popular for general cultivation. This medium early or main crop variety does best on rich, moderately dry soil, but on low muck land it is more apt to form large necks than the Danvers. There is no better sort for poor and dry soils. Pkt. 5c; Oz. 20c; ¼ Lb. 70c; Lb. \$2.00.

Mammoth Yellow Spanish

A very handsome late or main crop of the largest size and nearly globular in form, usually with shoulder and base slightly sloping. The skin is yellowish brown or light yellow with slight tinge of brown. The flesh is creamy white, very mild, tender, and of excellent flavor. The variety keeps well if thoroughly ripened and is very desirable for shipping for fall and early winter use. It is one of the best of the large European sorts that has become thoroughly acclimated in America and is exceptionally productive under proper conditions. If started very early in hotbed it will produce a mammoth onion the first season. Pkt. 5c; Oz. 25c; ¼ Lb. 75c; Lb. \$2.50.

M. G. Seed Co's.

Ohio Yellow Globe

The heaviest yield of onions is always obtained from rich, black lands. On such soils it is found that a globe shaped onion with a somewhat flattened base gives the largest returns and to meet the demands of the professional onion growers located on such lands, we have developed this variety. The bulbs are large, uniformly globe shaped, with small neck; shoulder usually slightly sloping, base often distinctly flattened, the largest diameter below the center of the bulb. The color is rich yellow with tinge of orange. The flesh is creamy white, mild, and of very fine quality. This main crop sort ripens down evenly, keeps very well and is excellent for shipping. No onion grower can afford to plant inferior seed when such as this can be procured. Pkt. 5c; Oz. 30c; ¼ Lb. 75c; Lb. \$2.75.

M. G. Seed Co's.

Ohio White Globe

A most desirable medium early or main crop variety for the home garden. The variety yields abundantly, producing medium to large, handsome, and finely shaped, clear white bulbs. The flesh is firm, fine grained, quite mild in flavor and is more attractive than the colored sorts when cooked. The bulbs are globe-shaped, full at the shoulder, rounded at the base, keep well and are desirable for shipping. To produce the beautifully white onions so much sought in every market, one must first of all have good seed; second, grow them well on rich lands; third, exercise great care in harvesting and curing the crop. "Cord" up the onions in long rows, the bulbs on the inside and cover with boards, so that the bulbs in the open air are well protected from rain or dew which would be sure to discolor them. Pkt. 5c; Oz. 30c; ¼ Lb. 80c; Lb. \$3.00.

ONION SETS

To raise onion sets from seed, use good ground prepared as for large onions and sow the seed very thick in broad drills, using forty to sixty pounds per acre. If the seed is sown thin, the bulbs will not only be too large for sets but will not be of the right shape and if sown thick on poor land they will be necky or bottle shaped.

RED BOTTOM SETS. Treated precisely as top onions are, setting them out in the spring instead of sowing seed. Lb. 15c.

YELLOW BOTTOM SETS. Like the preceding except in color and used in the same manner. Lb. 15c.

WHITE BOTTOM SETS. These do not keep as well as the red or yellow, but produce beautiful white onions early in the season. Lb. 15c.

M. G. Seed Co's Ohio Yellow Globe.

Our Yellow and White Ohio Globe Onions grow enormous crops from seed. Try Them.

NOTICE—Prices quoted on this page include Postage.

Mushroom

The Mushroom is an edible fungus of which there are numerous varieties. We handle the ordinary commercial variety of a creamy white color with loose gills which underneath are of pinkish-red, changing to liver color. The mushroom produces "seed" or spores and there is developed a white, fibrous substance in broken threads, called spawn, which is developed and preserved in horse manure, pressed in the form of bricks. Mushrooms can be grown in cellars, in sheds, in hotbeds, or sometimes in the open air, the great essential being a uniform degree of temperature and moisture. Our space is too limited here to give the necessary cultural directions, but these are published in book or pamphlet form.

PURE CULTURE MUSHROOM SPAWN. By a newly discovered process of selection and grafting the spawn is scientifically propagated so that large, vigorous, and finely flavored mushrooms are reproduced. The sort we offer is earlier, more productive and a marked improvement on wild spawn, either French or English. Brick (about 1¼ lbs.), postpaid, 35c; 5 bricks, not prepaid, \$1.25.

Mustard

Mustard is not only used as a condiment but the green leaves are used as a salad or cut and boiled like spinach. Sow as early in the spring as the ground will permit, in drills about eighteen inches apart, covering one-half inch deep. For succession, sow every few weeks till autumn. Water freely. In the South the seed may be sown in autumn and the plants used early in the spring as a salad and for greens.

Southern Giant Curled

The leaves are large, light green with tinge of yellow, much crimped and frilled at edges. The plant is upright or slightly spreading in growth. This variety is highly esteemed in the South for the market as well as the home garden on account of its vigorous growth, hardness and good quality. Seed small, reddish brown to nearly black. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

Okra or Gumbo

The young seed pods are used in soups, stews, catsups, etc. Highly esteemed in the South. After danger of frost is past, the ground being warm and in good condition, plant in rows about two and one-half feet apart, covering with about an inch of fine soil firmly pressed down. When about three inches high, thin to about one foot apart in the row. Cultivate and keep free from weeds. The pods are in best condition for use when from one to three inches long.

Mammoth Long Pod

This variety is about three feet high, very early and productive. The pods are deep green, very long, slender, slightly corrugated, very tender, and of good quality. This is a desirable market as well as home garden sort. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 75c.

Dwarf Green

The plants are about three and one-half feet high and very productive. The pods are of medium length, greenish, quite thick, slightly corrugated, tender, and of good quality. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 75c.

Champion Moss Curled

ing and flavoring, and a handsome decorative plant. The leaves are very finely cut and so closely crisped or curled as to resemble bunches of moss. Owing to its uniformly fine deep green color and very attractive foliage, this is one of the most popular sorts for both the market and home garden. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Hamburg or Rooted

The root is the edible portion of this variety and resembles a small parsnip both in color and shape. The flesh is white, a little dry and in flavor is similar to celeriac. The foliage is practically the same as that of plain Parsley. The roots can be dug late in the fall and stored in sand for winter use. They are extensively used for flavoring soups and stews. This variety is sometimes called Turnip Rooted. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

PARSNIP

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

Parsnips are usually grown on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow, and moderately rich. Fresh manure is apt to make the roots coarse and ill shaped. As the seed is sometimes slow and uneven in growth, it should be sown as early as possible in drills two and one-half feet apart; cover one-half inch deep and press the soil firmly over the seed. Give frequent cultivation and thin the plants to six inches apart in the row.

Hollow Crown or Guernsey

An excellent variety for the table. The roots are long, with smooth white skin, uniform in shape, tender, and of the best quality. The variety is easily distinguished by the leaves growing from the depression on top of crown of the root. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 75c.

PUMPKIN

Pumpkins are less sensitive than melons or cucumbers to unfavorable conditions of soil and climate but are cultivated the same, though on a larger scale. They are raised between hills of corn or in fields by themselves, but more properly belong to the farm than the garden as they readily mix with and injure the quality of the finer squash. After danger of frost is over plant the seed in hills eight to ten feet apart each way, dropping about a dozen seeds in a hill. The soil should be made as rich as possible. If planted with corn two or three seeds a rod apart each way will be sufficient. When danger from hoes is past, thin to three plants to a hill.

Large Yellow

The pumpkin most extensively used for feeding stock; also used for making pies. It grows to a large size and varies in shape from nearly round or slightly flattened to quite long. Flesh deep, rich yellow, fine grained, and highly flavored. This variety is often planted with corn. It is known also as Field Pumpkin. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 75c.

Sweet Cheese or Kentucky Field

The fruits are flattened, with the diameter usually about twice the length. The skin is mottled light green and yellow, changing to creamy yellow when mature. The flesh is yellow, tender, and of excellent quality. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 75c.

PARSLEY

This well-known vegetable is very useful for flavoring soups and stews and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to powder and kept in bottles until needed.

Parsley succeeds the best on rich, mellow soil. The seed is even slower than parsnip in germinating and should be sown as early as possible in the spring, in drills one to two feet apart, covering not more than one-half inch with fine soil firmly pressed down. When the plants are well up thin eight to twelve inches apart in the row. When the plants of the curled varieties are about three inches high cut off all the leaves; the plant will then start a new growth of leaves which will be brighter and better curled and later, if these turn dull or brown they can be cut in the same way; every cutting will result in improvement.

Plain

The leaves of this variety are flat, deeply cut but not curled. Very desirable for flavoring soups and stews and for drying. It is a favorite on account of its very dark green leaves as well as its hardness of plant. The curled sorts are more extensively used for garnishing. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 80c.

Champion Moss Curled

This is a vigorous compact growing variety, excellent for garnishing.

Don't fail to utilize all that ground of yours.

PEAS

For early peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas, furthermore such soil is often the cause of early sorts maturing unevenly.

Sow as early as possible a few of some early variety in warm, quick soil, prepared the fall before, planting in double rows six to eight inches apart and two and one-half to four feet between the double rows. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity.

The peas will give quicker returns if covered only one inch deep and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches 3 to 6 inches deep and covered with only 1 or 2 inches of soil. When the plants are five or six inches high fill the trench level with the surface. This will secure deep rooting, prevent mildew and prolong the bearing season. If the peas be covered to the full depth at first, or if water be allowed to stand in the trenches they will not germinate or grow well.

The wrinkled varieties are more sensitive to cold wet weather than the smooth seeded sorts but are of superior quality. All varieties growing more than one and one-half feet do better if staked up or bushed when four to six inches high. This support is usually given by sharpened branches of trees set between the double rows. The crop should be gathered as fast as it is fit for use. If even a few pods begin to ripen, not only will new pods cease to form, but those partly advanced will stop growing.

Notice—If Peas and Peanuts are wanted sent Parcel Post add 5c for first lb., 1c for each additional lb.

First and Best

This is the earliest and most even strain of white, extra early pea, maturing so well together that sometimes a single picking will secure the entire crop. The vines are vigorous and hardy, of medium height, about two and one-half to three feet, bearing three to seven straight pods of good size, about two and one-half to two and three-fourths inches long, each containing five to seven medium sized, smooth peas of fair quality. Seed small, smooth, yellowish white. The stock we offer is much superior to most on the market and more even than similar strains sold as Extra Early, Rural New Yorker, and Improved Early Daniel O'Rourke. Pkt. 5c; Lb. 25c.

Earliest of All or Alaska

We have a stock of this smooth blue pea of unequalled evenness in growth of vine and early maturity of pods which are filled with medium sized, bright green peas of good flavor. The vines are of medium height, about two and one-half to three feet and of distinctive light color. The pods are of good size, about two and one-half to two and three-fourths inches long. Seed small, smooth, and bluish green in color. This sort matures all of its crop at once and is an invaluable variety for market gardeners and canners. Pkt. 5c; Lb. 25c.

Thomas Laxton

A very early wrinkled variety of great merit. The vines are vigorous, of medium height, about three feet, similar to those of Gradus, but darker in color, hardier, and more productive. The pods are large, often four inches long, with square ends, similar to but larger, longer, and darker than those of Champion of England and as uniformly well filled. The green peas are very large, of fine deep color and unsurpassed in quality. One of the very best sorts for the market and home garden. Pkt. 5c; Lb. 35c.

Gradus

A very early, wrinkled pea. The vines are similar in appearance to Telephone but of medium height, only about three to three and one-half feet. The pods are very large, about four and one-fourth inches long, very nearly as large as those of Telephone, uniformly well shaped, pointed, handsome, and more attractive than those of the first earlies. The peas are very large, of splendid quality, and beautifully light green color which they retain after cooking. Practically the same as Prosperity. Pkt. 5c; Lb. 35c.

American Wonder

The earliest of the dwarf, wrinkled varieties. The vines are about nine to twelve inches high and produce a good crop of well filled pods of medium size, about two and five-eighths to two and three-fourths inches long, containing five to eight large peas which are exceedingly sweet, tender, and well flavored. Seed medium sized, generally flattened, wrinkled, and pale green. Pkt. 5c; Lb. 35c.

Nott's Excelsior

The best very early, dwarf pea. It combines the good qualities of American Wonder and Premium Gem peas. The vines are larger and more productive than American Wonder and earlier than Premium Gem and average about twelve inches high. The pods are medium sized, about two and three-fourths inches long. The peas, in sweetness and quality, are unsurpassed. Seed medium sized, wrinkled, green and somewhat flattened. A most desirable early sort for the market gardener and unsurpassed for the home garden. Pkt. 5c; Lb. 35c.

Market Gardeners Pride

A green variety of medium height.

An Extra Early

About two and one-half to three feet, with long, broad pods, about two and three-fourths to three inches long, which are abundantly produced and well filled to the ends. This pea is used very extensively by market gardeners because of its productiveness and fine appearance of its pods, and is popular with consumers on account of its quality. It is also largely used by canners. Pkt. 5c; Lb. 40c.

Laxtonian

This very handsome wrinkled pea is the largest podded of the dwarf varieties on our list. The beautiful dark green pods are similar to Gradus in shape and splendid quality, are very nearly as large in size and often mature a little earlier. The vines are vigorous and productive, averaging fifteen to eighteen inches high; foliage dark green; pods about four inches in length. Seed light green, large, wrinkled, flattened, irregular in shape. Pkt. 5c; Lb. 40c.

Premium Gem

(Improved Little Gem) A desirable early green wrinkled dwarf variety similar to but better than McLean's Little Gem. The vines are very productive, fifteen to eighteen inches high. The pods are of medium size, about two and three-fourths inches long, crowded with six to eight large peas of fine quality. Seed green, large, wrinkled, often flattened. Pkt. 5c; Lb. 35c.

Earliest of All or Alaska

Little Marvel

An excellent dwarf sort for the market and home garden. The pods average a little longer than those of Premium Gem, are more attractive in shape and color and the peas are of superior quality. The vines are sturdy, nearly eighteen inches high, heavily set with straight, deep green pods, square ended at the bottom and nearly three inches in length. Its season is about the same as Premium Gem. Seed large, green, wrinkled. Pkt. 5c; Lb. 40c.

Peter Pan

This new, large podded, early wrinkled pea is in great favor with market gardeners in all sections. The handsome large pods, which are well filled with big peas of delicious flavor, make it a good seller on the market stall. The vines are extremely vigorous, growing only fifteen to eighteen inches high, with dark green foliage, and produce a wonderful crop of pods. Peter Pan is one of the earliest wrinkled peas, bearing its dark green pods about the same time as Prosperity or Gradus, but a much heavier cropper and of quality equally as good. Pkt. 5c; Lb. 40c.

Treat yourself to the best ever, Delicious Peas.

PEAS—Continued

Delicious is a favorite for a general crop on account of the strong vines, large peas and pods. A heavy cropper. Vines are strong, vigorous, covered with large pods. Peas wrinkled, vines very branching, about two and one-half feet tall, often twenty pods to a vine; quality is excellent. Our stock has been carefully selected and will run remarkably true. One of the best. Pkt. 5c; Lb. 50c.

Alderman This is in many respects the very best early main crop variety of the valuable Telephone type. The vines are tall growing, about four and one-half to five feet high, dark green, vigorous, and exceedingly productive. The pods are of largest size, often five to five and one-half inches long, dark green, similar to but a little larger and a shade darker in color than those of Duke of Albany and about the same in season. The peas are of largest size and unsurpassed in quality. Market gardeners are demanding the large podded, dark colored sorts which retain their fine appearance even after shipping a long distance. The Alderman answers these requirements and we recommend it unreservedly. Pkt. 5c; Lb. 40c.

Duke of Albany A very large, wrinkled pea similar to Telephone in growth and season but darker in color of foliage and pods. The vines are tall, about four and one-half to five feet high, vigorous, and strong growing. The pods are of largest size, often four and one-half to five inches long, straight, and thick, borne in great profusion and when in condition for picking, of a deep green color. In many localities this variety is sold as an improved strain of Telephone. Its productiveness and fine color make it a very profitable sort for market gardeners while its splendid quality should give it a place in the home garden. Pkt. 5c; Lb. 35c.

Telephone This has become the leading pea with market gardeners whose trade appreciates fine appearance and high quality. The vines are tall and vigorous, growing about four feet high, with large, coarse, light colored leaves and producing an abundance of pointed pods of largest size, often four and one-half to five inches long, attractive bright green, filled with very large peas which are tender, sweet, and of excellent flavor. It comes into use soon after the Premium Gem and is one of the best sorts for either home or market. Pkt. 5c; Lb. 35c.

LATER VARIETIES

Cincinnati Market This is the leading pea with market gardeners whose trade appreciates fine appearance and high quality. The vines are tall and vigorous, growing about four feet high, with large, coarse, light colored leaves, and producing an abundance of pointed pods of largest size, often four and one-half to five inches long, attractive bright green, filled with very large peas which are tender, sweet, and of excellent flavor and is one of the best sorts for either home or market. Pkt. 5c; Lb. 50c.

Peanuts can be raised with but little expense, and are an exceedingly productive and paying crop. They are planted in much the same manner as potatoes, and require but little care beyond hilling up the young plants.

Melting Sugar (*Edible pods*) We consider this the best of the edible-podded sorts in which the pods are used when half grown and are cooked in the same way as snap beans. The pods of Melting Sugar are very large, four to four and one-half inches long, broad, often curved or twisted, and when young, stringless, very tender, and finely flavored. The variety we offer, sometimes called Mammoth Melting Sugar, is rather late maturing, very prolific, strong growing, about four to five feet high, with large light colored foliage. Seed medium to large, smooth, round, light yellowish white in color. Pkt. 5c; Lb. 35c.

Spanish. This variety is smaller and sweeter than the common, or Virginia. Plants grow upright and strong, and are easily harvested. Pkt. 5c; Lb. 30c.

Virginia. This is the common peanut grown in the South. Pkt. 5c; Lb. 30c.

PEPPER

NOTICE—Prices quoted on Pepper Seed includes Postage.

Peppers are most largely used for seasoning meat and vegetable dishes as well as for salads and mangoes. They are used also for making chow chow and chili sauce.

The culture is the same as for egg plant and the plants need quite as much heat to perfect them. Sow seed early in hotbed, or about middle of spring in open seed bed, the soil being light and warm. When three inches high transplant in rows about two and one-half feet apart, and two feet apart in the row. Cultivate and keep free from weeds. Guano, hen dung, or any other bird manure hoed into the surface soil when the plants are about six inches high, will undoubtedly increase the product.

Red Chili A late variety. The pods are bright, rich red, about two inches long, one-third to one-half inch in diameter at the base, tapering to a sharp point and exceedingly pungent when ripe. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50.

Long Red Cayenne A well-known medium early variety having a slender, twisted, and pointed pod about four inches long. The color is deep green when fruit is young, bright red when ripe. The flesh is extremely strong and pungent. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50.

Ruby King An improved American variety, very large and attractive. The plants are about two and one-half feet high, vigorous, compact, and productive. The fruits are often four to four and one-half inches long and of deep green color when young, bright red when ripe. The flesh is thick and mild flavored. One of the best varieties for mangoes, or stuffed peppers. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.50.

Royal An improved variety of the Ruby King type with the deep ridges eliminated, exceptionally smooth and glossy. Fruits good size often four inches long, deep green color when young, bright red when ripe, thick flesh and mild. The best Mango yet introduced. Warranted the best, most profitable market sort. Pkt. 5c; Oz. 60c; ¼ Lb. \$2.50.

Pimento The fruits of this very productive sort are exceptionally smooth and glossy, of good size, medium length and attractive color. The flesh is very thick and solid, mild, and of very fine flavor. Desirable not only for salads and stuffed peppers but it is also the sort used largely by canners. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruits are deep green when young becoming deep red as they mature. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.50.

Giant Crimson The fruits of this very desirable sort are of the largest size, ripen earlier than any of the other very large sorts and average heavier, as the flesh is exceptionally thick. The plants are vigorous and upright, about two and one-half to three feet high, larger than those of Chinese Giant and more productive. The color is deep green when fruit is young, deep crimson when matured. The flavor is mild. One of the very best sorts for salads and large mangoes. Pkt. 5c; Oz. 60c; ¼ Lb. \$2.40.

Large Sweet Spanish A late maturing and attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous, and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50.

M. G. Seed Co.'s Royal.

King of Mangoes, The M. G. Seed Co's Royal

Superior Seed Potatoes

perishable nature of seed potatoes and the unsettled condition of all markets, prices are made subject to market change and confirmation of order on receipt of same.

The necessity for changing seed often is universally admitted by all well-posted growers, especially when the best seed can be had at so little additional outlay. Owing to change and confirmation of order on receipt of same.

Culture

Any good soil will produce Potatoes, but a sandy loam is best. Make furrows of good depth, 3 feet apart; drop the cut-seed pieces about 8 or 10 inches apart. If grown in hills, one or two pieces of potatoes, containing one or more eyes in each piece, are placed in each hill, which are made 3 feet apart each way. Cover the seed four inches, but not so deep in wet, cold land. When the sprouts appear, cultivate and hoe to keep the soil free and clear of weeds. As the vines increase, draw earth around them, forming a slight ridge. Just as soon as the bugs appear use Paris Green. One peck will plant about 100 feet of row, or 100 hills. Ten bushels are required to plant an acre.

By planting Our Northern Grown Seed you are assured of Early Maturity, Increased Yield and a Vigorous Growth. To produce healthy stock we use first-class potato land, nothing but pure, well-matured, good-sized seed. The seed potatoes are very carefully handled when digging and barreling, that they may not be bruised or otherwise injured. Our seed potato stocks should not be compared with potatoes picked up on the market, named at a guess, and sold for seed.

M. G. Seed Co's. Dakota Early Ohio is fully two weeks ahead of the Early Rose, and is a general favorite with potato growers and marketmen alike, and is the most profitable Potato they can possibly grow. The sprouts are very strong, the vines grow erect and are easy to cultivate. Maturing early, it brings the highest prices, and the land can be used for another crop after it; does well on any soil suitable for Potatoes. The tubers grow compact in the hill, are easily dug—nearly every Potato is of marketable size; has few eyes, which are even with the surface. With heavy manuring, close planting, and good culture, a very large and profitable crop can be expected. Cooks dry and mealy. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

True Early Rose The Early Rose is the old standard early potato; rosy bluish skin, white flesh; productive, and of excellent flavor; a fine keeper. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Six Weeks One of the best of the extra-early varieties and is very popular with the large potato growers on Long Island. The tubers in shape are "round-oblong"; skin white and smooth; shallow eyes; the flavor is excellent and the flesh is always dry and mealy. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Carman No. 1 Size medium to large; thick and slightly flattened, a good tuber, being nearly five inches long, three and a half inches broad, and one and a half inches in thickness; color of skin very pale, nearly white; eyes few. $\frac{1}{4}$ Bu. 75c; Bu. \$2.00.

Carman No. 3 Enormously prolific, averaging nearly a pound apiece; very uniform in shape, white skinned, few and shallow eyes; flesh snow-white and of exceptionally fine cooking qualities. $\frac{1}{4}$ Bu. 75c; Bu. \$2.00.

Early Triumph It is from seven to ten days earlier than the Ohio, and that often means a difference of many dollars in the crop. The Potato is good size. Skin is red, flesh is very white and firm. It is productive. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Irish Cobbler Form oval and round; skin lightly netted, creamy white and having few eyes, which are quite shallow—some even with the surface. Flesh pure white and of the finest quality—not exceeded by any early variety. Keeps perfect until spring, when it starts large, strong, and vigorous sprouts. Its strong growth, earliness, uniformity, large yield, fine quality, and very handsome appearance have brought the Extra-Early Cobbler right to the front as a profitable variety for market or home use. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Beauty of Hebron Very rapid and vigorous grower, ripening as early as *Early Rose*, which it resembles but frequently exceeds in productiveness and excellence for table use, either baked or boiled. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

White Star A medium early variety of fine quality and appearance; large, oblong, uniform sized tubers, remarkably productive. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Hoosier Boy The vines are wonderfully vigorous, nearly blight and insect proof, quite stiffly erect, and the tubers lie closely together in the hill. Abundant deep green foliage, capable of withstanding heat and drought. The tubers are handsome, oblong, thick, and round in form, holding thickness well out to the ends; few and shallow eyes; skin pure white, quite thin, but firm and tough, readily pared with a minimum of waste, while the table quality is of the choicest, the flesh being pure white, dry, and floury. $\frac{1}{4}$ Bu. 75c; Bu. \$2.25.

Selected Seed Potatoes in the above list of standard varieties, to be shipped by express or freight at purchaser's expense.

We being headquarters for Seed Potatoes, know we are in a position to save you money on them. Write for prices on same, if larger quantities are wanted than listed above.

We make a specialty of Genuine Seed Potatoes and handle annually more than any Seed Establishment in our City, thereby are in position to give quality and lowest price.

Irish Cobbler

Early Ohio

Seed Sweet Potatoes

New Jersey Grown—Carefully dug, handled and stored over winter for us, expressly for sprouting purposes. The seed stocks are selected from the most perfect and prolific hills at the time of digging. We have been selling this stock, and find the potatoes much dryer and sweeter than those grown from Ohio or Western grown seed. We repack before shipping, but we wish it distinctly understood that customers take all risks after we deliver in good condition to express or railroad company here. We book orders at any time, but do not ship until about planting time. Our barrels contain 3 bushels, good measure. Hampers, 1 bu. Order early.

Yellow and Red Jersey, Red Bermuda, and Southern Queen. Write for prices. Ready for shipment about April 1.

50 Cars of Dakota Ohio Seed Potatoes sold in fall of 1920. More coming this year. Booking orders now.

RADISH

For forcing sow in hotbed or under glass in rich, sandy soil made perfectly level. Scatter evenly over the surface from fifty to one hundred seeds to the square foot and cover with one-half inch of soil sifted on. Careful watering to keep soil moist, even, moderate temperature, and good ventilation are required for rapid and best root development. If the bed is a good one the whole crop can be marketed in twenty-one to forty days after planting.

For open ground culture, sow in rich, sandy soil as soon in the spring as it is fit to work, in drills twelve to eighteen inches apart and thin out the plants to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins, it is better to sow the summer and winter varieties as they do not become tough and stringy nor pithy so quickly as the early sorts.

We have been very careful to secure the very best seed possible and there is none sold under other names which is better than that of the varieties we offer.

NOTICE—Prices quoted on this Page include Postage.

M. G. Seed Co's. The smallest reliable forcing radish. The tops are distinctly small. The roots are round or slightly flattened, very deep red in color and of the best quality. It remains in condition for use the longest of any of the first early forcing sorts and is a favorite where a very small, deep red radish is desired. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Early Scarlet Turnip One of the best early radishes for the home garden and a great favorite in large markets for early planting outdoors. It is but little later than Early Scarlet Turnip, White Tipped. Forcing and will give entire satisfaction where extreme earliness and small tops are not the chief consideration. The roots are nearly round, slightly flattened on the underside. The color is very bright, deep rose-carmine scarlet with a distinctly white tip. The flesh is white and of the best quality. The stock we offer is exceptionally attractive in its splendid coloring. The scarlet is unusually deep and affords a distinct contrast with the large, clear white tip. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Early Scarlet Turnip, White Tipped

Cincinnati Market

Icicle

Early Scarlet Turnip White Tipped, Forcing A beautiful variety, rose-scarlet with white tip, has small tops and may be planted closely. It is most attractive in appearance and cannot fail to give satisfaction as a forcing radish. This is very popular as a market sort. It is sold sometimes as Rosy Gem and Rapid Forcing. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Early Scarlet Globe The roots of this variety are slightly olive shaped and are a rich, bright scarlet in color. The flesh is white and tender. We especially recommend this to gardeners as a large, first early forcing radish. It is also desirable for first early planting outdoors for the home garden and market. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Early White Turnip This is an early white radish, a little more flattened than Early Scarlet Turnip, and as offered by us, of smaller size and sometimes a little earlier maturing. While used mostly for early outdoor planting, its very small tops and quick growth make it suitable for forcing. The roots are about one inch in diameter when mature. The flesh is pure white, crisp, and tender. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Crimson Giant Turnip A round radish of exceptionally large size for so early a variety. The roots are nearly globe-shaped, of beautiful crimson-carmine color and most excellent quality, often growing one and three-fourths inches in diameter before becoming pithy. It is a desirable variety for general outdoor planting, and also suitable for forcing where a very large round radish is wanted. It remains in condition a remarkably long time for so early a radish. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Early Long Scarlet, Forcing This is a standard, most excellent sort either for the home garden or the market. The tops are short and comparatively small. The roots are smooth, slender, uniform in shape and a very attractive bright carmine-red in color. They grow about one-third out of the ground and continue crisp and tender until fully matured, when they are about six inches long. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Cincinnati Market A desirable market variety with roots similar to Early Long Scarlet Forcing, but averaging longer, deeper red in color and remaining a little longer in condition for use. The roots are slender and before becoming pithy are often six to seven inches long by about five-eighths of an inch in diameter at the shoulder. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Icicle A very attractive, pure white radish, the earliest, of the long, white summer sorts and of most excellent quality. The roots when mature are five to six inches long by about one-half to five-eighths of an inch in diameter. One of the most desirable varieties for outdoor summer planting for the home garden and market. It is also adapted for forcing. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

Our Radish Seeds are all grown from selected bulbs carefully transplanted insuring the best strains.

RADISH--Continued

NOTICE—Price quoted on this page include postage except when noted.

Market Gardeners' Large White Globe Radish

Early Golden Yellow Oval This sort matures quickly, has small tops and resists the summer heat better than the early scarlet or white kinds. The roots are oval, tapering at the base, and are about one and one-half inches long by about one inch in diameter when mature. The color is bright light yellow, often russeted. The flesh is white, slightly pungent, crisp, and tender. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

Golden Globe This variety is of quick growth, affording crisp and tender radishes even in a very hot climate and is extensively grown in the South. The roots are uniformly globe-shaped, with skin of golden yellow color. They are about two inches long by two and one-fourth inches in diameter when mature. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

M. G. Seed Co's. Large White Globe A desirable large turnip shaped summer variety. The roots are round, smooth, white, and attractive and are two to three inches in diameter when mature. The flesh is crisp, firm, and rather pungent. Market gardeners use this variety largely for forcing under glass because of its small tops. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

RHUBARB or Pie Plant

Rhubarb, also known as Pie Plant, or Wine Plant, is the earliest spring vegetable and is grown for its leaf stalks which are extensively used for pies and sauce.

Rhubarb succeeds best in deep, somewhat retentive soil and the richer this is and the deeper it is stirred, the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the fall transplant into very highly manured and deeply stirred soil, setting them four to six feet apart each way and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year. When a blossom stalk appears, it should be cut back well into the ground and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of the Linnaeus, Victorie, Giant, and other improved sorts, but like the seeds of fruit trees, rhubarb seed cannot be relied upon to reproduce the same varieties. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. 90c.

SEED—

ROOTS—.....by mail, prepaid, 15c. each; by express, not prepaid, 75c. per dozen.

SALSIFY or Vegetable Oyster

One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Frost does not injure the roots, but before the ground freezes a quantity for winter use may be stored in a pit or in a very cool cellar.

Mammoth Sandwich Island This variety is large and strong growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. The tops are grassy. It is invaluable for market gardeners' use. Pkt. 5c; Oz. 20c; ¼ Lb. 75c; Lb. \$2.00.

SORREL The improved varieties of Sorrel when well grown and cooked like spinach make a palatable dish. Sow in drills early in spring and thin the seedlings to six or eight inches apart in the row. One may commence cutting in about two months and the plants will continue in full bearing from three to four years.

Large Leaved French The best garden variety, having large, pale green leaves of fine quality. Pkt. 5c; Oz. 25c; ¼ Lb. 75c; Lb. \$2.00.

White Strasburg Even when comparatively small this variety is in good condition for use and continues crisp until matured when the roots are four to six inches long by one and one-half to two inches in diameter. The roots are rather thick at the shoulder and are usually somewhat tapering. They remain in condition for use much longer than the early varieties. This is one of the best large, white later summer sorts for home garden and market. Pkt. 5c; Oz. 10c; ¼ Lb. 40c; Lb. \$1.25.

Early White Giant Stuttgart The roots are large, often four inches in diameter, white, and are usually top shaped. The flesh is white and crisp, and keeps remarkably well, so that those not used in the summer or fall can be stored for early winter use. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.25.

WINTER VARIETIES

Seed for winter radishes should be sown about the first of August in rich, warm, sandy loam, in rows about twenty inches apart, covering half an inch deep. When well up thin to three inches apart in the row and give frequent cultivation. For winter use, the roots should be pulled and packed in damp sand and stored in a cool cellar.

Scarlet China This is an extensively grown variety for fall and winter use. It is known also as Chinese Rose. Their roots are cylindrical, or largest near the bottom, stump rooted, or blunt at both ends. The skin is smooth and of a bright deep rose color. The flesh is white, firm, crisp, and pungent. The tops are moderately large with leaves distinctly cut and divided; leaf-stems tinged with rose. The roots are usually four to five inches long by about one and one-half to two inches in diameter when fully mature, sometimes growing considerably thicker. It is a desirable late maturing garden sort. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Round Black Spanish The roots are round, sometimes slightly top shaped, three or four inches in diameter. The skin is almost black. The flesh is white, very compact, decidedly pungent, but well flavored. The variety keeps well through the winter. Pkt. 5c; Oz. 10c; ¼ Lb. 20c; Lb. \$1.00.

California Mammoth The roots of this very large white winter sort grow nine to twelve inches long, by three to four inches or more in diameter just below the shoulder, tapering regularly to the tip. The flesh is firm, crisp, decidedly pungent but well flavored, keeping well through the winter. The variety matures later than Celestial and the roots are not as mild but they attain a larger size under favorable conditions. For table use they are pulled before fully grown. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Half Long Grey Winter This variety is intermediate in shape between the Round and the Long Black Spanish, and seems to combine the good qualities of both. The roots have grayish black skin and crisp, pungent but well flavored white flesh. They are four to five inches long and one and one-half to two inches in diameter, sometimes approaching stump-rooted form at maturity. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Don't overlook our Novelty Page.

NOTICE—Prices quoted on this Page include Postage.

SPINACH

No plant makes more palatable and nutritious greens than spinach when properly prepared. Seed should be planted in very rich ground, the richer the better. Sow in drills sixteen to twenty inches apart and thin to about six inches apart when the leaves are an inch wide. All should be cut before hot weather, while young and tender. For early spring use sow early in autumn and protect the plants with a light covering of leaves or straw, or plant as soon as the land can be worked in the spring. Under favorable conditions the leaves may be large enough for eating in eight weeks. South of Cincinnati spinach can be grown through the winter with very little or no covering.

Savoy Leaved

This sort is known also as Bloomsdale and as Norfolk Savoy Leaved. It is a very early variety and one of the best to plant in autumn for early spring use. The plant is of upright growth, with thick, glossy, dark green leaves of medium size, pointed but quite broad, and crumpled or blistered like those of Savoy cabbage. It is hardy and grows rapidly to a suitable size for use, but runs to seed quickly in warm weather. Seed round. This spinach is suitable for the home garden and is much used by truckers. Pkt. 5c; Oz. 10c; ¼ Lb. 20c; Lb. 50c.

Long Standing

An improved round seeded strain of excellent quality, comparatively late in season but after reaching maturity it remains in condition for use much longer than most sorts. The plant is very large, becoming rather procumbent when mature. The leaves are usually very broad arrow-shaped or rounded, comparatively smooth and dark, rich green. This sort is extensively used by market gardeners. Pkt. 5c; Oz. 10c; ¼ Lb. 20c; Lb. 50c.

New Zealand

(*Tetragonia expansa*) Unlike true spinach in type and in that it thrives during hot weather and in any soil rich or poor. The tender shoots are of good quality and may be cut throughout the summer. The plant becomes very large and spreading. The leaves are comparatively small, broad, and pointed. Plant three or four seeds in hills two feet apart each way. Germination of the seed can be hastened by soaking in warm water twenty-four hours. Pkt. 5c; Oz. 10c; ¼ Lb. 35c; Lb. \$1.00.

Savoy Leaved

SQUASH

One of the most nutritious and valuable garden vegetables. The summer varieties come to the table early in the season, while the fall and winter sorts can be had from August until the following spring. The winter varieties are very well adapted for stock feeding and we heartily recommend them for that purpose.

Squash plants are very tender and sensitive to cold and so planting must be delayed until settled warm weather. General methods of culture are the same as for cucumbers and melons, but the squash is less sensitive to unfavorable conditions of soil. Summer varieties should be planted four to six feet apart each way and winter sorts eight to ten. Three plants are sufficient for a hill. In gathering the winter sorts care should be taken not to bruise or break the stem from the squash, as the slightest injury will increase the liability to decay. Winter squashes should be stored in a moderately warm, dry place and the temperature kept as even as possible. For those who desire very early squashes, seed can be planted in boxes, and transplanted.

Mammoth White Bush Scallop

An early maturing, somewhat flattened, scalloped bush squash, of largest size and the handsomest of the summer varieties for home garden and market. The fruits are uniformly warted and a beautiful, clear waxy white, instead of the yellowish white so often seen in the old Early White Bush Scallop. The stock we offer of this variety is exceptionally true to type. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

Mammoth Summer Crookneck

The largest and one of the earliest of the crookedneck summer squashes. The vines are of bush habit, large, and more vigorous than Summer Crookneck. The fruits when mature are very large, often one and one-half to two feet long, with exceedingly warty surface. The color is deep yellow. Its large size and attractive color make this variety a favorite with market gardeners as well as for home garden use. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

Boston Marrow

This is a very productive fall and winter variety of medium to large size, oval shape, and thin skin. It is much used for canning and making pies. The fruits when ripe are bright orange with a shading of light cream color. The flesh is of rich salmon-yellow color, fine grained and of excellent flavor, but not as dry as the Hubbard. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.00.

Hubbard

One of the best of the winter squashes. The vines are vigorous and very productive. The fruits are large, heavy, and moderately warted, with a very hard shell. The skin is uniformly dark bronze green. The flesh is bright orange-yellow, fine grained, thick, dry, and richly flavored. This squash can be kept in good condition until spring. It is esteemed by many to be as good baked as the sweet potato. Our stock of this standard home garden and market variety is carefully selected in regard to quality of the flesh and color of the shell and is much superior to that sold as Chicago Warted or Warty Hubbard. Pkt. 5c; Oz. 20c; ¼ Lb. 60c; Lb. \$2.25.

Italian

(*Cocozella di Napoli*) The vines are of bush habit and produce large, much elongated fruits dark green at first, but as they mature, becoming marbled with yellow and lighter green in stripes. The fruits are in best condition for the table when six to eight inches long, but can be used when much larger. The young fruits when sliced and fried in oil constitute a vegetable delicacy that is very tender and marrowy. Pkt. 5c; Oz. 20c; ¼ Lb. 60c; Lb. \$2.00.

Vegetable

Marrow

at first, but as they mature, becoming marbled with yellow and lighter green in stripes. The fruits are in best condition for the table when six to eight inches long, but can be used when much larger. The young fruits when sliced and fried in oil constitute a vegetable delicacy that is very tender and marrowy. Pkt. 5c; Oz. 20c; ¼ Lb. 60c; Lb. \$2.00.

Mammoth White Bush Scallop and Mammoth Summer Crookneck

Our sales of spinach seed several tons annually. Why? Quality.

TOMATO

Tomatoes do best on light, warm, not over-rich soil, and success depends largely upon securing a rapid, vigorous, and unchecked growth during the early part of the season. Sow in hotbed or in shallow boxes in the house from six to eight weeks before they can be set out doors, which is when danger from frost is past; when the plants have four leaves transplant into shallow boxes or cold-frames, setting them four or five inches apart; give plenty of air and endeavor to secure a vigorous but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Even a slight check while the plants are small will materially diminish their productiveness.

Set out doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit. If to be grown without training, the plants are usually set about three to four feet apart each way according to the vigor of growth of the variety.

To insure best results in respect to early ripening as well as the amount and perfection of fruit, it is advisable to train up and trim the vines, especially if the patch is rather small. When the plants have been properly started and are six to ten inches high they will begin to throw out branches. Select the largest and most vigorous of these and pinch off all others except this one and the main stem. Care must be exercised not to pinch off the fruiting branches which, as they appear can be distinguished by the buds that are formed very early. In a short time these two remaining branches will become equally vigorous and as ordinary varieties will grow four to six feet high during the season, they should be securely tied at intervals of about ten inches to a long stake, preferably two inches square, which has been securely set in near the root of the vine.

Fruit will set to almost any height desired if all side branches are kept trimmed off at intervals of a week. By such a method of training and trimming the fruits are kept clear from the ground and with free access of sunlight they ripen much earlier; the vitality, otherwise exhausted in superfluous branches and leaves, is utilized in forming fruits of largest size, greatest perfection of shape and best quality.

All our Tomato seeds are from seed stocks carefully selected. We challenge comparison of our stocks with any offered.

NOTICE—Prices quoted on this Page include Postage.

Earliana Our strain of this first early sort is earlier and decidedly superior to much that is sold as Sparks' Earliana, and the extreme earliness of its large, smooth fruits makes it a very profitable tomato for market gardeners, as well as desirable for the home garden. The vines are small but vigorous and productive. The fruits are bright deep scarlet, medium to large, nearly round, and exceptionally smooth for so early a variety. The fruits are borne in clusters near the base of the plant and the bulk of the crop ripens very early, purplish tomato. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.25.

Market Gardeners Pride An extra early, purplish pink tomato similar to the popular scarlet fruited Earliana in growth of vine, shape, and size of fruits and time of maturing. A valuable variety for market gardeners who want a very early, purplish tomato. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.25.

M. G. Seed Co's. Early Michigan This splendid variety, introduced in 1909, is the largest and best of the early purple tomatoes. The vines are vigorous and very productive. The fruits are very smooth, uniform in size, nearly globe-shaped, firm, and of excellent quality. One of the most valuable shipping tomatoes yet produced. It is also desirable for the home garden and near markets. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.50.

Dwarf Champion This is sometimes sold as the "Tree Tomato." It is a second early, purplish pink variety, especially desirable where garden space is limited. The vines are about two feet high, vigorous, upright, and compact growing. The fruits are medium sized, exceptionally smooth and of very good quality. Our stock is a very superior strain with more even, smoother fruit than the original. Pkt. 5c; Oz. 35c; ¼ Lb. \$1.25.

Market Gardeners' Early Michigan Tomato

Truckers' Favorite

attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort, and is of superior solidity and interior color. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality. One of the best for gardeners whose trade demands fruits of beautiful shape and color. A very good variety for the early market and home garden. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.00.

Trucker's Favorite The choicest large-fruited tomato, purple tomato. Most regular in form and size, thick-meated and very solid, this is one of the largest smooth tomatoes grown. Of a beautiful purplish color, well ripened throughout, the smooth fleshy fruits always bring the highest prices on our markets where their fine flavor is especially esteemed. The vines are of strong growth, not subject to rust or blight, and bear enormous crops until killed by frost. The fruits continue of large size to the very last and are unexcelled for slicing or cooking. It is a main-crop variety. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.40.

Stone One of the largest and most solid, main crop or late, bright red varieties. It is unsurpassed for slicing and canning. The vines are large, vigorous, and very productive. The fruits are bright deep scarlet, nearly round or slightly flattened, exceptionally smooth and uniform in size. Our stock is distinctly superior to most of that offered under this name, being larger, smoother, more uniform, and better colored. Pkt. 5c; Oz. 35; ¼ Lb. \$1.25.

Ponderosa or Beefsteak A purplish pink tomato of the largest size. The vines are vigorous and very productive. The fruits are very solid, with exceptionally few seeds, fairly smooth and considered of very good quality, especially by those who prefer a tomato quite free from acid. The variety ripens about mid-season. It is very desirable for slicing. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.50.

Bonny Best The fruits of this desirable early sort are most

The Tomatoes pictured and described above are greatest sellers on our Markets. Buyers demand them.

TOMATO—Continued

NOTICE—Prices quoted on this Page include Postage.

John Baer An extra early scarlet fruited variety of superior merit. The vines are very hardy and exceptionally productive. The fruits are the largest of the extra early sorts and are also most attractive in color. They are nearly round, smooth, firm and of excellent quality. It is one of the very earliest to ripen its first fruits and it continues to furnish marketable fruits much longer than other very early varieties. It is an invaluable sort for market gardeners, shippers and canners. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.25.

Yellow Plum Fruits plum shaped, of clear, deep yellow color; flesh yellow and finely flavored. Much esteemed for preserves. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.00.

Yellow Pear Fruits similar to the Red Pear, but of rich, clear, yellow color and quite distinct from the variety sometimes sold under this name. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.00.

TURNIP The value of Turnips and Ruta Bagas for feeding stock in fall and winter is not fully appreciated, as they are much liked by all kinds of stock and serve to keep them in good condition. They should not be fed, however, in large quantities to milch cows, or the flavor of the milk will be disagreeably affected. We earnestly recommend that farmers increase their sowings largely, for we are sure the crop will prove remunerative for stock feeding as well as for table use when the roots are comparatively small.

Both of these wholesome vegetables are very easily affected in their form and flavor, by soil, climate, and mode of culture. The Turnip plant is distinguished from the Ruta Baga by its rougher leaves; the root usually matures earlier and is smoother and more symmetrical. There are a great many varieties, but our list comprises the best for the garden and farm.

For summer use sow early in spring in light, rich, or new soil, in drills one and one-half to two feet apart according to the size of the variety and cover one-half inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds so that the young plants will not be checked in growth. Any overcrowding will result in rough and poorly flavored roots. It is important to get the spring and summer crop started very early so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and bitter.

In the middle and western States sow for fall and main crop from the middle of June to the first of August and in the manner given for spring sowing. In the field, turnips are often sown broadcast, though in most cases better results are obtained by drill culture; good results from broadcast sowing are often obtained on new and burned over land where the weeds are not likely to be troublesome.

For winter keeping, store the turnips in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil where there will be no danger of water standing and to cover with straw overlaid with earth sufficiently deep to keep out frost. When they are thus protected, turnips will keep well till spring.

Extra Early Purple Top Similar to Extra Early white except that the roots are a little flatter and an attractive purple-red on the upper portion. Well adapted for forcing. All in all, the Milan turnips leave nothing more to be desired in the way of an extra early garden turnip. Pkt. 5c; Oz. 15c; ¼ Lb. 40c; Lb. \$1.50.

Early Purple Top, Strap Leaved A very early strap leaved variety, very extensively used for the table. The leaves are few, entire, upright in growth. The roots are flat, of medium size, purple, or dark red above ground, white below. The flesh is white, fine grained, and tender. Roots when in best condition for table use are about two and one-half inches in diameter, but can be grown much larger for stock feeding. This sort is also known as Early Red Top, Strap Leaved. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Purple Top White Globe This excellent table variety is globular in shape, of good size and very attractive appearance. The roots are large, purple, or dark red above ground, white below. The flesh is white, fine grained, and tender. The roots when in best condition for the table are about three inches in diameter, but can be grown much larger for stock feeding. This sort keeps well for so early a variety and is one of the best for market use. It is also known as Red Top White Globe. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Cow Horn or Long White This variety is clear white, except a little shade of green at the top of the root, which is long and carrot-like in form, cylindrical but usually ending in a point, and slightly crooked. The roots are often twelve to fifteen inches long by about two and one-half inches in diameter and grow about three inches out of the ground. The flesh is fine grained and well flavored, and for table use is in best condition when roots are about two inches in diameter. Desirable for stock feeding and has obtained considerable favor as a market sort. The variety is of very rapid growth and well adapted for fall and early winter use. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

TOBACCO The seed should be sown as early as possible after danger of frost is over. It is customary to burn a quantity of brush and rubbish in the spring on the ground intended for the seed bed; then dig and pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches high, transplant into rows four or five feet apart each way. Cultivate thoroughly with plow and hoe.

WHITE BURLEY. A favorite for plug fillers and wrappers. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.50.

CONNECTICUT SEED LEAF. A hardy cigar variety, well adapted to growing in the middle and northern

Beauty The vines are large, vigorous, and very productive. The fruits are large, purplish pink, exceptionally smooth and uniform in size, very solid and of excellent quality. This is one of the best second early or midseason purplish pink sorts for table use. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.00.

Yellow Husk or Ground Cherry Very sweet, mild flavor; used for preserves. Vines low and spreading. Fruits small, about one-half inch in diameter, enclosed in a loose husk. The seed we offer is that of the true Yellow Ground Cherry, not the purple fruited sort which is scarcely edible. Pkt. 5c; Oz. 40c; ¼ Lb. \$1.00.

Golden Queen The fruits are large and smooth, of bright golden yellow color, sometimes with a slight blush of red. They are as smooth and well shaped as the best of the red varieties and are of superior flavor. Pkt. 5c; Oz. 35c; ¼ Lb. 90c.

Purple Top White Globe

Seven Top This sort is cultivated extensively in the South for the tops which are used for greens. In many sections it is a favorite green feed for stock and its use like Rape for a pasture crop is quite general. This sort is very hardy and the growth usually continues throughout the winter. The variety is not generally depended on for the root since the tops are produced so abundantly. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Large Amber Globe One of the best yellow fleshed varieties grown usually for stock feeding. The roots are of large size and of globular shape. The skin is clear yellow except the top which is tinged with green. The flesh is light yellow, fine grained, and sweet. The variety keeps well and is a good cropper. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Ruta Baga A strain of Purple Top Yellow ruta baga of American origin, selected to a smaller top and much shorter neck than is usually found, while the roots are a little more globular, grow to a large size and are of the finest quality. Excellent for table use and stock feeding. We consider this one of the most desirable sorts. Pkt. 5c; Oz. 10c; ¼ Lb. 30c; Lb. \$1.00.

Improved Long Island States. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.25.
HAVANA. The leaf is very thin and is of fine texture. The variety is much used for cigar wrappers. Pkt. 5c; Oz. 50c; ¼ Lb. \$1.25.

Our special strain of Purple Top Globe Turnips are unequalled.

A DESCRIPTIVE LIST OF CHOICE FLOWER SEEDS

WITH GENERAL DIRECTIONS FOR CULTIVATION

MOST flowering plants will live in almost any soil, but to give them a fair chance to develop, some care should be taken to make the ground suited to their needs. The soil best adapted for flowering plants generally is a light, friable loam, containing a sufficient amount of sand to render it porous. Many flowers are better if produced on plants of vigorous growth, hence a portion of the garden should be prepared by deep digging, thorough pulverization and liberal enriching with large quantities of well-rotted manure. Since some other varieties produce the largest and finest colored flowers when grown on rather light, poor soil, a portion of the garden should not be enriched.

Cultural directions are given on the packets, and we urge purchasers to study them carefully. While some seeds need special treatment, the following general rules will apply to all. Make the surface of the soil as fine, smooth, and level as possible; do not plant when the ground is wet; cover each lot of seeds to a uniform depth, which should not be more than four to six times the diameter of the seed; press the soil firmly over the seed; plant in rows so that the starting plants can be seen easily; thin out the young plants to prevent crowding, and keep entirely free from weeds.

Very small seeds, such as Portulaca, Canterbury Bell, Foxglove, Petunia, etc., should be merely sprinkled on the surface of the ground, after making it quite smooth with the back of the spade, and barely covered with fine, sifted, light, mellow soil, and afterwards protected from the scorching sun and heavy rains by a cloth, mat, or some green branches stuck around them. If the weather, after sowing, should be dry, it will be necessary to water the places, where the seeds are sown, with a fine spray, regularly, but slightly, every evening, as it is essential that the seeds, during the process of germination, should be kept constantly moist. From a neglect or oversight of this arise most of the failures. As the process of germination is shorter or longer in the different kinds of seeds, the patience of the cultivator is often sorely tried with the seeds of a slowly germinating character.

Plants are usually divided into three classes, Annuals, Biennials, and Perennials. Annuals are plants which normally live but a single season. Biennials are plants living two years; particularly those which do not bear flowers and fruit until the second season. Perennials tend to live from year to year.

ALL FLOWER SEEDS SENT POSTPAID ON RECEIPT OF PRICE

Send us \$1.00 and select PACKETS to the value of...\$1.15
Send us 2.00 and select PACKETS to the value of... 2.35
Send us 3.00 and select PACKETS to the value of... 3.60

Send us \$4.00 and select PACKETS to the value of...\$4.85
Send us 5.00 and select PACKETS to the value of... 6.15
Send us 10.00 and select PACKETS to the value of...12.50

These Rates apply to Seeds in Packets, but not to Seeds by weight
No discount can be allowed on Flower Seeds by Weight

Acroclinium (*Everlasting*) A very pretty, half hardy annual producing white and rose colored, double daisy-like flowers, about one and one-half inches in diameter. Each flower-head is borne singly on a very long stem; leaves small, narrow, alternate. These are "Immortelles" so desirable for wreaths and winter bouquets.

Sow the seed in open ground early in spring; preferably in light, well prepared soil, and cover with one-fourth inch of fine soil firmly pressed down. Thin the young plants to four inches apart. Height fifteen inches.

Album. Pure white.....Pkt. 5c.
Roseum. Light rose.....Pkt. 5c.
Mixed.....Pkt. 5c.

Ageratum A beautiful, hardy annual of neat bushy habit. The attractive feathery flowers borne in dense clusters are very useful for bouquets. Very desirable for outdoor bedding and borders, being covered with bloom nearly all summer.

Sow outdoors after danger from frost is over; or for earlier blooming start under glass and transplant. Cover the seed with one-eighth to one-fourth inch of fine soil firmly pressed down.

Mexicanum. Light blue; about two feet high.....Pkt. 5c.
Imperial Dwarf White. Height ten inches.....Pkt. 5c.
Tom Thumb Dwarf Blue. For edging.....Pkt. 5c.
Mixed. Seeds of the above varieties mixed.....Pkt. 5c.

Alyssum The annual varieties can be grown very readily either outdoors or in the house and by cutting back the plants properly an almost constant succession of bloom may be had. Seed can be sown in open ground very early in spring, or may also be sown outdoors in fall.

Sweet (*Maritimum*) This very hardy annual for borders, edging, or massing in small beds, comes into bloom early in the spring, covering itself with clusters or trusses of small, pure, white cruciform flowers. They have a peculiar, delicate fragrance and are useful in small bouquets. Usually not over eight inches high but spreading.....Pkt. 5c.
Little Gem (*Maritimum Compactum, Carpet of Snow*) A beautiful white sort for edgings, borders, and rock work. The plants grow about six inches high, produce hundreds of flowers and form a compact mass of bloom usually fifteen to eighteen in. across. Hardy annual.....Pkt. 5c.

Antirrhinum—(*See Snapdragon*)
Aquilegia—(*See Columbine*)

Amaranthus These plants afford brilliant contrasts of color, being useful for tall borders, groups, and foliage effects. The leaves and stems are of different shades of red, blended usually with green; two to three feet high.

Seed may be sown in open ground early in spring, covering one-fourth inch deep; thin two to three feet apart.

Melancholicus ruber. Deep coppery red foliage; very hardy annual.....Pkt. 5c.
Tricolor. A hardy annual with leaves of red, yellow, and green; well-known as "Joseph's Coat." Especially brilliant if grown in rather poor soil.....Pkt. 5c.

Anemone (*Wind Flower*) Among the earliest of spring flowers. They are about two inches across, with blue stamens, resemble the single poppy in shape and come in several shades of color. The foliage is deeply cut.

Sow from April to August. Succeeds well in rich, light loam, in a sunny situation. Plants taken up in the fall will bloom well in pots in the winter. Hardy perennial; outdoors about six inches high. Single Mixed.....Pkt. 5c.

Arabis Among the earliest blooming plants. Very useful for rock work, edgings, etc. Sow early in spring. Some winter protection is advisable. Hardy perennials.

Alpina. This sort has small pure white, cruciform flowers. Leaves rather slender, somewhat clasping, small-toothed and pubescent.....Pkt. 5c.

Asparagus The ornamental varieties of asparagus are highly valued for their finely cut foliage. Both the climbing and trailing sorts are exceptionally attractive.

Soak seed in warm water before planting. When the plants are large enough to handle, transplant into rich, but open and friable soil.

Sprengeri (*Emerald Feather*) A most graceful house plant; valuable for hanging baskets. Sprays three to four feet long; light green.....Pkt. 5c.

Verticillatus. A beautiful climber with feathery foliage and scarlet berries which are quite ornamental. Sow early in spring. Hardy perennial; ten to fifteen feet high....Pkt. 10c.

Are you utilizing all that ground of yours?

ASTER

The Aster, in its many double varieties, is unsurpassed for bedding and cutting, and is not only one of the most profitable annuals for the professional florist but also one of the most satisfactory for the home garden. The great diversity of size, color, form, and season of blooming makes it one of the most suitable plants for supplying cut flowers. The plants are usually of vigorous growth and so hardy that they endure a slight frost without serious injury. By planting the different strains and at different times, one may have in the latitude of Detroit a constant succession of bloom from the last of July till the middle of October without the aid of a greenhouse or even a hotbed.

Seed may be sown outdoors as early in spring as the ground is warm and dry, or for earlier blooming may be started indoors or in a cold-frame and transplanted in the open ground after danger of killing frost is over. If conditions are favorable they will usually do well in any well prepared garden soil but a strong loam that has been well fertilized the previous year is preferable. In planting cover the seed with one-fourth inch of fine soil firmly pressed down. The rows for most of the varieties should be about one and one-half feet apart. When about one to two inches high, thin to sixteen inches apart in the row. It is desirable during warm and dry weather to water thoroughly the plants two or three times a week, preferably early in the morning or evening. It is desirable to change the location as often as practicable.

Insects, such as the red spider, may be kept at bay by frequently spraying with clear water, or for insects that eat the foliage add one-fourth teaspoonful of Paris Green to ten gallons of water. Sprinkle with tobacco water or dust to keep off the plant louse. We offer choice seed that has been grown for us from the best types by the most skillful cultivators in Europe and which is more certain to give good results than most of that on the market.

Queen of the Market Very desirable on account of extreme earliness as well as profuse blooming and wide range of colors. The plants are of somewhat compact but branching habit, about sixteen to eighteen inches high, bearing on long stems from ten to fifteen finely formed double flowers of medium size. Fine for cutting and used extensively for growing under glass. This class is known as Queen of the Earlies.

White. Distinctly early, double, fine form.....	Pkt. 10c.	Rose. A fine, very early red.....	Pkt. 10c.
Lavender. Light lavender-blue.....	Pkt. 10c.	Light Blue. A very pleasing shade.....	Pkt. 10c.
Deep Blue. An early and reliable deep blue aster.....	Pkt. 10c.		
Mixed. Many pleasing shades and colors including white, pink, rose, deep red, crimson, lavender, light blue, and dark blue; early blooming and very floriferous.....	Pkt. 10c.		

Victoria An early strain superior to the old type of Victoria. The flowers are large when grown under favorable conditions, sometimes three inches across and are very full in the center. The petals are broad and thick and curve outward, overlapping so regularly as to resemble those of the double dahlia. The plants are about fifteen to eighteen inches high.

Mixed. This includes white, light blue, peach blossom, violet, deep red, dark blue, and crimson.....Pkt. 10c.

Daybreak A very desirable, pink medium early variety. The plant is branching but upright and compact in habit of growth. The flowers are borne on long stems, almost round, exceptionally well formed and very double with regularly incurved petals. The color is a delicate light pink. Height of plant fifteen to twenty inches. Pkt. 10c.

Purity Similar to Daybreak but pure white. The flowers are abundantly produced, symmetrical in form, very full and globe shaped, with rather short petals which are slightly folded lengthwise. One of the best early white asters and with Daybreak a leading representative of what is sometimes called the Imperial class. An excellent variety for cutting.....Pkt. 10c.

Comet, Semi-Dwarf

This midseason class of semi-dwarf Comet Asters is fully two weeks earlier in blooming than the older Comet strains and though more compact in growth of plant is very floriferous. Flowers often three inches or more in diameter with centers well covered and petals broad and recurved; very satisfactory for cutting. Plant branching but rather upright in habit, about eighteen inches high.

White.....	Pkt. 10c.
Light Rose.....	Pkt. 10c.
Light Blue.....	Pkt. 10c.
Lilac.....	Pkt. 10c.

Mixed. Includes the four above varieties mixed Pkt. 10c.

Aster, Crego Giant Pink

No Flower Garden complete without a few Asters.

ASTER-Continued

Mikado Pink (*Rochester*) A beautiful mid-season aster of very large size and fine form, at first white but changing gradually to light rose with a lavender tint. Petals long and narrow, rather flat, some of them slightly curved and twisted, and cover well the centers of the flowers. Plants about two feet high, branching, with stems twelve to sixteen inches long. Pkt. 15c.

Violet King Similar in habit to the late branching asters, but producing a little earlier very large double blossoms of distinct form, many of the petals being rather narrow and slightly quilled and curved. The inner petals are incurved covering well the center. Color a shade of violet. Pkt. 10c.

Crimson King The flowers are a most attractive rich crimson, are very double in form and they last an exceptionally long time. This is another very desirable mid-season variety of the King class, being similar, aside from color, to Violet King. Pkt. 10c.

Truffaut's Perfection Peony Flowered The plants of this mid-season class are of upright growth and are colored flowers, with the petals curving upward and inward. They produce on long stems large, brilliantly Mixed. Many shades and colors, ranging from white to deep rose and dark blue. Pkt. 10c.

Crego Giant Pink A beautiful soft shell pink flower of largest size, with very long petals which are very attractively curled and twisted. Plant branching and very vigorous, with long, strong stems, very desirable for cutting. A mid-season sort, considered by many a decidedly the best aster yet introduced. Pkt. 15c.

Crego Giant White Similar to Crego Giant Pink, but the flowers are glistening pure white. The petals grow so thickly that the flowers show nothing of the ragged appearance seen in some of this class of asters. One of the best for cutting. Pkt. 15c.

Giant Comet In this class of asters the petals are very long and recurved and twisted near the center. Plant branching about two feet high, more vigorous and taller growing than the ordinary Comet; flowers larger and equal in form. A desirable class coming into bloom rather late. Known also as Ostrich Plume. Pkt. 15c.

Peerless Pink Flowers a very pleasing shade of rich shell pink. They are of very large size, exceptionally attractive form and are borne on very long stems. Plants branching, two to two and one-half feet high. One of the most desirable late asters for cutting. Pkt. 20c.

Semple's Branching A class of very strong growing asters usually not coming into bloom until the latter part of August, but producing on very long stems the full petalled, exceptionally large double blossoms of fine form. The plants are distinctly branching in habit of growth and are about two feet high. For many years this class with us has been almost entirely free from the aster blight.

White. Pure white, very attractive. Pkt. 10c.

Mary Semple. Flesh pink. A very light and charming shade. Pkt. 10c.

Light Pink. A beautiful light pink, slightly tinged with rose. Pkt. 10c.

Tyrian Rose. Flowers are very attractive deep purplish rose. Pkt. 10c.

Lavender. Bright lavender; very large flowers of fine form. Pkt. 10c.

Light Blue. Flowers light bright blue; very large and attractive. Pkt. 10c.

Crimson. Flowers bright deep crimson, tinged with carmine. Pkt. 10c.

Purple. Flowers are very deep purplish blue; rich and pleasing shades. Pkt. 10c.

Semple's Mixed. A superb mixture of all the shades and colors found in the Semple's class of late branching asters. Pkt. 10c.

Aster, Finest Mixed A mixture of very fine strains and colors. The bed can be made more attractive by pulling up the early plants as soon as they are out of bloom. Pkt. 5c.

Baby's Breath—(See *Gypsophila*)

Bachelor's Button—(See *Centaurea*)

List of Flower Seeds for Special Purposes

PERENNIAL PLANTS. Antirrhinum, Aquilegia, Asters (hardy sorts), Bellis, Canna, Campanula, Carnations, Chrysanthemums (hardy sorts), Coreopsis, Delphinium, Dianthus, Digitalis, Gaillardia (hardy), Geranium, Gypsophila, Paniculata, Heliotrope, Hollyhocks, Lobelia (hardy sorts), Matricaria, Myosotis, Pansy, Phlox (hardy), Pinks (hardy), Poppy Iceland, Poppy Oriental, Primrose Pyrethrum, Sweet William, Verhena, Violet, Wallflower.

EDGING AND BORDER PLANTS. Abronia Ageratum (dwarf), Alyssum Sweet, Bellis, Candytuft, Centaurea "Dusty Miller," Lobelia, Mignonette, Myosotis, Nasturtium (dwarf), Nemophila, Pansy, Portulaca, Snap Dragon (dwarf), Sweet William, Sweet Peas (dwarf), Violet.

PLANTS FOR BEDDING AND IN MASSES. Adonis, Agrostemma, Amaranthus, Antirrhinum, Asters, Bachelor's Button, Balsam, Calceolaria, Calendula, Calliopsis, California

Poppy, Campanula, Canna, Castor Beans, Carnation, Chrysanthemum, Clarkia, Cosmos, Coxcomb, Delphinium, Digitalis, Four O'clock, Gaillardia, Geranium, Heliotrope, Lantana, Larkspur, Linum, Mignonette, Nicotiana, Nigella, Phlox, Petunia, Pinks, Poppy, Salpiglossis, Salvia, Scabiosa, Sunflower (fancy), Stocks, Sweet Sultan, Sweet William, Verbena, Wallflower, Zinnia.

CLIMBING PLANTS. Bignonia, Canary Bird Flower, Clematis, Cobea, Cypress Vine, Gourds, Japanese Hop, Hyacinth Beans, Ipomoea, Ivy, Maurandia, Morning Glory, Nasturtium, Sweet Peas, Thunbergia, Wistaria.

PLANTS SUITABLE FOR POTS. Abutilon, Ageratum, Asparagus, Begonia, Calceolaria, Carnation, Cineraria, Coleus, Cyclamen, Daisy "Shasta," Daisy "Paris," Fuchsia, Geranium, Gloxinia, Heliotrope, Lantana, Mignonette, Mimosa, Mimulus, Petunia (double), Primrose, Smilax, Stocks, Violet.

Plant seeds that you possibly overlooked last season.

Balsam.

Balloon Vine (*Cardiospermum halicacabum*) A favorite with children, being remarkable for its inflated membranous capsules containing the seed. It is sometimes called "Love-in-a-Puff." A rapid and graceful climber. Flowers small, white. The round, black seed is marked with a white, heart-shaped spot. Sow seed outdoors in open ground early in spring and give the plant some support to run upon. Tender annual; six feet high.....Pkt. 5c.

Balsam (*Impatiens Balsamina*) Known also as Lady Slipper. The brilliantly colored, double rose-like flowers of this well-known border and bedding annual are thickly set along the branches of the erect, bushy plants. The dainty individual flowers, often two inches across, are borne on very short stems and when cut they show to best advantage floating in a dish of water. The colors range from white to dark purple, and are either self-colored or spotted and striped.

Balsams are tender and should be started in boxes indoors or in the open ground when danger of frost is past. The plants prefer a rich, moist, or even wet, sandy loam, and must not suffer for moisture. They do best if allowed eighteen inches apart each way in a sunny situation. Larger and more double flowers will be obtained if some of the young shoots are cut out when quite small, or by transplanting two or three times. Hardy annual; one to two feet high.

Double Camellia, extra fine mixed. As double as a Camellia, which this variety resembles; white blotched with various colors. Pkt. 5c.
Tall Double Mixed. About two feet high.....Pkt. 5c.
Dwarf Double Mixed. About one foot high.....Pkt. 5c.

Begonia Very desirable for pot culture or for bedding out in partially shaded locations. Suitable also for window boxes. Some varieties are grown for their foliage, but most sorts, when given proper care, produce abundantly large clusters of brilliantly beautiful wax-like flowers of fine form and substance.

Sow seed in March in shallow boxes or small pots plunged in moss. Begonia seed is extremely small and great care should be taken in opening the packet and planting. Open the packet directly over the surface to prevent any seed being lost. The surface of the soil should be very smooth and the seed carefully scattered on the surface and lightly pressed in. The moss should be kept quite damp, but the surface of the soil should not be watered. Moisture can be retained in the soil by placing a glass over the box or pots. When the plants are large enough to handle, transplant into small pots, and to larger sized pots as required. For winter or spring blooming, sow from August to September. For outdoor bedding, select a shady, moist situation, making the bed rich with well-rotted manure and leaf mold, if obtainable. The young plants started indoors may be set out when the weather is warm and settled. Water thoroughly every day. Tender perennial, blooming the first year if started early, one foot high.

Robusta Perfecta. Plants are of robust, compact habit; dark green foliage and brilliant, double, cinnabar-scarlet flowers.....Pkt. 15c.

Single Mixed. The seed we offer will produce the finest single flowers in various shades ranging from white to deep red.....Pkt. 10c.

Double Mixed. The largest and best double flowers, including shades of pink, red, scarlet, and light yellow.....Pkt. 15c.

Vernon (*Semperflorens atropurpurea*). Flowers brilliant, rich red, set off perfectly by the abundant, glossy green leaves, which are broadly margined with bronze and purple. Hardy and floriferous; the best of the semperflorens class.....Pkt. 15c.

Semperflorens alba. A very useful variety, well adapted for house or outdoor culture. Plants of compact dwarf habit, and under proper treatment almost continuous bloomers. Easily grown; flowers very attractive bluish white.....Pkt. 15c.

Semperflorens rosea. Like *Semperflorens alba*, except flowers are rose colored.....Pkt. 15c.
Rex. Ornamental leaved varieties. Leaves very large, and are either a rich crimson tinted bronze, or emerald hued, having the upper surface zoned or spotted with silvery white. Finest mixed.....Pkt. 25c.

For Begonia Bulbs, see Bulbs and Roots, page 58.

Bellis—(See *Daisy*).

Bignonia Radicans (*Tecoma radicans*, *Trumpet Vine*) One of the most showy, certainly one of the best hardy, deciduous flowering climbers for covering verandas, arbors, trunks of trees, old walls, etc. Vines should be moderately pruned and well trained so as to afford a good circulation of air, thus insuring a more and better bloom. The flowers produced in clusters are trumpet shaped, two to three inches long, and of orange-red color. The foliage is very attractive and unusually free from insects. It not only is one of the best climbers, but planted on the lawn makes a pretty bush of drooping habit, if the tops are cut back. Sow seed in well prepared beds, either in autumn or very early in spring, in drills, and keep free from weeds. Hardy perennial, often growing thirty feet.....Pkt. 10c.

Butterfly Flower—(See *Schizanthus*).

Calceolaria A much admired genus distinguished by its abundance of large, showy, sac-shaped or slipper-like flowers which are creamy white and various shades of yellow, often splashed, spotted, or blotched with dark reddish-brown, two plants rarely having flowers marked exactly alike. Leaves large, felty, close-growing. Under proper conditions can be grown indoors to perfection, making an exceedingly decorative plant. Start the seed at any time, except during hot weather, in a temperature of about 60°F. Herbaceous annuals or shrubby evergreen perennials.

Hybrida grandiflora. Large, self-colored flowers.....Pkt. 25c.

Hybrida tigrina. Flowers beautifully spotted.....Pkt. 25c.

Finest Hybrids Mixed. Seeds saved only from the most perfect flowers; all desirable.....Pkt. 25c.

California Poppy—(See *Eschscholtzia*). Chalcidula—(See *Marigold*).

Calliopsis or Coreopsis Very showy plants for bedding or borders, producing in great profusion for a long time flowers which are bright yellow and rich brown, self colored or with these colors and red contrasted.

Sow outdoors early in spring where plants are wanted to bloom, covering seed one-half inch deep; thin to two feet apart. For earlier bloom sow indoors and transplant.

Coreopsis tinctoria. A very hardy and easily grown annual, producing an abundance of brilliantly colored single ray flowers with dark center. The flowers, which are about one and one-half inches across, vary from clear yellow to deep rich brown, the two colors often being beautifully contrasted in the same blossom. Long, graceful stems and very desirable for decorative purposes. The tall, slender habit of growth makes neat staking desirable for best results. Height of plants, two to three feet. Fine mixed.....Pkt. 5c.

Remember our Flower Seed list is one of the most complete.

Golden Ray. This dwarf variety forms compact plants covered with singularly attractive flowers of rich maroon edged with golden yellow. The petals are rather narrow and are often twisted, giving the flowers a star-like appearance. Hardy annual, six to eight inches high, well adapted for edgings.....Pkt. 10c.

Lanceolata grandiflora. A very hardy perennial, blooming the first year and producing on long stems a succession of rich bright yellow flowers two to three inches across. Very valuable for cutting. Seed may also be sown in fall outdoors. About two feet high..Pkt. 10c.

Campanula—(See Canterbury Bell)

Canary Bird Flower (*Tropaeolum canariense*) A beautiful climber with small, curiously shaped, canary colored blossoms and attractive palmate leaves.

Sow outdoors early in spring, preferably in light, moderately rich soil by the side of an arbor or trellis. Will bloom freely from July until killed by frost. Tender annual; height, ten to twenty feet.....Pkt. 5c.

Candytuft (*Iberis*) Showy, branching plants twelve to fifteen inches high and

bearing in profusion terminal clusters of beautiful single cruciform flowers in a wide range of colors. Considered indispensable for cutting and very effective in beds, masses or rockeries.

If sown in spring in rich, mellow soil the plants will usually bloom from July to September or if in the fall will be likely to blossom from the last of May to July. Make rows about one foot apart and cover the seeds with about one-fourth inch of fine soil firmly pressed down. When two inches high thin to four inches apart in the row. Larger flowers are obtained if some of the branches are removed, and an abundance of water is desirable. Hardy annual.

Lilac. Shading to light purple.....Pkt. 5c.

White.....Pkt. 5c.

Rocket (*Giant Empress*). Extra large white trusses; much better than the common white variety..Pkt. 5c.

Fragrant. Flowers white, fragrant; foliage finely cut. Pkt. 5c.

Purple. A rich dark shade.....Pkt. 5c.

Rose Carmine. Compact habit.....Pkt. 10c.

Fine Mixed.....Pkt. 5c.

Canna Stately, very ornamental plants of semi-tropical appearance, very desirable for groups and in masses. Plants branching from the roots, with very large, broad leaves, producing clusters of large flowers of varied and brilliant colors from August until cut down by frost.

Sow seed indoors in February in light, sandy soil, first cutting a small notch through the hard outer coat with a knife or file, care being taken not to cut into the germ. Cover with one-half inch of fine soil. Keep the soil moist and the temperature averaging 60° F. Transplant outdoors after danger of frost is over, preferably in very rich soil, giving each plant two feet of room. Tender annual in the open ground, or tender perennial in the greenhouse.

Finest Large Flowering Mixed. Plants comparatively dwarf, about three feet high.....Pkt. 5c.

Canterbury Bell (*Campanula medium*) Handsome, easily grown herbaceous plants of stately branching growth and profuse bloom for beds and backgrounds. They produce long racemes of strikingly effective bell-shaped or saucer-shaped flowers of

rich color. Leaves sessile, lanceolate. Usually grown as a hardy biennial, but if seed is sown very early indoors it may be treated as a tender annual.

Sow seed outdoors early in spring in rows about two feet apart covering with about one-fourth inch of fine soil firmly pressed down. The plants succeed best in light, rich soil with good drainage and in the fall should be transplanted or thinned to six inches or two feet apart and given some protection in severe winter weather. Height of plants, from two to four feet.

Double White.....Pkt. 10c.

Double Blue. Shades of blue and purple.....Pkt. 10c.

Double Mixed.....Pkt. 5c.

Single Mixed. Colors white, and various shades of violet, rose, lilac, and blue.....Pkt. 5c.

Calliopsis (*Coreopsis tinctoria*)

.....Pkt. 5c.

Cannas.

Carnation

(*Dianthus barbatus*) "Carnation," "Pink," "Clove Pink," "Florists' Pink," are names applied by different people to the same or to different plants of several species as well as to hybrids between them. They are easily grown from seed and very free blooming, the flowers being bright colored and with most delicious clovelike fragrance.

Some varieties are best adapted for pot culture and make fine house plants; others do best in beds in the open ground. The improved varieties we offer are suitable also for cutting. They produce very double, semi-circular blooms with thick wax-like petals and long pod-like calyx. The plants are branching but compact and erect, with slender, bluish green foliage. The bursting of the calyx may be prevented by using ashes or some form of potash. Where size and quality of flowers are desired rather than profusion of bloom, all except the terminal buds should be removed. This is the method employed by florists to obtain the larger longer-stemmed beauties. Half hardy perennial, usually treated as a biennial.

Are you utilizing all that ground of yours?

Large Flowering Carnations Best Suited for Pot Culture

The choicest varieties sold by florists are propagated from cuttings, but very beautiful double flowers just as good in form and more fragrant, although not as large, can be produced from the seed we offer. Sow under glass in the greenhouse or hotbed from January to March. Use well prepared soil, cover lightly and keep in a temperature of about 60° F. Sprinkle with a fine spray. When the young plants are of a sufficient size transplant them out of doors two feet apart each way, or the seed may be sown in permanent bed as early in spring as weather will permit.

Double Perpetual Flowered Mixed. An exceedingly beautiful variety producing very double flowers of various shades and colors. Plants closely branched and very symmetrical. Seed saved from choicest double flowers.....Pkt. 15c.

Marguerite Finest Mixed. The plants of this wonderfully fine strain may be made to bloom in four months. Flowers large, double, deeply fringed, very fragrant and appear in very attractive shades of color. Plants semi-dwarf. One of the best carnations in cultivation. Especially desirable for bedding as an annual and for cutting.....Pkt. 5c.

Double Dwarf Vienna Mixed. Large flowered and comes into bloom early, producing flowers of many colors and beautiful markings; a large proportion double.....Pkt. 10c.

Castor Bean

(*Ricinus*) Tall majestic plants for lawns or driveways; with broad, beautifully lobed, palm-like leaves of glossy green, brown, or bronzed metallic hue and long spikes of scarlet, or of green, prickly seed pods. Makes rapid, vigorous growth in rich soil. Sow seed outdoors after danger of frost is over, preferably in light rich soil, or for earlier blooms start indoors and transplant. For best development each plant should have at least four feet each way. Its rich, luxuriant growth makes it very attractive for a long distance either grown singly or in groups, or as center plants with Cannas, Dahlias, etc., giving a semi-tropical effect. Seed beautifully striped or mottled. Tender annual; six to fifteen feet high.

Zanzibariensis. Wonderfully vigorous, from ten to fifteen feet high. Leaves have a brilliant luster, measuring about thirty inches across, ranging in color from bright green to deep bronze. Seed very large, oval. Mixed varieties.....Pkt. 5c.

Sanguineus. (Tricolor) Blood red stalks with red venation in leaves; height about six feet.....Pkt. 5c.

Castor Bean, Mixed. A desirable mixture of all the named varieties.....Pkt. 5c.

Celosia

An odd and picturesque class of plants having colored foliage and in which the innumerable small flower and seed vessels together with their supports form a very brilliant colored mass, sometimes gracefully arranged like plumes and sometimes more dense, being corrugated and frilled at the edge like a cock's comb. They form the gayest possible decoration in beds and borders, retaining their brilliant coloring, often from midsummer until frost. The red *Cristata* sorts are sometimes cut before fully ripe and dried in the house for winter bouquets.

Seed may be sown outdoors as early in spring as ground is warm and dry, using if possible, light, rich, well pulverized soil, and giving plenty of moisture. For larger and more beautiful plumes start the seed very early indoors and transplant to place when weather is settled. Also adapted for growing in pots in greenhouses and conservatory. Half hardy annuals.

Pyramid alis plumosa mixed. Plants pyramidal, branching, two or more feet high, covered with long, brilliantly colored and gracefully formed plumes in red, yellow, or violet. An excellent mixture of plumosa or feathered celosias.....Pkt. 5c.

Variegated. A *cristata* strain between the plumosa and the dwarf cockscomb types. The plumes are broadened at the top, variegated and striped in red and yellow. Height one and one-half to two feet.....Pkt. 10c.

Giant Empress. This beautiful dwarf plant has bronze leaves and forms very large crimson combs. Height about one foot.....Pkt. 10c.

Centaurea

Centaureas embrace some foliage plants but are more generally known for their hardy flowering annuals which include some of our most graceful and showy garden flowers that have long been favorites for cutting. The tall slender straight or slightly branching plants with narrow leaves thrive well in common garden soil. They produce bright colored single and double heads of flowers on long graceful stems and some sorts are fragrant.

Annual Varieties Cultivated for Their Flowers.

Sow seed in early spring in hotbed and transplant to open ground or sow in open ground as soon as the weather is warm and settled. Cover seed about one-fourth inch deep; thin three or four inches apart. Fine for bedding or borders. The young plants are very sensitive to wet, and care should be taken to prevent water standing on the leaves.

Cyanus (Bachelor's Button, Corn Flower) A well-known, hardy border plant, also called "blue bottle" and "ragged sailor," which does best in carefully prepared gravelly soil. If seed is sown as soon as the ground is fit in the spring and the flowers picked so as to prevent the plant exhausting itself by seeding, it will furnish a profusion of bright blue, purple, white, or pink single flowers from July until late in the autumn. Hardy annual; plant one to two feet high. Mixed.....Pkt. 5c.

Double Mixed (Bachelor's Button) Produces larger, more globular flower-heads than the common variety.....Pkt. 5c.

Odorata (Sweet Sultan) An old-fashioned hardy annual about eighteen inches high, with long-stemmed, sweet scented, light purple flowers.....Pkt. 10c.

Marguerite. A most desirable, sweet scented *Centaurea*, producing on long stems finely laciniated white flowers, about as large as a carnation, and which remain fresh and beautiful for a long time after cutting. Hardy annual; about eighteen inches high.....Pkt. 5c.

Imperialis Mixed. An excellent sweet scented variety, also called Sweet Sultan. The flowers are finely laciniated and are about the size of a carnation. They have long stems and keep well after cutting. Colors range through white, rose, lilac, purple, and yellow. Hardy annual; about eighteen inches high.....Pkt. 10c.

Perennial Varieties Cultivated for Foliage.

Seeds should be sown under glass and the young plants grown in pots or boxes until settled warm weather, when they may be set about one foot apart where wanted for borders or bedding. In southern latitudes seed may also be sown outdoors in fall.

Gymnocarpa. This is also called Dusty Miller. Valuable because of its finely cut silver gray foliage and graceful drooping habit of growth. Half hardy perennial; one and one-half to two feet high.....Pkt. 10c.

Chrysanthemum

These outdoor "summer Chrysanthemums" are showy and effective for bedding or borders in the garden and desirable for cut flowers. Plants become more bushy and shapely if pinched back in early growth and the practice of disbudding will result in much larger flowers. These annuals are not the winter flowering sorts sold by the florists and which are propagated only by division of roots.

Carnation

In selecting your list of Flowers, include some Chinese Woolflowers.

Early Blooming Garden Sorts.

Seed may be sown in the open ground after danger of frost is over and the seedlings thinned eight or ten inches apart, but the best results come from sowing under cover early in May and transplanting the young plants to open border. Height one and one-half to two feet.

Mixed. The choicest Carinatum and Coronarium varieties, both single and double.....Pkt. 5c

Cheiranthus Cheiri—(See Wallflower)

Cheiranthus Maritimus—(See Virginian Stock)

Cineraria

Cinerarias are easily grown from seed in the greenhouse. The large heads of brilliant daisy-like flowers of many colors, usually sharply margined and with dark eye, are very desirable in pots. The plants are often as broad as high and the velvety leaves are shaded on the under side.

Sow preferably early in fall. They thrive best in a mixture of loam and peat. Perennial, usually one to two feet high.

Maritima candidissima. (Dusty Miller) Cultivated for its handsome, silvery white foliage; very ornamental as a decorative pot plant, or for bedding. Half hardy perennial, one to two feet high.....Pkt. 10c

Hybrida, very dwarf, mixed. Large flowered, eight inches high. Blooms profusely; many colors.....Pkt. 25c

Clarkia Beautiful, hardy annuals with rose colored, white and purple flowers, in delicate but very brilliant shades. The plants are about one and one-half to two feet high and are profuse bloomers.

Sow in light, warm soil, as early in the spring as the ground can be worked, or if planted in August they will bloom the following summer. Double Mixed.....Pkt. 5c

Clematis

Well-known beautiful climbers, much admired for their gracefulness and attractive flowers. They are splendid for covering arbors, verandas, etc., as they cling readily.

The seed germinates slowly. For best results sow indoors in fall or very early in spring. Press the soil firmly over the seed and keep moist and warm. When suitable transplant to place one foot apart, or seed may be sown outdoors early in spring. Perennial but some protection in northern latitudes through winter is advised. Water the roots freely during dry weather to insure profuse blooming.

Mixed. Extra choice, large flowering varieties with beautiful clusters of purple and white flowers.....Pkt. 10c.

Cobaea Scandens

A fine rapid growing climber with handsome dark green foliage and bearing on graceful stems large,

bell-shaped flowers, green at first but rapidly changing to a beautiful deep violet-blue. A wire-netting trellis or support for the green profusion of tendrils to fasten upon is preferable to cords or smooth wire. A well established plant will run about thirty feet in a season, covering a large veranda.

For best results start indoors early in spring in rather dry soil and set out the young plants after danger of frost is past. Tender perennial.....Pkt. 5c

Cockscomb—(See Celosia)

Coix Lachryma—(See Job's Tears)

Centaurea Cyanus (Bachelor's Button)

Early Flowering Cosmos.

Coleus

Magnificent ornamental foliage plants for house or garden culture. The leaves are of many shapes, and the shades and colors are of remarkable beauty.

Sow in shallow pots in rich light soil. Cover the seed lightly with earth and keep the plants in an even moist temperature. Transplant to the open ground in bed or border as soon as danger of frost is over, and in a sheltered situation where they will not be too much exposed to the sun. For house plants seed may be sown indoors in fall. Tender perennial; plants about one to two feet high.

Finest Hybrids Mixed. Extra choice.....Pkt. 25c.

Columbine

(Aquilegia) Very desirable, easily grown, old-fashioned perennials for borders, forming large, permanent clumps. Blooms profusely early in the season and remains in bloom for a considerable period. The peculiar pendant flowers are exquisitely formed, in various colors, often with long spurs. The leaves are usually smooth, ternately compound, with roundish, obtusely lobed leaflets.

Sow the seed which is of rather slow germination, in open ground early in spring in any rich, well drained garden soil. In permanent bed plants should have at least one foot each way. Keep clear of weeds and give each year a dressing of well rotted manure. Seed may also be sown outdoors in fall. Hardy herbaceous perennials; two to three feet high.

Californica hybrida. Hardy, free blooming, with single orange, red and yellow flowers.....Pkt. 5c.

Double Mixed. Best and finest colors, including white, shades of blue and brownish purple.....Pkt. 5c.

Convolvulus Major—(See Morning Glory.)

Our Novelty list of Flowers contains some rare and beautiful varieties.

Convolvulus Minor (*Dwarf Morning Glory*) Dwarf plants of trailing, branching habit, each covering a space about two feet in diameter. At midday they are completely covered with a mass of pure white and variously colored funnel-shaped blossoms which remain open in clear weather until evening.

Sow seed early in spring in any good garden soil, covering about one-half inch deep. Half hardy annual; about one foot high. Mixed.....Pkt. 5c.

Cyclamen.

Cypress Vine (*Impomoea quamoclit*) A most beautiful rapid growing climber with delicate dark green, feathery foliage and many bright star-shaped, scarlet or white blossoms which contrast most effectively with the graceful foliage. Planted by the side of veranda, tree or stakes, and trained properly, there is no handsomer climber.

Seed is usually sown outdoors early in spring in the row where the plants are to remain. Cover seed one-half inch deep. Germination will be hastened if the soil is warm and kept in moist condition. Thin the young plants four to six inches apart. If very early blooming is desired, seed should be started indoors. Seed rather small, black, wedge-shaped. Tender annual; about fifteen feet high.

Dahlia A favorite for autumn flowering, blooming the first season from seed if started early. The flowers are so symmetrical and perfect and the range of colors so wide and varied that they will always be popular where display is wanted.

Seed may be sown in spring in open ground after danger of frost is over, but for best results sow in shallow pans at any time from March to June, and transplant the seedlings to small pots. When strong enough and danger from frost is over plant out one foot apart. These plants will produce tubers which should be taken up in the fall and replanted the following spring; these roots will flower freely the following autumn. Tender herbaceous perennial, three to four feet high.

Finest Double Mixed. Seeds saved from choicest double flowers, including shades of red, pink, dark maroon, yellow, white, etc.....Pkt. 10c.

Finest Single Mixed. Will produce brilliant flowers running through a wide range of striking colors. Pkt. 5c.

For Dahlia Roots see Bulbs and Roots, page 58.

Cosmos

Very effective for autumn flowering in broad masses or back-grounds. A hardy and rapid growing annual, forming bush-like plants with feathery green foliage, four to six feet high, covered with large flowers somewhat resembling the single dahlia. They are gracefully poised on long stems and very useful for decorative purposes.

Sow outdoors early in spring in rather light soil, not too rich, and preferably in a sunny situation. Cover the seed with one-fourth to one-half inch of fine soil firmly pressed down. If planted in rows, make the rows about two feet apart and when the young plants are well up thin from four to six inches apart in the row.

Early Flowering Cosmos

These early flowering strains are about four feet high and bloom profusely four to six weeks earlier than the giant sorts. The flowers are of good size; well adapted to northern latitudes.

Early Flowering Dawn. Flowers white.....Pkt. 5c.
Early Flowering Mixed. Includes white, bright red, and rose colored flowers.....Pkt. 5c.

Giant Flowering Sorts

Hybrida, Giant White.....Pkt. 5c.
Hybrida, Giant Pink.....Pkt. 5c.
Hybrida, Giant Mixed. Flowers white and in shades of pink, rose, and maroon.....Pkt. 5c.
Cucurbita—(See Gourd)

Cyclamen

Well-known and universally admired tuberous rooted pot plants producing exceedingly handsome red and white flowers for indoor winter or spring blooming in green houses or window garden. The gracefully richly colored single flowers are of distinctive shape and are borne on stems of good length for a long blooming season well above the beautiful foliage. The glossy ovate or nearly round leaves are usually marbled or variegated with white.

Sow the seed, which is of rather slow germination, in shallow boxes or pans, using light rich soil and covering the seed slightly. Keep at a temperature of 50° to 60° F. and water freely until well started. Seed sown in spring, by autumn will produce a little bulb. If this is placed first in a three inch pot and later repotted as required in a five or six inch pot it will produce blooms the following spring. Seed may also be sown in fall. Tender perennial; one foot high.

Persicum giganteum, mixed. Beautiful foliage and profuse bloom; each flower is two to two and one-half inches long. Very choice.....Pkt. 80c.

Daisy

(*Bellis perennis*) Charming little plants for edgings and borders, also used for low beds and rock work. The flowers of the improved varieties we offer are borne above the low clusters of leaves on stiff flower stalks, making them suitable for bouquets. With careful cultivation nearly seventy-five percent are double. Leaves spatulate or obovate.

For best results sow seed early in hotbed and when plants are large enough transplant to a rich soil in a cool and partially shaded situation, setting the plants six inches apart. If plants are started early indoors they will flower the same season, but bloom more abundantly in the spring if sown in autumn and the plants wintered over in cold frames; or can be set out in the open border and protected with mulching. Half hardy perennial; about six inches high.

Double Rose. (*Longfellow*) Finest strain.....Pkt. 10c.
Double White. Very double, clear white.....Pkt. 10c.
Double Mixed. Shades of rose and white.....Pkt. 5c.

Datura

Large branching plants producing very large, handsome, double, or single, trumpet-shaped blossoms of exquisite fragrance. Excellent for late summer and autumn flowering.

Seed may be sown outdoors after danger of frost is over, but for early blooming sow in hotbed and transplant about three feet apart each way. Roots can be kept all winter in cellars. Tender annual; three feet high.

Wrightii. Pure white at the center shaded into lilac and blue magnificent large single flowers. In warm latitudes can be continued as a perennial.....Pkt. 5c.
Chlorantha, fl. pl. (*Humilis flava*) Large, usually double yellow, richly scented.....Pkt. 5c.
Mixed. The above varieties.....Pkt. 5c.

Delphinium—(See Larkspur)

Dianthus—(See Pinks)

Dianthus Barbatus—(See Sweet William)

Dianthus Caryophyllus—(See Carnation)

Digitalis—(See Foxglove)

Eschscholtzia, Bush (*Hunnemannia*).**Dimorphoteca Aurantiaca**

This showy annual with bright orange-yellow flowers, is sometimes called African "Golden-Orange" Daisy. Plants somewhat spreading, with finely cut foliage, producing abundantly on stems of good length, glossy, single daisy-like blossoms about two and one-half inches across. The brilliant orange coloring of the petals contrasts strikingly with the black center which is surrounded by a dark colored disc. Well adapted for summer flowering in beds or borders.

Sow early in spring, preferably in light, well prepared soil, not too rich, in a sunny situation. Make rows one and one-half feet apart, covering seed one-fourth inch deep; thin the young plants ten to twelve inches apart. Hardy annual, about one foot high. Pkt. 10c.

Emerald Feather—(See *Asparagus Sprengeri*)

Dolichos—(See *Hyacinth Bean*)

Eschscholtzia

(*California Poppy*) The State flower of California. It is fully as valuable as the common Poppy for garden ornamentation since it blooms through a much longer season. A bed in full bloom of these large saucer-shaped flowers in various shades of yellow with orange center gives a brilliant color effect. The foliage is finely cut and has a bluish tinge or bloom, delicate and very attractive.

Sow seed early in spring or late in autumn where plants are wanted to bloom as they do not bear transplanting well. Use well pulverized soil, make the rows one foot apart and cover the seed one-fourth inch deep. Thin six to eight inches apart. Effective results are also obtained by thinly sowing broadcast and lightly raking in the seed. Hardy annual, low spreading; about one to one and one-half feet high.

Mandarin. The outer side of the petal is tinged with scarlet, the inner side rich brownish orange Pkt. 5c.

Mixed. An excellent mixture producing deep yellow, creamy white, scarlet and orange flowers Pkt. 5c.

Bush (Hunnemannia) Flowers beautifully cup-shaped, about three inches across; petals broad, bright yellow with wavy edges; leaves coarser and larger than common kinds. Stems ten inches long and desirable for cutting. In the northern states for early blooming and largest flowers, start in pots and transplant outdoors. Height about two feet. Hardy annual, becoming in warm latitudes a tender perennial. Pkt. 5c.

Evening Glory—(See *Ipomoea Bona Nox*)

Ferns

Perennial flowerless plants, too well known to need description. The seed spores are very small and of slow germination but the exceeding grace and beauty of the plants usually well repay all the care necessary to start them properly in the green house or some place indoors where they will keep moist. The young ferns may be placed in a window-box without much sun, or can be set outdoors in summer in some moist and shady place.

Fine Mixed Pkt. 20c.

Feverfew—(See *Matricaria and Puncture*)

Forget-Me-Not (*Myosotis*)

This is a favorite old-fashioned flower, bearing in profusion, especially in fall and spring, clusters of dainty blue five-petaled blossoms. It thrives well in the shade or open border but flourishes best in a moist, shady situation.

For bloom the first year, sow indoors in February or March, and transplant as soon as the ground is warm enough, or sow outdoors as early as possible, covering seed one-half inch deep; thin to six inches apart. Seed may also be sown in fall. Hardy perennial but usually does better if given some protection during winter.

Alpestris. Plants of compact, bushy habit with finely cut foliage, growing six to eight inches high. Flowers blue with a very small yellowish eye. . . . Pkt. 5c.

Four O'Clock (*Marvel of Peru, Mirabilis Jalapa*)

Large and beautiful, old-fashioned plants of erect bushy habit which produce in profusion a succession of brilliantly colored tube-shaped flowers, that open about four o'clock in the afternoon, remaining open all night and usually are closed before noon the next day. The flowers are red, white, yellow, or are striped and blotched in shades of these colors. Very desirable for borders, along a wire fence, or as the background of a flower garden, blooming during the late summer and autumn.

Sow seed in spring in open ground after danger of frost is over, covering one-half inch deep. For best development allow two to three feet apart each way. Hardy annual, about two feet high.

Mixed. An exceptionally attractive mixture. . Pkt. 5c.

Foxglove.

Plant seeds that you possibly overlooked last season.

Gaillardia, Picta Lorenziana.

Foxglove (*Digitalis*) Stately old-fashioned border plants, affording dense spikes of large brilliantly colored flowers which are terminal and half as long as the height of the plant. The flowers are very distinct and showy, being thimble-like or long bell-shaped, and the colors include white, lavender and rose, many being spotted or blotched. It is often used as a background, and does especially well in cool, shady locations in front of shrubbery. The leaves are wrinkled and somewhat downy.

Seed may be sown outdoors after danger from frost is over, but for best results start in boxes and transplant. The seed is very small and should be covered lightly and kept moist until plants are well established and they should be transplanted to two feet apart. May be sown outdoors in fall. Hardy biennial or perennial, usually blooming the second season; three to five feet high.

Fine Mixed. Many shades and markings.....Pkt. 5c.
Mammoth Foxglove (*Digitalis monstrosa*) Remarkably odd; each flower spike surmounted with a very large bell-shaped flower. Mixed colors.....Pkt. 15c.

French Honeysuckle (*Hedysarum*) Very handsome, branching free flowering plants, producing racemes of beautiful small fragrant pea-shaped flowers; well adapted for borders or rock work.

Sow in open border in spring after danger from frost is past, preferably in light and open well drained soil, in a sunny situation. Hardy perennial; often growing four feet.

Coronarium, Scarlet.....Pkt. 5c.
Coronarium, Album, white.....Pkt. 5c.

Fuchsia Known also as "Lady's Eardrops" from the bright colored pendulous double flowers with four parted, funnel shaped calyx. Plants with very beautiful blossoms may be grown from seed with proper care. Results are usually most satisfactory when grown indoors in pots in firm rich soil, but if seed is started early under glass it often succeeds well in an outdoor window-box, or a shady situation in the garden. Tender perennial; one to two and one-half feet high. Double Finest Mixed. Seed from finest named sorts....Pkt. 25c.

Gaillardia Showy bedding and border plants, remarkable for the profusion, size, and brilliancy of their flowers, blooming the first year and among the gayest ornaments of the garden in summer and autumn. Combinations of yellow and red predominate in the highly colored single and double flower-heads, two inches or more across, which are borne singly well above the foliage on long, slender stems, suitable for cutting. Leaves alternate, simple, and more or less toothed.

Sow seed outdoors early in spring; cover one-fourth inch deep. Make rows eighteen inches apart and thin eight to ten inches apart in the row; or a longer season of bloom may be secured by planting in frames and transplanting. Plants one to one and one-half feet high.

Grandiflora. Flowers scarlet and orange, single, often three inches across, with flat petals. Excellent for cutting. Hardy perennial, blooming the first year.....Pkt. 5c.

Geranium (*Pelargonium*) When properly grown, the constant succession of bloom until frost comes, the brilliant colors of the flowers and the exquisite zone or horseshoe markings of the leaves of some of the varieties, render the Geranium very desirable for pot culture as well as for bedding out of doors and for growing in window boxes.

The seed is slow to germinate. Sow in a pot or box in the house in rather light soil, preferably containing a little leaf mold and sand. Cover seed one-fourth inch deep, and keep as near 65° F. as possible. Water moderately, and as soon as the third leaf appears, pot singly in two-inch pots, transferring to larger ones as the plants require. Plunge the pots or set in open border, and on approach of frost remove to cover. They will blossom the succeeding spring. Half hardy perennial; about two feet high.

Scarlet Mixed (*Zonale*) The seed we offer will produce a large percentage of double flowers in many beautiful shades of scarlet and red.....Pkt. 25c.

Gilliflower—(See Stock)

Gladiolus These magnificent plants for bedding and cutting with their long spikes of tubular lily-form flowers can be raised from seed in nearly every conceivable color and shade, some being most beautifully striped and blotched. Sow seed thickly, as soon as the ground is warm in spring, covering one-fourth inch deep. The plants should have very careful attention and be kept free from weeds. The bulbs which have formed should be taken up in the fall and kept dry during winter. The stronger bulbs will flower the second season; the balance the third season. Tender perennial; about two and one-half feet high.

Finest Mixed. Finest named sorts mixed.....Pkt. 15c.
For Gladiolus Bulbs, see Bulbs and Roots, page 59.

Globe Amaranth (*Gomphrena globosa*) A desirable everlasting, valued for its handsome, small, globular flower heads, which, if cut when well matured will retain their beauty through the winter. Seeds germinate slowly; start in a hotbed or soak in warm water to soften the woolly husk. Set the plants one foot apart. Tender annual; twelve to eighteen inches high. Mixed.....Pkt. 5c.

Gloxinia Greenhouse perennial plants producing soft, velvety green leaves and rich, beautifully colored trumpet-shaped flowers. Gloxinias thrive best in an equal mixture of leaf mold, loam and sand. If started in February will usually bloom the latter part of summer. Seed may also be sown in fall. The plants are delicate and not easily grown but the flowers are of such beauty that one generally feels amply repaid for the effort.

Hybrid Mixed. A strain of the richest color and variety of markings. Plants ten to twelve inches high.....Pkt. 25c.

Gourd (*Cucurbita*) A very extensive genus of trailing annuals with curiously shaped yellow fruit, commonly known as Ornamental Gourds. The vines are of easy culture and make a rapid growth, so are much used for covering old fences, trellises, stumps, etc. The foliage is ornamental, and the markings of some of the fruit extraordinary.

Do not plant the seed till danger of frost is over, and select light, rich soil and a sunny situation. Water freely. Tender annual; 10 to 20 feet high.

Apple Shaped. Fruits are nearly round, yellow, sometimes striped.....Pkt. 5c.

Dish Cloth. Long, green, corrugated fruit, the inside fibrous mass of which, when shell and seeds are removed, makes an excellent sponge.....Pkt. 5c.

Hercules' Club. Distinctly club-shaped, the longest of all the varieties.....Pkt. 5c.

Japanese Nest Egg. Used as nest eggs; fruits are white, do not crack; not injured by heat or cold.....Pkt. 5c.

Orange. Also known as Mock Orange. Nearly round, orange colored.....Pkt. 5c.

Gaillardia, a profuse bloomer and hardy.

GOURD—continued

- Pear Shaped, Ringed. Green and yellow, beautiful bicolored fruit, upper half yellow, lower half greenPkt. 5c.
 Pear Shaped, Striped. Fruits green, with cream colored striping, sometimes changing to yellow.Pkt. 5c.
 Siphon or Dipper. Useful for dippers; fruits long, bottle-shaped with straight or slightly crooked neckPkt. 5c.
 MixedPkt. 5c.

Gypsophila Delicate, free-flowering plants, covered with star-shaped flowers, valuable for mist-like effects and as trimming in bouquets, also for hanging baskets or edgings. Sometimes called Baby's Breath. Will thrive in almost any well prepared ground, but does best on a limestone soil. Make handsome specimens dried.

- Elegans Large Flowering Pure White.** An improved large-flowering strain, superior to the common Elegans not only in size of flowers, but also in color. A very charming sort for combining in bouquets with Sweet Peas or other cut flowersPkt. 5c.
Elegans Mixed. Very small, delicate white and rose-pink flowers. Hardy annual; one foot high.Pkt. 5c.
Muralis. Charming, easily grown border plants having very small pink flowers. Hardy annual; six inches high.....Pkt. 5c.
Hedysarum—(See French Honeysuckle)
Helianthus—(See Sunflower)

Helichrysum (Everlasting) Sometimes called Straw Flower. Large, full, double daisy-like flower heads with prominent centers and stiff overlapping scales, produced in various shades of bright yellow and scarlet on stems of good length. Desirable as dried specimens and for use in making winter bouquets. For this purpose the flowers should be gathered when on the point of expanding.

- Sow early in spring; thin to one foot apart each way. Hardy annual; two to two and one-half feet high.
Monstrosum, fl. pl., mixed. Largest double flowers..Pkt. 5c.

Heliotrope Well-known and much-admired border and bedding plants, highly valued for the blue color and fragrance of their branching clusters of small salver-shaped flowers as well as the duration of their bloom. Sow the seed early in spring, in mellow soil indoors, and when plants are one to two inches high, prick out into pots. Transplant to place when three to four inches high. Will live outdoors through the winter in a warm climate. Desirable **Gypsophila, Elegans Large Flowering Pure White.** also as a pot-plant for indoor blooming from fall sown seed. Half hardy perennial; one and one-half to two feet high.
Dark Varieties Mixed. Very choice.....Pkt. 10c.
Hesperis Matronalis—(See Rocket).

Hibiscus Africanus A vigorous branching plant, of easy culture, with pretty foliage and large, light yellow or cream-colored blossoms, dark purple in the center. The flowers are exceedingly showy, saucer-shaped, often two or three inches across; not of very long duration, but continue to bloom from early summer till October. The seed should be planted early, and the plants should be thinned to one foot apart each way. Hardy annuals; about two feet high. Pkt. 5c.

Hollyhock (*Althaea rosea*) For a background to a flower garden nothing is better than the improved strains we offer of this tall old-fashioned garden perennial. The large, richly colored blossoms, about three inches across, ranging from deep yellow and red to pure white, are set as rosettes around the strong growing flower stalks. Sow seed in June or July, in open ground, and in the autumn, when the plants have made five leaves, transplant to permanent position two to three feet apart. The following summer they will bloom. All double varieties are hardy perennials; five feet high.
Early Flowering. Blooms readily as an annual the first year from seed sown in spring. A wide range of colors in large single or semi-double flowers.....Pkt. 15c.
Chater's Finest Mixed. Double perfection.....Pkt. 15c.
Double Blood Red.....Pkt. 10c.
Double Lemon Yellow.....Pkt. 10c.
Double Deep Rose.....Pkt. 10c.
Double Pink.....Pkt. 10c.
Double Salmon. Rich salmon color, suffused with pink.Pkt. 10c.
Double Pure White. Our special improved strain..Pkt. 10c.
Double Mixed.....Pkt. 5c.

Gypsophila, Elegans Large Flowering Pure White.

Humulus Japonicus (*Japanese Hop*) Hardy annual climber fifteen to twenty feet high with rough lobed leaves of variegated colors, very rough leaf stems and small flowers. Desirable for covering unsightly objects or shading verandas..Pkt. 5c.

Hyacinth Bean (*Dolichos lablab*) A fine climber with clusters of purple or white flowers followed by ornamental seed pods. Tender annual; from ten to fifteen feet high.
Alba, White.....Pkt. 5c.
Purpurea, Purple.....Pkt. 5c.
Mixed. The above mixed.....Pkt. 5c.
Loeris—(See Candytuft)

Ice Plant (*Mesembryanthemum crystallinum*) A curious plant for hanging baskets, rock-work, vases and edgings; leaves and stems succulent, appearing as though covered with ice crystals. Tender annual trailer; six inches high.....Pkt. 5c.
Immortelles—(See Ageratum, Globe Amaranth, Helichrysum, Rhodanthé)
Impatiens—(See Balsam)

Ipomoea Beautiful annual outdoor climber of luxuriant growth for covering verandas and arbors, or for screening unsightly objects. Sow preferably in heat and transplant to open border; or sow in open border after the ground becomes warm. Soak seed in lukewarm water before planting. Tender annual; 10 to 15 feet high.
Setosa (Brazilian Morning Glory) Very vigorous rapid growing vine with large, three-lobed leaves and stems covered with brown hair. Flowers open in morning; salver formed, delicate blue or reddish purple with pink star in center and produced in clusters. Seed black, a little larger than Limbata.....Pkt. 10c.

Co ea (Star Ipomoea) Like a Morning Glory but with smaller, rather pointed leaves, and covered with small scarlet, star-shaped flowers. Height often ten feet. Seed small, blackPkt. 5c.

Bona Nox (Evening Glory) Violet blue flowers, open in the evening; similar to the white Moon Flower but not as large; seed as large but darker.....Pkt. 5c.

Fine Mixed. The four above varieties mixed.....Pkt. 5c.

Early Flowering Sky Blue (Ipomoea grandiflora rubro carulea) A most desirable, early, free flowering sort, with glossy dark foliage and very large flowers that open a tinge of carmine-rose and when mature are bright light bluePkt. 15c.

Are you utilizing all that ground of yours?

Ipomoea Grandiflora—(See *Moon Flower*)
Ipomoea Quamoclit—(See *Cypress Vine*)
Ipomoea Purpurea—(See *Morning Glory*)
 Japanese Hop—(See *Humulus Japonicus*)
 Joseph's Coat—(See *Amaranthus tricolor*)

Job's Tears (*Coix lachryma*) Curious ornamental grass with broad, corn-like leaves and lustrous slate-colored seeds used for beads. Valuable for winter bouquets with everlasting flowers. Plant outdoors early in spring in hills three feet apart, four or five seeds in a hill, and cover half an inch deep. Hardy annual; three feet high. Oz. 15c; Pkt. 5c.

Kochia Trichophylla (*Mexican Fire Bush*, or *Summer Cypress*) A quick growing foliage or hedge plant, very symmetrical and attractive in summer and fall. The foliage is as fine as moss and of clean bright green color. Early in the fall innumerable little flowers appear and the bush takes on a deep red tinge. Sow outdoors early in spring, covering one-fourth inch deep. Make the rows two feet apart and thin eighteen inches apart. For earlier blooming plant indoors and transplant to open ground. Hardy annual; about two and one-half feet high. Pkt. 5c.

Lantana The plants form small shrubs, producing in late summer and autumn an abundance of beautiful irregular clusters of single, fragrant flowers that change color. Succeeded by green berries that turn to a deep blue. Start under glass and transplant when danger of frost is over. May also be grown in pots. Tender perennial; about two feet high. Finest French Hybrids Mixed. Pkt. 5c.

Larkspur (*Delphinium*) The Larkspur, with its long clustered spikes of beautiful irregular flowers, often with long spurs, is especially valuable for its shades of blue. The annual forms are very desirable for bedding and the perennials are strikingly effective as a background, for borders, and for planting among shrubbery. Seed of annual varieties may be sown outdoors early in spring. For earlier blooming start very early indoors or sow in fall. Thin one to one and one-half feet apart. The perennial sorts are sown in fall or early in spring.

Annual Varieties

Double Dwarf Rocket Mixed. Beautiful spikes of double flowers in many shades. Hardy annual; one foot high. Pkt. 5c.
Tall Stock Flowered Mixed (*Consolida fl. pl.*) Flowers double, borne on spikes about fifteen inches long. Colors rose, white, and shades of blue. Hardy annual; two feet high. Pkt. 5c.

Perennial Varieties

Elatum (See *Larkspur*) Flowers blue with hairy petals in the center giving them a fancied resemblance to a bee. Hardy perennial; three to five feet high. Pkt. 5c.
Formosum. Flowers large, deep blue shaded indigo, small white center. Hardy perennial; three to five feet high; long blooming season. Sometimes called Mexican Larkspur. Pkt. 5c.
Lathyrus Latifolius—(See *Peas*, *Everlasting*)
Lathyrus Odoratus—(See *Sweet Peas*)

Linum Grandiflorum Rubrum (*Scarlet Flax*) An attractive free-flowering bedding plant with slender foliage and bearing on delicate stems clusters of glossy bright red single flowers, saucer-shaped, with black center. If sown in hotbed and transplanted into good, rich soil, one foot apart, the period of flowering will be much advanced but the seed can be sown in the open ground after the weather is warm. Hardy annual; about one and one-half feet high. Pkt. 5c.

Kochia (Mexican Fire Bush).

Larkspur, Formosum.

Lobelia Are charming plants, well adapted for bedding, pots or rockeries. They make a neat edging for beds of white flowers and are very effective in masses, being completely covered with flowers for a long time. The flowers are usually blue with lighter center and are borne in neat clusters, each irregularly lobed flower being about five-eighths inch across.

Seed may be sown outdoors after danger of frost is over, or start the plants in pots in greenhouses or hotbeds early in spring and transplant in May to place outdoors. Half hardy annual; usually about six inches high.

Emperor William. A very fine, erect and compact variety with clear intensely blue flowers. Pkt. 5c.

Crystal Palace. A compact, exceptionally graceful sort, very desirable for edgings, having bright deep blue flowers; very dark green foliage. Pkt. 5c.

Gracilis. The flowers are bright blue with small white centers, fine for baskets and vases, trailing gracefully and blooming profusely. Plants slender, six inches high. Pkt. 5c.

Love-in-a-Mist (*Nigella*) Also known as Lady-in-the-Green and as Devil-in-a-Bush, because the blossoms are partly concealed by the finely cut foliage. The large oddly shaped flowers are surrounded by a very dense fringe or wreath of mossy fibres. Both plant and flower are handsome and require but little care. Sow seed in spring in any good garden soil, or may be sown in fall. Hardy annual.

Damascena, fl. pl. Double blue flowers; one and one-half to two feet high. Pkt. 5c.

Lupin A very attractive free-flowering plant with long graceful terminal spikes of fragrant pea-shaped blossoms. Bloom's early in the season and is desirable for cutting. Sow seed in place in spring and thin to one and one-half feet apart. Hardy annual; about three feet high.

Cruikshanki. Blossoms white, shaded with yellow, blue and purple. Pkt. 5c.

Malcolmia Maritima—(See *Virginian Stock*)

Marigold

No flower garden seems complete without this fine old-fashioned garden plant with its brilliant displays of yellow and orange, both tall and dwarf sorts, and with finely cut or entire bright green foliage. The African (*Tagete serotina*) varieties are tall, usually one and one-half to three feet, and are well adapted for large beds, backgrounds, or mixed borders,

The most luxuriant climber, Moon Flower.

MARIGOLD—continued

while the French (*Tagetes patula*) are more dwarf and are often used for borders and pot culture as well as bedding. All of these varieties have finely cut foliage, while the Pot Marigold (*Calendula officinalis*) has entire leaves, somewhat clasping the rather hardy stems.

For best results start seed early indoors and transplant six inches apart when danger from frost is over, but good blooms of all varieties of Marigold are often successfully obtained from seed planted in the open ground after danger from frost is past. Make the rows one foot apart. Use well pulverized soil, preferably light sandy loam and cover the seed with about one-fourth inch of fine soil firmly pressed down. When about two inches high, thin six to twelve inches. Hardy annuals; in bloom till frost comes.

African Double Dwarf, Lemon Colored. Very early and a profuse bloomer of very compact habit. One of the best of this class. Comes true from seed; about eighteen inches high. Desirable for shrubbery or mixed border...Pkt. 5c.

African Orange Quilled. A double variety with quilled petals; flowers showy, bloom very early and are used for cutting. Plants rather dwarf, about fifteen inches high...Pkt. 5c.

African El Dorado, Double. Flowers about three inches in diameter, imbricated, extremely double and in tints of primrose, orange, and gold. Two to three feet high. Pkt. 5c.

African Double Mixed. A tall mixture well adapted for large beds. About two feet high.....Pkt. 5c.

French, Double Dwarf, Gold Striped, Brown and golden yellow; very double. Valuable for bedding; one foot high Pkt. 5c.

French Legion of Honor (Little Brownie) A single, dwarf, bushy variety, very desirable for borders. The plants bear rich golden yellow flowers with garnet blotches in the center of each petal and are about 1 ft. high.....Pkt. 5c.

Tagetes Signata Pumila. A dwarf French sort with small, bright orange-yellow flowers; excellent for borders or massing. About twelve inches high.....Pkt. 5c.

Prince of Orange (*Calandula officinalis* fl. pl.) This very distinct variety has large double, golden yellow flowers, the petals striped or shaded dark orange; produced in great abundance. Ht. of plant about 1 ft.....Pkt. 5c.

Meteor (*Calendula officinalis* fl. pl.) Large beautiful imbricated, double flowers; petals yellow, striped, or edged with orange. Desirable for beds, borders, and backgrounds. Two feet high.....Pkt. 5c.

Marvel of Peru—(See Four O'clock)

Mathiola—(See Stock)

Matricaria *Eximia grandiflora*, fl. pl. (*Double Feverfew*) Beautiful small white button-like double flower-heads. Plants of bushy growth, with very finely cut dark green foliage; desirable for bedding.

Start the seed very early indoors in shallow boxes; transplant when size permits to small pots or plant boxes, giving each seedling two to three inches of space and set out in the open ground after danger of frost is over. Where climate permits seed may also be sown in fall outdoors. Half hardy perennial, about two feet high.....Pkt. 5c.

Matricaria

Marigold, El Dorado

Maurandia Graceful slender climber with glossy ivy-shaped leaves. It produces an abundance of showy, irregular trumpet-shaped flowers, one and one-half inches long, usually purplish blue, white, or rose colored with lighter throat. Suitable for greenhouse and hanging baskets in the winter and very satisfactory outdoors especially if a small trellis is given as support.

Seed may be started in hotbed or indoors and the young plants set out in open border after danger of frost is over. Tender perennial, blooming the first season; six to ten feet high.

Fine Mixed.....Pkt. 10c.

Mexican Fire Bush—(See Kochia)

Mignonette (*Reseda*) A well-known hardy annual producing dense cone-shaped flower-spikes, made up of thickly set flowerets of modest colors. It is often used for cutting to combine in bouquets with other more pretentious flowers lacking its delicate and pleasing fragrance.

Seed is usually sown outdoors after danger of frost is over and if sown at intervals in spring and early summer a succession of bloom, under favorable conditions, is assured till frost. Well pulverized soil, preferably light sandy loam, should be used and the seed covered one-fourth inch deep. Make rows one foot apart; thin to six inches. For very early blooming, seed may be sown in the fall, or started indoors and transplanted. May also be grown in pots. Thrives best in a cool temperature and is usually most fragrant in rather light soil. Hardy annual; one foot high. Machet. Of dwarf and vigorous growth, with numerous stout flower stalks, terminated by large spikes of red flowers.

This is one of the very best for pot culture.....Pkt. 5c.

Mimosa Pudica (*Sensitive Plant*) A curious plant with globular heads of small pink flowers, chiefly valued because of the extreme irritability of its leaves which close and droop at the slightest touch, also in cloudy, damp weather and at night. Start in hotbed in pots, and transplant to a warm situation six inches apart. Tender annual; height one and one-half feet Pkt. 5c.

No Flower Garden complete without Marigolds.

Mimulus

Strikingly handsome flowers of easy cultivation. Perennial in the greenhouse, annual in the open air. Sow the seed, which is exceedingly fine under glass in spring or fall in rich moist soil, mixed with sand, and in a somewhat shaded situation. Cover the seed lightly and keep well watered. An attractive trailer with bright green foliage and many small yellow flowers of musky odor. Desirable for hanging baskets and window gardens. Pkt. 5c.
Moschatus (Musk Plant) Dark red. Pkt. 5c.
Cardinalis grandiflorus Large curiously shaped yellow flowers, spotted with shades of red and rich maroon. An effective pot plant about eight inches high; blooms first year. Pkt. 5c.
Punctatus (Monkey Flower) Pkt. 10c.
Mirabilis—(See *Four O'Clock*)

Momordica

Gracefully climbing vines with small yellow blossoms, followed by fruits of curious shape. Foliage gracefully cut and although tender annuals, the vines run ten feet or more during the season. The seed is very hard and germination will be hastened if a notch is carefully cut through the shell before planting. For best results, sow indoors early in spring and transplant after danger of frost is over, or sow in place as soon as ground is warm and dry.
Balsam Pear (Charantia) The fruit is pear-shaped, green changing to bright red and has a warty skin; when ripe it bursts open and shows a brilliant interior of large carmine seeds. Pkt. 5c.
Balsam Apple (Balsamina) Like Balsam Pear but foliage smaller; fruit much smaller and nearly round, green striped when young, becoming scarlet. Pkt. 5c.

Moon Flower

(*Ipomœa grandiflora albo*) One of the most vigorous summer climbers and will grow under favorable conditions thirty to forty feet in a single season and be covered evenings and cloudy days with very large, white trumpet-shaped flowers widely extended, often four inches across. Leaves large, frequently four to five inches across. The hard outer coat of the very large, light yellow seed should be cut through with a sharp knife, care being taken not to cut any deeper than the hard shell and the seed planted about one inch deep in moist soil in a box or pan and set in a warm place. If soil be kept moist, germination will take place in about two weeks. After plants are up, transplant outdoors in a sunny situation when danger from frost is past. Known as *Ipomœa Noctiflora*. Tender annual. Pkt. 5c.

Morning Glory

(*Convolvulus major*, *Ipomœa purpurea*) A handsome showy climber of easy culture and suitable for covering arbors, windows, trellises, old stumps, etc., if support be given the vines. The flowers are most brilliant in the morning. Seed is usually sown outdoors in spring in row where plants are to remain. Well pulverized soil should be used and the seed covered one-half inch deep; thin four to six inches apart. If very early blooming is desired, seed may be started indoors and transplanted. Give some support such as strings or cord to the vines as soon as they begin to run and they will often exceed ten feet in height before the season is over. Seed triangular, black, except white, which is light yellow. Hardy annual. Mixed. Many shades from white to dark blue, red, and striped. Pkt. 5c.
Giant Japanese Mixed. (Imperial) The flowers of this variety are of largest size, often three inches or more across; some are brilliant red or rich blue, others are equally brilliant, with broad margins of clear white; some are striped or dotted with blue or red on white or lemon yellow ground, others are clouded with blue and red. The foliage in some plants comes plain green, in others it is mottled with white and shades of yellow or yellowish green. Seed black, larger than other varieties of Morning Glory. Pkt. 5c.

Mourning Bride

(*Scabiosa* or *Sweet Scabious*) An old-fashioned but most attractive flower. Its great abundance and long succession of richly colored, fragrant blossoms on long stems make it one of the most useful decorative plants of the garden. Desirable for cutting as well as for beds and borders. Flower heads about two inches across; flowerets double, surrounding the thimble-shaped cone, and giving a fancied resemblance to a pin cushion. Seed may be sown in place as soon as ground can be worked; or for earlier blooming sow in hotbed early in spring and transplant one and one-half feet apart. Hardy annual; about two to two and one-half feet high. Double Mixed. Colors include deep and light purple, scarlet, pure white and a dark mulberry red; some of the darker shades are tipped with white. Pkt. 5c.
Myrsiphyllum—(See *Smilax*)

Nasturtiums.

Nasturtium

Few plants are more easily grown or remain longer in bloom than the *Tropæolum*, with its large shield-shaped leaves and beautifully irregular flowers having long spurs and brilliantly colored petals. In favorable soil flowers are produced in abundance throughout the season. Much used for window boxes. If the black aphid appears, spray the foliage vigorously with water. Seed is usually sown outdoors, as soon as the weather is warm and settled, in the row where the plants are to remain. Well pulverized soil, preferably well drained and moderately rich, should be used and the seed covered with about one inch of fine soil firmly pressed down. A sunny situation is essential for free blooming. If the soil is very rich the plants give a large amount of foliage but few flowers. For earlier blooming, start indoors and transplant to the open ground after danger of frost is over.

Dwarf Varieties

(*Tropæolum minor*) Sometimes called Tom-Thumb sorts. The flowers are brilliant and attractive. The plants are evenly dwarf and are often used for a border. When about two inches high, thin so as to give each plant about one foot of room. Hardy annual; about one foot high.

Old fashioned but beautiful—Scabiosa.

NASTURTIUM—continued

Aurora. Flowers light reddish orange, veined with carmine Pkt. 5c.
 Bronze Colored. Bronze-orange Pkt. 5c.
 Crimson. Dark crimson Pkt. 5c.
 Empress of India. Small, compact plant; deep scarlet flowers; very dark foliage Pkt. 5c.
 King Theodore. Scarlet-maroon or brown-red flowers Pkt. 5c.

Pearl. Pale yellow Pkt. 5c.
 Rose. A warm rose-pink Pkt. 5c.
 Scarlet. Scarlet-orange Pkt. 5c.
 Schilling's Striped. Bright yellow with brownish red or maroon blotches and stripes Pkt. 5c.
 Yellow. Bright rich yellow Pkt. 5c.
 Dwarf Mixed. Many desirable shades and colors. Pkt. 5c.

Trailing Varieties

(*Trop. oecolum Lobbian*) The Lobbianum differs from the common tall, climbing or running nasturtium in being a little smaller in leaf, more compact in growth, more floriferous and having richer, more varied colored flowers. When about two inches high thin to six inches apart. Give some support to the vines as soon as they begin to run and they will usually grow six to eight feet during the season. The trailing sorts are much used for covering arbors and trellises. Half hardy annual.

Brilliant. Intense scarlet-red, dark foliage Pkt. 5c.
 Brilliant. Intense scarlet-red, dark foliage Pkt. 5c.
 Chestnut Brown. Rich red-maroon Pkt. 5c.
 Giant of Battles. Sulphur, red blotches Pkt. 5c.
 Hemisphaericum. Straw, blotched and suffused orange-scarlet; very large foliage, very strong growing, usually twelve to fifteen feet high Pkt. 5c.
 Jupiter. Very large, golden-yellow flowers; very large foliage, very strong growing, usually twelve to fifteen feet high; free blooming Pkt. 5c.

King of the Blacks. Black-red or crimson-maroon, with darker markings; dark foliage Pkt. 5c.
 Light Yellow. Attractive light yellow or yellowish white with maroon stain Pkt. 5c.
 Queen Wilhelmina. Foliage variegated, being marbled and veined with light green and white. Flowers rosy scarlet Pkt. 5c.
 Rose. Bright and attractive Pkt. 5c.
 Spitfire. Bright, fiery scarlet flowers; very floriferous Pkt. 5c.
 Trailing Mixed. Lobbianum varieties. A wide range of colors and shades Pkt. 5c.

Madame Gunter's Hybrid Nasturtiums. The flowers are striped or blotched with shades of red on yellow and orange ground, forming a combination of exceeding brilliancy and beauty. About four feet high. Half hardy annual Pkt. 5c.

Chameleon Nasturtiums. Almost every shade of color and marking known to nasturtiums; continually changing from day to day. Attractive strains.
 Dwarf Chameleon Pkt. 5c.
 Trailing Chameleon Pkt. 5c.

Nicotiana

Handsome bedding plants of the tobacco family, valuable for and free blooming. The flowers are salver-shaped, with long tubular corollas.

Sown outdoors when ground is warm and dry or for earlier blooming start in boxes indoors early in spring and transplant to open ground after danger of frost is past. Cover the fine seed one-eighth inch deep. Half hardy annuals; about three feet high.

Affinis. Flowers large, white and fully expanded only in evening or cloudy days. Very fragrant. Pkt. 5c.

Nigella—(See *Love-in-a-Mist*) CEnothera—(See *Primrose*)

Pansies

Pansies are now produced in an almost infinite variety of colors and markings. Their brilliancy of shading, extended season of blooming and long keeping characteristics make them general favorites. The strains now offered are far superior to the old Heart's Ease or *Viola Tricolor* and the esteem in which they were held by older generations has been heightened by the greater variety and more brilliant colors of the improved sorts. We have been interested in the bringing forward of advanced types of very large varieties in this country as well as in Europe, and our stocks are the very best obtainable. We spare neither pains nor expense to satisfy the most critical trade. While the variations in shades of color and markings appear almost limitless, our list includes the very best strains the world produces.

Seed may be sown indoors very early in spring, or a little later in the open ground, and transplanted when an inch high. Such plants will commence to bloom in June. If sown in July, the plants will bloom in the fall, or if sown in September, the following spring. Well pulverized soil should be used and the seeds covered one-eighth to one-fourth inch deep with fine soil firmly pressed down. The largest and best flowers are produced by young plants which have been grown rather slowly in a partially shaded situation, and in very rich soil; coolness and moisture are necessary. A situation sheltered from high winds and exposed to the morning sun is most favorable and frequent sprinklings are advantageous. Grown indoors pansies make a good winter blooming pot plant. Hardy perennial, four to six inches high.

LARGE FLOWERING

King of the Blacks (*Faust*) Large velvety, pure black blossoms. This is probably the darkest flower grown Pkt. 10c.
 Meteor. The flowers are large, rich, velvety red or mahogany. Excellent for massing or edgings. Very hardy Pkt. 10c.
 Pure Yellow. Brilliant, deep lemon yellow color, large flowering variety Pkt. 10c.
 Variegated and Striped. The flowers of this variety are beautifully striped in various colors, very rich and attractive. Pkt. 10c.
 Violet White Edged. Deep warm violet, edged white Pkt. 10c.
 White. Flowers large and of fine form. An early and very floriferous strain Pkt. 10c.
 Choice Mixed. Seeds saved from large flowering sorts. A special mixture in a wide range of colors, shades and markings Pkt. 5c.
 Collection of eight splendid varieties 50c.

GIANT FLOWERING

Bugnot's Very Large Stained Mixed. An exceptionally fine mixture of very large, blotched and stained flowers. Each petal distinctly blotched, and its margin usually veined. Sturdy plants. Many shades Pkt. 15c.
 Emperor William. Deep lavender-blue petals, dark Prussian blue about the eye; very large flowering Pkt. 10c.
 Superbissima Blotched. Very large flowers of exceptionally fine form and substance, usually ruffled and beautifully veined and blotched in all the finer and deeper shades and colors found in pansies. Plants very vigorous and floriferous. Superior to rather than simply different from old strains Pkt. 15c.
 Giant Blue Black. Very large flowers; a rich velvety purple, almost black Pkt. 10c.
 Giant Flowering Parisian Mixed. The flowers of this splendid mixture are of largest size, very fine form and range of colors, often in the lighter shades. Each petal is usually beautifully blotched Pkt. 5c.
 Giant Trimadeau Mixed. Our stock of this variety produces the largest pansies grown. Flowers of richest, most varied shades; generally marked with three large blotches. Plants very hardy and vigorous. We recommend this mixture as one sure to give general satisfaction where conditions are at all suitable for pansy growth Pkt. 5c.

Nasturtiums—profuse bloomers with little care.

PANSIES—continued

Giant Yellow (Trimardeau) Very large yellow flowers with large black centers. A very distinct and attractive variety.....Pkt. 15c.

Lord Beaconsfield. The lower petals are very deep violet-purple, shading in upper petals to white, slightly tinted with purple. The flowers are very large and finely formed.....Pkt. 10c.

Odier, or Very Large Stained, mixed. Known also as Cassier's. Very large flowers, distinctly veined and each petal beautifully blotched. This is a very fine strain of pansies with wide range of splendid colors. Sturdy plants, very vigorous and floriferous. Pkt. 15c.

Extra Choice Mixed. From best named flowers of very large size. An extra fine Trimardeau mixture, very superior in size, form, coloring, and substancePkt. 10c.

Peas, Everlasting (*Lathyrus Sutilifolius*) An easily grown, hardy perennial climber with smaller flowers lacking the fragrance of Sweet Peas, but producing for many weeks a succession of blossoms in clusters of eight to ten each. Only a few flowers can be expected the second season but in the third and fourth, the plants then being well established, an abundance of foliage and blossoms is afforded. The plants die down late in the fall and start again in the spring.

Sow the seed outdoors early in spring, using well prepared soil and covering the seed about one inch deep with fine soil firmly pressed down. The perennial sorts are suitable for covering stumps and fences, and on a trellis will often grow five to six feet. Mixed. Includes white, rose, and purple flowers. Pkt. 5c.

Pelargonium—(See *Geranium*)

Petunia

Petunias are unsurpassed for massing in beds. They also are used along

walks and driveways and are often grown in window boxes. Their richness of color, duration of bloom and easy culture will always make them popular. They endure drought exceptionally well. The full, double petunias do not produce seeds. To procure double flowers one must use the seeds saved from single flowers which have been fertilized by hand with pollen from the double ones. The seed we offer is the result of careful hybridization and can be depended upon to give as large a proportion of double flowers as any.

In some strains the flowers are very large, measuring four to five inches across; in others, they are deeply fringed; still others have star-like markings radiating from the throat and extending nearly or quite to the outer margin of the blossom; again, others have full, double flowers. The colors range from white to deep red-purple and are variously striped and blotched.

Plant the seed, which is exceedingly fine, in a warm, open, sunny place. Seeds may be sown directly in the open ground; or for early results the plants may be started in cold-frame, hotbed, or in pots indoors, in a temperature averaging sixty to seventy degrees. Water with a fine spray and do not permit the seedlings to dry out. The plants are tender and should not be trusted in the open until danger of frost is over. Any good, friable garden soil, well pulverized and in good condition may be used, and the seed covered with about one-eighth to one-fourth inch of fine soil firmly pressed down. The rows should be two feet apart. Thin to eighteen inches apart. The plants begin to bloom when small and continue until cut off by frost. Tender perennial, blooming the first year; about one and one-half feet high.

Petunias are also sometimes grown under glass in winter. The best method is to sow seeds in late summer or early fall and grow stocky plants in pots, but old plants can be lifted on the approach of cold weather, cut back and taken inside for winter bloom.

Single Dwarf Compact (Intimable Dwarf) Bushy plants only about eight inches high, covered with small flowers, generally striped or blotched. In many the markings are as beautifully star-shaped as in the strain offered as "Star" petuniaPkt. 15c.

Countess of Ellesmere. Flowers single, deep rose, white throat, very small. A good bedder.....Pkt. 5c.

Nyctaginiflora. Flowers white, fragrant. A good white bedding variety; very floriferous.....Pkt. 5c.

Finest Striped and Blotched. Includes striped or blotched flowers in a wide range of colors. A fine bedder.....Pkt. 5c.

Fine Mixed. An excellent variety of markings including white, stripes, and shades of rose, red and purple.....Pkt. 5c.

Double Mixed. The seed we offer will produce a large percentage of double flowers in a good range of colors. Pkt. 20c.

LARGE FLOWERING PETUNIAS

Large Flowered Mixed. Plants vigorous and flowers very large; some striped, others self colored.....Pkt. 10c.

Fringed and Stained Mixed. Very attractive, deeply fringed flowers in a variety of colors.....Pkt. 20c.

Superbissima Mixed. Flowers of immense size, superbly colored with throats beautifully veined. We have carefully compared other strains sold as "Giants of California," etc., and have found none superior and many of them not equal to our strain of this magnificent variety.....Pkt. 25c.

Brilliant Rose. Large flowers of very bright, yet delicate and exceptionally attractive rose color. One of the finest single varieties in cultivation and comes true from seed.Pkt. 25c.

General Dodds. Large, single flowers of an exceedingly rich, dark purple color. A vigorous and very persistent bloomer and there are few garden plants that will make so satisfactory a display.....Pkt. 10c.

Extra Double Fringed. Many colors; flowers beautifully fringedPkt. 25c.

Grandiflora Robusta, fl. pl. Dwarf. of robust growth, forming a compact, upright, branched bush about ten inches in height and fourteen inches in width, with large flowers, many double and in all shades of colors existing in petunias. The latest of the varieties to bloom.....Pkt. 25c.

Pentstemon Handsome, half hardy, herbaceous perennials about two feet high and very desirable for bedding and borders. They usually bloom the first year, especially if started early. The flowers are bell-shaped or tubular, an inch and a half long, and are borne in racemes or spikes. The colors include white and various shades of red and purplish red striped with white.

Sow outdoors after danger of frost is past. It is well to use some mulching for protection through winter.

MixedPkt. 10c.

Giant Trimardeau.

Pansies—angel faces that seem to speak.

Peony (*Paeonia herbacea Chinensis*) Well-known herbaceous perennial plants, with very double flowers and abundant dark green foliage, which may be grown either from seed or roots. The seed is of very slow growth, and germination may be hastened somewhat by cutting or filing carefully a notch through the shell of the seed, preferably on the rounding side. Rich, well prepared soil should be used and the seed covered one-half inch deep; keep well moistened and at a temperature of 50° to 60°. If the seed be sown in a cold frame in autumn, the plants will be large enough to transplant the following spring, and a year later will bloom. Plants about three feet high.

Double Mixed Pkt. 25c.
Periwinkle—(See Vinca)

Phlox Drummondii (*Large Flowering*) Unequalled in the magnificent display of their many and brilliantly colored flowers. The plants are hardy bush-like annuals with many broad flat-topped clusters of nearly round and star-shaped flowers. They are of easiest culture and bloom profusely through a long season. Especially attractive in masses or ribbon beds of contrasted colors; useful as window-garden plants and very desirable for combining in mixed bouquets. Seed is usually sown very early in spring outdoors in rows one foot apart. A sunny situation is desirable. Well pulverized soil, preferably rich and mellow, should be used and the seed, which germinates rather slowly, covered with about one-fourth inch of fine soil firmly pressed down. Thin to four inches apart. For very early blooming, seed may be sown outdoors, in fall, or started indoors and transplanted early in April. Hardy annual; one foot high.

Alba. Pure white, very desirable. Pkt. 10c.
Black Warrior. Very deep maroon. Pkt. 10c.
Isabellina. Creamy yellow... Pkt. 10c.
Kermesina Alba Oculata. Rose crimson white eye..... Pkt. 10c.
Lilac. With white center... Pkt. 10c.
Rosea. Rose with distinct eye. Pkt. 10c.
Rosy Chamois. Deep salmon-rose. Pkt. 10c.
Scarlet. Maroon center..... Pkt. 10c.
Splendens. Crimson, pure white eye; one of the finest of this strain. Pkt. 10c.
Violet. Deep violet-blue, white eye. Pkt. 10c.
Extra Choice Mixed. Best large flowered varieties. Our mixture is unexcelled for profusion of bloom and wide range of brilliant colors. Pkt. 5c.

Pinks

(*Dianthus*) The *Dianthus* family furnishes many of the most beautiful and profitable flowers, including the Carnation, Sweet William, Chinese and Japanese Pinks, in all their varieties. The Pinks are old-fashioned favorites and as a class are more varied in color than the Carnations but lack their fragrance. Both the single and double Pinks are well adapted for bedding and borders, and are suitable also for cutting, as the stems are of good length and the brilliantly colored flowers, often one and one-half to two inches across, contrast vividly with the rather narrow bright light green leaves.

Seed may be sown in the open ground in spring after danger of frost is past, in the place where the plants are wanted to bloom. Use well pulverized soil, preferably sandy loam. Make rows one foot to fifteen inches apart and cover the seed with one-fourth inch of fine soil firmly pressed down. When two inches high, thin six to eight inches apart. Earlier blooming is obtained in the north if plants are started in the house. Plants compact, bushy, usually about one foot high. Where climate permits they may be treated as perennials, but practically are hardy annuals. When grown, however, for spring blooming, if in a well drained situation and protected by a light mulch of straw, cut fodder or leaves, the plants are less likely to winter kill than if in a moist unprotected part of the garden during blooms than those of the first season.

Royal Pinks (*Heddeewigi nobilis*) These very large, single flowers afford a wide range of colors. Petals deeply cut and fringed and flowers in splendid shades from blood-red to carmine, pink, and even white. Plants dwarf and very free flowering Pkt. 10c.
Heddeewig's Single Mixed. A splendid mixture of single flowers of the best shades and beautifully marked. Plants dwarf; very free flowering..... Pkt. 5c.
Double China Mixed (*Chinensis*) White and dark crimson selves, also white tipped light purple and shades of red with dark blotchings. A mixture of double pinks unsurpassed in variety of brilliant coloring and marking..... Pkt. 5c.

Double Petunias

Are you utilizing all that ground of yours? Set aside a little space for a few flowers.

Poppy

(*Papaver*) These well-known hardy annuals and perennials flower in great profusion throughout the summer. Both the single and double varieties are very desirable for bedding and borders. The flowers are remarkable for their large size, delicacy of tissue and wide range of bright dazzling colors.

As early in spring as ground can be worked sow the seed, which is quite small, where the flowers are to bloom as the annual varieties do not bear transplanting. Pulverized soil, preferably light sandy loam, should be used. Make rows fifteen inches apart and cover seed one-fourth inch deep. When two inches high, thin from six inches to one foot. To insure continuous bloom during a long season the flowers should be cut regularly and no seed pods allowed to form.

Annual Varieties

- Shirley.** A magnificent variety, producing through a long season large single flowers of charmingly delicate colors, ranging from pure white through shades of pink and rose to brightest scarlet and carmine-red. Some petals are of silky texture, others like tissue paper, some are plain, some crimped, and some wavy. If cut before the blooms are fully expanded, they will keep fresh in water for several days. Hardy annual, about twenty inches high.....Pkt. 5c.
- Tulip Flowered.** Single bright scarlet tulip-shaped flowers, a black spot appearing at the base of each petal. Hardy annual, about one foot high.....Pkt. 5c.
- Cardinal.** Flowers very large and very double, each petal being so finely cut as to give the blossom the appearance of a large ball of brilliant cardinal colored silk. One of the finest poppies in cultivation. Hardy annual, two feet high.....Pkt. 5c.
- Double White Fringed.** The finest double white poppy. Plant upright growing and floriferous. Flowers three to four inches across, perfectly double, finely fringed. Hardy annual, two feet high.....Pkt. 5c.
- Double Carnation Mixed.** Large showy double fringed flowers of various colors; hardy annual, about two feet high.....Pkt. 5c.
- Double Choice Mixed.** Very large, double poppies in a variety of colors. Some petals quite broad, others finely fringed. About two feet high.....Pkt. 5c.

Perennial Varieties

- Perennial poppies do best in rows one and one-half feet apart and one foot apart in the row. The plants have stout, leafy flower-stalks; leaves rough, pinnately parted; lobes oblong-lanceolate, toothed. Seed may be sown outdoors either in spring or fall.
- Bracteatum.** Flowers very large, single brilliant orange-crimson; base of petals bluish black. A garden perennial of most striking appearance; about two feet high.....Pkt. 5c.
- Oriente.** Very large single gorgeous scarlet blossoms; base of petals bluish black. One of the most showy garden perennials; about two feet high.....Pkt. 5c.
- The **Carnation Poppy** is an improved double form of the single *Papaver Somniferum*, used for the extraction of opium. We do not furnish seed of the opium poppy.

Portulaca

Sometimes called Rose Moss. Few flowers make such a dazzling display of color in the bright sunshine as a bed of portulacas. The glossy cup-shaped single flowers and rose-like double flowers, about one inch across, range through many shades of red, white, pink, orange, yellow, striped, etc. Plants low growing or creeping with thick fleshy stems ringed with red and small quill-shaped leaves. Desirable also for edgings. They are in bloom through a long season.

Sow seed outdoors, after weather is warm and settled, where the plants are to stand in rows one foot apart. They should have a sunny situation. Well pulverized soil should be used but it does not need to be rich. Cover seed about one-eighth inch deep. Thin to two inches apart. For massed beds seed can be sown broadcast, the soil sifted on and the whole bed carefully pressed with a board. For earliest blooming start under glass and transplant to place after danger of killing frost is over. Tender annual; about nine inches high.

Fine Mixed. A wide range of colors. Pkt. 5c

DOUBLE FINE

The seed we offer can be depended upon for a large proportion of fine, very double flowers and the few that come single can be pulled out if desired.

Double Mixed. Many beautiful shades. Pkt. 10c.

Poor Man's Orchid—(See *Schizanthus*)

Primrose, Evening

(*Enothera*) Large, showy saucer-shaped blossoms, usually fully expanded only towards and during evening. The blossoms are yellow or white and are very freely produced.

Single Pinks

Double Pinks

Phlox. Colors brilliant, unequalled.

Pyrethrum

Very ornamental, both foliage and flowers. Well adapted for bedding and borders. Sow outdoors in spring as soon as ground can be worked, or for best results start the seed indoors and transplant after danger from frost is past. (See also *Matricaria*) *Parthenifolium Aureum* (*Golden Feather*) Beautiful dwarf gold leaved bedding plant. Flowers white. Half hardy perennial, often treated as an annual; height one foot. Pkt. 5c.

Parthenifolium Aureum Selaginoides. Finely cut, fern-like leaves of bright golden yellow color. Extra fine for bedding. Half hardy perennial; twelve to fifteen inches high. Pkt. 10c.

Rhodanthe

One of the most beautiful everlasting. Sometimes called Straw Flower. The flower heads are somewhat bellshaped, becoming when gracefully poised on slender stems. The mixture we offer includes rose with golden center and white with yellow disc. Blooms should be gathered before fully expanded and dried in the shade. The leaves are glaucous, clasping and are oval or elliptical in shape.

Start under glass, or sow seed outdoors after danger of frost is over. Tender annual; one and one-half to two feet high. Mixed. Pkt. 5c.

Ricinus—(See *Castor Bean*)

Rocket, Sweet

(*Hesperis matronalis*) Produces loose clusters of flowers very fragrant during the evening and useful for cutting. Flowers cruciform, somewhat resembling the single Stock but smaller.

Seed germinates readily in open ground if sown after danger of frost is past. Hardy perennial.

Purple. Plants two and one-half to three feet high. Pkt. 5c.

White. About two feet high. Pkt. 5c.

Rose

Multiflora Dwarf Perpetual, Mixed. Plants under good care will commence to flower when six inches high and about two months old, and continue to grow and bloom until they form compact bushes about sixteen inches high, well covered with single and double flowers.

Open the berries and separate the seeds, sowing in pots of rich sandy soil and keep at about 70° F. and moderately moist. When plants are about one inch high transplant and give plenty of light and air. Tender perennial; blooming the first year. Pkt. 15c.

Rose Moss—(See *Portulaca*)

Salvia

Salpiglossis

Very showy bedding or border plants with richly colored, funnel-shaped flowers which are purple, scarlet, crimson, yellow, buff, blue, or almost black, beautifully marbled and pencilled.

For early blooming seed may be started indoors as early as the middle of March and the young plants set out in the garden one foot apart, or seed may be sown outdoors after settled warm weather. Useful for cutting. Blooms from August to October. Half hardy annual; about two feet high.

Fine Mixed. Hybrids. Easily grown large, long stemmed flowers, in many beautiful shades and markings. Pkt. 5c.

Large Flowering Mixed. A mixture of improved dwarf, very large flowering sorts, more compact than ordinary varieties and with much larger, more richly colored flowers. Pkt. 10c.

Salvia

(*Flowering Sage*) Among the most brilliantly colored of garden flowers and extremely useful for bedding; also valuable for pot culture and cutting. Blooms are borne in long spikes well above the foliage and are of fiery red, crimson, or blue, continuing in flower a long time. The densely filled flower spikes are often eight to ten inches long and includes thirty or more tube-like florets, one to two inches in length.

Start early in heat and transplant into light soil one to two feet apart; or seed can be sown outdoors after danger from frost is past. Tender perennial, but blooms the first season; height one and one-half to three feet.

Splendens. Sold also as "*Splendens Bonfire*." The large, brilliant scarlet flowers are in very striking contrast with the rich, dark green background of dense foliage. This variety is most generally used in parks and on extensive lawns, as it is more vigorous than the dwarf varieties. One of the most distinct and effective bedding plants. Two and one-half to three feet high. Pkt. 10c.

Patens. One of the finest blue flowers known; not as well suited for bedding as the other varieties of salvia, but very attractive in the mixed border or in the greenhouse. Height of plant, about one and one-half to two feet. Pkt. 15c.

Fireball. Many strains of *Salvia Splendens* have been offered under different names claiming they are larger flowered or more floriferous than the old type. We have found none more valuable than this strain in which the plant is more uniformly dwarf, and comes into bloom earlier than most sorts and remains covered with brilliant red flower spikes a remarkably long time. About two feet high. Pkt. 10c.

Scabiosa—(See *Mourning Bride*)

Scarlet Flax—(See *Linum*)

Schizanthus

Retusus trimaculatus. Also known as Butterfly Flower or Poor Man's Orchid. Dainty compact branching plants with finely cut foliage, covered when in bloom with clusters or spikes of brilliantly colored butterfly-like flowers. Valuable for garden decoration or pot culture. Petals bright yellow with margins and tube of carmine or purple-rose, shading from lighter to darker shades.

The seed may be sown outdoors after danger of frost is past, where the plants are to remain; or start inside and transplant when weather is suitable. Hardy annual; about twenty inches high. Pkt. 15c.

Sensitive Plant—(See *Mimosa Pudica*)

Smilax

(*Myrsiphyllum asparagoides*) No twining plant in cultivation surpasses this in graceful beauty of foliage. Indispensable to florists for table and house decoration. The hard texture of its small glossy green leaves permits the long delicate sprays of foliage to be kept without wilting several days after being cut.

Planted in spring it makes a fine pot plant for fall and winter. The seed germinates very slowly. The process may be hastened somewhat by soaking the seed in hot water for ten hours before planting, but even then it is often six or eight weeks before the plants make the appearance. Tender perennial climber, ten feet high. Pkt. 5c.

Snapdragon

(*Antirrhinum*) This well-known border and bedding plant of long blooming season is now one of the best perennials suitable for flowering as an annual. The long showy spikes of curiously shaped tubular flowers with irregular spreading lobes and finely marked throats are fragrant as well as brilliantly colored. They are very desirable for cutting as the spikes of bloom are borne well above the dark glossy leaves and keep fresh for a long time.

For blooms the first season outdoors, sow seed very early under glass and transplant to open border as soon as the ground is warm and dry, in rich loamy soil in a sunny situation setting one foot apart each way and giving them plenty of water; or sow seed in August or September and cover plants with a mulch on approach of cold weather. These fall-sown plants may be transplanted into pots and flowers in the house, and in this case give them the same temperature and treatment as geraniums and carnations. Tender perennial, often treated as annual or biennial; one and one-half to two feet high.

Majus album. Pure white, light yellow throat. Pkt. 5c.

Majus brilliant. Crimson and yellow, throat white. Pkt. 5c.

Majus Delila. Reddish-violet, white throat. Pkt. 5c.

Fine Mixed. Includes all of the best colors. Pkt. 5c.

For a dazzling display in a sunny place don't forget *Portulaca*.

PLAN FOR KITCHEN GARDEN WHERE SPACE IS LIMITED

For the convenience of those who have only a limited space at their command, the following is suggested as an aid in laying out a small kitchen garden.

If the rows are to run east and west it is desirable to have the corn at the north end otherwise the corn is likely to shade too much the rows near it on the north side.

The rows may be as long as space permits or individual preferences may call for, and where space is less limited more rows of favorite sorts may be added or provision made for other vegetables or flowers that may be desired.

The Asparagus, Horse Radish and Rhubarb should be permanent beds.

Among the varieties of vegetables that we recommend, mentioned somewhat in order of planting, are the following:

Tomato, Early—Earliana, Chalk's Early Jewel and Early Detroit.

Cabbage, First Early—Early Jersey Wakefield and Copenhagen Market.

Cabbage, Second Early and Intermediate—Early Summer, Succession and Early Winnigstadt.

Cauliflower—Early Favorite and Early Snowball.

Onion—Bunching and White Portugal.

Pepper—Large Bell or Bull Nose and Giant Crimson.

The above sorts do best when started indoors and transplanted. Others mentioned below may be sown outdoors.

Lettuce Clustering or Loose Leaved—Black Seeded Simpson and Ferry's Early Prize Head.

Lettuce, Cabbage or Heading—California Cream Butter and Big Boston.

Onion—Yellow Globe Danvers, Southport Red Globe and White Globe.

Radishes—French Breakfast, Early Scarlet Turnip, White Tipped, Early Long Scarlet and Crimson Giant Turnip.

Spinach—Early Giant Thick Leaved and Long Season.

Parsley—Plain and Champion Moss Curled.

Asparagus—Palmetto and Conover's Colossal. Peas—Nott's Excelsior and Premium Gem (dwarf) and Champion of England (tall).

Beet—Detroit Dark Red and Crosby's Egyptian.

Corn, Early—Mammoth White Cory, Crosby's Early, Golden Bantam and Charlevoix.

Corn, Main Crop—Ferry's Early Evergreen and Stowell's Evergreen.

Beans, Dwarf Wax Podded—Golden Wax and Prolific Wax, Black Seeded.

Beans, Dwarf Green Podded—Early Red Valentine and Stringless Green Pod.

Beans, Pole—Kentucky Wonder and White Crease Back.

Cucumber—Early White Spine and Improved Long Green.

Squash, Summer—Mammoth White Bush Scallop and Mammoth Summer Crookneck.

Squash, Fall and Winter—Delicious and Hubbard.

Musk Melon—Emerald Gem, Admiral Togo and Osage.

Water Melon—Peerless and Monte Cristo.

Cardinal Poppy

Primula Sinensis (Chinese Primrose)

This beautiful winter blooming pot plant is especially valuable in that its brightly colored and finely formed flowers and prettily cut foliage may be had in perfection from November until late in spring. The splendid salver-formed flowers are produced in large clusters.

Sow seed indoors in well drained, shallow pans or boxes from April to last of July, to insure flowering the following winter. For best results use finely sifted leaf mold, loam and sand in equal parts. Cover slightly and place the pans in a temperature of about 60° F. Water with a fine spray. If covered too deeply or if allowed to dry after being wet the seed will not germinate. Transplant into pots and keep in a cool place so that the plants will grow slowly until ready to bloom. Seed may also be sown in fall. Greenhouse perennial, six to ten inches high.

Single Fringed, Choicest Mixed.....Pkt. 25c.

Double Fringed Mixed, Very choice; shades of red, rose, white, etc. The seed we offer can be depended on to produce a very large proportion of double flowers.....Pkt. 25c.

Even a small yard should have its flowers. Plant a few Sweet Peas or some Nasturtiums, either Dwarf or Trailing. Our Mixtures of Asters, Pansies, Petunias, Phlox Drummondii, Poppies, Morning Glories, Marigolds, Verbenas and Zinnias, all are easily grown. A few packets of flowers well grown will give an abundant harvest of pleasure.

Each packet of seed gives cultural directions sufficient to insure success under normal conditions, and more detailed suggestions for many sorts will be found in the following pages.

Salvia, too well known and liked to be forgotten.

Stock

(*Mathiola*) Sometimes called **Gilliflower**. Considered almost indispensable where a fine display of flowers is wanted and particularly valued for edgings, bedding, and pot culture. The improved varieties we offer of this favorite garden plant produce dense spikes of very fragrant and beautiful rosette-like double flowers in a wide range of attractive colors. They are suitable for cutting, being produced on stems of good length in pleasing contrast with the dark green foliage of the

bushy plants. Each of the four types is of long flowering period, and if the earlier ones are started indoors, a profusion of fragrant and pleasing flowers is afforded for the entire season.

Sow outdoors early in spring, using well fertilized, carefully pulverized soil and cover seed with one-fourth inch of fine soil firmly pressed down. Make the rows fifteen inches apart; thin to six inches apart. For earlier blooming start indoors and transplant. Height of plants, one to one and one-half feet.

Early Flowering Brompton

A decidedly superior, large-flowering annual strain with the splendid foliage and bloom of the older type but flowering with the German Ten Weeks and decidedly superior in length of stem and size of flower spike. This group is also called **Beauty Stocks**, **Giant of Nice**, "Cut and Come Again," and **Victoria Stocks**.
Belle of Naples. Old rose or light purplish rose.....Pkt. 15c.
Camaldoli. Dark violet or light purplish red.....Pkt. 15c.
Snow White, (*Victoria*).....Pkt. 10c.
Vesuvius. Blood-red or deep purplish red.....Pkt. 15c.
Early Flowering Brompton Mixed. Includes shades of white, old rose, blood-red, purple, and violet.....Pkt. 5c.

Double German Ten Weeks (Large Flowering)

This favorite half-hardy summer blooming annual has deliciously fragrant flowers and is very desirable for cutting.

Double German Ten Weeks, Mixed (*Levkoejen*) Shades of white, red, purple, lavender, and maroon.....Pkt. 5c.
Double German Ten Weeks, Pure White. Very useful for floral work and bouquets.....Pkt. 10c.

Intermediate or Autumnal Stocks

Sown at the same time as the Ten Weeks, the Intermediate sorts will succeed them in bloom thus affording flowers continuously until late in the fall. The flowers are larger and are produced on longer, bolder spikes. For indoor blooming, if sown in pots late in summer the plants will bloom the following spring.

Intermediate White.....Pkt. 15c.
Intermediate Scarlet.....Pkt. 15c.

Winter or Biennial Brompton Stocks

These require a longer time than the intermediate to grow and cannot endure our winters unless protected.

Brompton Mixed. This mixture of Winter or Biennial Brompton Stocks forms bushy plants flowering in the fall outdoors if started in hotbed early in spring and transplanted, or blooming well in winter from seed sown outdoors in summer if plants are taken up in the fall and given airy quarters indoors; half hardy biennial.....Pkt. 10c.

Stock, Double German Ten Weeks

Sunflower, Stella

Sunflower

(*Helianthus*) These stately, old-fashioned flowers with the newer improved varieties

are coming into special favor as a background for lawns and in front of high fences. Valuable also as a screen to hide unsightly places and sometimes used to mitigate the evil of adjacent swamp holes. Their very tall dense growth and bright yellow disc-like flowers of very large size and long blooming period make them one of the most deserving and useful of hardy annuals.

Sunflowers grow readily in almost any soil but do best on light, rich limestone or alluvial land well supplied with moisture and not shaded by trees or buildings. Sow the seed outdoors in spring after danger of frost is over, preferably in well pulverized soil either broadcast or in rows two to three feet apart and cover about one-half inch deep. When the young plants are about four inches high, thin one and one-half to two feet apart to secure the best development.

Double Chrysanthemum Flowered. The most attractive of the very double sunflowers. Plant tall, growing seven feet high and blooming profusely all summer. Flowers very large, often eight to ten inches across, very double, with long fringed petals and resemble chrysanthemums. The color is a splendid, rich, golden-yellow, free from any black center.....Pkt. 5c.

Stella. The plant of this fine variety is spreading with many branches and attains a height of about three feet. The flowers are about three inches in diameter and are of an unusually pure golden yellow with black discs or centers, and are borne on long stems well above the foliage. Early blooming and produced in abundance throughout a long season.....Pkt. 5c.

Straw Flower—(See *Helichrysum* and *Rhodanthe*)
Sweet Rocket—(See *Rocket*)

Are you utilizing all that ground of yours?

Market Gardeners' Seed Co. Fancy Sweet Peas

(*Lathyrus odoratus*) No garden is too small for a row of Sweet Peas and no estate, however extensive or magnificent, should fail to include many varieties of this most popular flower. Its long blooming season usually extends from early summer until very hot dry weather and no other climer equals it for cutting, either for use in bouquets or for table decoration.

Hundreds of varieties have been offered for sale by seedsmen but owing to recent marked improvements many sorts are decidedly inferior and have been dropped from our list.

In describing varieties, by "standard" is meant the wide petal at the top of the flower; the "wings" are the two petals below.

Extra Early Blanche Ferry and Earliest White, being the earliest known varieties are excellent for growing indoors.

For Outdoor Planting there are two general classes. The more extensive is the Grandiflora or large flowering division. This class, owing to its general vigor of growth, its freedom of blooming and extremely wide range of colors, is best suited for most conditions of growth and location.

The Spencers are of exceptionally large size, the standard and wings waved or frilled and the general effect remarkably graceful and attractive. A characteristic of the best Spencers is an "open keel." The petal or envelope enclosing the pistil, stamens and anthers is called the keel. In a typical Spencer flower grown under favorable conditions the anthers and stigma are not clamped together and the envelope of the keel is large and baggy and open at the top. The plants of Spencer varieties are usually in bloom much longer than other sweet peas, as most of the blossoms fall off after maturity without setting pods. The Spencers are decidedly shy seeders, hence the price will doubtless always be higher than for the older types.

Culture. Early in spring make a trench three to four inches deep in rich, mellow, soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. Sweet Peas, particularly the white seeded sorts, are often a little difficult to start. If the soil is too dry they will remain a long time without germinating; if it is too wet and cold they will not sprout at all. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the trench and sow the seed on this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun but remove this as soon as the young plants appear.

When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon, preferably a wire netting firmly supported by stakes to prevent sagging, but strings or brush are often used with satisfactory results.

The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week preferably early in the morning or in the evening, is usually better than light sprinkling more frequently.

For the aphid or plant louse, spraying with solutions of some tobacco extract or whale-oil soap is usually effective; and for the Red Spider, which also causes trouble at times, spraying with pure water is usually sufficient. A frequent change of location has also been found important.

A better growth of vine and earlier blooming often results from planting seed late in the fall instead of early in the spring.

The blooms should be picked before they form pods or the plants will soon stop flowering.

Sweet Peas, White Spencer.

Plant seeds that you possibly overlooked last season.

Market Gardeners' Seed Co. Fancy Sweet Peas—Continued

WRITE FOR SPECIAL PRICES ON LARGER QUANTITIES

SPENCER VARIETIES

This group includes the largest and most beautifully formed sweet peas. The Spencers have very large waxed flowers which are produced abundantly on long, strong stems, making the blossoms most desirable for cutting.

APPLE BLOSSOM SPENCER. Bright rose standard with wings of very light primrose flushed or tinted rose-carmine. Very large Spencer form. A free blooming sort and a very reliable bicolored sweet pea of robust growth. Pkt. 5c; Oz. 35c.

ASTA OHN. Suffused lavender or tinted mauve sometimes with pinkish tinge. Spencer form, large and wavy. The best of the deeper lavender sweet peas. Pkt. 5c; Oz. 35c.

AURORA SPENCER. Flowers brilliant orange-rose, striped and flaked on white. One of the most attractive very large striped Spencers. Pkt. 5c; Oz. 35c.

BLANCHE FERRY SPENCER. This is similar in color to the old Blanche Ferry, but like all Spencers, the type is not unalterably fixed. Rose-pink standard; wings white, suffused and tinted with light pink. It is a very pleasing bi-colored sweet pea and is one of the most attractive varieties yet introduced. Pkt. 5c; Oz. 40c.

CAPTAIN OF THE BLUES SPENCER. Purple, with blue wings, beautifully waved; margin of petals marbled. Flowers of large Spencer form, but lighter shade than Captain of the Blues; more truly Waverly Spencer in color. A very distinct and pleasing variety. Pkt. 5c; Oz. 35c.

CONSTANCE OLIVER. Cream ground, beautifully suffused with pale orange-pink, sometimes called bright pink on primrose ground. A large Spencer of vigorous growth, and one of the finest cream pinks. Pkt. 5c; Oz. 35c.

COUNTESS SPENCER. Bright clear pink sometimes darker towards the edges; very large, open form; long stems. The first variety introduced of the Spencer type and still the best deep pink sweet pea. Pkt. 5c; Oz. 30c.

DAINTY SPENCER. White suffused and edged with rose-pink; large Spencer form; picotee edged; very free blooming. Pkt. 5c; Oz. 35c.

ELFRIDA PEARSON. A very large light pink on white ground, beautifully edged and shaded. Plants sturdy and very vigorous. A most useful pink Spencer for decoration and exhibition. The best light blush pink. Pkt. 10c; Oz. 40c.

FLORENCE MORSE SPENCER. A very large, delicate blush shaded and edged with rose-pink. Excellent for cutting. One of the very best light pink sweet peas. Pkt. 5c; Oz. 35c.

FLORA NORTON SPENCER. Flowers bright blue with tint of purple; nicely waved. One of the very best blue Spencers. Pkt. 5c; Oz. 1.00.

GEORGE HERBERT. A bright, rose-crimson or rose-carmine Spencer variety of large size suffused with magenta and showing veins in wings. Both standard and wings beautifully waved. The best carmine and rose sweet pea yet introduced. Pkt. 5c; Oz. 30c.

GLADYS UNWIN. Clear light bright pink with deeper shade at edge of standard; texture heavy. One of the best of the large waved types. Pkt. 5c; Oz. 25c.

HELEN LEWIS. A rich crimson-orange, with wings of orange rose or orange-salmon pink. Large, fine Spencer form. One of the finest reliable orange sweet peas. Pkt. 5c; Oz. 35c.

KING EDWARD SPENCER. Brilliant crimson-scarlet; very large size and of open form. The best of the pure red or crimson Spencers. Pkt. 5c; Oz. 35c.

KING WHITE. The form, size, vigor, waviness, and purity of color, give pre-eminence to its claim as the best Spencer yet introduced. Seed white. Pkt. 15c.

LOYALTY SPENCER. Bright blue flaked and striped on white ground. Flowers of large Spencer form. The best blue striped sort yet introduced. Pkt. 10c; Oz. \$1.00.

MARGARET MADISON. A self-colored soft light azure blue or pale lavender Spencer. The form and coloring when grown under favorable conditions are exquisite. Pkt. 10c; Oz. \$1.00.

MRS. ROUTZAHN. A most attractive Spencer of largest size and very graceful form; apricot and buff, shaded light rose at edges. One of the very best cream pink sweet peas. Pkt. 5c; Oz. 40c.

NORA UNWIN. Flowers large, of waved type, heavy texture, beautifully frilled. Seed white. This desirable white sweet pea is practically a Spencer. Pkt. 5c; Oz. 35c.

OTHELLO SPENCER. A beautiful, deep, pure maroon of very large Spencer type. The most reliable of the maroon shades of Spencers. Pkt. 5c; Oz. 35c.

PRIMROSE SPENCER. We consider this the best primrose, or cream and ivory sweet pea yet developed. Spencer type, large wavy petals, frilled at edges; clear, distinct color. Seed white. Pkt. 5c; Oz. 35c.

STIRLING STENT. A rich, deep, metallic salmon, suffused with orange. A beautiful Spencer, especially in artificial light, requiring shading to show true color. Pkt. 10c; Oz. \$1.00.

TENNANT SPENCER. A light rosy purple or purplish mauve Spencer of very large size and excellent form. The best mauve sweet pea. Pkt. 5c; Oz. 35c.

THOMAS STEVENSON. Brilliant orange-scarlet of large Spencer form, the standard showing more orange than the wings. Vines vigorous and very floriferous. The intense coloring is heightened by shading. Pkt. 10c; Oz. \$1.00.

VERMILION BRILLIANT. This variety is considered the best scarlet Spencer yet introduced. Flowers of good size, nicely waved. Color almost true scarlet, with a slight tinge of orange. Pkt. 10c; Oz. \$2.00.

WHITE SPENCER. Standard and wings of pure white, beautifully waved and fluted. An especially attractive variety of very large size. Seed white. One of the very best white sweet peas. Pkt. 5c; Oz. 75c.

GRANDIFLORA VARIETIES

The Grandifloras, sometimes called the Eckford class, are an older type than the Waved or Spencer sorts, and the flowers are not so large. They are not so long in bloom, but are decidedly cheaper and more easily grown. In addition to the classification by colors, there are two typical forms of grandifloras recognized, the "open form" and the "hooded form," referring to the shape of the standard. In the open form, illustrated by Blanche Ferry, Katherine Tracy, and King Edward VII., the standard is nearly round, smooth, and straight on the edges. The standard in the hooded form, of which well known examples are Dorothy Eckford, Countess of Radnor and Othello, has slightly rolling sides at the top, giving the flower a shell-shaped appearance.

A group of Early Flowering sorts, sometimes called the Christmas class, includes as representative varieties Extra Early Blanche Ferry, Earliest White, and Mont Blanc.

WHITE

DOROTHY ECKFORD. Flowers large, pure white, shell shaped, extra good substance. Considered the best of this class. Seed white. Pkt. 5c; Oz. 15c.

EARLIEST WHITE. The earliest blooming white sweet pea. Hooded form. Seed black. A most desirable variety for forcing. Pkt. 10c; Oz. 15c.

EMILY HENDERSON. A clear white of open form. Early, free bloomer. Seed white. Pkt. 5c; Oz. 10c.

MONT BLANC. Flowers of open form, good size, very clear white, very early. Vines dwarf, slender, graceful, with narrow leaves. Seed white. Pkt. 5c; Oz. 15c.

PRIMROSE OR VERY LIGHT YELLOW

HON. MRS. E. KENYON. Clear primrose; large semi-hooded flower. White seeded. Pkt. 5c; Oz. 15c.

MRS. COLLIER. A lighter shade of primrose than Mrs. Kenyon. Seed white. Pkt. 5c; Oz. 15c.

LIGHT PINK

DAINTY. The flowers of this grandiflora variety are white shaded lightly and edged with light pink. They are of good size, hooded form and are borne on very long stems. Pkt. 5c; Oz. 15c.

KATHERINE TRACY. Flowers soft but brilliant pink; open form. The plants are vigorous, and give a profusion of flowers which continue of good size until the end of the season. Pkt. 5c; Oz. 15c.

LOVELY. The flowers are large, abundantly produced and of attractive hooded form. Standard and wings both deep pink shading to very light pink at edges; white ground. The plants often have four flowers on a stem. One of the best of this class. Pkt. 5c; Oz. 15c.

PRIMA DONNA. One of the very best of the hooded pink grandiflora varieties. The flowers are of good size, clear soft shade; self-colored. The vines are of vigorous growth often with three or four flowers on a stem. Pkt. 5c; Oz. 15c.

Our Spencer Sweet Peas are the best ever. Try them.

Market Gardeners' Seed Co. Fancy Sweet Peas—Continued

WRITE FOR SPECIAL PRICES ON LARGER QUANTITIES

GRANDIFLORA VARIETIES

ROSE WITH WHITE WINGS

BLANCHE FERRY. Blooms very early and continues to produce abundantly through a long season. Standard medium sized, open form, bright rose-pink; wings large, rounded, nearly white. Pkt. 5c; Oz. 10c.

EXTRA EARLY BLANCHE FERRY. The earliest known sweet pea. Vines vigorous and hardy though of dwarf habit. It will be found to be the first to furnish flowers either in greenhouse or out of doors and it will continue to furnish them in great abundance longer than most varieties. Pkt. 5c; Oz. 15c.

ORANGE PINK

BOLTON'S PINK. Orange-pink veined with rose; large size, semi-hooded form. Pkt. 5c; Oz. 15c.

MISS WILLMOTT. A fine orange-pink, showing veins of deeper tint. Flowers semi-hooded, good size, on long stems; plant very vigorous. Pkt. 5c; Oz. 15c.

ST. GEORGE. Flowers flame color. The brightest of the orange-pink; large, of open form, and slightly waved Unwin type; wonderfully brilliant. Pkt. 5c; Oz. 15c.

SHADES OF RED

KING EDWARD VII. Superior to Firefly. A bright crimson-scarlet or pure red of largest grandiflora size; open form. One of the very best. Pkt. 5c; Oz. 15c.

LORD ROSEBERRY. Magenta-rose, veined with deeper rose; good size, hooded form. Pkt. 5c; Oz. 15c.

MILLIE MASLIN. An attractive crimson-red. Large hooded or shell-shaped flowers. Pkt. 5c; Oz. 15c.

PRINCE OF WALES. Flowers large, shell shaped; pure rose-crimson. A very attractive sort, larger and finer than Her Majesty. Pkt. 5c; Oz. 15c.

QUEEN ALEXANDRA. Flowers very bright red, large, semi-hooded. Unsurpassed in brilliancy of color. The nearest scarlet in sweet peas. Pkt. 5c; Oz. 15c.

SALOPIAN. Rich, cardinal-red, deeper than King Edward VII; large, hooded form. Pkt. 5c; Oz. 20c.

PINK AND RED STRIPES

AMERICA. Carmine striped and splashed on white ground. Open form, good size. Pkt. 5c; Oz. 10c.

AURORA. Large, hooded form; striped and flaked with orange-salmon-pink over white. Pkt. 5c; Oz. 15c.

MRS. JOSEPH CHAMBERLAIN. Large flowers, hooded form; white, striped with light purplish rose. Pkt. 5c; Oz. 15c.

LAVENDER AND LIGHT BLUE

COUNTESS OF RADNOR. A beautiful lavender of hooded form, nearly self-colored. Pkt. 5c; Oz. 15c.

FRANK DOLBY. A lavender and mauve of Unwin type, similar to Lady Grisel Hamilton, but the flowers larger and beautifully waved and frilled. Pkt. 5c; Oz. 15c.

LAVENDER AND LIGHT BLUE—Continued

HELEN PIERCE. Flowers veined and finely mottled bright blue on ivory-white; semi-hooded form. Very attractive in its "gloxina-like" coloring. Pkt. 5c; Oz. 15c.

LADY GRISEL HAMILTON. A large, soft lavender, tinted mauve; similar to Countess of Radnor, but nearer blue; hooded form. One of the best. Pkt. 5c; Oz. 15c.

LOTTIE ECKFORD. Picotee edged with magenta-blue; standard white, heavily shaded lilac; wings with lighter shade of lilac. Large, hooded form. Better than Maid of Honor. Pkt. 5c; Oz. 15c.

MRS. GEORGE HIGGINSON, JR. A very clear, delicate shade of lilac-blue, self-colored; medium size, semi-hooded form. Pkt. 5c; Oz. 15c.

MAUVE AND PURPLE

MRS. WALTER WRIGHT. A large, hooded, rosy purple. Superior to Dorothy Tennant. Pkt. 5c; Oz. 15c.

ROMOLO PIAZANNI. Flowers rosy purple, changing to lilac and blue. Large size, hooded, and better than Fascination. Pkt. 5c; Oz. 15c.

BLUE AND PURPLE

COUNTESS OF CADOGAN. Purple, soon turning to blue; wings bright blue; medium size, hooded form. A little darker than Navy Blue and of better form. Pkt. 5c; Oz. 15c.

DUKE OF WESTMINSTER. Purple standard, with wings shading to violet; large size, hooded form. Pkt. 5c; Oz. 15c.

FLORA NORTON. Flowers light clear blue; medium size, hooded form. Pkt. 5c; Oz. 15c.

LORD NELSON. (Brilliant Blue) Deeper in color than Navy Blue; good size; semi-hooded. This is considered the best grandiflora dark blue. Pkt. 5c; Oz. 15c.

NAVY BLUE, Indigo, and violet, with wings of navy blue shading to light blue; medium size, semi-hooded. Pkt. 5c; Oz. 15c.

BLUE AND MAROON STRIPES

HESTER. Large, open grandiflora type; purplish blue, marbled and shaded on white ground. Pkt. 5c; Oz. 15c.

SENATOR. Purplish maroon and indigo heavily striped and splashed on light ground; medium size, hooded form. Pkt. 5c; Oz. 15c.

VIOLET AND MAROON

BLACK KNIGHT. Glossy deep maroon, one of the darkest medium size, open form. Better than Boreatton. Pkt. 5c; Oz. 15c.

HORACE J. WRIGHT. Large, violet-maroon flowers with violet wings; somewhat waved, hooded form. Better than Duke of Sutherland. Pkt. 5c; Oz. 15c.

OTHELLO. A very dark maroon, practically self-colored with almost black veining. Large size, hooded form, very attractive. Pkt. 5c; Oz. 15c.

STANLEY. A deep maroon, warmer than Boreatton; good size, open form. Pkt. 5c; Oz. 15c.

Mixtures of Sweet Peas

Most people obtain more satisfaction from planting Sweet Peas in mixture than from growing named sorts, but to be successful it is necessary that the seed be of the best quality obtainable. Often what is offered as mixed seed is stock harvested from plants that have come up as volunteers on ground where Sweet Peas have been grown before, or a lot of seed which has been grown, saved, or handled so carelessly that it cannot be sold as any distinct variety. The use of such seeds will not give satisfactory results. We assure our customers the Mixtures of Sweet Peas which we offer are the results of as great care in selecting as any stocks we grow, and as fine flowers are obtained from them as from any seed that can be bought. We invite comparison with any and all others, no matter under what name or at how high prices offered, and are certain that a trial will demonstrate the superiority of our mixtures.

Choice Mixed This mixture has been most carefully grown from our selected stock seed and it will afford a splendid variety of blooms of improved forms and in the widest possible range of desirable colors. Many of the most pleasing and brilliant colors are included. Pkt. 5c; Oz. 15c.

M. G. S. Co's. Superb Mixed We make up this mixture by combining in carefully considered proportions twenty-one separate named varieties, each the very choicest of its class. This was done after first carefully considering the desirability of color, form, and freedom of blooming in our many trials of nearly two hundred different named sorts. Nowhere else can one procure a more magnificent mixture of finely formed and beautifully colored, large flowering Sweet Peas. Pkt. 5c; Oz. 15c.

Spencers Mixed A splendid mixture of Spencer varieties grown for us by the most careful methods from proven stocks. A wide range of colors is thus assured in this comparative new class of Sweet Peas of such remarkably large size and wonderfully attractive form. Pkt. 5c; Oz. 30c.

M. G. S. Co's. Superb Spencers Mixed We make up this magnificent mixture by combining eighteen separate named Spencer varieties, each of which our trials have repeatedly shown to be the very best of its class. Unsurpassed as a mixture of this superb class and showing the most desirable range of colors and the finest forms. No better mixture in all the world than this. Pkt. 10c; Oz. 50c.

Are you utilizing all that ground of yours?

Sweet William

grown, hardy and free flowering.

They produce a succession of flower clusters, thus affording splendid bloom for several weeks. The florets are handsomely colored and marked, and are borne on stiff stems in great profusion, forming dense round topped heads or clusters, often three to four inches across. The colors are exceedingly varied, ranging from white through many shades of rose, lilac, red, carmine, crimson, and maroon to nearly black, usually two shades to each plant. The petals are barbed or bearded and the leaves are lanceolate in shape, and grow opposite or conduplicate.

Sow outdoors very early in spring, preferably in rich, mellow soil, in rows one foot apart. Cover seed with one-fourth inch of fine soil firmly pressed down. When two inches high, thin to six inches apart. In the more northerly latitudes, protect with mulching in winter. Seed can also be sown in fall. There are usually no flowers until the second season, but if seed is started very early under glass and transplanted, blooms may be had late in autumn. The old clumps may be divided, but it is usually more satisfactory to start vigorous young plants every year or two. Hardy perennial; one and one-half feet high.

Double Mixed. Double flowers in a great variety of colors and shadesPkt. 5c.

Tagetes—(See Marigold)

Tropaeolum Canariense—
(See Canary Bird Flower)

Tropaeolum Lobbianum—
(See Nasturtium, Trailing)

Tropaeolum Minor—
(See Nasturtium, Dwarf)

Torenia A fine annual with trumpet-shaped, sky-blue flowers, each having three spots of dark indigo blue and a yellow stain in the center. Plants of bushy habit, about ten inches high. Extremely handsome when grown in pots or out of doors in a shaded location.

Sow in heat very early in spring, or in open border when the weather has become warm and settled, using light, rich soil.....Pkt. 10c.

Verbena

This well known annual of low growing decumbent habit of growth is very desirable for massing in beds on the lawn. It is suitable also for borders and window boxes.

Large clusters of showy flowers are borne in succession through a long season until frost. Each truss or cluster is about two to three inches across, and includes a dozen or more single flowers about three-fourths of an inch across, tubular with five spreading lobes. The length of stem and texture of the flowers make them of value for bouquets and table decorations. There is a wide range of colors, shades and stripes usually running from pure white to deep purple.

Verbenas usually flower well in August from seed sown in open ground in May. Germination will be hastened if the seed is soaked in lukewarm water before planting. It is desirable to have the soil well fertilized and carefully pulverized. Cover seed about one-fourth inch deep. When the young plants have three or four leaves, transplant in rows two feet apart and about twenty-four inches apart in the row, choosing preferably a sunny situation. At this distance the plants, if conditions are favorable, will spread so as to cover the ground completely.

Earlier blooming may be had if plants are started indoors and transplanted in the open ground after danger of killing frost is over. Half hardy perennial trailer, one foot high, usually treated as an annual.

Montana (Drummondii) This variety is hardy and exceptionally vigorous in growth of plant; flowers, rose changing to lilac; fragrant.....Pkt. 5c.

Hybrida Defiance. May be relied upon to produce the true, deep scarlet color. No variety gives a more brilliant effect when used as a bedding plant.

Hybrida Blue. All shades of blue.....Pkt. 10c.

Hybrida Auriculaciflora. Various shades of pink, red, purple and blue, all with distinct white eye.....Pkt. 10c.

Sweet William

Hybrida White. Produces large, pure white flowers; very floriferous, fine for florists; comes true from seed. Pkt. 5c.

Mammoth White. The largest trusses of the finest formed and clearest white flowers of any named sort. It comes absolutely true from seed, thus enabling us to secure the greater vigor and more abundant bloom of the seedling, united with the fine flowers of the named varieties. Pkt. 10c.

Hybrida Italian Striped. A strikingly attractive and beautiful sort, producing large, brilliant, striped blossoms in great abundance.....Pkt. 10c.

Fine Mixed. This desirable mixture includes a wide range of colors, shades, and stripes, usually running from pure white to deep purple.....Pkt. 5c.

Mammoth Mixed. Embraces a wide range of the most beautiful colors, the clusters being of largest size. Pkt. 15c.

Hybrida Compacta Mixed. A distinct sort. The plant forms a compact bunch about five inches high and eighteen inches across, covered throughout the season with large trusses of white, scarlet, and violet flowers.....Pkt. 15c.

Sweet Williams should have a place in every Flower Garden.

Vinca

(*Periwinkle*) These very attractive bushy plants with glossy green foliage produce in abundance handsome round or salver shaped single flowers, suitable either for culture in pots or boxes or for summer bedding and borders. If sown early under glass and transplanted in a warm, sheltered situation, will bloom in summer and autumn and may be potted for the house before frost. The plants require no trimming, are in continuous bloom from setting out until frost and are entirely free from the attacks of insects. These desirable features account for the increasing demand for Vincas in parks and private grounds for summer bedding and borders. Tender perennial, blooming the first season, about fifteen inches high.

Pure White. Beautiful pure white.....Pkt. 5c. Rosea Albo. White with crimson eye.....Pkt. 5c. Rosea. Rose with crimson eye; flowers often two inches in diameter. A very desirable window plant.....Pkt. 5c. Mixed. The above named varieties mixed.....Pkt. 5c.

Viola Tricolor—(See Pansy).

Virginian Stock

(*Cheiranthus maritimus*, *Malcomia maritima*) The plants are of more branching and decidedly more open in habit than the common Stock (*Mathiola*) and are very useful for border or edging. Sow early in spring or for very early blooming sow in fall or start indoors and transplant. A continual succession of blossoms may be kept up by sowing at intervals through spring and summer. Hardy annual; about nine inches high. Red and white, mixed. Clusters of beautiful single cruciform flowers Pkt. 5c.

Wallflower

(*Cheiranthus cheiri*) This is a favorite European garden flower. The long, fragrant terminal spikes of the Wallflower when properly grown are very conspicuous in beds and borders and are very useful in making bouquets. Sow seed early in hotbed and while plants are small, prick them out into pots and sink in the earth. On approach of cold weather, remove the pots to the house and the plants will bloom all winter. Tender bushy biennial or perennial that will live through the winter in a mild climate; height of plants about one and one-half feet.

Double Mixed. Deliciously fragrant, perfectly double, and combine many shades of color, the orange, purple, and chocolate predominating Pkt. 10c.

Wild Cucumber

(*Echinocystis lobata*) This is a useful climber where a rapid and vigorous growth of vine is desired. To cover or to screen an unsightly building, there is perhaps no annual climber better adapted for the purpose. The vine has abundant foliage and is thickly covered with sprays of small white, fragrant flowers, followed by numerous prickly seed pods. Sow late in fall or very early in spring. Usually the plants are produced from year to year by self-sown seed. Hardy annual..... Pkt. 5c.

Zinnia.

Wistaria Chinensis

One of the most beautiful and rapid growing of the hardy perennial climbers. When well established in good soil it will often grow fifteen to twenty feet during the season, and frequently blooms both in spring and fall. The flowers are very fragrant, single, pale blue, pea-shaped and are borne in long, drooping, grape-like clusters, often over a foot in length. Foliage light green, pinnate. The seed should be sown in mellow loam early in the spring, or in greenhouse or hotbed in winter and when plants are one foot high, transplanted into permanent situations. Pkt. 20c.

Zinnia

Sometimes called Youth and Old Age. The well known bush-like plants of Zinnias produce a profusion of large, double imbricated flowers, usually about two inches across, borne on stiff stems. They are much used for bedding and are suitable for borders and for cutting.

There is much satisfaction in a bed of Zinnias with their twisted and recurved petalled flowers in many bright colors, and when nearly every other flower has been killed by frost, this plant is still in full bloom. Few flowers are more easily grown or bloom more abundantly throughout the season, and the wide range of color is not less remarkable than their unusual depth and richness.

Sow the seed early in spring, in open ground in good, rich soil, preferably in rows one and one-half feet apart and covering about one and one-fourth inch deep. When the young plants are one to two inches high, thin to six inches apart. Start under glass for earlier blooming. Half hardy annual; tall growing, usually about one and one-half to two feet high.

Double yellow.....Pkt. 5c.
Double scarlet.....Pkt. 5c.
Double deep red.....Pkt. 5c.
Double magenta.....Pkt. 5c.
Double orange.....Pkt. 5c.
Double white.....Pkt. 5c.
Double black purple.....Pkt. 5c.
Double dark crimson.....Pkt. 5c.
Double striped or zebra, mixed.....Pkt. 5c.
Double choice mixed. Includes the above colors; a very fine mixture.....Pkt. 5c.

Lilliput, double mixed. This strain grows about one foot high and bears a profusion of comparatively small, very double, globular flowers about one inch in diameter, very brilliant in color.....Pkt. 10c.

Pompon, double mixed. The globular flowers are fully as varied and brilliant in color as the ordinary Zinnia and about half its size.....Pkt. 5c.

Haageana, double. Dwarf variety with double flowers of a deep orange color, about one and one-quarter inches in diameter; fine for cut flowers; height one foot. Pkt. 10c.

Mexicana Hybrida, variegated. Distinctive in its well-formed single flowers of deep maroon and golden yellow, strikingly contrasted. Flowers similar to French Legion of Honor Marigold, but are earlier and more easily grown. Hardy annual; one foot high.....Pkt. 15c.

NOTICE—We carry in season a full line of Potted Plants, for bedding out, or decoration purposes.

Our giant Zinnias are the most wonderful of Flowers.

BULBS AND ROOTS FOR SPRING PLANTING

WRITE FOR SPECIAL PRICES ON ALL BULBS IF LARGER QUANTITIES ARE WANTED.

Included in this class are some of our most showy garden flowers and their culture is very easy. In the spring, after danger from frost is over, plant in a rich, loamy soil, having a sunny position and flowers the same season are assured. All bulbs and roots will be sent by mail or express, charges prepaid, when ordered at single or dozen rates. At the 100 rate they will be sent by express or freight, the purchaser paying the charges unless otherwise stated. Not less than six of any one variety supplied at dozen rates and not less than 25 at the 100 rate. Orders with money should be sent to us as early as possible and they will be filled in rotation. Bulbs subject to injury by frost will not be sent until such danger is over.

Begonia

outdoors, select a shady, moist situation making the bed rich with thoroughly rotted manure and leaf mold, if obtainable. Plant as soon as danger from frost is over. After the plants start into vigorous growth keep well watered.

	Each	Doz.		Each	Doz.
Single, pink	20c.	\$2.00	Double, pink	20c.	\$2.00
Single, scarlet	20c.	2.00	Double, scarlet	20c.	2.00
Single, white	20c.	2.00	Double, white	20c.	2.00
Single, yellow	20c.	2.00	Double, yellow	20c.	2.00
Single, mixed	20c.	2.00	Double, mixed	20c.	2.00

Caladium

Esulentum. Known also as Elephant's Ear. One of the finest tropical plants which can be grown in the open air in the north. It can be made to produce three to ten leaves three to four feet long and nearly as wide, on stalks four to six feet high.

The soil best suited to Caladiums is a mixture of fibrous loam, leaf mold, peat, and well rotted cow or sheep manure in equal parts, with a sprinkling of sand added. Bulbs may be planted outdoors as soon as danger of frost is over, covering about three inches deep; or for largest growth start early indoors in pots and set out when the weather is warm and settled. But little water must be given to the roots till active growth commences, when, as the plants develop, they require an abundance. Humidity and warmth are necessary for their best development.

First Size Bulbs. Nine inches and over in circumference.....Each, 25c.; doz., \$2.50
Second Size Bulbs. Seven to nine inches in circumference.....Each, 15c.; doz., \$1.50
Third Size Bulbs. Under seven inches in circumference.....Each, 10c.; doz., \$1.00

Cannas

Select Large Flowering. They do well in all sections of the country, and stand preeminently 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. Set the plants 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.

PRICES.

Named varieties, as listed below. Dormant Roots—10c each, \$1.00 per doz. (by mail \$1.15 doz.)

Mixed Tall Varieties. Our selection; dormant roots. 10c. each, 75c. per doz. (85c. doz. by mail)

Charles Henderson. Vermillion red, penciled with yellow in the center; very large flowers; green foliage; 3½ feet.
Mrs. Kate Gray. Rich orange scarlet, overlaid with gold; flowers large, with immense trusses, foliage bright glossy green; one of the best; 5 feet.

Pennsylvania. Intense vermilion-scarlet, overlaid with an orange sheen. Flowers measure fully 6 inches, are produced freely; foliage rich green; 5 feet.

King 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 copy-bronze; 4 to 5 feet.

Mont Blanc. Large, beautiful white flowers on strong branching stalks, well above the foliage. It blooms early and continuously. Its great masses of snowy-white flowers contrast finely when planted with crimson and scarlet kinds. 3 feet.

Dahlia

The "Decorative" types are characterized by gracefully formed flowers of large size and broad petals being intermediate in form between the compact "Show" sorts which are nearly round and the "Cactus" varieties which have loosely formed blossoms with long twisted petals.

The roots are tender and easily injured by frost. They should be set out three feet apart, after all danger of frost is over. The best blooms are sometimes obtained if planting is deferred until about June 1. The soil should be deeply dug and well drained but only moderately enriched with thoroughly rotted barnyard manure. A stiff clay should be avoided. A sunny situation is desirable as well as plenty of space and air. Place the roots horizontally, covering two to three inches deep. Give thorough cultivation and during dry weather water well once a week. Larger blossoms are usually obtained if most of the side shoots are removed. Dahlias usually do not require much fertilizer and fresh barnyard manure especially should not be used. The plants should be supported by tying to stakes. The roots should be placed during winter in a cool cellar but not allowed to freeze. All named varieties 20c each; \$2.25 per doz.

Blue Oban. One of the choicest decorative varieties, very large; nearest to a blue dahlia.

Cuban Giant (*Giant*) Dark, glowing crimson, shaded maroon; flowers of immense size; decorative.

Gabriel, (*Cactus*) Striking shades of scarlet and cinnamon; long twisted, incurved petals.

Jack Rose. Large brilliant crimson. One of the best decorative dahlias for garden or cutting.

Jeanne Charmet. Remarkably free flowering and vigorous decorative variety. Rose shaded and edged with carmine. Flowers of largest size.

Lyndhurst. A dazzling bright scarlet; large full-centered decorative sort. Excellent for cutting.

Maid of Kent. Cardinal red tipped with white, variable.

Mrs. Roosevelt (*Giant*) Very double; very large, often over six inches across; color, a delicate shade of soft pink. Decorative; excellent for cutting.

Mixed Dwarf Varieties. Our selection; dormant roots. 10c. each, 75c. per doz. (85c. doz. by mail)

Canna Plants. Ready about May 10. 15c each, \$1.50 per doz. Sent by express only at purchaser's expense.

Venus. One of the softest and most delicately colored varieties that has yet been introduced. The flowers are of fair size, of a soft rosy pink, with a pretty mottled border of creamy yellow. The plant always presents a clean, fresh appearance; green foliage; 3½ feet.

Richard Wallace. A good free-flowering yellow Canna of vigorous growth, we believe this variety comes nearer to the ideal than any variety yet offered. In color it is a pleasing canary-yellow with exceptionally large flowers, which are carried well above the bright green foliage; 4½ to 5 feet.

Robusta Perfecta. A distinct and handsome sort, makes a good screen; bearing immense leaves eleven to eighteen inches wide and three feet long, of a bright bronze-red color; the flowers are insignificant; six to seven feet high; with good cultivation grows 8 feet; used for a screen or background.

Twentieth Century. (*Single*) Intense rosy crimson, white tips and white disc around yellow center.

White Swan (*Show*) Snow white; unusually full and round with long stems.

Yellow Duke (*Giant*) Pure canary-yellow flowers of very large size. A grand decorative variety.

	Each	Doz.
Dahlia, Double, pink	15c.	\$1.50
Dahlia, Double, scarlet	15c.	1.50
Dahlia, Double, white	15c.	1.50
Dahlia, Double, yellow	15c.	1.50
Dahlia, Double, mixed	15c.	1.50

Dielytra

(*Bleeding Heart*, *Dicentra Spectabilis*) A hardy perennial plant, with finely cut foliage, blooming in the spring. Flowers graceful, heart-shaped, pink and white; borne in long racemes.

Each, 15c.; doz., \$1.50

Our list of Cannas and Dahlias complete.

GLADIOLUS

WRITE FOR SPECIAL PRICES ON ALL BULBS IF LARGER QUANTITIES ARE WANTED.

The Gladiolus is one of the most decorative plants in the garden, and as a cut flower lends itself readily to any arrangement. If the spikes are cut when the lowest flower is in bloom, the others will open in succession and remain fresh a week or ten days. No flower has gained more rapidly in public favor than the Gladiolus; this could not well be otherwise, for in addition to the great intrinsic merit of the flower, it is hardy and blooms the first season from bulbs.

Gladioli will thrive in almost any good soil except a stiff clay. They require full sunlight and are liable to injury only from rank manure. Plant bulbs six to nine inches apart, the large ones four inches and the small ones two inches deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm. Continue to plant at intervals of two weeks during the spring and early summer; in this way a succession of bloom may be had from midsummer until frost. A free use of water during the season of active growth and particularly as the buds begin to show color will be beneficial in producing fine blossoms. In the autumn, before freezing, they should be dug up and the tops allowed to dry down, after which the dry tops, earth, and old bulbs can be removed. Store in a cool, dry place, secure from frost until spring.

GIANT FLOWERED VARIETIES

A class of hybrids between *Gladiolus Gandeensis* and *Gladiolus Saundersoni* which for varied and exquisite beauty has never been equaled. The flowers are of very large size, frequently eight inches across, borne on spikes four to five feet high, the upper two feet covered with flowers. Named *Gladiolus* 10c each; 90c per doz.; \$8.00 per 100.

America. The finest of the light colored sorts. Very light pink, exquisitely tinted with lavender. Unsurpassed in freedom of bloom and size of flower spike. Magnificent variety.

Attraction. Bright deep rich crimson with large white center and throat. One of the most pleasing sorts.

Baron Hulot. Flowers dark velvety purple and of the Lemoine type. One of the very best so-called blues.

Columbia. Very attractive, light orange-scarlet blotched and penciled with bluish purple; throat freely mottled.

Dawn. Strong, straight, and vigorous plant. Flowers large, very beautiful shell pink, slightly penciled in throat. Excellent for cutting.

Jane Dieulafoy. Flowers creamy white, lower petals stained maroon. Remains in bloom a long time; exceptionally fine for bouquets.

Sunlight. Light rosy crimson with canary yellow throat; attractively blotched flowers.

Giant Flowered, fine mixed.

Gladiolus

CHOICE NAMED VARIETIES

These named varieties are selected with special reference to beauty of flower, range of color, and habit of plant.

Augusta. Pure white, with blue anthers. Strong, straight spikes.

Baron Staffe. Clear lilac, stained pale violet and yellow.

Brenchleyensis. Rich, brilliant, dark scarlet. Much used on account of its brilliant color, and distinct marking.

Ceres. Beautiful white flowers, spotted rose on lower petals.

Eugene Scribe. Flowers very large and wide, perfect, tender rose, blazed with carminate red; beautiful.

Kunderdi Glory. A very striking variety with fluted or ruffled petals. Flowers very large, delicate cream pink with a crimson stripe on each lower petal; fine spike.

Mrs. Francis King. A most effective variety for decoration. Spikes extra long; flowers brilliant pink, blazed with vermilion.

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.

Princes. An especially fine variety with immense wide-open amaryllis-like flowers, of a rich dazzling scarlet, marked with white on the lower portion, which serves to intensify the brilliancy of the scarlet.

GLADIOLUS MIXTURES

These choice assortments must not be confounded with the common mixed sorts. We recommend this stock with perfect confidence, as it is composed only of choice varieties and purchasers can depend upon having a magnificent variety of colors. Single and dozen prices include postage. The 100 rate is by express at purchaser's expense.

	Each	Doz.	Per 100		Each	Doz.	Per 100
Shades of Pink and Rose.....	5c.	40c.	\$2.00	Extra Fine American Hybrids Mixed.....	5c.	50c.	\$3.00
Shades of Scarlet and Red.....	4c.	40c.	1.50	Groff's Hybrid Seedlings. A great variety			
Shades of Orange and Yellow.....	6c.	60c.	4.00	of shades and markings.....	5c.	40c.	2.00
White and Light Varieties.....	4c.	40c.	2.75	Lemoine's Butterfly Varieties Mixed.			
Striped and Variegated Mixed.....	5c.	50c.	3.00	Throats very distinctly marked.....	3c.	25c.	1.75

Gladiolus should be planted at intervals to insure a succession of bloom.

LILIES

No flower is more expressive of the idea of queenly beauty and faultless purity than the Lily. Nearly every variety we offer will, with a little care, endure the severity of our winters, and some are among the most hardy of our garden flowers. Most lilies last a long time after cutting and are admirably suited for decorative purposes.

Bulbs should be planted as soon as the frost is out of the ground; the earlier the better. Select a well-drained spot, dig the soil deep and make it fine, enriching it abundantly with well-rotted cow manure, adding a liberal mixture of sand. Set the bulbs from three to five inches deep, according to size. During the winter it is advisable to cover the surface of the bed with a thin layer of manure which will afford a slight protection to the bulbs and also materially enrich the soil. In spring the manure may be removed or dug in between the rows. Care should be taken that they have proper drainage, no water being allowed to stand around the roots. Once firmly established, they should not be disturbed oftener than once in five years.

To produce extra fine specimens, plant bulbs in pots early in spring and grow them in the house or under glass.

Auratum (*Gold-Banded Lily of Japan*) This favorite garden lily is one of the grandest plants in cultivation. Its immense ivory-white flowers are thickly studded with yellow and crimson spots, while in the center of each petal is a golden band, fading at its edges into the white. Such choice bulbs as we offer, if well cared for, will give from five to ten magnificent flowers the first year and under good cultivation will, after becoming well established, give many more. Height outdoors in the open usually three to five feet. 35c. each; \$3.50 per doz.

Longiflorum (*Giganteum*) Beautiful, pure white, trumpet-shaped flowers, similar in form to *Lilium Harrisii*, the well-known Bermuda Easter Lily, and preferred by some to that variety. It does not come into bloom as early, but the flowers are of better substance. Extensively used by florists for cut flowers. When grown in the open ground it blooms in June or July. Height outdoors in the open, usually two or three feet. 25c. each; \$2.50 per doz.

Speciosum Album Pure white flowers with a greenish band through the center of each petal; of great substance, very fragrant. One of the best for general culture. Height of plants in the open, usually two to four feet. 35c. each; \$3.50 per doz.

Speciosum Rubrum (*Roseum*) The *Speciosum* or *Lancifolium* are among the most charming and brilliantly beautiful of the Japanese Lilies. The six broad, white or pink petals are

Lilium Auratum.

thickly dotted with rose or crimson spots. Especially thrifty and hardy. One of the best for garden culture. Height, two to four feet. 35c. each; \$3.50 per doz.

Tigrinum Splendens (*Improved Single Tiger Lily*) This is of most striking appearance with very large, nodding flowers of excellent form; color, orange-salmon with dark spots. The plants are of more robust habit, with longer flower spikes than the older type and are highly recommended. Height, outdoors in the open, usually three to four feet, sometimes taller. 20c. each; \$2.00 per doz.

Tigrinum Flore Pleno (*Double Tiger Lily*) This magnificent lily is of stately habit, bearing immense clusters of very large, double flowers on tall, strong stems; color, bright orange-red spotted with black. Height outdoors in the open, usually three to five feet. 20c. each; \$2.00 per doz.

Madeira Vine Sometimes called Mignonette or Mexican Potato Vine. This tuberous rooted climber of dense, branching growth has thick, heart-shaped, glossy green leaves and delightfully fragrant, small, feathery, white blossoms produced in long, hanging racemes. It is of rapid growth, and is fine for porches and covering arbors in a single season. Perennial, but take up roots in fall, as the plant will not endure frost. Each 5c; doz. 40c.

Tritoma PFITZERI. An improved variety of the plant sometimes called Red Hot Poker. The handsome flowers are produced in large spikes of rich orange-red tinted flower tubes. Plant two feet apart. Tritomas are hardy when well covered in winter. Each 25c; doz. \$2.50.

Tuberose The flowers of this well-known, tuberous rooted plant are waxy-white, double and exceedingly fragrant. They are very useful in bouquets and house decoration.

If early flowers are wanted, fill five-inch pots half full of well-rotted cow manure and the remainder with good, rich, sandy soil. Plant the bulbs in this in March or April, water moderately and hasten growth by putting in a warm, light place. When weather has become warm, plunge the pots in the earth out of doors. They will usually flower before cold weather; if they do not, the pots can be brought in and bulbs will bloom in the house. Double Dwarf Pearl, first size bulbs, 10c. each; \$1.00 per doz.; \$7.00 per 100. We will supply second size Tuberose bulbs, 75c. per doz. The 100 rates are by express at purchaser's expense.

If you want larger quantities of bulbs than here quoted, write for our low prices.

Fruit Trees, Small Fruits, and Grape Vines

Select 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.

Apples

3 years old, 5 to 7 feet high, \$1.50 each.

SUMMER VARIETIES

EARLY HARVEST. Pale yellow, fine; August.
GOLDEN SWEET. Pale yellow, sweet; August.
OLDENBURG. Large, striped red over a yellow ground.
RED ASTRACHAN. Large, crimson, juicy, rich sub-acid.
SUMMER RAMBO. Green striped red, sub-acid.
YELLOW TRANSPARENT. Pale yellow, good quality.

AUTUMN VARIETIES

DELICIOUS. Large, dark red, juicy, aromatic.
GRAVENSTEIN. Large striped; September.
MAIDEN'S BLUSH. Large, beautiful, blush cheek.
RAMBO. Yellow, streaked with red; October to December.
RED BEITIGHEIMER. Pale cream, covered with crimson.
WESTERN BEAUTY. Large, yellow shaded with carmine.

WINTER VARIETIES

BANANA. Large, golden yellow, shaded crimson.
BALDWIN. Large, dark red, productive.
BEN DAVIS. Large, handsome, striped.
GANO. Deep red, fine quality; good shipper.
GRIMES GOLDEN. Medium to large, skin golden yellow, flesh crisp, tender, juicy, long keeper.
JONATHAN. Medium, red and yellow, flesh tender.
NORTHERN SPY. Large, striped red; good keeper.
ROME BEAUTY. Large, yellow shaded red, tender.
SMITH'S CIDER. Medium, tender, and juicy.
WEALTHY. Large, round, skin smooth, splashed dark red; flesh white, tender, juicy, sub-acid.
WINE SAP. Medium, deep red, rich, sub-acid.
YORK IMPERIAL. Medium, yellow shaded red, firm, juicy, sub-acid. An excellent shipping apple.

Cherries

HEART AND BIGARREAU (Sweet)

5 to 7 feet, first-class, \$2.50 each.

ALLEN. Large, nearly black, very productive.
BLACK TARTARIAN. Very large, purplish black, juicy, rich, excellent, productive; last of June.
GOVERNOR WOOD. Large, light red, juicy, rich, delicious. Tree healthy and productive; June.
NAPOLEON. Large, pale yellow, firm, juicy.
ROCKPORT BIGARREAU. Large, yellow, juicy.
WINDSOR. Large, liver colored, fine quality.
YELLOW SPANISH. Large, pale yellow with light red cheek; late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, first-class, \$1.50 each.

DYEHOUSE. A very early and sure bearer; ripens a week before Early Richmond; fine quality; June.
EARLY RICHMOND. Medium, dark red, fine.
ENGLISH MORELLO. Dark red, rich acid, juicy.
MAY DUKE. Large, red, and excellent variety.
MONTMORENCY. Large, red, fine flavor; finest.
OLIVET. Large, red, tender, rich; sub-acid flavor.
REINE HORTENSE. Large, bright red.

Crab Apples

5 to 7 feet, \$1.50 each.

HEWES CRAB FOR CIDER. Best cider crab grown.
YELLOW SIBERIAN. Amber, with red blush.
HYSLOP. Deep crimson, very popular.
TRANSCENDANT. Skin yellow, striped with red.
WHITNEY. Large, glossy green, splashed carmine.

Mulberries

5 to 6 feet, \$1.50 each.

DOWNING'S EVERBEARING. One of the most prolific varieties, bearing an abundance of large, black sub-acid fruits, hardy.
NEW AMERICAN. An everbearing variety; large fruit of finest flavor, hardy.

Peaches

4 to 6 feet, \$1.00 each.

CHAMPION. Creamy white with red cheeks, freestone, excellent quality; early in August.
CRAWFORD'S EARLY. Large, yellow, of good quality, freestone; early in September.
CRAWFORD'S LATE. Large, yellow with red cheeks, freestone; last of September.
EARLY RIVERS. Large, creamy white, with pink cheeks; early in August.
ELBERTA. Large, yellow with red cheek, flesh yellow; firm, juicy, very prolific; September.
FITZGERALD. Large, yellow, suffused with red, flesh deep yellow, best quality, hardy and productive; Early September.
HEATH CLING. Large, flesh white, juicy, and melting; October.
MOUNTAIN ROSE. Large, handsome red cheek, flesh white, juicy; one of the best; August.
OLD MIXON CLING. Large, yellow with red cheek; September.
OLD MIXON FREE. Large, yellow with red cheek; September.
SALWAY. Large, creamy yellow with crimson cheek; October.

Pears

STANDARD AND DWARF

6 to 7 feet, first-class, \$1.50 each.

BARTLETT. Large, clear yellow, juicy; August.
FLEMISH BEAUTY. Large, juicy, rich and fine; September to October.
HOWELL. Large, yellow; September.
KIEFFER'S HYBRID. Large, and good quality.
LAWRENCE. Yellow, thickly dotted, fine flavor.
SECKEL. Small, yellowish brown.
SHELDON. Large, round russet-red; October.
TYSON. Yellow with brown cheek, sweet.
WILDER. Yellow with red cheek, fine quality.

Plums

STANDARD

ON PLUM STOCKS, 5 to 7 feet, \$2.00 each.

ABUNDANCE. Large, yellow with heavy bloom.
BEAUTY OF NAPLES. Green with purple cheek.
BURBANK. Large variety; color red; excellent.
DAMSON. Small, oval fruit, purple, hardy.
GERMAN PRUNE. Medium, oval fruit, purple.
GREEN GAGE. Small, delicious, very prolific.
LOMBARD. Medium, red, juicy, productive.
PURPLE EGG. Rich purple, fine flavor, best market variety.
RED JUNE. Large, red, fine quality; strong, vigorous grower.
SHIPPER'S PRIDE. Large, purple, fine and sweet.
WILD GOOSE. Medium, purple, juicy, and sweet.

Quinces

4 to 5 feet, \$1.50 each.

MEECH'S PROLIFIC. Fruit bright yellow; flesh very fragrant and tender; October.
ORANGE. Large bright golden yellow, fine quality.
 We can furnish all varieties of fruit trees, etc., usually catalogued, but our list comprises the most desirable sorts.

All fruit trees should be sprayed intelligently. Ask us for booklet telling you how.

Fruit Trees, Small Fruits, and Grape Vines—Continued

SELECT GRAPES They do well trained to the side of any building or along the garden fences, occupying but little room and furnishing an abundance of the healthiest of fruit. Make the soil mellow and plant the vines from six to eight feet apart.

ALL TWO-YEAR OLD SELECTED STOCK

40c each; \$4.50 per doz.

Black or Purple Grapes

CAMPBELL'S EARLY. In all respects better adapted to general use than any other. Large, nearly round, often an inch or more in diameter; black with light purple bloom, skin thin, flavor rich and sweet.

CONCORD. Large, black grape, hardy and productive; juicy and sweet.

EATON. Bunch and berries very large, skin black and finest quality.

IVES' SEEDLING. Dark purple. Sweet

MOORE'S EARLY. Bunch medium; berry large; round, with a heavy blue bloom; vine hardy and moderately prolific. Its large size and earliness render it desirable for an early crop.

WORDEN. Larger than Concord in bunch and berry; ex-sweet, sprightly.

Red Grapes

BRIGHTON. Bunch large, berries large, red, round, excellent flavor.

CATAWBA. Berries large, round; when ripe a dark copper color; sweet, rich.

DELAWARE. Small, light red, thin skin; very juicy; sweet, sprightly.

VERGENNES. Clusters and berries large, amber colored fruit, rich.

White or Yellow Grapes

GREEN'S EARLY. Nearly as large as Niagara, of fine quality.

MARTHA. Large, pale yellow.

MOORE'S DIAMOND. White good sized berries, juicy and sweet.

NIAGARA. Bunches very large and compact; berries large, light greenish white, slightly ambered in the sun.

POCLINGTON. Bunch and berry very large; attractive golden yellow color.

Blackberries

\$1.00 per dozen; \$7.00 per 100.

ANCIENT BRITON. Large fruit, stems loaded with good sized berries of fine quality; vigorous grower, one of the best.

BLOWER. Large berries. Very productive.

EARLY HARVEST. Dwarf grower; fruit medium size of fine quality. The first to ripen.

ELDORADO. Large fruit, borne in large clusters and ripen well together, fine quality, good keeper.

MERSEREAU. Extremely hardy, berries large; extra quality, sweet, rich and melting without core, good keeper and shipper, vigorous grower.

RATHBUN. A strong erect grower with strong stem, branching freely. Fruit very large, sweet and luscious, without hard core.

SNYDER. Medium size sweet and juicy, extremely hardy and very productive.

TAYLOR. Medium size fruit of fine flavor, extremely hardy and very productive; ripens late.

WARD. A strong vigorous grower, producing fine, large fruit of excellent quality, hardy.

Currants

Best Sorts—strong two-year-old plants.

35c. each; \$3.00 per doz.

CHERRY. Deep red.

FAY'S PROLIFIC. Color rich red; the leading variety for home use.

BLACK PROLIFIC. The favorite sort for preserving.

PERFECTION. A new red variety, combining size, color, high quality, and productiveness.

WHITE GRAPE. Best white.

Dewberry

LUCRETIA. One of the low-growing, trailing blackberries. It has proven highly satisfactory wherever tried, and many say it is the best of all the blackberry family. \$1.00 per doz; \$7.50 per 100.

Gooseberries

35c. each; \$3.00 per doz.

DOWNING. Large, pale green, and of splendid quality for both cooking and table use.

HOUGHTON'S. Small to medium; roundish, oval, pale red, sweet, tender.

INDUSTRY. Berries of largest size, excellent flavor, pleasant and rich, dark red color when fully ripe. Strong upright grower, an immense cropper.

SMITH'S IMPROVED. Large, pale greenish yellow, skin thin, of excellent quality.

Raspberries

\$1.00 per doz.; \$7.00 per 100 except where noted.

BRANDYWINE. Large size, light crimson color, good quality and firm, vigorous and productive.

COLUMBIAN. The fruits are cone shaped of dark red, almost purplish color, rich sprightly flavor.

CUMBERLAND. The largest black cap; a healthy, vigorous grower; very productive.

CUTHBERT. Large, firm, deep rich crimson, of excellent quality, tall, strong, and vigorous.

EATON. Hardy and strong grower, berries red, large, handsome, firm and highest quality, solid.

GREGG. A large black variety, fruit firm.

HAYMAKER. A purple cap variety, berries large.

KING. The earliest Red Raspberry; berries round, medium size, light crimson, and excellent.

KANSAS. The hardest black cap; strong, vigorous.

LOUDON. The best red mid-season berry; fruit large, of a beautiful, rich, dark crimson color.

RUBY. Fruit large, bright red, exceedingly firm.

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 of exceedingly meaty, firm texture and keep in good condition longer after being gathered, than any other red raspberry. \$1.00 per doz.; \$7.50 per 100.

Strawberries

The blossoms of those marked with (P) are destitute of stamens and are termed pistillate, and unless a row of perfect flowering variety is planted at intervals not exceeding about a rod, they will produce imperfect fruit and but little of it; but when properly fertilized as a rule they are more prolific than those with perfect flowers.

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. 50c. per doz.; \$1.75 per 100.

BRANDYWINE. A fine, large, late, handsome, productive berry of excellent quality; regular conical form; dark, glossy red.

BUBACH'S No. 5. (P.) Large and uniform size, fine form and color; the leading market sort.

CARDINAL. (P.) This Strawberry surpasses all in size of plant and abundance of runners; fruit stalks tall and robust, bearing fruit well off the ground; color, beautiful cardinal red.

CLYDE. Large, light scarlet color; conical shape; very productive.

GANDY. One of the best late varieties. Berries large, of fine form.

GLEN MARY. Large, to very large, sometimes flattened; sweet, rich.

HAVERLAND. (P.) Very productive of medium to large, conical berries that are smooth, regular, mildly sub-acid.

JESSIE. Berries large, handsome, dark red. The plant is vigorous, healthy, with strongly staminate blooms; a good pollinizer.

NICK OHMER. A fine, fancy market berry. A giant in size.

SENATOR DUNLAP. Exceedingly vigorous. Fruit large, regular, and attractive in form, deep red to the center. Firm in substance.

WARFIELD. (P.) Great beauty, firmness, earliness, productiveness, and vigor make this berry most popular.

WM. BELT. Berries very large, conical, bright red, of good flavor. The plant is strong, healthy, very fruitful. Season medium to late.

SUPERB. The Ever-bearing Strawberry—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. They continue 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.

75c. per doz.; \$4.50 per 100.

Use plenty of fertilizers. They are big crop makers.

Water Lilies

"Nothing equals a water lily pool for giving interest and distinction to the garden."

A natural pond is not required, in fact an artificial one is better, as it can be kept to the same level. And a natural pond is likely to be fed by a cold spring which is injurious to many of the water lily plants.

The artificial pond is nothing more or less than an open tank with cement sides and bottom; any man who works in cement will know how to do this. It should be about two feet deep, and a drain opening should be provided to empty the pond when it is necessary and a faucet to fill it, or this may be done by a hose.

Make the pond as large as possible; don't be afraid of its being too big. The shape depends entirely upon its location and the surroundings; a round pond may seem to be most in keeping with the garden scheme, or a square, or an irregular pool may seem best. I prefer the latter myself.

It should have full sunlight; a water lily pool under the shade of trees will be a disappointment if you want the plants to bloom. Plant the water lilies in boxes or tubs, they will do better and can be better handled. A box two feet square, or diameter, is as small as you can have for the plants to do well; this should be about ten inches deep, but a larger box is better.

The soil should be a heavy loam, or a clay will do mixed with one-third to even one-half well-rotted cow manure and a little bone meal.

Hardy Nymphaeas (Day Blooming)

ALBA CANDIDISSIMA. A very vigorous and desirable variety, much stronger than the type, requiring ample space; flowers large, pure white, sepals occasionally flushed with pink. An early and continuous bloomer.

50c. each, \$5.50 per doz.

JAMES BRYDON. Beautiful cup-shaped flowers, 5 to 6 inches in diameter; in color a rich rosy crimson; reverse of petals having a silvery sheen. A strong vigorous grower and free and continuous bloomer. No collection of Hardy Water Lilies is complete without this splendid variety.....\$1.00 each.

MARLIACEA CHROMATELLA. A free and vigorous grower, flowers 4 to 6 inches across, bright canary yellow, stamens deep yellow, leaves deep green, beautifully blotched with brown. One of the best.

75c. each, \$7.50 per doz.

MARLIACEA ROSEA. Flowers large, deep rose color, young leaves, purplish red, changing to deep green.

75c. each, \$7.50 per doz.

ODORATA. This is the fragrant Pond Lily of the United States; flowers white, 3 to 5 inches in diameter, stamens yellow, leaves dark green above, under surface deep red to reddish green; splendidly adapted for planting in quantity in natural ponds.....20c. each, \$2.00 per doz.

ROBINSONI. The large, floating flowers of this distinct and striking variety are difficult to describe, but may be said to have a ground color of yellow overlaid with purplish-red, the general effect being dark orange-red. The foliage is dark green, spotted with chestnut above, dark red on the under side. A fine variety, and should be in every collection.....\$1.00 each.

TUBEROSA ROSEA. Flowers an exquisite shade of pink, standing above the water. A good vigorous grower, without being rank; a free bloomer...35c. each, \$3.50 per doz.

TUBEROSA RICHARDSONI. Flowers pure white and quite double, the stamens being converted into petals which are more or less fluted in the center. The flowers stand well above the water, the sepals and outer petals drooping, forming immense snowball-like flower, 8 inches in diameter.....35c. each, \$3.50 per doz.

Nelumbiums

These are stately plants with bold massive peltate leaves on stout stalks 4 to 5 feet high and 1 to 2 feet across. They are perfectly hardy, provided the tubers are kept free from frost, but should not be transplanted before May.

ALBUM GRANDIFLORUM. A grand white variety, whose purity, fragrance, size, majestic foliage, and hardness stamp it as one of the best. Dormant tubers.

\$2.00 each.

ALBUM STRIATUM. The flowers of this exquisite variety are pure white. The edge of the petals irregularly striped and tipped rosy carmine, with distinct magnolia fragrance. Strong, vigorous grower. Dormant tubers...\$2.50 each.

SPECIOSUM. (Egyptian Lotus) The best known variety and the easiest to grow, desirable for naturalizing in ponds where the magnificent foliage and superb flowers produce a splendid sub-tropical effect. Flowers 8 to 12 inches across, of a deep rose color, creamy white at base of petals, exquisite for cutting. Dormant tubers.

\$1.50 each.

Everblooming Hybrid-Tea Roses

Our selection embraces the most popular of the Hybrid-Tea type, which have been found most satisfactory for outdoor planting.

75c each \$7.50 per doz.

THE NEWER VARIETIES.

Pot Plants (4 inch) Ready May 10th.

BRITISH QUEEN. Surpasses in beauty and elegance of form all other white varieties. The freedom with which it blooms is remarkable. The type of flower is between White Maman Cochet and Frau Karl Druschki, with Tea Rose form and refinement.

CHATEAU DES CLOS VOUGEAT. The richest colored of all Roses, shading from deepest velvety maroon-red to blackish-crimson. Will become one of the most popular of garden Roses.

DOUBLE PINK KILLARNEY. Will supersede the Killarney now grown, as it possesses from ten to twelve more petals than its parent.

DOUBLE WHITE KILLARNEY. A pure white sport from White Killarney; has a much larger bud, double the size of the ordinary White Killarney.

EDWARD MAWLEY. Is the finest of all dark crimson Roses. A true perpetual flowering Hybrid Tea.

FLORENCE FORRESTER. Clear snow-white with a lemon tinge, as the flowers age they become a pure white, the blooms are even larger than Paul Neyron. The grandest of all whites for bedding.

FLORENCE HASWELL VEITCH. Flowers brilliant scarlet, shaded with black; large flowers of excellent shape, with petals of great substance. Has a remarkable fragrance. Very free flowering.

HADLEY. In color it is a deep velvety-crimson, retaining its brilliancy at all times; very fragrant; flowers are borne on long, stiff stems.

HELEN TAFT. A rich cerise-pink. Very large, free bloomer. Growth very strong.

HERZOGIN MARIE ANTOINETTE. Long buds of pure orange or old gold; very large flower of perfect form.

KILLARNEY BRILLIANT. Has the same habit of growth and the same freedom of bloom as its parent, while the flower is more double. The color is a very brilliant pink.

MABEL DREW. The color is deep cream on the first opening, passing to intense canary-yellow in the center as the bloom develops.

MELODY. The blooms are of good size; the color is an intense, pure, deep saffron-yellow, with primrose edges, a delightful color harmony.

MEVROUW DORA VAN TETS. This is another most valuable garden Rose. The color is a deep glowing crimson.

MILDRED GRANT. Ivory-white, with an occasional flush of pale peach. High pointed center, with unusually large and massive petals, opening to perfectly formed flowers of enormous size and substance.

MRS. ANDREW CARNEGIE. Handsome shape and delicious fragrance. Color pale lemon-yellow at base of the petals shading to pure white.

MRS. CORNWALLIS WEST. A magnificent Rose of huge size. The purity of the transparent delicate pink—which is between a shell and rose-pink—on the purest white gives it an attraction that is difficult to convey.

MRS. CHARLES RUSSELL. A strong growing, free flowering Rose. The bud is fully as large as American Beauty, but longer and pointed. The color is bright rose pink, deeper toward the centre.

OPHELIA. Very large flower of fine form and habit; salmon flesh shaded pink; the flowers are borne freely on stiff stems.

SUNBURST. Long pointed buds; golden orange flowers; very free bloomer and a strong grower.

Don't forget. Plenty of bone dust insures lots of rose blooms.

Roses—Continued

All roses on this page strong 2 years old.
75c each \$7.50 per doz.

Hybrid Tea Roses

STANDARD VARIETIES

AMERICAN BEAUTY. Extra large, full and fragrant. The color is a fine deep pink shaded toward the center a carmine crimson. Pot Plants.

CARDINAL. A delightfully fragrant red rose of a strong robust habit a desirable bedder. Pot Plants.

ETOILE de LYON. Deep golden yellow; very large and full buds; fine for outdoor summer blooming. Pot Plants.

GRUSS an TEPLITZ. Unquestionably the finest brilliant red, hardy, ever-blooming garden rose. The flowers are very showy and handsome. It blooms constantly and continues covered with flowers the whole season. Dormant and Pot Plants.

HERMOSA. (China) A popular bedding rose. It is a bright pink color, free-flowering, and perfectly hardy. Dormant and Pot Plants.

JONKHEER MOCK. One of the richest roses in cultivation. The flower is perfect, being a grand shade of deep pink, while the outer petals are silvery rose. A free bloomer. Dormant and Pot.

KAISERIN AUGUSTA VICTORIA. Soft pearly-white, tinted with just enough lemon in the center to relieve the white; remarkably fragrant, beautifully formed flowers on long, graceful stems. Dormant and Pot Plants.

KILLARNEY. In shape nothing can approach this beautiful rose, its long perfectly shaped bud, which on the outside is of a delicate pink, unfolds a flower with a deeper pink on the inside. Dormant and Pot Plants.

LA FRANCE. Satiny rose, with reflexed petals, which are of a darker pink on the reverse side. Dormant and Pot Plants.

LADY ASHTOWN. Delicate rose with a trace of yellow at the petal base. The outer flower leaves expand, while the center petals remain in exquisite bud form. Pot Plants.

LADY HILLINGDON. (Tea) Deep coppery yellow and an attractive long bud. It is very free in growth and a continuous bloomer. Dormant and Pot Plants.

LYON ROSE. Color, shrimp pink at edges of petals; center of flower intense coral red, shaded chrome yellow; free grower and abundant bloomer. Dormant and Pot Plants.

MAMAN COCHET, PINK. (Tea) Is grown perhaps more than any other on account of its many good qualities. The individual large flowers are often on stems 2 feet long which makes it grand as a cut flower. The shade of color is a "Bridesmaid Pink." Dormant and Pot Plants.

MAMAN COCHET, WHITE. The exact duplicate of the Pink Cochet except in color, which is white, occasionally tinted pink. Dormant and Pot Plants.

MRS. AARON WARD. As a bud it is a deep Indian yellow, as it opens it adopts a broad margin of light yellow on the inner edge, when fully opened it is light yellow throughout. Very free bloomer. Dormant and Pot Plants.

MY MARYLAND. Perfect form and exquisite fragrance. Salmon pink shade, which becomes lighter as the flower opens. It is an elegant grower, and sure to please. Pot Plants.

RHEA REID. Flower large and double; free flowering and exquisitely fragrant; rich, dark, velvety red. Fine bedding rose. Pot Plants.

RICHMOND. A beautiful variety, a rich shade of crimson; should be in every garden. Dormant and Pot Plants.

WHITE KILLARNEY. A pure white sport from Killarney, with which it is identical. It is perfectly hardy with light protection. A strong, robust grower, flowering very freely throughout the season. Dormant and Pot Plants.

WM. R. SMITH. The flowers are large and double. The petals softly curled, colored cream with flesh tint, buffy-yellow base and the center pink; fine bedding variety. Pot Plants.

Moss Rose

CRESTED MOSS. Rose color. Plants.

Hardy Hybrid Perpetual Roses

CAPTAIN CHRISTY. Delicate flesh pink, very free.

FRAU KARL DRUSCHKI. An exquisite flower of the purest white.

GENERAL JACQUEMINOT. The old favorite; velvety crimson.

GEORGE AHRENDTS. This is a clear pink variety of the Druschki type. It is frequently referred to as the pink Druschki Rose. Pot Plants.

JOHN HOPPER. Brilliant crimson, large flowers remarkable for their fragrance. Pot Plants only.

MABEL MORRISON. An attractive rose with pure white, perfectly formed flowers. Pot Plants only.

MME. PLANTIER. Pure white, large, and double; free bloomer, fine for cemetery planting.

MAGNA CHARTA. Deep pink, large sweet scented and of fine form, one of the hardiest.

MARSHALL P. WILDER. A grand rose of large full flowers of a bright carmine red. Pot Plants only.

MRS. JOHN LAING. Large beautiful pink blooms, borne on long sturdy stems.

PAUL NEYRON. An immense rose of a deep rose color.

PRINCE C. DE ROHAN. (The Black Rose) Deep velvety crimson passing to intense maroon. Pot Plants only.

ULRICH BRUNNER. Cherry crimson, large fine form, strong grower and hardy.

Polyantha, or Baby Rambler Roses

BABY TAUSENDSCHON. An exact counterpart of the grand climber, "Tausendschon," except in habit of growth.

CECILE BRUNNER. The delicate buds are of perfect form and color, which at first is rose pink, shading to a deep salmon pink, and showing a rich orange center, toning to a pale flesh color when fully opened.

CLOTHILDE SOUPERT. A grand bedding rose pearly white shading to a pure rose pink.

ERNA TESCHENDORFF. Bright red, being superior to the Crimson Baby Rambler.

ORLEANS. Bright red and pink, center slightly shaded white.

Hardy Climbing Roses

AMERICAN PILLAR. The enormous flowers sometimes measuring 3 inches across, are borne in large clusters and are produced with the greatest freedom. Color is a delightful shade of pink.

CRIMSON RAMBLER. The trusses of bright crimson flowers are freely produced. It is one of the easiest Roses to grow for hedges, pillars, arches, pergolas, etc.

DOROTHY PERKINS. One of the best. The flowers are borne in clusters and are very double. The color is a most beautiful shell pink and holds a long time without fading.

FLOWER OF FAIRFIELD. A sport from Crimson Rambler, with same climbing habit, hardiness and immense trusses of crimson flowers.

PHILADELPHIA RAMBLER. Identical with the Crimson Rambler except the color is deeper and more lasting, the flowers are perfectly double to the center and come into flower about 10 days after the Crimson Rambler.

LADY GAY. A delicate cherry pink, changing to a soft white. Rich glossy foliage.

TAUSENDSCHON. The flowers appear in large clusters from the beginning of June till the end of July. A beautiful soft pink, same color as Clothilde Soupert, later on changes into rose carmine.

GARDENIA. (Wichuriana) Buds bright yellow, opening double flowers of a cream color. Suitable for climbing over walls, arbors, stumps of trees, and for trailing over rocks or rough ground.

MICHIGAN CLIMBER. Single flowers nearly two inches in diameter; color, bright rich Pink.

Spray Roses regularly to prevent blight and Rose Aphids.

Climbing Vines

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy) The leaves are small on young plants, which at first are an olive green color, changing to red in the autumn; as the plant acquires age the leaves increase in size. The best climbing plant for covering brick or stone walls.

AMPELOPSIS ROBUSTA. A strong vigorous grower. A quicker grower than Veitchii.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper) For covering walls, verandas, and trunks of trees. Above, 50c. each.

ARISTOLOCHIA SIPHO. (Dutchman's Pipe) Hardy vine of rapid growth, with very large heart-shaped leaves. 75c. each.

BIGNONIA RADICANS. (Trumpet Vine) Flowers trumpet-shaped, bright scarlet. 50c. each.

CELASTRUS SCANDENS. (Climbing Bitter Sweet) Yellow flowers, followed in the autumn with orange fruit. 50c. each.

Clematis

DUCHESS OF EDINBURGH. A free-flowering double white.

GISSY QUEEN. One of the finest of the dark purple.

HENRY II. Fine large, creamy white flowers.

JACKMANII. Intense violet purple.

MISS BATEMAN. White, with chocolate-red anthers.

SEIBOLDI. Silvery lavender; a most beautiful shade.

VILLE DE LYON. Magnificent brilliant crimson.

The above named Clematis, 75c. each.

COCCINEA. Bell-shaped flowers, bright coral-red; small flowering. 75c. each.

PANICULATA. (Japanese Clematis) Pure white, very fragrant, borne in large clusters; small flowering. 40c. each.

CARDINAL CLIMBER. A graceful annual climber. The flowers are a fiery cardinal red, flowering from mid-summer until frost. Plant in good, rich soil when all danger of frost is over. Plants, 50c. each.

COBÆA SCANDENS. (Cathedral Bells.) Purplish lilac flowers. Rapid grower. 50c. each.

Honeysuckles

50c. each.

AUREA RETICULATA. Foliage variegated yellow and green with yellowish white fragrant flowers.

MONTHLY FRAGRANT OR DUTCH. Blooms all summer.

COMMON WOODBINE. A strong, rapid grower; flowers very showy; red outside, buff within.

HALLEANA. Nearly evergreen; flowers pure white.

SCARLET TRUMPET. Scarlet inodorous flowers.

HECKROTTI. (New Sweet Scented) Flowers, dark rich red and creamy yellow in color. Blooms continually the whole season.

IVY, ENGLISH. Beautiful evergreen vine. For hanging baskets, window-boxes, and vases. 40c. each.

KUDZU VINE. (Or Jack-and-the-Bean-Stalk) A rapid growing vine. 40c. each.

MOON FLOWER PLANTS. 25c. each.

VITIS HETEROPHYLLA VARIEGATA. Dark green foliage, variegated with white and pink. Useful for trailing over rocks or for a low trellis. 30c. to \$1.00 each.

WISTARIA, CHINESE. Delicate violet blue blossoms. 50c. each.

WISTARIA, CHINESE WHITE. Pure white flowers. 50c. each.

Hardy Perennial Plants

The steadily increasing demand for hardy plants has been little short of marvelous. We are in a position to supply all varieties in any quantity. If large quantities are wanted, write for special prices. All perennials, 25c. each; \$2.50 per doz. (except where noted).

ACHILLEA. (Sneezewort) The Pearl. Flowers of the purest white. 2 feet high.

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.

ANTHEMIS TINCTORIA. The hardy Marguerites are summer-flowering perennials, growing about 15 inches. Large golden yellow flowers.

ANTIRRHUM. (Snap Dragon) Assorted colors.

ANEMONE JAPONICA. (Wind Flowers) They grow 2 to 3 feet and are in bloom from August till mid-November, furnishing abundant cut flowers and a brilliant display. Queen Charlotte. Very large semi-double flowers of La France-pink, a color that is rare among hardy plants. Whirlwind. Large semi-double white flowers.

AQUILEGIA. (Columbine) The distinct, clear-cut foliage and delicate arrangement of colors in the flowers of Columbine, make it one of the showiest and most desirable of the hardy garden plants.

Coerulea. A beautiful Rocky Mountain species with broad flowers, often 3 inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur, tipped green.

Coerulea Hybrids. Beautiful variations from the standard type.

Rose Queen. Pleasing shade of delicate pink, long spurred flowers.

Chrysanth. Golden yellow flowers with long spurs; one of the most distinct of the family.

Nivea Grandiflora. Pure white.

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 4 feet; September.

Perry's Pink. A pleasing bright pink; one of the best in this color; 3 feet; September.

Grandiflorus. Quite distinct; the flowers, which are bluish-violet, measure often 2 inches in diameter; 2 feet; October and November.

Mme. Soynouse. Pale lilac; very free; 15 inches.

Novae Anglae. Bright violet-purple; 4 feet.

Mrs. F. W. Raynor. Large, rich crimson-purple; 4 feet.

Rosea. Bright purplish-mauve; 4 feet.

White Queen. Fine pure white; 4 feet.

BEGONIA, HARDY. Exceedingly useful plants for the garden, good for shady places. Lustrous bronze green foliage with small pink flowers.

BOCCONIA. (Plume Poppy) Cordata. A splendid plant, growing sometimes 6 feet high, bearing panicles of creamy-white flowers in July and August; makes a grand effect as a centre in a hardy bed or a border background.

BOLTONIA. (False Chamomile) Tall-growing showy plants, with flowers resembling hardy Asters; appearing in September.

Asteroides. Pure white; 5 to 6 feet.

Latisquama. Pink, tinted lavender; 6 feet.

CAMPANULAS. (Bell Flower) Bell-shaped flowers, well-known and most easily grown; equally useful for flower border, shrubbery, or wild garden.

Carpatica. (Carpathian Hare Bell) Ideal for border or rockery planting, being about 8 inches high; flowers from June till frost. Blue and white, each separate.

Calycanthemum. (Cup and Saucer) White, pink, or blue.

Medium. (Canterbury Bell) Single white, single blue, and single pink.

CHRYSANTHEMUMS, HARDY. These varieties are very popular for out-door bedding. They will produce an abundance of bloom until killed by frost.

Old-Fashioned, Large Flowering.—Autumn Glow. Rose-crimson. Indian. Red. Golden Queen. Yellow. Old Homestead. Pink. Victory. White.

Pompons.—Baby, a miniature lemon-yellow. Boston. Golden-bronze. Cerise Queen. Cerise pink. Gold Nugget. Golden-yellow, inner petals tinged red. Golden Pheasant. Rich golden-yellow. Julia Lagravere. Rich garnet. Model of Perfection. White. President. Purplish-crimson. Rhoda. Apple-blossom pink. St. Illoria. Silver-rose, quilled petals. Strathmeath. Rosy-pink. The Hub. Fine white.

Vines and Perennials like good soil. Fertilize frequently.

Hardy Perennial Plants—Continued

COREOPSIS LANCEOLATA GRANDIFLORA. A beautiful hardy border plant; grows 18 inches high, and produces its bright golden yellow flowers in great profusion the entire season.

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.

Belladonna. The freest and most continuous blooming of all. The clear turquoise-blue flowers are not surpassed by any.

Formosum. Dark blue, white center, spikes 3 to 4 feet tall, vigorous; free blooming.

Formosum. Dark blue, white center, spikes 3 to 4 feet immense flowers.

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 two feet and over long, the majority running in the lighter shades of blue.

DIELYTRA 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.

DIGITALIS. (Foxglove) The strong flowerstalks—frequently 4 to 6 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.

FUNKIA. The Plantain Lillies 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, broad green leaves.

Subcordata Grandiflora Alba. (White Day Lily, August Lily) Pure white, lily-shaped, fragrant flowers.

Undulata Variegata. Foliage green, striped with white.

GAILLARDIA GRANDIFLORA. Beginning to flower in June, they continue one mass of blooms the entire summer. Flower, 3 inches in diameter; center dark reddish brown; petals orange to crimson.

GYP SOPHILA. (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.

Paniculata Flore Pleno. Produces double pure white flowers. Splendid for bouquets.

GRASSES. (Ornamental.) See page 81.

HELENIUM. (Sneezewort) These are desirable border plants, succeeding in any soil in a sunny location, useful for cutting.

Riverton Beauty. Lemon-yellow, with large purplish-black cone.

Riverton Gem. Old-gold, changing to wall flower-red.

HELIANTHUS. (Hardy Sunflower) The perennial Sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc.

Soleil d'Or. Deep golden-yellow, quilled petals, 4 feet; August and September.

Multiflorus Fl. Pl. Large, double Dahlia-like golden-yellow flowers in great profusion during July and August; 4 feet. (See cut).

Maximiliana. Flowers in long, graceful sprays during October, when all others have finished flowering; 5 to 7 feet.

Mollis. Large, single lemon-yellow flowers, with downy white foliage; blooms in August and September; 4 feet.

Sparsifolius. A most gracefully formed single variety of large size, of a deep yellow color, on long stems; splendid for cutting; August to September; 6 to 8 feet.

HELIOPSIS. (Orange Sunflower) Pitcheriana. Very similar to a small sunflower, but blooming earlier; deep golden yellow; all summer. June till frost; 3 feet high. Scabra Zinniaeflora. A new double flowering form of the Orange Sunflower, somewhat resembling a Zinnia in shape. Fine for cutting; July and August; 2 feet.

HEMEROCALLIS. (Yellow Day Lily) Lily-like plants, which flower in greatest profusion during the summer. **Aurantiaca Major.** Large, orange flowers. One of the best sorts; June and July; 2 feet high; should be protected during the winter

Florham. A strong grower 3 to 3½ feet high, large trumpet-shaped flowers; rich golden-yellow, with Indian-yellow markings; June and July.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July.

Fulva. Grows from 4 to 5 feet high, with trumpet-shaped flowers of a neutral orange color with darker shadings; June and July.

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.

HIBISCUS. (Mallow) These are a mass of bloom during the entire summer, when they produce large flowers in gorgeous colors.

Crimson Eye. Blooms of purest white with deep crimson eye; flowering in July; 4 feet.

Mallow Marvels. A robust type of upright habit, producing an abundance of large flowers in all the richest shades of crimson, pink and white.

Giant-flowering Marshmallows. Flowers of enormous size, frequently 10 to 12 inches in diameter, have been developed. They appear to be equally at home in all positions, having the same vigor in dry and wet ground, and are perfectly hardy. They grow from 5 to 8 feet high, and are very floriferous, blooming from early in July until late in autumn. We offer three distinct colors—red, pink, and white—strong roots. One each of the 3 colors for \$1.00. 35c. each, \$3.50 per doz.

HOLLYHOCK. For planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Double White, Double Rose, Double Yellow, Double Red, Double Mixed, Single Mixed, Allegheny Fringed Mixed.

IBERIS. (Hardy Candytuft) Sempervirens. Low-growing with evergreen foliage. In spring and early summer is completely covered with dense heads of pure white flowers.

German Iris (Iris Germanica)

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, very fine.

CELESTE. Fine satiny blue. One of the most beautiful German Irises.

COERULEA. Sky blue.

FLORENTINA ALBA. White; one of the most desirable.

FLORENTINA COERULEA. Blue, very fine.

KING OF YELLOWS. Yellow.

L'INNOCENCE. Pure white veined with orange purple.

MME. CHEREAU. One of the most beautiful of its class. The flowers are pure white, with a broad and irregular border of clear blue, and are borne on strong upright stems that are often from two to three feet tall.

MONT BLANC. Pure white.

PURPURASCENS. Dark Purple.

QUEEN VICTORIA. Blue, changing to pale bluish white.

THORBECKE. White and deep violet.

Price of above Iris, 15c. each, \$1.50 per dozen. If by mail, add 5c. each, 50c. per dozen.

We can furnish large clumps of most of the above varieties from 75c. to \$1.00 each.

KING OF IRIS. A striking novelty, with flowers of perfect form, the standards clear lemon-color, falls deep satiny-brown, with a broad border of golden-yellow. 35c. each.

PALLIDA DALMATICA. One of the finest of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender shaded blue. 25c. each.

PRINCES VICTORIA LOUISE. Standards pure sulphur-yellow; falls rich plum color, with cream-colored edges. New and distinct. 35c. each.

Japanese Iris (Iris Kaempferi)

They like rich soil and plenty of water when they are forming buds and developing flowers.

AZUMA NISHIKI. Outer petals have soft pink ground, shading to white at edges, inner petals lilac. Bright yellow star center, standards white with red borders.

AZUMA YUKI. Petals rosy purple with heavy white veins, standards brownish-red, striped with yellow, yellow star center.

If contemplating a hardy border, ask our advice as to varieties best suited for continuous bloom.

Hardy Perennial Plants—Continued

BANRAI NAMI. Petals pale pinkish white with white standards and yellow center.

FUROMON. Petals bright pink, shading to creamy white, with heavy purple veins, standards purple, yellow center.

GOSETSU NO MAI. Petals light blue, yellow star center, with dark bluish purple standards.

HITOME-NO-SEKI. Petals pink and creamy white, beautifully blended, standards pink blotched with white, large yellow star center.

KIMINO-MEDMUL. Soft lilac with dark purple veins, and purple standards.

KRISHI-IKARI. Petals brownish-red with light brown veins, center yellow, standards scarlet striped with white.

KURO KUMO. Petals intense bluish purple, heavily veined with light purple standards.

KYO-DAI-YAMA. Petals indigo, standards greenish blue striped with white.

OKINO-KAMONE. Petals recurved and creamy white, standards pure white.

SASSA NO KOE. Petals recurved and creamy white, veined pink and white, orange center, standards pure white, spotted deep pink.

SHIRAITO-DAKI. Petals creamy white with bluish tinge, finely veined, center yellow, standards white with deep blue edges.

TAI HEI RAKU. Petals rich pansy purple, with light purple standards.

YEZO-NISHIKI. Petals lavender, heavily spotted with dark purple, center yellow, standards lavender bordered with purple.

YODO NO KURUMA. Petals bright pink shading to dark pink at center and heavily veined, standards purple marbled with white.

Above named varieties 35c. each, \$3.50 per dozen.

We can furnish large clumps of most of the above varieties from \$1.00 to \$1.50 each.

Iris Siberica

ORIENTALIS. (Yale Blue) A slender, graceful, tall-growing Iris, with flowers quite similar to those of the German 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.

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.

Pycnostachya. Spikes of light, rosy-purple flowers; 5 feet.

Spicata. Deep purple flowers in spikes 2 to 3 feet high.

LUPINUS POLYPHYLLUS. (Lupine) Effective plants, producing large spikes of flowers.

Polyphyllus. Clear blue.

Albus. A white variety of above.

Roseus. Charming rose pink.

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.

LYCHNIS CHARCEDNOICA. A desirable plant, grows 2 to 3 feet high; flowers, brilliant orange scarlet.

Viscaria Splendens. (Catch Fly) Is a brilliant border plant, the flowers being produced in dense spikes.

LYSIMACHIA. Clethroides. (Loose-strife) A fine variety about 2 feet high, with long, dense, recurved spikes of pure white flowers from July to September.

Nummularia. (Creeping Jenny, or Moneywort) Valuable for planting under trees or shrubs where grass will not grow, where it quickly forms a dense carpet.

LYTHRUM ROSEUM SUPERBUM. (Rose Loose Strife) A strong growing plant, 3 to 4 feet high, producing large spikes of rose colored flowers from July to September.

MERTENSIA VIRGINICA. (Blue Bells) 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.

MONARDA. (Bergamot) Showy plants, growing from 2 to 3 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.

MYOSOTIS. (Forget-Me-Not.) *Palustris Semperflorens.* A variety that is hardly ever out of flower; useful in a shady spot in the border.

Alpestris Robusta Grandiflora. The large spring-flowering Forget-Me-Not, with intense sky-blue flowers.

OENOTHERA. (Evening Primrose) Elegant subjects for growing in an exposed, sunny position, either in the border or on the rockery, blooming the entire summer. *Missouriensis.* Large golden yellow; 1 foot.

PHYSOSTEGIA. (False Dragon-Head) One of the most beautiful of our mid-summer flowering perennials, forming dense bushes 3 to 4 feet high, bearing spikes of delicate tubular flowers not unlike a gigantic heather. *Virginica.* Bright but soft pink.

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, 1½ feet.

Album. A white-flowered form of the above.

Mariesi. Deep blue bell-shaped flowers, nearly 3 inches across on 1-foot high plants.

Hardy Phloxes (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.

AFRICA. Brilliant carmine-red with deeper eye.

BARON VON DEDEM. Blood-red scarlet, 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.

DAUBIGNY. Rosy purple, with enormous florets.

ECLAIREUR. Dark crimson, center rose, surrounded with white; and excellent variety.

ETNA. Deep fiery red, dark eye.

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 individual flower.

GEO. A. STROHLEIN. Bright scarlet, with crimson red eye; large flowers, does not bleach.

HENRY MURGER. White, with crimson-carmine center; a beautiful variety.

INDEPENDENCE. An early, pure white.

LE SOLEIL. Bright china rose, dark rose center.

MME. PAUL DUTRIE. Delicate lilac-rose in shade like a soft pink Orchid; flowers very large, borne in immense panicles.

MACULATA. Tall growing, bright purple.

MISS LINGARD. (Suffruticosa) Pearly white, very early and free.

OBERGARTNER WITTIG. Large, crimson-carmine flowers, vigorous grower.

PANTHEON. Bright carmine rose; large and fine.

R. P. STRUTHRES. Bright rosy-carmine, with claret-red eye.

RICHARD WALLACE. White with bright crimson center, large flowers in immense panicles.

ROSENBURG. Bright reddish violet with blood-red eye; individual flowers large.

SELMA. Large trusses of very large pink flowers with cherry-red eye; choice.

SNOWFLAKE. Large flowering pure white.

THEBAIDE. Salmon with carmine eye, dwarf.

VON LASSBURG. Splendid pure white, very large individual flowers.

WM. ROBINSON. Bright pink. Tall growing variety.

Phlox 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.

Hardy Perennial Plants—Continued

Double Paeonies

All Paeonies 40c each except where noted.

- DORCHESTER.** A most beautiful soft pink of fine form, dwarf grower.
- DUC DE WELLINGTON.** Large bomb, white guards, sulphur center. Fragrant. Medium tall, vigorous grower; free bloomer. Late.
- EDULIS SUPERBA.** Bright mauve pink color mixed with lilac, fragrant, strong, upright stems, free bloomer, early.
- FELIX CROUSSE.** Large double ball-shaped bloom; color brilliant red; one of the finest self-colored varieties. 50c. each.
- FESTIVA MAXIMA.** White with carmine tipped flakes to a few center petals; a strong grower with immense flowers.
- FLORAL TREASURE.** Large, full, clear pink with lighter center; blooms large on heavy stems.
- HAMLET.** Fine full bloom, color very dark red.
- JEANNE D'ARC.** Outside petals rose colored, inside straw colored, with crimson spots. 60c. each.
- LIVINGSTONE.** Soft rosy pink, silvery reflex, strong long stems, best late pink. 75c. each.
- LOUIS VAN HOUTTE.** Medium size, semi-rose type. Deep carmine-rose, tipped silver with a brilliant fiery reflex. Medium late.
- MME. CALOT.** Large, pale hydrangea-pink, with darker shadings in the center; early.
- MADAME BOULANGER.** Mid-season. Very large bloom. Color glossy tender rose shading to soft heliotrope, bordered with silvery flesh. Extra fine.
- MATHILDE DE ROSENECK.** Late, soft flesh-pink, shading deeper toward the center with tints of lilac and chamois; petals bordered with silver and occasional narrow edgings of bright carmine. 50c. each.
- MARIE LEMOINE.** Large sulphur white shaded with pink; magnificent.
- MEISSONIER.** Broad outer petals, brilliant purple amaranth, inner petals crimson, free bloomer.
- PURPUREA SUPERBA.** Large purplish-crimson, large guards.
- QUEEN VICTORIA.** Large, full compact bloom, opening flesh, changing to white, center petals tipped with carmine.
- ROSA MAGNA.** Beautiful large rose-colored Paeony. Very free.
- THORBECKII.** Deep red pink; of fine form; lighter in center. Medium dwarf.
- TRICOLOR ROSEA.** Dark violet rose; large globular flower.

We can supply large clumps of many varieties of Paeonies from \$1.00 to \$1.50 each.

Paeonies in Mixture

They are from our named varieties. We keep the colors separate and offer them to color as follows: White, red, and pink in mixture.

Paeonia Officinalis

This type is the real old-fashioned "Paeony," and comes into bloom from ten days to two weeks ahead of the above sorts. All strong growers with large, full, double, fragrant flowers.

ALBA. Blush-white. **ROSEA.** Rose. **RUBRA.** Crimson.

Paeonies—Japanese Single

The single Paeonies are even more beautiful than the double. They are larger in size of flowers and more delicate in coloring. No other plant flowering at the same season can vie with the Single Paeony.

We offer the following colors: Carmine, Crimson, Magenta, Maroon, Purple, and Rose. 50c. each.

Hardy Garden Pinks

These old-fashioned favorites, are absolutely perfect as an edging for the hardy border; as cut flowers, they are indispensable.

DELICATA. A self-colored variety of a delicate lilac shade, on long stems.

HER MAJESTY. The best, pure white.

NAPOLEON III. Double blood-crimson flowers. The best of all hardy pinks.

NEWPORT PINK. Very early, fine salmon pink.

MIXED HARDY GARDEN PINKS. Seedlings grown from a very select strain, which should produce a good percentage of double flowers.

Oriental Poppies (Papaver Orientale)

The gorgeous colored flowers make a rich, brilliant display. These bloom usually in July; after the flowering period the plants have a tendency to take on the appearance as if they were dead; but they return to vigor as soon as the weather becomes cool.

DIANA. Beautiful salmon flowers.

GOLIATH. Flowers scarlet, of enormous size.

MARY STUDHOLME. Salmon, with silvery shade.

MAHOGANY. Flowers dark red, shading to crimson-maroon.

MRS. PERRY. Salmon-rose.

PERRY'S WHITE. A pure satiny white, with a bold crimson blotch at the base of each petal.

PRINCESS VICTORIA LOUISE. Soft lilac rose.

PROCEPINE. Dark lilac with large black blotch.

ROYAL SCARLET. Scarlet flowers with black center.

SALMON QUEEN. Soft, salmon-scarlet; very distinct. 25c. each, \$2.50 per doz.

ORIENTAL POPPIES MIXED. 15c. each, \$1.25 per doz.

Iceland Poppies (Papaver Nudicaule)

The graceful feathery foliage is surmounted with a mass of stems a foot high, which terminate in a beautiful cup-shaped flower. They flower the entire summer.

Orange King, White, Yellow, Mixed Colors.

Iceland Poppies.

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.

HYBRIDUM, SINGLE FLOWERING. In choicest mixture.

ULIGINOSUM. (Giant Daisy) Grows 4 to 5 feet high, and is covered with large white daisy-like flowers 3 inches in diameter from July to September.

RUDECKIA. (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; 6 feet; August.

Newmanni. Single dark orange, with deep purple cone center; 3 feet high; flowers from July to September.

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; 2½ feet high.

SAXIFRAGA. Umbrosa, (London Pride, Nancy Pretty, or None-so-Pretty) The Alpine Saxifraga requires a semi-shady position in well drained ground or on the rockery. A low growing, spreading sort, throwing up stems a foot high of white flowers, sometimes suffused with red.

SCABIOSA JAPONICA. They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September.

SEDUM SPECTABILIS. (Brilliant Stone Crop) Erect growing height 18 inches with broad light green foliage and immense heads of handsome, showy rose colored flowers.

Acre. (Golden Moss) Much used for covering graves; foliage green, flowers bright yellow.

SHASTA DAISY. Large 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.

STATICE. Latifolia, (Great Sea Lavender) Immense heads, 2 to 3 feet across, small blue flowers, which last for months if cut and dried.

Hardy Perennial Plants—Continued

STOKESIA CYANEA. (Cornflower Aster) 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.

SWEET WILLIAM. (Dianthus Barbatus) We offer a superb strain of mixed single and double-flowering sorts.

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.

VERONICA. (Speedwell) Spicata. An elegant border plant, growing about 1½ feet high, producing long spikes of bright blue flowers.

Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire summer and fall.

VINCA MINOR. (Periwinkle or Trailing Myrtle) Dwarf evergreen training plant, is used for carpeting the ground where it is too shady for other plants to thrive.

Variegata Aurea. A variegated form of the hardy Vinca Minor, the foliage is irregularly margined and marbled with yellow. It should prove valuable for use in the window boxes.

YUCCA FILAMENTOSA. (Adam's Needle) A hardy evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.

Ornamental Grasses

ARUNDO DONAX. (Great Reed) Ornamental, grows 10 to 12 feet.

ARUNDO DONAX VARIEGATA. A variegated form, grows 6 to 8 feet.

ERIANTHUS RAVENNAE. (Plume Grass) Grows 6 to 8 feet.

Ornamental Trees and Flowering Shrubs

75c. each, except where noted.

There is nothing that will add to the beauty and value of the home so much as well-selected, judiciously planted Trees and Shrubs, and considering their moderate cost and the fact that they last for many years when properly cared for, is the best reason why they should surround every home. We shall always be pleased to make suggestions as to the best varieties to plant for certain purposes or locations.

ALMOND DOUBLE FLOWERING. Erect slender branches, covered with small double pink flowers.

ALTHEA. (Rose of Sharon) The Altheas are among the most valuable of our hardy Shrubs on account of blooming, from August to October, a period during which but few Shrubs are in flower. They are also extensively used as hedge plants.

Boule-De-Feu. Double red.

Grandiflora Superba. Double blush, white shaded carmine.

Jeanne D'Arc. Double white.

Mechani. Beautiful variegated foliage with satiny lavender colored flowers, single fully open and free blooming.

Purpurea. Single purple.

Rosea. Single white, red center.

Coelestis. Single blue.

Totus Albus. Single pure white.

50c. each. 2 to 3 feet.

ASH, WEeping MOUNTAIN. Odd, drooping branches. 2 year heads.....\$2.00 each.

AZALEA AMOENA. A dwarf evergreen with small green leaves that deepen to a lustrous coppery hue in winter. In April or May the whole plant is a mass of rosy crimson flowers.....\$1.00 each.

Mollis. A hardy species from Japan. Flowers yellow and different shades of red, in trusses. 75c. each; extra strong plants.....\$1.00 each.

Anthony Koster. One of the prettiest of the Mollis section. Its intense golden orange-yellow flowers are of exceptional large size, and are produced very freely early in May.....\$1.25 each.

BERBERIS. Thunbergii. (Japanese Barberry) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and never need be touched with the shears. The foliage is beautiful at all times and in the fall turns to a most brilliant crimson color. The plant is literally covered with bright scarlet berries all the fall and winter. It seldom grows over 4

EULALIA GRACILLIMA. (Japan Rush) Narrow, graceful foliage, without variegation.

EULALIA JAPONICA VARIEGATA. Leaves striped white and green longitudinally.

EULALIA ZEBINA. (Zebra Grass) The variegation is across the leaf in regular bands.

PHALARIS ARUNDINACEA VARIEGATA. (Variegated Ribbon Grass, or Gardener's Garters) For bordering large beds.

ALL GRASSES:

25c. each, \$2.50 per doz. Large clumps 50c. to \$1.00 each.

Boxwood Trees

PYRAMID-SHAPED

2½ feet high.....	\$3.00 each, \$5.00 pair
3 feet high.....	3.50 each, 6.00 pair
3½ feet high.....	4.00 each, 7.00 pair
4 feet high.....	5.00 each, 9.00 pair
4½ feet high.....	6.00 each, 11.00 pair
5 feet high.....	8.00 each, 15.00 pair

BUSH-SHAPED

1 foot high.....	\$.50 to \$.60 each
1½ feet high.....	.75 to 1.00 each
2 feet high.....	2.00 to 2.50 each
2½ feet high.....	3.00 to 4.00 each
3 feet high.....	4.00 to 5.00 each
3½ feet high.....	4.50 to 6.00 each

Globe Shaped, 1½ feet high by 1½ feet in diameter. From \$5.00 each

Globe Shaped. 2½ feet high by 2½ feet in diameter. From \$7.50 each

Standard or Tree Shaped. Good crowns...\$3.50 to \$15.00 each

Boxwood Edging

6 inches high.....	\$1.00 per doz. \$6.00 per 100
8 to 10 inches high.....	3.00
10 to 12 inches high.....	5.00

feet high. It is fine for the edge of a terrace and along roads and walks, and is justly popular as a hedge plant, forming without clipping a low dense hedge, or by the free use of the shears, a formal hedge of great density and durability. 15 to 18 inches 20c. each, \$1.75 per doz. 18 to 24 inches.....30c. each, \$2.25 per doz. **Vulgaris Purpurea.** (Purple-leaved Barberry) Especially remarkable for purple foliage and fruit. When full grown, plants attain a height of 4 to 5 feet, but can be kept at any height below this by shearing. Endures partial shade and is perfectly hardy.

BUDDLEYA. (Butterfly Shrub or Summer Lilac).

Variabilis Magnifica. Flowers continuously all season. The flower racemes are composed of many little blossoms in the shape and color of lilacs. This variety is entirely separate and distinct from Buddleya Veitchiana, which at times is referred to as "Butterfly Bush." Our trials of the two have shown "Magnifica" to be much superior.

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub) Flowers fragrant, double and of a chocolate color.

CARYOPTERIS MASTACANTHUS. (Blue Spirea) A pretty autumn blooming shrubby plant producing clusters of beautiful blue fragrant flowers in great profusion from September until frost. Dies to the ground in winter.

CATALPA BUNGEI. (Umbrella Catalpa) Grafted on stems 6 to 9 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. Specimen trees.....\$2.50

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. 6 to 8 feet \$1.25 each

CLETHRA. ALNIFOLIA. (Sweet Pepper Bush) A desirable, dense growing shrub, with dark green foliage and showy upright spikes of creamy white fragrant flowers in August.

CHIONANTHUS VIRGINICA. (White Fringe Tree) Large shrub or small tree with large, heavy leaves almost hidden in spring by a thick mist of fragrant drooping white flowers. 2 to 3 feet.....50c. each.

CHESTNUT. (Horse Chestnut) Dwarf.....\$1.25 each.

A Suburban Home is not complete without trees and shrubbery.

Ornamental Trees and Flowering Shrubs—Continued

CHERRY. (Ornamental) Double Rose Flowering. 5 to 6 feet.....\$1.50 each.

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. 4 to 5 feet..\$1.25 each.

CORCHORUS. (Kerria) Globe Flower or Japanese Rose. Japonica. A shrub 4 to 6 feet tall. Native of Japan. Leaves bright green, fading in autumn with tones of yellow. Flowers numerous, bright yellow, large and showy. A charming old-fashioned plant.

Japonica Flore Pleno. Double flowered. This fine old shrub should be in all collections. It is of spreading habit. Its double yellow blossoms, which are about 1 inch in diameter appear early in May, one from each leaf axil. It is excellent for massing.

Argentea Variegata. A dwarf variety with small green foliage, edged with white. One of the prettiest and most valuable dwarf shrubs.

CORNUS. (Dogwood) Florida. (White Flowered Dogwood). Strong plants, 2 to 3 feet.

Rubra. (Pink Flowered Dogwood)

Mascula. (Cornelian Cherry) One of the earliest of spring blooming shrubs, bearing a profusion of small, yellow flowers along its naked branches in early days of April. Bright red berries the size of small cherries, very ornamental. 2 to 3 feet, 40c. each. 3 to 4 feet..50c. each.

Sanguinea. (Red-branched Dogwood) Very conspicuous and ornamental. Bark in winter blood-red.

CORYLUS PURPUREA. (Purple Leaved Filbert) A conspicuous shrub with large dark leaves; distinct. 60c. each.

CYDONIA JAPONICA. (Pyrus Japonica) Japan Quince, or Fire Bush. A single shrub on the lawn is very attractive; brilliant crimson flowers, among the first in spring. Valuable for ornamental hedges.

CYTISUS. Laburnum. (Golden Chain) A large shrub with shining green leaves and racemes of Wistaria-like yellow flowers, which appear in early summer.

DESMODIUM PENDULIFLORUM. (Lespedeza) A shrub-like plant which dies to the ground in winter, but comes up vigorously each spring. Bears attractive sprays of bright rose-colored flowers in September.

DEUTZIA. We are indebted to Japan for this valuable genus of plants. Their hardihood, fine habit, luxuriant foliage, and profusion of attractive flowers places them among the most beautiful and most popular of flowering shrubs. Flowers in June and through July and August.

Crenata Flora Plena. Flowers double white, tinged with pink, very desirable.

Gracilis. A dwarf bush, covered with spikes of pure white flowers.

Lemoinei. Flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf and free flowering. A decided acquisition.

Pride of Rochester. Large double white flowers; the back of the petals being slightly tinted with rose. It excels all the older sorts in size of flower, length of panicle, profusion of bloom and vigorous habit.

ELEAGNUS. Longipes. (Japanese Oleaster) A desirable nearly evergreen shrub of medium height, with light green foliage, which is silvered on the under surface. The orange-scarlet colored berries are very attractive during late summer.

EUONYMUS. (Strawberry or Burning Bush) Hardy shrubs with showy fruits, noted for intense coloring of the fall foliage. They are well adapted for specimen plants or for massing in the shrub borders. They require moist, loamy soil.

Americanus. (Strawberry Bush) An erect shrub with slender green branches, leaves bright green. Fruit warty, rose color, with scarlet seed coats.

Europaeus. (European Spindel Tree, Burning Bush) A conspicuous shrub in the autumn and winter, when loaded with scarlet seed pods, from which the orange-colored berries hang on slender threads.

ELM. Camperdown. (Weeping) 2 year heads..\$2.00 each.

EXOCHORDA GRANDIFLORA. (Pearl Bush) A vigorous-growing shrub, bearing white flowers in slender racemes in early spring; very graceful; useful for cut flowers.

FORSYTHIA. (Golden Bells) Bright golden yellow, star-shaped flowers, burst into bloom just as winter is leaving and while the bush is otherwise bare. In fact, when in flower, nothing else but bloom can be seen.

Fortunei. Erect growing with dark green foliage.

Suspensa. Of graceful drooping habit, can also be trained for covering arches and trellis work.

Viridissima. Of erect growth and spreading branches, narrow glossy foliage; one of the first to bloom.

HALESIA TETRAPTERA. (Silver Bell) A beautiful large shrub, with pretty white, bell-shaped flowers in May. It is distinguished by its four winged fruit, which is from one to two inches long.

HYDRANGEA. Paniculata Grandiflora. The large panicles of white flowers are at their best during August; later they take on a reddish cast. These plants look fine used as single specimens on the lawn or grouped in large beds. Strong bush form plants.

Paniculata Grandiflora. (Standard or Tree Shaped) These are fine, planted as individual specimens in the lawn or in the center of beds, containing other plants. 2 to 2½ feet long with shapely heads.....75c. each.

Arborescens Grandiflora Alba. (Snowball Hydrangea) The snow-white blooms are of the largest size coming into flower early in June and lasting until late in August. Is more hardy than any other sort and especially suited to plant in shaded places.

KALMIA LATIFOLIA. (Mountain Laurel) For planting in conjunction with Evergreens, the Laurel fills an important part. Foliage is evergreen and about May and June, according to locality, the plant is a mass of flower-heads, resembling somewhat the Rhododendron. A delicate pink, changing to white as they expand. Strong plants\$1.00 each.

LILACS. (True Syringa) Purple (Syringa Vulgaris) The common purple species, and one of the best.

White. (Syringa Vulgaris Alba) Flowers pure white; very fragrant.

Price of Any of the Following Named Lilacs Fine Plants, \$1.00 each. Extra strong, \$1.50 each.

Charles X. Rapid grower, reddish, purple flower.

Josikaea. Blooms in June, flowers lilac purple.

Ludwig Spaeth. Long panicles of purplish-red flowers

Madame Lemoine. Double white flowers.

Marie Legrave. Flowers pure white, extra.

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.

Morrowi. A handsome Japanese variety with white flowers during May, but especially valuable for its bright red fruit during the summer and autumn months.

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, white, and pink.

LYCIUM. (Matrimony Vine) The long branches may be trained over fences or trellises, but more effective results may be obtained by planting at the top of retaining walls or steep banks and allowing the graceful stems to fall over.

MAGNOLIA. We offer the best adapted to our climate. Alba Superba. Its superb pure white flowers cover the tree in early spring.....\$5.00 each.

Alexandria. A Chinese species. The flowers are large pure white, very numerous, and appear before the leaves.

.....\$5.00 each.

Halleana. (Stellata) A pretty dwarf form that opens its

snowy, semi-double flowers in April.....\$5.00 each.

Lennel. The flowers are of a deep rose color, the foliage

large, flowers at intervals through the summer.

.....\$5.00 each.

Soulangeana. One of the hardiest. Its blossoms are from

3 to 5 inches across, cup-shaped, white and rosy violet,

opening before its leaves, which are massive and glossy

.....\$5.00 each.

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.

MAPLES, JAPANESE. These are exceedingly beautiful, especially in spring, when they burst into leaf.

Polymorphum Atropurpureum. Leaves deep blood red.

.....\$2.50 each.

Polymorphum Atropurpureum Dissectum. Dark maroon,

deeply serrated thread-like leaves.....\$3.50 each.

MULBERRY, TEAS' WEEPING. 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. 1 year heads. \$1.50 each. 2 to 3 year heads.....\$2.50 each.

OSMANTHUS AQUIFOLIUM. A very beautiful evergreen shrub, with dark green, spiny-toothed leaves, resembling the Holly. In the fall, and sometimes in the spring, it produces deliciously fragrant white flowers. Strong plants.....\$1.00 each

Are you utilizing all that ground of yours?

Ornamental Trees and Flowering Shrubs—Continued

PEACH. Double flowering red and double flowering white. 4 to 5 feet.....75c. each.

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.

Coronarius. (Garland Mock Orange) This is the popular tall variety; very sweet and one of the first to flower.

Coronarius Aurea. (Golden-leaved Mock Orange) Fine golden-yellow foliage, contrasting beautifully with the dark leaves of other shrubs.

Grandiflorous. (Large-flowered Mock Orange) Without a doubt one of the most popular shrubs grown, and ought to be in every garden. Flowers are pure white and very large.

PRUNUS. (Plum, Ornamental) **Pissardi.** (Purple-leaved Plum) Single white flowers in spring, the leaves are a lustrous crimson, changing to a rich purple.....75c. each.

Triloba. (Double-flowered Plum) Native of China. Flowers double, of a delicate pink, thickly set on the long, slender branches; flowers in May before the leaves unfold.

RHODODENDRON. Named hardy Hybrids....\$1.25 each

RHODOTYPOS. (White Kerria) **Kerrioides.** Handsome foliage and large single white flowers in the latter part of May, succeeded by numerous black berries.

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.

RHUS TYPHINA LACINIATA. (Cut-leaved Staghorn Sumac) A large-growing bold and effective shrub, with delicate fern-like foliage and brilliant scarlet fruit in the autumn.

RIBES AUREUM. (Golden Currant) Bright green foliage, beautifully tinted in the autumn; fragrant yellow flowers in May, followed by dark brown fruit.

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.

ROSA RUBIGINOSA. (True English Sweet Briar) This is the true Eglantine.

ROSA RUGOSA. (Japanese or Shrubby Rose) An excellent plant for a shrubbery bed or a solid hedge.

Alba. Single white. **Rubra.** Single reddish pink. **Blanc de Coubert.** Double pure white.

SPIREA. A large group of showy, free-flowering hardy shrubs.

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.

Anthony Waterer. Makes nice, round bushes 3 feet high and wide; beginning to bloom in summer, continuing until fall. Rose red flowers in large round clusters all over the bush.

Billardii. Pink flowers; bloom nearly all summer. It is grand for planting in masses.

Callosa Alba. A white flowering variety of dwarf, bushy symmetrical form. Flowers all summer.

Opulifolia Aurea. (Virginian Guelder Rose) Golden-tinted foliage and large white flowers in June.

Prunifolia Fl. Pl. (Old Bridal Wreath) Blooms in May, with pure white double flowers.

Reevesii Fl. Pl. Tall with dark, bluish green foliage, and large pure white double flowers, in May and June.

Thunbergii. Of dwarf, graceful form; branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small white, appearing early in spring.

SAMBUCUS Aurea. (Golden Elder) Attractive golden foliage and desirable to mix with other shrubs.

SYMPHORICARPUS. Snowberry and Indian Currant. Small native shrubs much used in shaded places and in open masses. Grow in almost any soil; quite hardy.

Racemosus. (Snowberry) A graceful shrub, 3 to 5 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.

Volgaris. (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.

TAMARIX. **Africana.** (Tamarisk) Strong, slender, tall-growing, irregular shrubs, with feathery foliage and small, delicate pink flowers.

THORN. **Paul's Scarlet.** 3 to 4 feet.....\$1.00 each.

Paul's White. 3 to 4 feet.....75c. each.

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.

Opulus. (High Bush Cranberry) The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until very late in winter. Strong bush plants.

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. Strong plants.

Plicatum. (Japan Snowball) One of the choicest hardy shrubs, with healthy dark foliage; the perfect balls of pure white flowers are borne in great profusion in May.

VITEX. **Agnus Castus.** (Chaste Tree) A graceful shrub, growing from 5 to 6 feet high, with dense spikes 6 to 8 inches long, of lilac-colored flowers late in summer.

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.

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.

Rosea. A beautiful shrub, with rose-colored flowers in May and June.

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.

WILLOW. **Salix Babylonica.** (Weeping Willow) Hardy and rapid growing shrubs, suitable for waterside planting. 60c. to \$1.00 each.

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 to 15 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.

2 Year Old Plants \$1.00 per doz.; \$6.00 per 100; \$50.00 per 1,000. 3 Year Old Plants \$1.25 per doz.; \$8.00 per 100; \$70.00 per 1,000.

Extra Large Bushy Plants \$1.50 per doz.; \$10.00 per 100.

AMOR RIVER PRIVET. A very hardy variety with large oblong, glossy green foliage nearly evergreen. Flowers white, in erect panicles. Splended for hedges. Very similar to the California Privet so universally used for hedging.

18 to 24 inches.....\$1.50 per doz., \$10.00 per 100

24 to 36 inches.....\$2.00 per doz., \$15.00 per 100

ALTHEA. (Rose of Sharon) Few are aware of the strikingly attractive characteristics of this perfectly hardy and profuse flowering shrub, when used as a hedge plant or as a screen. Plant 15 to 18 inches apart. For prices, etc., see shrubs.

BERBERIS THUNBERGII. (Japan Barberry) Where a low, dwarf deciduous hedge is wanted nothing equals this beautiful Barberry. Requires but little pruning to keep it in shape. The leaves are small, light green, and towards fall assume rich, brilliant colors, the fruit or berries becoming scarlet. Absolutely hardy in all parts of the country. Plant 12 to 15 inches apart.

15 to 18 inches.....\$1.75 per doz., \$12.00 per 100

18 to 24 inches.....\$2.25 per doz., \$16.00 per 100

PYRUS JAPONICUS. (Japan Quince) An excellent hedge plant with scarlet flowers. Plant 15 inches apart. See shrubs. (*Cydonia Japonica*).

ROSA RUGOSA. (Ramanas Rose of Japan) Both the single red and white flowering forms of this beautiful Rose are popular hedge plants. For price, etc., see Shrubs.

SPIRAEA VAN HOUTTEI. An ideal flowering shrub to use as a dividing line between properties. Plant 18 to 24 inches apart. For prices, etc., see Shrubs.

Can you imagine anything prettier than a well kept hedge of Privets.

Evergreens

ABIES BALSAMEA. (Balsam Fir) A symmetrical tree. Leaves dark green, lighter beneath. 2 to 3 feet, 75c. each. 3 to 4 feet.....\$1.00 to \$3.00 each.

Bracphylla. A magnificent Japanese fir, with erect stem regularly whorled horizontal branches. Specimens.....\$3.00.

Nordmanniana. (Nordmann's Fir) A thick dense tree. The needles are wide dark green, with a silvery under surface. Specimens, 3 feet.....\$4.00 each.

Veitchii. A tree of splendid habit. The needles are dark green above and silvery white beneath.....\$5.00 each.

UNIPERUS, PFITZERIANA. Specimens.....\$5.00 each.

Sabina. (Savin Juniper) A thickly branched dwarf spreading shrub with dark green foliage. 2½ feet, \$3.00 each. Specimens.....\$5.00 each.

Sabina Tamaricifolia. (Tamarax Leaved Savin) 4 to 5 feet.....\$5.00 each.

Virginia Cannarti......\$5.00 each.

Virginia Glauca. (Blue Virginia Cedar) Specimens 4 to 5 feet.....\$5.00 each.

Virginia Shottel. A distinct variety of pyramidal habit, with light green foliage. Specimens.....\$2.50 each.

PICEA EXCELSA. (Norway Spruce) A rapid vigorous growing tree, with dark green foliage. One of the most popular evergreen trees. 3 to 4 feet, \$1.50 each. 4 to 5 feet, \$2.00 to \$2.50 each. Specimens.....\$5.00 each.

Excelsia Compacta. Very attractive, compact and distinct. Specimens.....\$4.00 each.

Excelsia Remontii. Dwarf compact variety. 2 feet, \$1.50 to \$4.00 each.

Orientalis. Compact, with short dark green needles. Specimens.....\$3.50 each.

Pungens Glauca Kosteriana. (Koster's Blue Spruce) The finest ornamental evergreen grown. The foliage is the purest blue. Specimens 2½ feet, \$4.00 each. 3 to 3½ feet.....\$5.00 each.

Pungens Glauca Pendula. (Koster's Weeping Blue Spruce) Specimens.....\$7.00 each.

PINUS AUSTRIACA. (Austrian Pine) A tall tree, with spreading branches heavily plumed with long, stiff needles, 2 to 2½ feet.....\$1.00 each.

Cembra. (Swiss Stone Pine) A hardy slow growing tree of distinct habit. 2 feet.....\$2.00 each.

Strobus. (White Pine) A beautiful ornamental tree, also used for shade and shelter belts. 2 to 3 feet....\$1.00 each.

Sylvestris. (Scotch Pine) A strong grower, with spreading branches and short stiff needles. 2 to 3 feet, 75c. each; 3 to 4 feet.....\$1.00 each.

RETINOSPORA FILIFERA. A broad bushy tree, with dark green foliage in pendulous thread-like strings. 3½ feet.....\$4.00 each.

Pisifera. Slender branches. Foliage light green above, silvery beneath.....\$3.50 each.

Pisifera Aurea. Golden evergreen, light airy foliage. Specimens 2 feet, \$2.00 each. 3 feet.....\$3.50 each.

Plumosa. Light green feathery foliage, it stands shearing well.....\$2.50 each.

Plumosa Aurea. A dense small sized graceful tree. The young growth is a bright golden yellow. Specimens 3 feet.....\$3.50 each.

Plumosa Aurea Globe-Shaped......\$3.50 each.

Squarrosa Veitchii. Dense growth; soft beautiful silvery blue foliage, arranged in spirals. 2 feet, \$2.00 each. Specimens.....\$3.50 each.

TAXUS CUSPIDATA. A large handsome bush with spreading branches; foliage deep glossy green above, pale yellowish green beneath. Specimens.....\$4.00 each.

THUYA OCCIDENTALIS. (American Arbor Vitae) Well-known screen and hedge plant. 3 to 4 feet....\$2.00 each.

Occidentalis Columbia. 2½ feet.....\$2.00 each.

Occidentalis Globosa Nova. Grows naturally into a rounded almost ball-like form. 2 feet.....\$3.00 each.

Occidentalis Wareana. A valuable species for cold climates, dense and shapely.....\$2.00 to \$3.50 each.

Pyramidalis. Suitable for tubs.....\$2.50 each.

Species Rivers. 2½ feet.....\$2.00 each.

Standishii. Of graceful drooping habit. 3 feet....\$3.50 each.

TSUGA CANADENSIS. (Hemlock Spruce) Native tree that grows rapidly, very hardy. 2½ feet, \$3.50 each. 3 feet.....\$5.00 each.

Shade Trees

	Each.	Doz.
ALNUS (Alder) European.....6 to 8 ft.	\$1.25	\$12.50
Imperial Cut-Leaved.....3 to 4 ft.	1.25	12.50
ASH, American White.....8 to 10 ft.	2.00	20.00
American Green.....8 to 10 ft.	2.00	20.00
European.....6 to 8 ft.	2.00	20.00
Mountain.....8 to 10 ft.	2.00	20.00
BEECH, Purple-Leaved.....4 to 5 ft.	2.00	20.00
BIRCH, European White.....8 to 10 ft.	2.00	22.00
Purple-Leaved.....3 to 4 ft.	2.00	22.00
CATALPA, Speciosa.....8 to 10 ft.	2.00	20.00
CLADRASTIS TINCTORIA,		
Yellow Wood.....5 to 6 ft.	2.00	20.00
CYPRESS, Deciduous.....6 to 8 ft.	2.00	20.00
ELM, American.....8 to 10 ft.	2.00	20.00
English.....6 to 8 ft.	2.00	20.00
Scotch.....8 to 10 ft.	2.00	20.00
HACKBERRY5 to 6 ft.	2.00	20.00
HORSE CHESTNUT		
White Flowering.....6 to 7 ft.	2.00	20.00
Red Flowering.....4 to 5 ft.	2.00	20.00
American Buckeye.....5 to 6 ft.	2.00	20.00
KENTUCKY COFFEE TREE5 to 6 ft.	2.00	20.00
KOELREUTERIA PANICULATA		
3 to 4 ft.	2.00	22.00
LABURNUM, Scotch.....5 to 6 ft.	2.00	22.00
LARCH, European.....8 to 10 ft.	2.00	22.00
LINDEN, American.....8 to 10 ft.	2.00	22.00
European.....6 to 8 ft.	2.00	22.00
Silver or White Leaf.....6 to 8 ft.	2.00	22.00
LIQUIDAMBER		
Sweet Gum.....6 to 8 ft.	2.00	20.00
MAPLE, Norway.....8 to 10 ft.	2.00	20.00
Rock of Sugar.....8 to 10 ft.	2.00	20.00
Scarlet.....8 to 10 ft.	2.00	20.00
Weir's Cut-Leaved.....8 to 10 ft.	2.00	20.00

	Each.	Doz.
Silver or Soft.....8 to 10 ft.	\$2.00	\$20.00
Cork Bark.....3 to 4 ft.	2.00	20.00
Schwedleri.....6 to 8 ft.	2.00	20.00
Ash-Leaved (Box Elder).....8 to 10 ft.	2.00	20.00
Sycamore Leaved.....5 to 6 ft.	2.00	20.00
MULBERRY, Russian.....5 to 6 ft.	2.00	20.00
OAK, Red.....6 to 8 ft.	3.00	30.00
Scarlet.....6 to 8 ft.	3.00	30.00
Pin.....6 to 8 ft.	3.00	30.00
Burr or Mossy Cup.....8 to 10 ft.	3.00	30.00
Golden.....4 to 5 ft.	3.00	30.00
White.....8 to 10 ft.	3.00	30.00
English.....6 to 8 ft.	3.00	30.00
OLIVE, Russian.....6 to 8 ft.	3.00	30.00
PAULOWNIA IMPERIALIS		
(Empress Tree).....4 to 6 ft.	1.50	15.00
PERSIMMON, American.....4 to 6 ft.	1.50	15.00
POPLAR, Carolina.....10 to 12 ft.	1.50	15.00
Balsam (Balm of Gilead).....6 to 8 ft.	1.50	15.00
Bolleana.....8 to 10 ft.	1.50	15.00
Golden Aurea.....6 to 8 ft.	1.50	15.00
Lombardy.....6 to 8 ft.	1.50	15.00
SALISBURIA		
Maiden Hair or Ginkgo.....4 to 5 ft.	.75	7.50
SYCAMORE, American.....6 to 8 ft.	1.00	10.00
European.....5 to 6 ft.	1.25	10.00
TULIP TREE6 to 8 ft.	1.25	12.50
NUT BEARING TREES		
CHESTNUTS, American.....6 to 8 ft.	2.00	20.00
Spanish.....3 to 4 ft.	2.00	20.00
Japan.....3 to 4 ft.	2.00	20.00
FILBERT, English.....3 to 4 ft.	2.00	20.00
HICKORY, Shell Bark.....2 to 2½ ft.	2.00	20.00
PECANS3 to 4 ft.	2.00	20.00
WALNUTS, English.....2 to 3 ft.	2.00	20.00
Black.....5 to 6 ft.	2.00	20.00
Japan.....6 to 8 ft.	2.00	20.00

Evergreens and shade trees add to the beauty of any home.

VELVET LAWN SEED

A Superior Mixture of Selected Grasses for Lawns, Terraces, Croquet Grounds, Etc.

You will find no chaff or dirt in our VELVET LAWN SEED; it starts at once.

Price, 1 lb., 40c; 5 lb., \$1.75; 1/2 Bu. 8 lb., \$2.50; Bu. 16 lbs., \$4.75.

The mixture of grass seed that we sell under this name is made by the identical formula used by some Park Commissioners in their work in laying out the beautiful lawns and terraces, which add so much charm to new parks. For many years the grass seed on a good many lawns has been supplied by us, which fact should be a strong guarantee of quality. This mixture gives a fine, velvety sward within a few weeks after sowing. The very large demand for this lawn seed has necessitated our having the name "Velvet" as a trade mark, in order to protect ourselves from imitators.

Our Velvet Lawn Seed is made up of all the re-cleaned seeds of different varieties that will make a good lawn quickly, so that when the seed is sown, if the ground is in proper shape, it will start at once, and in a short time show a beautiful, deep green lawn and retain the same during the season with slight attention.

Upon no one thing does so much depend in making beautiful home grounds as upon a good lawn, for without that velvety green carpet, no place, however lavishly planned or grandly built, looks finished. The average person who buys a few pounds of grass seed and sows it on a hard-baked soil usually feels he has done his full duty and lays the subsequent failure of the seed at the door of the seedsman. The real lover of nature and the beautiful need never be disappointed in his lawn if care is used in the preparation of the soil and selection of his grass seed.

To obtain a good lawn grass mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality, and hardness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. We offer our lawn grass seed mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact, evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.

Watering the lawn is not as necessary as is popularly imagined. The only time it is needful is in time of drought. Surface sprinkling is responsible for the poor appearance of many lawns. It has a natural tendency to make the roots seek the best supply of moisture, which, in this condition, would be near the surface. A deep-rooted lawn is the best. If you must water, water thoroughly. Take the nozzle off the hose and let the stream flow continuously for a couple of hours, then move and water another section.

DIRECTIONS—The following directions may be found useful to those who are not familiar with lawn making. First get the ground in good shape and be sure that the surface is smooth and well drained. An application of sheep manure, at the rate of ten pounds to three hundred square feet, or pure bone meal in the same proportion, will be very beneficial. On larger lawns use four bushels of grass seed to the acre and one thousand pounds of fertilizer. After spreading the fertilizer, the surface should be carefully raked and rolled. After sowing, the ground should again be lightly raked and rolled. One pound of our seed will sow 300 square feet. Four or five bushels per acre for new lawns being about the amount required. For renovating purpose, use only one-half the amount used on a new lawn.

Notice—Some of the finest Lawns were made with our Velvet Lawn Seed.

SHADY NOOK LAWN SEED

For sowing on the north side of buildings, between houses, and for securing a lawn under large shade trees

Price: 1 Lb. 50c; ½ Bu., 8 Lbs., \$3.00; 1 Bu., 16 Lbs., \$5.50.

In many lawns there are places which seem as if nothing can be grown; some are shaded by large trees and others by buildings. For these locations we have offered for some time our Shady Lawn Seed, which really meets the desired requirement.

It is always advisable for those who are seeding down the shady places to supply new soil, if possible, especially if the large trees are producing the shade, as their roots spread so fast and exhaust the nourishment in the soil. In the event of not being able to supply new soil, the ground should be well dug over and if tree roots predominate, these should be taken out.

In most places where grass seed is to be sown, when shaded by buildings, the soil will have a tendency to sour, and in such cases we strongly recommend the use of agricultural lime (about 50 lbs. per 1,000 sq. ft.).

This special mixture for shady locations is selected from the best grasses possible to obtain for this purpose, and only those that will grow and flourish under shady conditions are used.

The ordinary lawn grass might grow for a short time, but as a general rule it will not last but one or two seasons, and then make a poor showing.

Shady Nook Lawn Seed, if sown in these places, will undoubtedly grow and produce the best satisfaction.

Mixtures for Golf Links

While there are on the market numerous ready prepared golf mixtures of more or less value we have found that the best results are obtained by giving individual attention to each customer and making a special mixture to suit his needs. We have thus overcome the difficulties presented by the great dissimilarity of local conditions of various links, and are willing to give you the benefit not only of our experience on some of the best greens in the country, but of expert knowledge of grass seeds as well. Write us a description of your links, telling what the nature of the soil is, how drained, how much it has the sun, whether the winters are long or open, and whether the summers are wet or dry, and we will offer you two or more mixtures especially adapted to the various parts of your grounds.

FIELD CORN

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 corns where re-selection means the limit of crops with little or no increase in cost. It is amazing to realize 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, uniformity of kernel and the careful finish of the tip and butt, all of which means a considerable increase in production. Plant 8 to 10 quarts per acre in hills, sow 2½ to 3 bushels broadcast for fodder. Never use feeding corn for seeding purposes. All our corn is grown in Ohio and thoroughly acclimated, insuring the greatest yield.

cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredding sort, as it shatters the least of any by actual test.

Boone County White Dent

The shape of the ear is cylindrical to within about two inches of the tip, then slightly tapering. Tips fill well over the end and a large per cent. of the ears are entirely covered with grains; the butts are well rounded out with a medium-sized shank, kernels very uniform wedge-shaped, pure white, and white cob; ears average about 10 inches in length with the circumference about three-fourths of the length.

Of strong and vigorous habit of growth and well covered with broad blades—very valuable for ensilage. The length of season is about 120 days. This corn has been successfully grown as far north as Ft. Wayne, Ind., or Marion, Ohio. We especially recommend it for the great corn-growing valleys in latitudes of Columbus and south.

Silver Mine

One of the best yielding White Dent Corns. Cylindrical shape, tapering a little at the tip end; 18 to 20 rows; kernels deep and cobs small. A fine shelling and high-yielding variety.

Red Cob Ensilage

A southern type of large, white corn, with deep red cob, strong leafy stalks, and short joints. Adapted to all sections of the country, and a general favorite with thousands of dairy farmers.

Sugar Corn or Ensilage

There is nothing better for green feed or curing for winter than sweet corn. Cattle highly relish it, and when fed on it, keep in fine condition and give an abundance of milk. It has the great merit of being so sweet and palatable that cattle eat every part of the stalks and leaves, and consequently none is wasted. Also excellent for siloing. Sow thickly in drills or broadcast at the rate of 2 to 3 bushels per acre.

SEED POP CORN Plant two quarts to the acre

White Rice

A handsome variety, kernels long and pointed, very prolific. Price, Lb. 25c.

Queen's Golden

The stalks grow six feet high and the large ears are produced in abundance. It pops perfectly white. Price, 25c.

M. G. Seed Co's. Truly a variety of great merit offered and named by us and as anticipated.

Perfected Golden Harvest it has met with great favor wherever it has been tested. Beautiful in its rich Golden color and profitable in its depth of grain and ears, well filled out to the extreme end. Stalks, strong, vigorous with broad leaves, which make it a valuable fodder Corn. This variety offered to the public only after careful observation for a number of years. In the preparation of this Corn for Seed each ear is carefully selected, tipped and butted and hand-shelled, insuring corn of the highest percent germination.

True Yellow Leaming

The Standard Variety for Quality. An extensively-grown, large, Yellow Dent variety, which we have grown and sold with the greatest satisfaction for years. Our improved strain we do not believe is excelled, if equaled, by any other now offered. It has pure, glossy yellow ears, growing low, on very strong, heavy stalks; grains square and deep; ripens quite early—frequently in 100 days from planting.

Reid's Thoroughbred

If any seed grain can truly be called pedigreed, the Reid's Yellow Dent Field Corn is certainly entitled to be known as such, as its history dates many years back. It has been bred up and selected with painstaking care to what is at the present time one of the best varieties of yellow corn grown. Far medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small, red

Also cream of all yellow varieties. The M. G. Seed Co.'s Perfected Golden Harvest.

GRASS SEEDS

Prices upon Application.

Awnless Brome Grass (*Bromus inermis*) A perennial, valuable for binding the soil of embankments and for resisting both drought and cold. On light, dry soils it is used for hay and pasturage, but is not recommended where better grasses will succeed. Sow forty pounds per acre.

Canadian Blue Grass (*Poa compressa*) A hardy perennial with creeping root-stalks which form a strong turf. It withstands drought better than most cultivated grasses and is especially valuable in Lawn Grass mixtures. It succeeds best on clay soils but does well on sandy soils, being better adapted for use on sterile knolls and barren fields than probably any other cultivated grass. For hay or pasturage it is best sown in mixture with other grasses. It is distinguished from the Kentucky Blue Grass by its flattened, shorter stems and bluer color of leaf. Height six to twenty inches.

Creeping Bent Grass (*Agrostis stolonifera*) This is particularly valuable for lawns that are to be used as croquet and tennis grounds, because it is benefitted more than hurt by tramping and by its bright color adds to the beauty of the lawn.

Hard Fescue (*Festuca duriuscula*) Similar to Sheep's Fescue, but not so dense and taller. It will often cover sandy soil under the shade of large trees where no other grass will grow. It is a desirable addition to lawn grass. Sow thirty pounds per acre.

Kentucky Blue Grass (*Poa pratensis*) Fancy Clean. Sometimes called June Grass, but the true June or Wire Grass is much inferior. Kentucky Blue Grass is the most nutritious, hardy and valuable of all northern grasses. Sown with White Clover it forms a splendid lawn; for this purpose use not less than fifty-four pounds of Blue Grass and six pounds of White Clover per acre. If sown by itself for meadow or pasture use about twenty-eight pounds per acre.

Meadow Fescue or English Blue Grass (*Festuca pratensis*) A perennial, from two to four feet high, with flat, broad leaves. One of the standard European grasses. It needs rich ground and succeeds well on prairie soil. An excellent pasture grass to take the place of the wild grasses, as it yields a large amount of early and late feed. Sow about twenty-five pounds per acre.

Rhode Island Bent Grass (*Agrostis canina*) A valuable perennial for lawns and pasturage. Much like Red Top, though smaller. Thrives on light, dry soils as well as on rich, moist ones. For lawn purposes, if used alone, it should be sown at the rate of about forty pounds per acre; for pasture, if used alone, twenty-four pounds per acre.

Sheep's Fescue (*Festuca ovina*) A small tufted, hardy grass forming a cluster of narrow cylindrical leaves. Valuable in mixture for lawns on dry soils and in shady locations. Sow about thirty-five pounds per acre.

Tall Meadow Oat Grass (*Avena elatior*) A hardy perennial much used in the South and West. Roots penetrate deep. It yields a heavy crop on any good soil, and is valuable both for meadow and pasture. Sow thirty to forty pounds per acre.

SUDAN GRASS (Andropogon Sorghum)

A sweet 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 6¼ 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.

Soudan Grass is Without Doubt the Greatest Drought-Resistant Forage Crop Known. At the same time it does not blight where the moisture is heavy, and under good seasonable conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the crop is usually ready for harvest within thirty days from the first cutting.

A revolution in haymaking. Sweeter than Johnson Grass, makes more hay, and yet an annual with no objectionable root system. Early Cow Peas, and Early Soy Beans and Sudan mix well.

Grass Seed Mixtures

We prepare for many customers special mixtures of grass and clover seeds for certain soils and will cheerfully give information on this subject when so requested. Our price on these will be about the same as the market price on grass seed as we do not charge for mixing or bagging.

Orchard Grass (*Dactylis glomerata*.) Desirable on account of its quick growth and valuable aftermath. It is ready for grazing in spring two weeks sooner than most grasses and when fed off is again ready for grazing in a week and will continue green when other grasses are withered by dry weather. It is palatable and nutritious and stock eat it greedily when green. A tendency to grow in tufts unfits it for lawns. It does better if sown with clover and as it ripens at the same time, the mixed hay is of the best quality. If sown alone, about twenty-eight pounds are required per acre; if sown with clover, half that quantity. Perennial.

Perennial Rye Grass (*Lolium perenne*) A very valuable variety for permanent pasture. Succeeds well on almost any soil, but is particularly adapted to moderately moist or irrigated lands. Sow thirty to forty pounds per acre in spring.

Westerwold Italian Rye Grass (*Lolium Italicum Westerwoldicum*) An extremely rapid growing annual for spring and summer sowing. As a forage and pasture grass it thrives on almost any soil but does best on heavy loam, clay, or land of a somewhat damp character. It is lighter in color and coarser in leaf than Perennial Rye but is very much stronger growing. After cutting it is the quickest grass to start again, making a new growth more rapidly than any other sort with which we are acquainted. From our repeated comparative trials we believe this is a most valuable addition to the list of grasses grown in this country.

Red or Creeping Fescue (*Festuca rubra*) A creeping rooted grass, resisting extreme drought, and especially adapted for forming a close and lasting turf in shady places. Valuable also for exposed hillsides, and golf courses. Sow thirty pounds per acre.

Red Top (*Agrostis vulgaris*) In Pennsylvania and States farther south this is known as *Herb's Grass*, a name applied in New England and New York to Timothy. It is a good, permanent grass, standing our climate well, and makes good pasture when fed close. It is also valuable for low, wet meadows, producing a large return in good hay. Sow in spring or fall.

RED TOP FANCY. Sow eight to ten pounds per acre. **RED TOP UNHULLED.** When sown alone, use about twenty-eight pounds of the chaff seed per acre.

Tall Fescue (*Festuca elatior*) A valuable perennial grass, very productive and nutritious. Succeeds best on moist, heavy soil, but will do well on any good soil, wet or dry. If used alone sow forty pounds per acre.

Timothy (*Phleum pratense*) The most valuable of all the grasses for hay, especially in the North. Thrives best on moist, loamy soils of medium tenacity. It should be cut just when the blossom falls. Sow early in the spring or fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses.

Wood Meadow Grass (*Poa nemoralis*) Grows from one and one-half to two feet high; has a perennial creeping root and an erect, slender, smooth stem. Well adapted to shaded situations, such as orchards and parks, for either hay or pasture. Sow about thirty pounds per acre.

Speltz or Emmer A combination of Wheat, Oats and Barley, which is excellent for fattening cattle, poultry, horses, sheep, pigs, etc. Makes a heavy yield of grain and hay; excellent pasture, and may be fed green. Sow 70 to 80 pounds per acre.

Miscellaneous, Bird and Sundry Seeds

Five Cents per Pound Extra, if Sent by Mail

	Per Lb.
Black Locust.....	\$.40
Honey Locust.....	.40
Castor Beans.....	.20
Canary Seed.....	.25
Mixed Bird Seed.....	.20
Caraway Seed.....	.75
Celery Seed, for flavoring.....	.40
Fennel Seed.....	.75
Flax Seed.....	.15
Flax Seed, crushed.....	.20
Hemp Seed.....	.15
Lettuce Seed, for birds.....	.20
Maw or Poppy Seed.....	.75
Millet.....	.05
Mustard Seed, white, for pickles.....	.25
Mustard Seed, black.....	.25
Osage Orange.....	.40
Pumpkin Seed (10 Lb. at 18c).....	.25
Rape Seed.....	.20
Sunflower Seed.....	.20
Water Melon Seed for tea.....	.20

Notice—Special low prices on all Grass Seeds upon request.

PRICES

(State for what crop.)

½ acre size	\$0.60
1 acre size	1.00
2 acre size	1.80
5 acre size	4.00
10 acre size	7.50

Postage Paid

Be sure to state what crop the "NITRAGIN" is to be used for.

You can also get the special Garden "Nitratin," which is good for Peas, Beans and Sweet Peas, and large enough for the average garden, for 35c., postpaid. Simply order GARDEN "NITRAGIN" — 35c., postpaid.

For Success with Legumes Inoculate Your Seed with "NITRAGIN"

You should not sow Alfalfa, Clover, Vetches, Cowpeas, Soybeans, Peas or Beans without

Helps Legumes, Stores Nitrogen in the soil—a Safe, Sure Bacteria applied on the seed.

"Nitratin" Increases Yield--Makes Fertile Soil

Don't Sow Legume Seed Without Inoculation

Science has definitely proven that certain crops must find certain bacteria in the soil or they will prove a disappointment or a failure.

The pure culture system of inoculating Legume seed is endorsed and recommended by the U. S. Dept. of Agriculture, experiment stations, other agriculture experts and farmers who have used "Nitratin." It insures your crop. It will enable you to get a "catch."

Once tried you will always use it. It pays for itself ten times over. It is not an expense, but a necessary investment for the best results. It improves the quality and increases the yield. Don't fail to mention crop you will use "Nitratin" on.

"Nitratin" is put up in a granulated medium and packed in a ventilated can, the modern scientific way of packing legume germs.

Include "NITRAGIN" with your seed order--Mention crop you want it for

CLOVER SEED

Alfalfa or Lucerne (*Medicago sativa*) It is useless to sow this clover on land having a stiff clay or hard pan subsoil, as the roots naturally penetrate to a great depth and must do so if the plants live any time. Sow on rich, moist loam or sandy soil having a deep, porous subsoil. Prepare the land thoroughly and sow seed at the rate of fifteen to twenty-five pounds per acre with a broadcaster or grass seeder. Cover with a brush or light harrow. The young plants are quite tender and the land must be free of weeds until they become established.

Crimson Trefoil or Scarlet Italian (*Trifolium incarnatum*) An annual variety in common use in the southeast for feeding green and for hay, and also found profitable on the sandy soils of New Jersey. The yield in fodder is immense and after cutting, it at once commences growing again, continuing until severe cold, freezing weather. It grows about one foot high; the roots are nearly black; leaves long; blossoms long, pointed and of very deep red or carmine color. Makes good hay. It is sown in August or September in the South, but should not be planted in the North until spring. Sow ten to fifteen pounds per acre.

Alsike or Swedish (*Trifolium hybridum*) This perennial is the most hardy of all clovers. On rich, moist soil it yields an enormous quantity of hay or pasture, but its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom and greatly increases the yield of hay; cattle prefer it to any other forage. The heads are globular, fragrant, and much liked by bees which obtain a large amount of honey from them. Sow the seed in spring or fall, at the rate of six pounds per acre, when used alone.

Mammoth or Large Red (*Trifolium pratense*) This sort grows nearly twice the size of the Common Red Clover, often making a stand when the other clovers fail. Sow about eight to twelve pounds per acre.

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

White Dutch (*Trifolium repens*) A small, creeping perennial variety valuable for pasture and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. Sow in spring at the rate of six pounds per acre, or when used with other grasses, half that amount.

Bokhara, or Sweet Clover

WHITE FLOWERED. (*Melilotus Alba*.) a biennial plant and bears a close resemblance to Alfalfa, but is larger and coarser. It will make an excellent growth on any lime lands and stiffest clays, or any soils so hard and barren that they will sustain no other vegetation. It makes only a moderate growth and seldom blooms the first year, but during the second year it will reach from four to seven feet high, making stronger and heavier roots than any other forage plant. At the end of the second season it matures its seed and dies out; the roots decaying soon after.

The roots are very long, penetrating the soil to a depth of three to four feet, are large and being fleshy, decay more rapidly than alfalfa roots, hence their nitrogen becomes more quickly available for other crops. As they decay at the end of the second season, there is a good supply of humus.

Sweet Clover on account of its strong odor is not liked very much by stock at first, but since it starts very early in the spring when other forage is scarce, animals turned into a pasture of it at that time soon acquire a taste for it and eat it readily throughout the remainder of the season.

If cut before it ripens its seed, it will not spread. However, it will reseed the ground thoroughly if not cut in due time. Sow ten to fifteen pounds per acre.

YELLOW FLOWERED. (*Melilotus Officialis*) It resembles the White Sweet Clover, but blooms about three weeks earlier; produces finer stalks and does not grow as tall. It makes first class hay and excellent pasture for cattle and sheep. It will grow on any kind of soil, and being deep rooted, remains green in the driest season. It should be sown by bee keepers in localities where Alfalfa is not grown, as it is one of the best honey plants.

UNHULLED SEED. (Bokhara.) It is very slow to germinate.

JAPAN CLOVER. (*Lespedeza Striata*) It thrives on poor land and produces continual herbage. Half-hardy. Sow 10 to 12 lbs. per acre.

Ask for special lowest Market Prices on all Clovers.

MISCELLANEOUS FARM SEEDS

NOTICE—Owing to almost Daily Market fluctuations of all farm seeds we have omitted prices. If interested will quote upon request.

Barley, Common Barley succeeds best on rich lands more sandy and lighter than those adapted to wheat. It is shown in the spring and can be grown farther north than any other grain. Unless intended for seed it should be cut before fully ripe, as it is then heavier, of better quality and less liable to shell. Use about two and one-half bushels per acre.

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 8 to 10 quarts to the acre.

Buckwheat, Japanese Plants large and vigorous, maturing seed early and resisting drought and blight remarkably well; the grain is much larger and has a thinner hull than Common or Silver Hull. Recommended especially for well-drained or sandy land and the dry climate of the western plains.

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

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

Rye, Fall or Winter A hardy, strong growing annual, cultivated not only for its grain and straw, but valuable also for soiling and as a cover-crop and for use as green manure. It can be successfully grown under greater extremes of climatic conditions than probably any other cereal, but makes its best growth on soils containing less clay than some which are adapted to wheat. Good drainage is very important. The time for sowing is from the middle of August to the last of September. Prepare the ground as for wheat and sow broadcast or with a drill at the rate of one and one-half bushels per acre. 3 lbs., postpaid, 40c.

CANADA FIELD PEAS

These are used for various purposes, chief among them being a very early green food; when used this way they are sown with oats about April first at the rate of 1½ bushels of peas and 1½ bushels 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 three bushels per acre, and furnish excellent pea hay; horses like it very much when properly cured, as does all other stock. For plowing under as green manure, they add a vast amount of nitrogen to the soil and succeeding crops sown there the same year or even later, particularly wheat, are wonderfully benefited by producing a more luxuriant growth and larger yield. 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.

Vetches or Tares SPRING. (*Vicia sativa*) A perennial pea-like plant grown as an annual in the North. Desirable as a forage plant and valuable as a cover-crop for orchards. Culture same as for field peas. Sow ninety to one hundred twenty pounds per acre.

Vetches SAND, WINTER OR HAIRY (*Vicia villosa*) A very hardy forage plant growing well on soils so poor and sandy that they will produce but little clover. Its nitrogen-gathering properties make it particularly valuable as a soil renewer and enricher, but it is not recommended for land which is to be cultivated for grain crops on account of its tendency to volunteer and persist. The plants,

Hungarian (*Panicum germanicum*) This is a species of annual millet growing less rank, with smaller stalk, and darker beard, and often yielding two or three tons of hay per acre. It is very valuable and popular with those who are clearing timber lands. Sow and cultivate like millet.

Kaffir Corn A great fodder crop. The finest grain for poultry and pigeons. The stalks keep green and are brittle and juicy, making excellent fodder, either green or dried, which is highly relished by cattle, horses, and mules. 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 the grain, sow in rows three feet apart; 3 to 5 lbs. of seed to the acre. For fodder, sow 25 to 50 lbs., either broadcast or in drills.

Millet, Common (*Panicum millaceum*) Requires a dry, light, rich soil, and grows two and one-half to four feet high with a fine bulk of stalks and leaves. It is early maturing and is excellent for forage. For hay, sow broadcast, about 25 lbs. per acre, from May first to August first. For grain, sow in drills, about twelve pounds per acre and not later than June 20.

Millet, German or Golden An improved large leaved variety, growing three to five feet high; later maturing than Common Millet, and a heavy yielder. The heads, though numerous, are very large and compact. The seeds are contained in rough, bristly sheaths and are round, golden yellow in color and very attractive in appearance.

when mature, are about forty inches high and if cut for forage as soon as full grown and before setting seed, they will start up again and furnish even a larger crop than the first. Seed round, black, and should be sown thirty to sixty pounds per acre.

RAPE DWARF ESSEX FOR SOWING. There is but one variety of Rape that has proven profitable to sow in America, and that is the Dwarf Essex. No other plant will give as heavy a yield of forage at such a small cost as this, and its general cultivation would add largely to the profits of American farms. Especially valuable for green manuring and pasture. When fed off by sheep, it will probably do more to restore and make profitable exhausted soils than any other plant. Biennial.

Ground should be prepared same as for turnips. Sow in June or July, with a turnip drill, in rows two and one-half feet apart, at the rate of two and one-half pounds of seed per acre. It may be sown broadcast, either with other fall forage crops or by itself, using from one to five pounds of seed per acre. Lb., postpaid, 25c.

Don't forget to inoculate all Legumes.

MISCELLANEOUS FARM SEED (Continued)

Sugar Cane (Sorghum)

Amber The best early variety and the one which we especially recommend for the North where the season is short. It is practically as early as the old Early Amber and yields much more per acre either of syrup or seed. The plant is large, of strong, vigorous, and erect habit and stands up much better than Early Amber. It may be planted as late as the fifteenth of June and will be in condition to harvest for syrup in September. Cane seed should not be planted before the weather is warm in the spring. Three to four pounds of seed are required per acre.

Early Orange An exceedingly valuable variety; very large, of strong and vigorous habit and does not fall down. It is early and often yields as much as two hundred and forty gallons of very beautifully colored and highly flavored syrup to the acre. We recommend it highly to all desiring a superior cane.

Sunflower **LARGE RUSSIAN.** This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts. It is used extensively for feeding poultry. The plant often grows ten feet high. Sow seed as soon as ground is fit for planting corn, in rows three to four feet apart and ten inches apart in row. Cultivate same as corn. When the seed is ripe and hard, cut off the heads and pile loosely in a rail pen having a solid floor or in a corn crib. After curing so that they will thresh easily, flail out or run through a threshing machine and clean with a fanning mill. This variety will yield 1,000 pounds or more of seed per acre. Some species are planted largely in the flower garden for ornament.

Carefully Grown, Selected Seed Oats

Danish Renegade Oats As indicated by the name, this variety originally was imported from Denmark, where the summer season is quite cool and comparatively short, as instanced by the fine strains of cauliflower and winter cabbages produced in that country. We have had our stock of seed of this variety grown in the Northwest, where the growers are most enthusiastic in its praise. It is very productive, growing with a strong, stiff straw from four to five and a half feet in height. Grains plump, thin-hulled, and of a bright yellow, often three grains in a spikelet and distributed over the entire head. The stalks, being so stiff and heavy, do not lodge, nor does the grain fall off during a stormy season. The straw is very strong, well bladed, and when sown thinly stools very freely, as many as forty stalks being produced from a single grain. It is an excellent variety to sow with Canada field peas or vetches, and other leguminous crops where the latter are grown to produce ensilage or cured for hay. The strong, stiff straw makes a grand support for the running vines of the leguminous crop.

SEED WHEAT. We handle the best varieties only. Prices on application.

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 productivity 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, either green fed as hay or preserved as ensilage, is very high, being considerably above that of Red Clover. The yield of green vines per acre runs ordinarily from five to fifteen tons.

Sow $1\frac{1}{4}$ to $1\frac{3}{4}$ 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.

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.

Soy, or Soja Beans, 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 pronounced it a forage and grain plant 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 claiming 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 three 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 $1\frac{1}{2}$ 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 black appearance. For silage, cut as near maturing as possible without dropping the leaves.

SOUTHERN GROWN

EARLY BLACK. Sometimes known as Tar Heel or Ebony Black. Mature considerably earlier than Mammoth Yellow and considered superior. Also produces a fine crop of hay, and believe will mature 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 a fine fertilizer, giving good satisfaction at all times.

NORTHERN GROWN

ITO SAN. Early Yellow seeded variety being 10 to 15 days earlier than the Medium Green; will mature seed in this section and 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; grow a little taller and 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— $\frac{1}{4}$ to $\frac{3}{4}$ 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 $1\frac{1}{2}$ inches long. Color of seeds, bright green. The branches are usually far enough above the ground to permit easy harvesting.

Notice, Farmers—Scarcity of Manure necessitates sowing Cow Peas and Soy Beans.

Poultry Feeds and Supplies

The following is a lot of Poultry Feeds, etc., we always carry in stock in large quantities with-
out prices quoted, owing to constant market fluctuations. We invite all who contemplate purchas-
ing anything in the Poultry Supply line to get our special prices before buying elsewhere.

Hen Feeds

ALFALFA MEAL.
BARLEY.
BONE, GRANULATED.
BRAN.
BUCKWHEAT.
BLOOD MEAL.
CRACKED CORN.
CHARCOAL, Coarse, Med-
ium, and Fine.
EGG MASH.
GRIT, Coarse, Medium, and
Fine.
HEMP.
KAFIR CORN.
MILLET.
MIDDLINGS.
MEAT SCRAPS
OATS.
OYSTER SHELLS, Coarse
and Fine.
RYE.
SCRATCH FEED.
SUNFLOWER SEED.
SHELLED CORN.
VETCHES.
WHEAT.

Chick Feeds

CHICK SCRATCH FEED.
CONKEY'S BUTTERMILK
FOOD.
DEVELOPING FEED.
ALFALFA MEAL.
PIN HEAD OATS.
MILLET.
PRATT'S BABY CHICK
FOOD.
CRUSHED OYSTER
SHELLS, Fine.
MICA CRYSTAL GRIT,
Fine.
PRATT'S BUTTERMILK
BABY CHICK FOOD.
PRATT'S BUTTERMILK
GROWING MASH.

Pigeon Feeds

PIGEON FEED—MIXED
—NO GRIT.
HEMP.
CANADA PIGEON PEAS.
BARLEY FOR PIGEONS.
PIGEON MILLET.
HARD WHEAT, RE-
CLEANED.
VETCHES.
MICA PIGEON GRIT.
OYSTER SHELLS, for
Pigeons.
CRACKED CORN.
KAFIR CORN.
MILLET.
SOY BEANS.

Leg Bands

LEG BANDS—Celluloid
Keg Rings, American and
Mediterranean breeds, 10
colors. Dozen, 15c; 50 for
45c; 100 for 75c. Chicken
and Pigeon Size—Dozen,
10c; 50 for 30c; 100 for
50c.

NEST EGGS.
LICE EXPELLANT.
Each 5c; Dozen, 50c.

Buckeye Incubator

The Standard Colony Brooder

The Most Wonder- ful Hatching Device Ever Invented

Whether you are a begin-
ner or a big breeder, we
want you to try a Buckeye
—any of the six sizes—and
see just how easy it is to
produce a big strong chick
from every hatchable egg.

ASK FOR CATALOGUE
DESCRIBING ALL SIZE
INCUBATORS WE
HANDLE.

Select the incubator you
want—send us your order—
and we will guarantee the
machine you buy to hatch
every hatchable egg you put
in it—or better still—let us
show you a Buckeye in
operation and prove to you
that they will hatch more
chicks and better chicks
than any incubator or old
hen you ever saw.

THE STANDARD COL-
ONY BROODER is the
most practical brooder ever
invented. It will do any-
thing any other brooder
will do and do it better. Ever-
lasting, self-regulating and
nothing to wear out.

No. 18 broods up to 500
chicks.

No. 19 broods up to 1,000
chicks.

Security Portable Brooder

Centre Heat
Capacity 150 Chicks.

Buckeye Portable Brooder

No. 20—Capacity, 60 chicks.
No. 21—Capacity, 100 chicks.
No. 22—Capacity, 150 chicks.

We are jobbers of PRATT'S FOODS, REGULATORS, AND REMEDIES, insuring
you fresh goods always. We have constantly in stock the following:

PRATT'S BABY CHICK FOOD. A predigested food for Baby Chicks. Pkg. 30c and
60c; also 14, 25, 50, 100 Lb. Sacks.

PRATT'S BUTTERMILK GROWING MASH, for chicks. This splendid Mash is the
result of scientific tests, and is composed of the best and highest quality grains, butter-
milk and bone, making phosphates, insuring healthy chicks. Lb. 10c; 3 Lbs. 25c;
100 Lbs.

PRATT'S HEAD LICE OINTMENT, for chicks. It soothes and heals, and is safe
to use on all parasite diseases. Tins, 30c.

PRATT'S POWDERED LICE KILLER for chicks. It quickly kills all lice on small
or large chicks in a day's time. Small size, 15c; Larger Pkgs. 30c and 60c.

PRATT'S WHITE DIARRHEA REMEDY. To protect your chicks from the most
destructive disease. Pkg. 30c; Large 60c.

PRATT'S POULTRY REMEDY. Insure healthy birds, lots of eggs, builds up
vitality, prevents disease. Small Trial Pkg. 15c; larger 30c and 60c; 12 Lb. Pail, \$1.75;
25 Lb. Pail, \$3.00; 100 Lb. Bag, \$10.00.

PRATT'S CHOLERA REMEDY. An unfailing remedy for Cholera and Guaranteed to
do the work. Pkg. 30c and larger 60c.

PRATT'S ROUPE REMEDY. The Guaranteed remedy for Roupe, Colds, Catarrh and
all cold weather diseases. In tablet form. Package 30c; larger 60c and \$1.20 sizes.

PRATT'S CONDITION TABLETS. Keeps the heavy layers up to concert pitch,
and puts exhibition birds in prize-winning form. Pkg. 30c; larger 60c.

PRATT'S GAPE REMEDY. A sure cure for this deadly disease. Pkg. 30c;
larger 60c.

PRATT'S BRONCHITIS REMEDY. Quickly absorbed by the blood, reduces fever,
allays inflammation. Pkg. 30c; larger 60c.

PRATT'S SCALY LEG REMEDY. Sure cure for this annoying disease, which im-
pairs their vitality. Pkg. 30c; larger 60c.

We also carry in stock CONKEY'S REMEDIES.

Brooder and Incubator Lamp—both gas and oil—for the Celebrated Buckeye Machine.

Planet Jr. Garden Tools

Prices upon application

Space will permit our showing and describing only a few Planet Jr. Tools, but we will send to all who ask for it a fully illustrated catalogue of Planet Jr. Garden Implements. We deliver at depot or express office at prices given herein.

Planet Jr. No. 4

Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow.

Planet Jr. No. 11,

Double Wheel Hoe.

With 2 pairs hoes, 2 pairs cultivator teeth, 2 pairs rakes, 1 pair plows, and 1 pair leaf lifters.

A Cultivator with Exclusive Features

THE TRUE TEMPER GENEVA, No. G 2, is recognized everywhere as the only real Quick-Adjustable Cultivator on the market to-day. It has a Scuffle Hoe, a Plow and five Cultivator Teeth, all permanently attached to the frame. Any of these tools may be securely locked into working position by a few turns of the Hand Wheel. No lost attachments or wrenches to look for.

Every gardener knows and appreciates the value of time—that is one reason why this Cultivator is such a favorite.

THE TRUE TEMPER GENEVA, No. G 2, has steel-forged tools, well selected oak handles, bent. Has a 14-inch Steel wheel with 1 1/4 inch Tire. It is nicely finished in colors and varnished. Weight complete, 20 pounds. Metal parts packed in crate, handles wired in pairs and papered. Price.

**Efficient--Inexpensive
--Easy to Operate**

THE TRUE TEMPER FAIRY will keep your garden free from weeds and keep the soil in just the right condition to make the plants grow.

It will be a delight for your children to care for the garden with a Fairy—it runs so easily.

It is not intended for plowing, but for the otherwise tedious work of hoeing.

The Fairy has a strong steel frame with the best selected ash handles, easily adjusted for man or boy.

The Five Cultivator Teeth may be adjusted in many ways, as each tooth is bolted on separately. They are forged from high-grade tool steel—hardened.

It will cultivate rows from six to twelve inches apart.

Please note shape of Cultivator Teeth—they are made to cultivate the easy way.

It has a 14-inch steel oval-spoke wheel. Machine is handsomely finished in crimson, black and meadow green and varnished. Somehow its style appeals to everybody.

Packed one machine per bundle, knocked down. Weight 13 lbs. Easily carried in one hand.

Magic Weeders and Cultivators

MAGIC WEEDER—One of the best hand tools, saving time and labor. It is made in different styles as shown

by the cuts and can be used both for cutting and digging out weeds, as well as for making rows, if desired.

No. 1. 3 Times, 20c.

No. 2. 4 Times, 30c.

No. 3. 4 Times, Handle 4 ft. 75c.

Baskets, Wire Hanging

8 in.	\$0.15	18 in.	.50
10 in.	.20	20 in.	.60
12 in.	.25	22 in.	.80
14 in.	.30	24 in.	1.00
16 in.	.35		

BRUSHES, SCRUB. All kinds of vegetable cleaning, 15c each.

CANES. 7 to 9 feet long, for plant stakes. \$1.00-\$1.75.

CANES. Japanese, Green dyed, 3 1/2 feet. \$1.00-\$1.75.

ASPARAGUS KNIFE
Made of good material, 40c each.

DANDELION EXTERMINATOR, LIGHTNING. The only quick, sure, and easy way to rid your lawn of Dandelions and keep it free. \$1.50 each.

DIBBLE — All iron, good Tool, 40c.

DIBBLE — Wood Handle, steel point, best made, 50c.

EDGING KNIFE For cutting edges of walks and beds. 75c.

FORKS — Digging or spading. \$1.25 to \$2.00.

True Temper Cultivators are as good as the True Temper Forks and Hoes you have been using since you were a boy

The TRUE TEMPER GENEVA is recognized everywhere as the only real quick-adjustable cultivator on the market.

It has a Scuffle Hoe, a Plow and five Cultivator Teeth, all permanently attached to a revolving steel casting.

Any of these tools may be securely locked into working position by a few turns of the Hand Wheel.

It has steel forged tools, well selected oak handles, with comfortable handle grips. Machine has 14-inch steel wheel and is nicely finished. Weight 20 pounds.

The Midget Seeder and a Turning Plow, which are sold as extras, may be easily attached in place of Drill Plow.

No. G2—Geneva - - - - - \$8.00

The TRUE TEMPER SIMPLEX weeds and cultivates with one operation and does it so easily it will surprise you.

The 8-inch blade is forged from tool steel and polished. The ends are turned up to safeguard growing plants. It is V-shaped, which gives it a razor-like draw cut.

It weeds and cultivates the modern way without disturbing the roots of growing plants.

Handle is adjustable for height. It has a 15-inch steel wheel. Machine is nicely finished in red and black and varnished. Weight 13 pounds.

The Midget Seeder or Turning Plow, which are sold as extras, may be easily attached.

No. A3—Simplex - - - - - \$3.20

The TRUE TEMPER FAIRY will make gardening a pleasure, because it is very easy to operate. It will keep your garden free from weeds and keep the soil in just the right condition to make the plants grow.

It has a strong steel frame with best selected ash handles easily adjusted for man or boy.

The five Cultivator Teeth are forged from high-grade tool steel. They are adjustable in many ways, as each tooth is bolted on separately. The Fairy will cultivate rows from six to twelve inches apart—just the machine for your home garden.

It has a 14-inch steel wheel. Machine is nicely finished in colors and varnished. Weight 12 pounds.

No. G5—Fairy - - - - - \$3.20

The TRUE TEMPER STANDARD No. 20 is the most popular and best selling High Wheel Cultivator on the market.

It has a 24-inch wheel, which runs on a bushing, is well balanced and easy to operate.

Adjustment is made with one wing nut—no wrench is needed.

Attachments furnished: Double Point Shovel, Turning Plow with landside, combined Rake and Sweep.

These tools are made of high grade tool steel, hardened and polished. They will scour and work perfectly in any soil.

The Midget Seeder may be easily attached with one bolt. Weight, 19 pounds.

No. 20—Standard - - - - - \$5.20

Write us for discount on above prices

These Two Cultivators and our No. 14 Seeder are made especially for Market Gardeners. All Machines Guaranteed

The TRUE TEMPER SPECIAL is the very best double-wheel cultivator that nearly a hundred years of tool-making experience can produce.

Frame is made of high-grade steel. It has dust-proof, machined bearings with adjustment for wear. The wheels run true.

Attachments are forged from tool steel, hardened and polished. Not a rivet or weld in them.

Has 14-inch steel oval-spoke wheels. Finest second growth white ash handles with comfortable handle grips that fit the hand. Machine is beautifully finished.

Equipment includes two Seuffle Hoes, four Cultivator Teeth and two Plows. Weight with one set of tools about 20 pounds. Choice of tools sold with each cultivator as follows:

No. G1 —Full equipment of tools	- - -	\$14.00
No. G1A—Two Hoes and four Cultivator Teeth	- - -	12.40
No. G1B—Two Hoes	- - - - -	11.40

The TRUE TEMPER EAGLE is a single-wheel cultivator. Like our double-wheel True Temper Special, it is made especially for market gardeners.

It has a steel frame with a 15-inch steel wheel, supported on each side at the axle.

Handles are made of best selected oak with handle grips that rest the hands and arms while cultivating.

Attachments are forged from tool steel, hardened and polished. Machine is handsomely finished in colors and varnished. Weight with one set of tools about 12 pounds.

Equipment includes two Seuffle Hoes, three Cultivator Teeth, one large Turning Plow with landside. Choice of tools sold with each cultivator, as follows:

No. G4 —Full equipment of tools	- - -	\$9.70
No. G4A—Two Hoes and three Cultivator Teeth	- - -	8.30
No. G4B—Two Hoes	- - - - -	6.50

The TRUE TEMPER STANDARD SEEDER is made especially for the market gardener and vegetable growers.

The seed is fed by means of a rotary bristle brush which gives a constant steady flow without injury to the seed.

It will plant almost any kind of seed in hills, four, six, eight, twelve and twenty-four inches apart or will drill a continuous row accurately.

Seeder is very simple in construction and easy to operate. By slightly moving one part, it is changed from hill to drill sowing.

The index is in plain view and easily adjusted. A special adjustable shoe will open a clean furrow and the Coverer swings free. A coneave roller completes the job.

This Seeder opens the furrow, sows the seed, covers up, rolls down and marks the next row all in one operation. Weight 36 pounds.

No. 14—Seeder	- - - - -	\$13.20
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The MIDGET SEEDER will pay for itself in a short time, because it saves seed by sowing accurately. Sowing by hand wastes seed.

It is very easy to operate and drills almost any kind of garden seed from the smallest up to peas and beans. With ordinary care this seeder will last a lifetime.

The index is in plain view and easily adjusted. The shoe is adjustable for any depth desired, and the Coverer swings free.

The Midget opens the furrow, sows the seed and covers up, all in one operation.

It is sold with handle complete, or may be easily attached to almost any wheel cultivator. Weight 6 pounds

No. 1H—With Handle	- - - - -	\$5.4
No. 1 —Without Handle	- - - - -	4.8

Write us for discount on above prices

Horticultural Tools and Sundries

FORK HAND
NEEDING— Small,
25c; large 40c.

GLAZING POINTS—Peerless; best made; per 1,000, 75c.
GLAZING POINTS—Zink City; Lb. 65c.
GRASS HOOKS—Adjustable, best made, 75c.
GRASS SHEARS—Best steel, \$1.00; common grade, 50c.
GUNS, INSECT POWDER. Cyclone, 20c.
GUNS, INSECT POWDER. Jumbo, 35c.

CORN PLANTER. A real necessity in replanting Corn, both Field and Sugar; Each \$1.50.

MOLE TRAP. The Rittenhouse kind; no Mole can escape. 90c.

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. All sizes always on hand. Get special prices before buying elsewhere.

PRUNING KNIVES, TREE. The work that this knife will do is wonderful. Five or six trees can be trimmed with it while one is being done with other knives. It 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. 90c to \$2.00.

PRUNING SHEARS, HAND. California Pattern—9-inch, 75c; French—8 inch, \$1.50; Wiss Heavy—fine quality, 9-inch, \$2.75; Ladies' Hand, \$1.25.

PATTY, TWEMLOW'S LIQUID GLAZING. For bedding glass in sash. One gallon will cover about 600 running feet (one side). Gallon, \$3.00. Mastica—For glazing greenhouses. Gallon, \$2.25.

PATTY BULB. A useful tool for applying liquid putty and glazing greenhouses, \$1.10.

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc. Per Lb., 60c; 4 Lbs., \$2.00.

RAT EXTERMINATOR Guaranteed to kill them and leaves no odor. Price 25c.

PERMANITE is different from all putties in every respect. **PERMANITE** is made of ground asbestos combined with the most durable and elastic gums on the market. That **PERMANITE** contains asbestos explains the "why" of its wonderful lasting qualities. Asbestos as is shown by its use in gas grates or for cold storage insulation work, is unaffected by intense heat or extreme cold. **PERMANITE** has the same heat and cold resisting qualities. It will never harden. **PERMANITE** will always remain in a rubber-like condition.

PERMANITE gives with the vibration of the house saving in cracked or broken glass. Further, glass set with **PERMANITE** is easily removed when desired.

PERMANITE will not run in hot weather nor will it puddle when being applied. It flows from the bulb or our special **Permanite Machine** perfectly in a pencil-thick stream.

Guaranteed to do as represented or money refunded. Prices Gal. \$1.95; 5 Gal. \$1.85 per gal.; 1/2 Bbl. 30 to 40 Gal. \$1.75 a gal.; 1 Bbl. 60 Gal. \$1.65 a Gal.

PERMANITE MACHINE. Made of good steel used by simply strapping to the underside of the arm. \$3.50 new style \$6.50

TROWELS. Transplanting, 25c.
Transplanting Hoe. 50c.

Flower. 15c. Garden, one of the best. 35c.

SASH, HOTBED, UNGLAZED. Made from strictly clear cypress lumber. White lead used on the tendons, and iron dowel pins at the corners. 4x6 ft., 5 rows, 8-inch glass. \$2.50 each; \$28.00 per doz.

We also carry in stock regulation size Sash Glazed second hand but good. \$1.00 to \$3.50 each.

THERMOMETERS. We carry the best make of Incubator or Brooder Thermometers. 75c—\$1.50 each.

HUMUS. A wonderful soil builder. Price bag about 50 Lbs. \$1.00.

SHOES, WOODEN. We carry all sizes and shapes constantly. \$1.00 to \$1.50 per pair.

TWINE. For tying vegetables. All grades always carried.

WEEDERS—Excelsior. For weeding seed beds. 15c; Lungs. Allows use of hands, 25c. Christy Garden Weeder 15c.

CULTIVATOR, HAND GARDEN. The Prongs are square spring steel bent Cornerwise, with forged shovels at ends. The Socket Frame and Clamping Bar are made of toughest malleable. Handle best grade of White Ash; 4 feet long. 9 Tooth Cultivator, \$1.50; 5 Tooth Cultivator, 75c.

LABELS, WOOD. For pots, painted.

4 x 5/8-inch, per 100, 15c; per 1,000, \$1.10.

5 x 5/8-inch, per 100, 20c; per 1,000, \$1.35.

6 x 5/8-inch, per 100, 25c; per 1,000, \$1.75.

8 x 5/8-inch, per 100, 35c; per 1,000, \$2.75.

10 x 5/8-inch, per 100, 50c; per 1,000, \$4.50.

12 x 1 1/8-inch, per 100, 90c; per 1,000, \$5.00.

LABELS. Tree, notched, copper wired, per 100, 25c; per 1,000, \$2.00.

LABELS. Tree, copper, No. 1, per 100, \$1.50.

LABELS. Tree, copper, 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 Nicotinic (or similar preparation) is also drawn in one piece and can not leak. No glass about the lamp to be broken. Used by prominent Market Gardeners all over the country. Each, 65c; Doz. \$6.50

"ADJUSTO" PLANT SUPPORT is a marvel for simplicity and efficiency. It consists of two parts; an oak stake pointed at the bottom and painted green, and a hoop of the toughest wire, also painted green to prevent rust.

It contains no nails, hooks or screws. It holds securely any flower or plant and can be adjusted to any height

to conform with the plant's growth.

As permanent equipment which can be used year after year, they are dirt cheap. 3 ft., 15c each; \$1.75 doz.

18 in., 8c each; 85c doz. 4 ft., 18c each; \$2.00 doz.

24 in., 10c each; \$1.00 doz. 5 ft., 20c each; \$2.25 doz.

SEED SOWER—LITTLE GIANT. For sowing wheat, oats, rye, rice, 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. \$1.75 each.

The best garden tools for private gardens are True Temper.

Flower Pots and Saucers

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well. No charge for packing.

Flower Pots

Size	Ea.	Doz.	Size	Ea.	Doz.	Size	Ea.	Doz.
2 inch	.2c	18c	5 inch	.8c	\$0.85	10 inch	\$0.40	\$4.00
2½ inch	.3c	25c	6 inch	1.0c	1.00	12 inch	.75	7.50
3 inch	.4c	30c	7 inch	1.5c	1.60	14 inch	1.25	12.00
3½ inch	.4c	35c	8 inch	2.0c	2.00	16 inch	2.50	25.00
4 inch	.5c	50c	9 inch	3.0c	3.00			

Flower Pot Saucers

Size	Ea.	Doz.	Size	Ea.	Doz.	Size	Ea.	Doz.
4 inch	.3c	30c	7 inch	.8c	\$0.80	10 inch	20c	\$2.00
5 inch	.4c	40c	8 inches	1.0c	1.00	12 inch	40c	4.00
6 inch	.5c	50c	9 inch	1.5c	1.50			

Azalea Flower Pots

These are the same style as our standard Flower Pots, but not so deep. Suitable for Azaleas, Bulbs, Ferns, Spireas, etc.

Size	Each	Doz.	Size	Each	Doz.	Size	Each	Doz.
5 inch	.8c	\$0.80	7 inch	.15c	\$1.60	10 inch	.40c	\$4.00
6 inch	.10c	1.00	8 inch	.20c	2.00	12 inch	.75c	7.50

Round Seed Pans

These are the same style as our standard Pots, but not so deep, and are suitable for Cacti, Begonias, Tulips, etc.

Size	Each	Doz.	Size	Each	Doz.	Size	Each	Doz.
5 inch	.7c	70c	7 inch	.12c	\$1.20	10 inch	.30c	\$3.00
6 inch	.9c	90c	8 inch	.18c	1.75	12 inch	.70c	7.00

Fern Pans

These Pans are especially adapted for linings to Porcelain and Silver Fern Pans.

Size	Each	Doz.	Size	Each	Doz.	Size	Each	Doz.
5½ inch	.8c	\$0.80	7 inch	.15c	\$1.50	9 inch	.25c	\$2.50
6¼ inch	.10c	1.00	8 inch	.20c	2.00	10 inch	.85c	3.25

American Plant Tubs

An excellent tub, cheap, neat and durable. Made from ¾-inch Cypress, with iron handles and feet, 3 iron hoops, and 2 coats of green paint.

No.	diameter	high	No.	diameter	high
No. 1	11½ inches	11½ inches	No. 5	19 inches	18 inches
No. 2	13½ inches	11¼ inches	No. 6	22 inches	19½ inches
No. 3	14¾ inches	14 inches	No. 7	25 inches	22 inches
No. 4	16 inches	15 inches	No. 8	26 inches	23¼ inches

FERTILIZERS

Ask for special prices on ton lots.

Fertilizers and warfare bear a most intimate and most sensitive relationship. War decreases the supply of fertilizing materials and at the same time increases the importance of their use. Good production takes on a patriotic aspect. The farmers' tools of production become of importance second only to the needs of the army itself.

Every ton of manure and straw should be saved and hauled to the field. Fertilizers should be ordered early and used on all intensively grown crops. They mean bigger crops and save labor at a time when it is scarce, in that they make every acre return its utmost for the work expended upon it. All Fertilizers delivered free of charge, and prices quoted subject to marked change without notice. If large quantities are wanted ask for special prices.

ASHES, HARD WOOD. Indispensable for all crops requiring potash; very beneficial for lawns. Apply one to two tons per acre. Per Lb. 5c; 50 Lbs. 90c; 100 Lbs. \$1.50.

BLOOD DRIED. For flowering plants. Its chief element being nitrogen. Per Lb 15c; 25 Lbs. \$3.15; 100 Lbs. \$11.00.

BONE, PURE GROUND. This is ground very fine, decomposes more rapidly in the soil than coarser grades, and is therefore more quickly beneficial. Per Lb. 10c; 10 Lbs. 70c; 25 Lbs. \$1.50; 50 Lbs. \$2.50; bag 125 Lbs. \$4.75.

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 Pkg. 10c; Medium Pkg. 25c; Large Pkg. 35c.

HUMUS. That portion of soil formed by decomposition of animal and vegetable matter. A valuable constituent of soil. Price per bag. Per Lb. 5c; 100 Lbs. \$2.00.

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. Per Lb. 5c; 100 Lbs. \$1.50.

LIMESTONE AGRICULTURAL. Destroys Soil Acidity—Loosens Up Clay Soils—Tightens Up Sandy Soils. Puts soils in better condition. Apply at the rate of 2,000 to 4,000 lbs. per acre, and may be applied at any season of the year. Per Pkg. 10c; 100 Lb. bag \$1.25.

MURIATE OF POTASH. One of the most necessary fertilizers. This fertilizer is entirely imported. Lb. 20c; 25 Lbs. \$2.65; 100 Lbs. \$9.00.

NITRATE OF SODA. Contains about 16 per cent. nitrogen, equal to 20 per cent. ammonia. If plants are slow in taking hold a small quantity will be found beneficial. Per Lb. 15c; 10 Lbs. \$1.15; 25 Lbs. \$2.00; 100 Lbs. \$7.00.

ACID PHOSPHATE 16%. Analysis—Available Phos. Acid, 16 per cent.; Insoluble, 1 per cent. Per Lb. 5c; 25 Lbs. \$1.00; bag 125 Lbs. \$3.00.

Invaluable for all crops.

DUPLEX BASIC PHOSPHATE. Contains a minimum of phosphate of lime equivalent to eighteen per cent. phosphate and fifteen per cent. lime. Also contains six to nine per cent. Iron Oxide, one-fifth to per cent. Manganese Oxide and small quantities of other elements. Best phosphate fertilizer known. (Get booklet on same.) Per Lb. 5c; 25 Lbs. 75c; 100 Lbs. \$2.50.

PULVERIZED SHEEP MANURE. This is a pure, natural manure, and one of the most nutritious foods for plants. Its effect is immediate. It is very rich, safe, and gives quick results. It will give excellent results on flower beds, lawns, or in vegetable gardens, as it contains all the elements for promoting a quick, luxuriant growth, as well as adding body to the plant. Can be used either in dry form or dissolved to make a liquid manure. If applied dry, no raking off is required, as it does not disfigure the grounds, nor does it contain seeds of foul weeds, nor offensive odor. It is especially desirable for lawns, producing a quick, luxuriant growth of rich green color, that will enable the grass to withstand the heat and drought of summer. Per Pkg. 10c; 5 Lbs. 30c; 10 Lbs. 50c; 25 Lbs. \$1.10; 50 Lbs. \$1.65; 100 Lbs. \$2.75.

Moss, Peat, etc.

MOSS, GREEN SHEET. For hanging baskets, etc. Per bale 60c; bundle 5 bales \$2.50.

MOSS SPHAGNUM. For packing plants and growing Orchids, etc. Per Lb. 15c; bale \$2.50.

PEAT, JERSEY. Per Bu. \$1.50; 2 Bu. bag \$2.50.

POTTING SOIL. Per Peck 35c; Bushel \$1.25.

Don't be too afraid to use fertilizers. Ask our opinion as to what kind to use.

Coming to the point where Commercial Fertilizers must be used.

Insecticides and Fungicides

Ask for special prices on large quantities.

Almost every one realizes the necessity for spraying. It is also necessary to use the right materials, the right way, at the right time. In order to acquaint yourself with how, what, and when to spray, get our spray calendar free.

ANT EXTERMINATOR. ¼ Lb. 25c; ½ Lb. 45c; 1 Lb. 80c.

APHIS PUNK. Used for fumigating in greenhouses or hotbeds and guaranteed to destroy most insects. Pkg. 60c.

ARSENATE OF LEAD. (Paste.) The most effective poisonous insecticide for leaf eating insects. 1 Lb. can 45c; 5 Lbs. \$2.00; 10 Lbs. \$3.25; 25 Lbs. \$7.50; 50 Lbs. \$11.50; 100 Lbs. \$21.00.

ARSENATE OF LEAD. (Dry Powdered.) Cannot dry out or deteriorate in any way, even if carried over indefinitely and represents the ideal Arsenate of Lead. ½ Lb. Pkg. 35c; 1 Lb. Pkg. 65c; 5 Lb. Pkg. \$2.75; 10 Lb. Pkg. \$4.75; 25 Lb. \$10.00.

"BLACK LEAF 40." Soft-bodied, sucking insects may be effectively controlled by spraying with "Black Leaf 40." This is a contact remedy. 1 Oz. bottle 25c; ½ Lb. tin \$1.00; 2 Lb. tin \$3.25; 10 Lb. tin \$13.75.

BORDEAUX LEAD ARSENATE MIXTURE. (Paste.) An Insecticide and Fungicide combined in one very effective product. Sticks well to the foliage. 1 Lb. can 40c; 5 Lbs. 1.75; 10 Lbs. \$2.80; 25 Lbs. \$6.25.

BORDO LEAD DRY. An Insecticide and Fungicide composed of Arsenate of Lead and Bordeaux Mixture in dry powdered form. 1 Lb. 45c; 5 Lbs. \$2.00; 10 Lb. \$3.50.

BORDEAUX MIXTURE. (Paste.) A fungicide for curing and preventing fungoid disease on plants. 1 Lb. 35c; 5 Lbs. \$1.70; 10 Lbs. \$3.00.

BORDEAUX MIXTURE. (Dry Powdered.) Will not dry out or deteriorate. ½ Lb. 35c; 1 Lb. can 60c; 5 Lbs. \$2.75; 10 Lbs. \$5.00.

BUG DEATH. A valuable powder for Cucumbers, Egg Plants, Melons, Rose Bushes, Currants and Potatoes. 1 Lb. 25c; 3 Lbs. 50c; 5 Lbs. 75c; 12½ Lbs. \$1.50.

COPPER SULPHATE. For making Bordeaux mixture. 1 Lb. 20c; 10 Lbs. \$1.50; 100 Lb. \$12.50.

CUTWORM FOOD. The worm seeks the Food in preference to the plant. 1 Lb. 35c; 5 Lbs. \$1.40.

DRY LIME-SULPHUR. Is a combination of Lime and Sulphur which can be used not only as a dormant spray but also as a summer spray in

TOBACCO STEMS. Used 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. 1 Lb. 50c; 3 Lbs. \$1.45; 10 Lbs. \$4.50; 20 Lbs. \$8.75.

WEED KILLER, TARGET BRAND. One application will keep paths and roadways free from weeds for an entire season. 1 Qt. 65c; 1 Gal. \$1.75; 5 Gals. \$7.00.

PARIS GREEN. ¼ Lb. 20c; 1 Lb. 65c; 5 Lbs. \$3.00.

SCALE DESTROYER, TARGET BRAND. This preparation is a soluble, mineral oil, designed especially for

combination with Arsenate of Lead. 1 Lb. can 35c; 5 Lbs. \$1.50; 10 Lbs. \$2.25; 25 Lbs. \$4.50.

FISH OIL SOAP. For destroying insects on Plants, Trees, Vines, etc. This is also a contact remedy. ½ Lb. 20c; 1 Lb. 30c; 5 Lbs. \$1.25; in bulk, 25 Lbs. or over, per Lb. 22c.

HELLEBORE POWDER. For destruction of Slugs, Worms, Caterpillars, etc. ¼ Lb. 20c; ½ Lb. 35c; 1 Lb. 60c; 5 Lbs. \$2.75.

LAWN, SILICATE. A powder for killing weeds. 5 Lb. Pkg. 25c.

LIME SULPHUR SOLUTION. For Fall Winter and early Spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphid, Blister Mite, any scale, Insects or Bark Lice. 1 Qt. 40c; ½ Gal. 65c; 1 Gal. \$1.00; 5 Gal. \$3.50; ½ Bbl. (25 Gals.) \$9.80; 1 Bbl. (50 Gals.) \$15.00.

NICOTEEEN. Best for destroying lice on roses and all other plants. 1 Oz. bottle, 25c; ½ Lb. tin, \$1.00; 2 Lb. tin, \$3.25; 10 Lb. tin, \$13.75.

TOBACCO DUST FOR FUMIGATING. 1 Lb. 10c; 3 Lbs. 25c; 10 Lbs. 60c; 25 Lbs. \$1.25; 100 Lbs. \$4.00.

destroying and preventing San Jose Scale. 1 Qt. 60c; 1 Gal. \$1.75; 5 Gal. \$7.50; 30 Gal. \$30.25; 50 Gal. \$45.00.

SCALECIDE. Used according to directions will kill every San Jose Scale that comes in contact with it. 1 Qt. 70c; 1 Gal. \$1.75; 5 Gals. \$7.50; 30 Gals. \$30.25; 50 Gals. \$45.00.

SLUG SHOT. Very effectual in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, Rose Lice, etc. 1 Lb. carton 25c; 5 Lbs. 65c; 10 Lbs. \$1.25.

SULPHUR, POWDERED. Used to prevent and cure mildew on plants. 1 Lb. 15c; 2 Lbs. 25c; 5 Lbs. 50c; 10 Lbs. 90c.

SPECIAL NOTICE

The suggestions which we give under directions in regard to quantity of spray products to use and when to use them have been carefully compiled after conferring with Government and State Authorities and a large number of the leading growers located in all districts.

The dilutions given may not in all cases bring satisfactory results in all districts and may have to be changed somewhat to meet the various climatic conditions governing the different districts.

We strongly recommend that the growers frequently confer with the Government and State Authorities and secure the latest information regarding dilution best suited to local conditions.

We always have spray calendars on hand. They are yours for the asking.

Spraying Pumps, Powder Dusters and Appliances

PARAGON SPRAYERS

are always sold fully equipped with pipe, hose, nozzles, everything required ready for spraying.

All Paragon Sprayers are carefully tested before leaving the factory, so they never fail to work satisfactorily.

Paragon Sprayers are adapted to any spraying solution, and will positively spray whitewash and water paints without straining, and will not clog.

No. 1 - 6 Gal.

PRICE \$20.00

EQUIPMENT

5 feet 6-ply hose, 5 feet spray pipe, 2 nozzles.

This cut of No. 1 Sprayer shows inside mechanical arrangement and patented self-cleaning strainer. No other sprayer can show this feature.

One hundred and fifty pounds pressure are easily attained with these sprayers.

One season's increased production of fruit or one good job of whitewashing will pay many times the cost of a sprayer.

Every Paragon Sprayer is fully guaranteed, and should by chance any part prove defective, same will be immediately replaced free of charge.

No. 3. Capacity, 12 Gallons

PRICE \$30.00

EQUIPMENT

10 feet 6-ply hose, 7½ feet spray pipe, 2 spray nozzles.

Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired.

The above cut represents our most popular and best selling sprayer. Thousands are now in use and giving best of satisfaction.

Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps.

NOTICE—Our space being limited, compels us to omit illustrating and describing other sizes of Paragon Sprayers. However, if interested, will mail a circular describing each, and every paragon sprayer made. We also carry a full line of repairs for Paragon Sprayers; also Bamboo Brass Lined Spray Poles.

Auto Compressed Air Sprayer

AUTO COMPRESSED AIR SPRAY. 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.

Auto-Spray No. 1B, Brass Tank, with Auto-Pop Nozzle. Price \$11.50.

Auto-Spray No. 1D, Galvanized Tank, with Auto-Pop Nozzle. Price \$8.00.

Brass Extension, 2 foot length. Price 65c.

Auto Compressed Air Sprayer

Auto Spray No. 3

Suitable for spraying, whitewashing and disinfecting with creosote or other heavy mixtures. Tanks 8 to 12 gallons capacity, made of heavy galvanized iron, reinforced at top and bottom all working parts of pump that come in contact with liquids are brass. Pressure of from 150 to 200 pounds can be easily maintained. Plunger can be repacked without removing from brass cylinder. 18 gallon outfit can be had with two wheels if desired. Price 8 Gal. \$17.50; 12 Gal. size \$22.50.

Utility Knapsack Sprayer

Utility Knapsack Sprayer

UTILITY KNAPSACK SPRAYER. Made of heavy Galvanized Iron or Brass. Tank equipped with standard hose connection and heads so constructed as to eliminate danger of blowing out. Pump of heavy Brass tubing with bronze Ball check valve. Nothing to weaken—no rubber to wear out.

No. 10 Galv. Iron.....\$ 8.80

No. 15 Brass 12.00

Auto Spray No. 3

Complete line of Sprayers and Dusters always on hand.

Spraying Pumps, Powder Dusters and Appliances—Continued

Utility No. 95 Bucket Pump

UTILITY NO. 95 BUCKET PUMP. Was designed to meet the demands for a small powerful double-action spray pump. It is very efficient for domestic purposes. Pump is of all-brass construction with ball valves and hemp plunger. It is equipped with our No. 80 Angle Service Nozzle, which has strainer and so designed as to give a fine mist. By removing verbal disc a straight stream can be had. Whitewashing can be done with this pump successfully. Packed one in a box. Shipping weight 6 pounds. Price \$5.40.

LITTLE GIANT BRASS SPRAY PUMP. Is improved with a large air chamber. With agitator, complete with hose and Imperial combination, fine, coarse spray and solid stream nozzle, with malleable foot rest. Price \$4.00.

Glass Jar Sprayer

GLASS JAR SPRAYER. Frame made of heavy galvanized steel; all parts well riveted. Leather plunger so assembled as to retain its shape. Packed separately in boxes to prevent breakage.

Will not corrode or rust, and if accidentally broken, can be replaced at once with a Mason Fruit Jar. Price Pt. size 50c; Qt. size 75c.

The 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 and Reservoir, each \$1.00. Brass Pump and Reservoir, each \$1.75.

Utility Tin Tank Sprayer

UTILITY-TIN TANK SPRAYER. Made of heavy tin, strong, durable and perfectly satisfactory. Qt. size price 50c.

MIDGET SPRAYER. Capacity one pint, made of tin, suitable for small gardens and house plants. 35c each.

Champion Insecticide Duster

CAMPION INSECTICIDE DUSTER. It will cover two rows as fast as a man can walk. Can be easily regulated as to quantity and will do as much work in a day as a horse sprayer. Extension tubes enable the Gun to be used on fruit and shade trees and in the vineyard. Among tobacco and potato growers they have become almost indispensable performing the work in a perfect and rapid manner. Price complete, \$15.00.

Little Giant Duster

LITTLE GIANT DUSTER. This is made on the same principle as the Champion but the capacity is smaller and there are some differences in construction. It is offered to supply the demand for a low-priced implement. It works in the same manner as the Champion with a crank. Does not have as many parts nor as much extension. Price each \$12.00.

DICKEY BUG DEATH DUSTER. Practical and effective; for applying Bug Death Powder. 25c. each.

BELLOWS, ACME. Is well made, with a solid hardwood head block, hardwood handles, best leather for the bellows, and extra elbow is furnished to tilt the funnel for getting under the leaves of plants and shrubs. \$1.75 each.

We Also Carry in Stock Constantly Pratt's Stock Remedies as follows:

PRATT'S ANIMAL REGULATOR. By the constant use of this well known regulator you can keep your stock in the pink of condition. Pkg. 30c; larger 60c; 12 Lb. Pail, \$2.50; 25 Lb. Pail, \$4.00; 100 Lb. Bag, \$12.00.

PRATT'S HEALING OINTMENT. It penetrates quickly, insuring cooling qualities and immediate relief. Pkg.

PRATT'S DISTEMPER AND PINK-EYE REMEDY. It overcomes a most troublesome disease by going direct to the cause. Bottle, 60c.

PRATT'S HEAVE COUGH AND COLD REMEDY. A positive remedy for Heaves, Coughs and Colds, by restoring natural breathing; strengthens the lungs. Pkg. 60c; larger, \$1.20.

PRATT'S WORM POWDER. A guaranteed worm expellant. Pkg. 50c.

PRATT'S COLIC CURE. Every horse owner should always have some on hand—a sure cure. Bottle, 75c.

PRATT'S COW REMEDY. It's a tested remedy for contagious abortion, barrenness (failure to breed), and all cow diseases, and a reliable fattener.

PRATT'S BAG OINTMENT. Sure cure for caked bag, sore teats, bunches, and all inflammation. Box, 35c; larger, 70c.

PRATT'S HOG TONIC. A tonic which will cause the Hog Machine to change a reduced amount of feed into clean, sound and worm-free Pork.

Novelties and Specialties of Great Merit

In the following list of Novelties and Specialties you will find varieties which have been thoroughly tested and have proven their merit. For home gardens we especially advise trying Perfection Stringless Beans, Gigantic Pole Lima, Golden Honey Dew Corn, Delicious Peas.

M. G. S. Co's. Round Pod Wax Bean A very handsome mid-season variety, especially desirable for snaps for the home garden. The plants are of strong growth, spreading and very productive. The leaves are large, broad, and roughened. The pods are long and round, five and one-half to six inches, slightly curved, light yellow, wax-like stringless, and of the very best quality. Seed long, cylindrical, medium sized, nearly white with a little dark marking about the eye. (See page 4.)

M. G. S. Co's. Perfection Stringless Bean A very hardy and productive green podded sort with strong vigorous vines. The pods are round, more fleshy, straighter, much longer, and more productive than Red Valentine and entirely stringless. Pods 6 to 7 inches long. One of the best stringless beans yet introduced. (See page 5.)

M. G. Seed Co.'s Stringless White Valentine This new and distinct white Valentine has all the good qualities of the well known Red Valentine with the advantage of a white seed, very productive, stringless and unequalled flavor, also a good shell bean for baking. Once tried you will want nothing better than this variety. (See page 5.)

Fordhook Bush Lima Bean An improved dwarf lima of the Kumerle type. It is sometimes called Potato Bush Lima. The plants are vigorous and erect, bearing well above the ground. The pods, which are produced in large clusters, are medium green, about four and three-fourths inches long and each contains three to five large beans of exceptionally fine quality. It is much more productive than Kumerle and matures earlier. Seed large, irregularly oval in shape, very thick, white with greenish tinge. This sort is popular for home and market use, especially in the east. (See page 6.)

M. G. S. Co's. White Ky. Wonder Bean An early maturing, green podded, white seeded pole sort desirable for snaps and unsurpassed in its class as green shell beans. The vines are vigorous and very productive. The pods are round, very long, often eight to nine inches, irregular in shape and quite stringless. The beans when shelled green are large, very tender and white, a very desirable feature when comparison is made with the colored beans of other varieties of this class. Seed medium big, oval or well rounded, solid white. Many gardeners consider this bean the most desirable pole sort. (See page 7.)

Gigantic Pole Lima Beans This comparatively new pole lima bean is the largest podded of any variety of this class. The mammoth pods are eight to twelve inches long, dark green in color and contain six to eight beans of the most excellent quality. It comes into bearing medium early and the vines which are vigorous and strong growing are exceptionally productive. A variety of distinctive merit for the home garden. (See page 8.)

Swiss Chard (Sea Kale or Spinach Beet) This kind of beet is grown exclusively for the numerous, fleshy, tender leaves and leaf stalks, which are superior to those of other beets for use as greens. Later in the season the wax-like leaf stems are cooked, like asparagus, or are pickled. This variety we offer has large, broad, undulated leaves of attractive yellowish green color, and remarkably large, broad, white stalks and midribs or chards. It is well worthy of a place in the home garden as well as for market use. Swiss Chard is sometimes called "Leaf Beet and Silver Beet." (See page 9.)

Copenhagen Market Cabbage The earliest large round-headed cabbage yet introduced. The heads are exceptionally large for so early a variety, very solid and of most excellent quality. The plants are vigorous but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. This is a most excellent sort, both for the home garden and market gardening trade. Our strain produces the characteristic large, round heads that for solidity and excellent quality make this variety so valuable. (See page 11.)

Chinese Cabbage (Pe-Tsai) The improved strain we offer resembles when well-grown Cos Lettuce rather than Cabbage. It is often called Celery Cabbage on the market.

The leaves of the plant when young are crimped at the edges, of light green color and appear like smooth-leaved mustard, but with much broader and heavier midribs. The plant as it matures becomes more upright and forms heads much like Cos Lettuce. The inner leaves blanch an attractive light yellow or creamy white with very white midribs. It is of distinctive flavor, very mild and pleasant. It is served as a salad like lettuce or cooked like asparagus.

Sow in this latitude after July 1st at the same time as turnips. The early plantings of Pe-Tsai run quickly to seed in hot weather. Sow in drills fourteen to twenty inches apart and thin seedlings two or three times; or if grown for the market start in boxes and transplant like late cabbage. (See page 11.)

Golden Honey Dew Corn A New Golden Grain variety that has ears about seven inches long which resembles Golden Bantam in color but we claim superior flavor. Usually twelve rowed, long grained, very sweet and tender and remains fit for table use longer than any other yellow corn. (See page 15.)

Blue Bantam This corn, when very young, cooks remarkably white, but the ripe grain is bluish black. For home use we consider it the best second early sort where tenderness and sweetness are the qualities most desired. It does especially well as a second early variety in the South. The stalks are about six and one-half feet high. The ears are about eight inches long and are usually eight rowed. (See page 15.)

M. G. S. Co's. Big Boston Lettuce (Seed white) This variety is popular for outdoor culture and is also much in demand as a compact, large heading, forcing sort for cold-frames. The plants are large, very hardy and vigorous. The leaves are broad, comparatively smooth but wavy at the edge, thin, very hard, and crisp. In color they are bright light green, the head slightly tinged with reddish brown. The inner leaves blanch to an attractive greenish white, tinged with light yellow. It usually heads up under cold weather conditions better than any other variety, and is grown extensively in the south for shipment north in the winter. (See page 19.)

M. G. S. Co's. Ohio White Globe Onion A most desirable early or main crop variety for the home garden. The variety yields abundantly, producing medium to large, handsome, and finely shaped, clear white bulbs. The flesh is firm, fine grained, quite mild in flavor and is more attractive than the colored sorts when cooked. The bulbs are globe-shaped, full at the shoulder, rounded at the base, keep well and are desirable for shipping. To produce the beautifully white onions so much sought in every market, one must first of all have good seed; second, grow them well on rich lands; third, exercise great care in harvesting and curing the crop. In Southport they "cord" up the onions in long rows, the bulbs on the inside, and cover with boards, so that the bulbs in the open air are well protected from rain or dew which would be sure to discolor them. We have a developed strain which is unsurpassed in uniformity and beauty of shape and color. (See page 22.)

M. G. S. Co's. Ohio Yellow Globe Onion A very handsome late or main crop onion of the largest size and nearly globular in form, usually with shoulder and base slightly sloping. The skin is yellowish brown or light yellow with slight tinge of brown. The flesh is creamy white, very mild, tender, and of excellent flavor. The variety keeps well if thoroughly ripened and is very desirable for shipping for fall and early winter use. It is one of the best of the large sorts that has become thoroughly acclimated in America and is exceptionally productive under proper conditions. If started very early it will produce a mammoth onion the first season. (See page 22.)

M. G. S. Co's. Delicious Peas It is a favorite with the market gardeners for a general crop on account of the strong vines, large peas and pods. A heavy cropper. Vines are strong, vigorous, and covered with large pods 4 to 5 inches long well filled. Peas wrinkled, vines branching, about 2½ feet tall. The most delicious Peas obtainable. (See page 25.)

M. G. S. Co's. Early Michigan Tomato This splendid variety, introduced in 1909, is the largest and best of the early purplish tomatoes. The vines are vigorous and very productive. The fruits are very smooth, uniform in size, nearly globe-shaped, firm, and of excellent quality. Early Michigan is one of the most valuable shipping tomatoes yet produced. It is also desirable for the home garden and near markets. We highly recommend this variety. (See page 30.)

NOTICE—A liberal size package of each of the above sixteen novelties, \$1.00. If any of the above prove anything but what we claim for them, your money will be refunded.

Novelty Flower Seeds

Antirrhinum or Snap Dragon. One of the best border plant that blooms almost the entire season. Have long showy spikes of tubular flowers spreading lobes and finely marked throats, fragrant and brilliant colored. One of the best annuals for cutting, as flower spikes are long and blooms are borne well above the dark glossy green leaves. (See other description on page 51.)

Aster Mammoth Flowering American Beauty. A class of strong superb strain of American origin and especially adapted to our climate conditions. The plants form strong branching bushes two to two and one-half feet high bearing on long strong stems their handsome Chrysanthemum like flowers, which under ordinary cultivation average five inches across. Colors white, light blue, dark blue and pink.

Calendula Will grow in any good soil, and are easily raised from seed. Flowers in many shades of orange and yellow, also white. Continues to bloom all season until frost.

Carnations Mixed Marguerite. A strain of the very best seed, in all colors, of the best variety only, which grow to an even height. The stalks are sturdy, flowers are very large, fragrant and perfectly double. The plant blooms from spring to late in the fall, until checked by severe frost. A half hardy perennial; a slight protection of coarse straw will preserve them during winter.

Cardinal Climber This is a very attractive, strong and rapid grower attaining a height of twenty-five feet with beautiful fern-like foliage and covered with intensely red flowers.

Celosia Childsii (Chinese Wallflower). A unique form of the feathered cockscomb growing two to three feet high, each branch terminated with a large head of rich crimson flowers that look like silky wool. Good for border or bedding and very valuable for cutting.

Cosmos New Double Flowering. It has taken a great deal of patience to produce and perfect this strain now offered. The flowers vary considerably in their doubleness some absolutely double others have a frill or color surrounding the double disc. Very artistic and beautiful in either form. Foliage heavier less cut than the single varieties. Quite a novelty and should be tried by all flower lovers.

Gypsophila Annual plants growing about two feet high, and producing large clusters of pink and white flowers. Of bushy dense growth covered with bloom. Invaluable for cut flowers.

Helichrysum (Strawflower). Everlasting. A very beautiful everlasting flower in a wide range of colors. If cut before quite developed the flowers are very lasting.

Kochia (Summer Cypress). Also known as "Burning Bush." Grow about three feet and form a symmetrical dense bush, similar to a cypress. In the fall they take on a red hue gradually becoming entirely red.

Linum (Scarlet Flax). Plants with a finely divided slender foliage. Grow to a height of one and one-half feet, producing an abundance of crimson saucer shaped single flowers, with black centers and measuring an inch or more across. Best started indoors early, but will do well if sown outside.

Marigold (Legion of Honor). A single flowering sort, forming a compact bush about 1 foot high. Begins flowering early and continues throughout the season. Flowers a golden yellow, marked with a spot of crimson velvet.

Morning Bride (Scabiosa). The great variety of shades and the long rigid stems make these beautiful flowers, one of the most desirable for cutting and bouquet work. Similar in shape to the Marigolds. Of easiest culture. Sow outdoors where plants are to stand. Our mixture contains many beautiful colors.

New Japanese Poppy Geisha A very pretty fluted or ruffled variety, bright glistening scarlet on the outside while the inside is rich golden orange, a most brilliant oriental color combination.

Petunia, Rosy Morn. A pink bedding variety, the result of several years of careful selecting, which are now almost true compact globular plants about a foot high covered with soft carmine pink flowers the entire season. One of the best varieties for bedding.

Petunia (Giant California). Flowers of immense size, superbly colored with throats beautifully veined and bloched. They commence blooming early in season and continue until cut off by frost. Our strain is considered by those who know the best obtainable.

Salpiglossis Not so generally known but one of the best flowering plants we have. Flowers large trumpet shaped and of many beautiful shades and stripes. Lasting well when cut. Sow outdoors in rich soil and sunny locations. Blooms until frost.

Schizanthus (Butterfly Flower). Are not as well known to flower lovers as they ought to be. Of easy culture. Plants grow to a height of two feet and are covered with a mass of beautiful colored flowers in many shades.

Sweet Peas (Spencers Mixed). The greatest care has been exercised in blending this superb mixture. Made out of the finest named sorts insuring a well balanced range of describable colors and it would be impossible to get a finer variety at any price.

Sweet Sultan This beautiful class is undoubtedly the finest of all Sweet Sultans for cut flower purposes. 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 the best, in this latitude, to sow very early in the spring, so that they may perfect their flowers before very hot weather comes.

Verbena (New Lucifer). A most valuable addition to the range of colors in this important bedding variety being intensely deep cardinal scarlet throughout. Identical to the Mammoth Verbena in size of bloom, floriferousness and other good qualities. A brilliant bed or border plant.

Wall Flower In Europe these fine free blooming plants are much grown and appreciated. Grow about eighteen inches high in many colors similar to Stocks. Sow early in boxes or under glass; transplant to pots. Plunge the pots down in the garden and late in the fall take in house for winter bloom.

Zinnia (Double Giant Flowering). One of the most distinct and meritorious annals of recent introduction. Plant is compact, about three feet high and bears a multitude of very double flowers about six inches across. Flowers on long stems all colors and one of the most satisfactory bedding plants.

Our Flower Seeds please.

CANNING DIRECTIONS

Canned vegetables for use when fresh vegetables are not available have an assured place in household economy, and by this method any surplus of the garden may be used to advantage. All of the garden vegetables are wholesome and nutritious when properly canned, and if the directions given are followed all of them may be kept satisfactory. There are several methods by which vegetables may be canned. We believe, however, that what is known as the "cold-pack" method is the most satisfactory for general use. By this method, with a table showing the time required for cooking, any fruit or vegetable may be canned successfully.

THE HOME-MADE OUTFIT—A serviceable cold-pack home canning outfit may be made of materials found in any household. All that is necessary is a vessel to hold the jars or cans, such as a wash boiler or large tin pail. This vessel should have a tight fitting cover and be deep enough so that water will cover the top of the jars at least one inch. Provide a false bottom of wood or a wire rack to allow of free circulation of water under the jars. The wood bottom may be made of perforated boards or of lath or similar strips of wood nailed to cross pieces. A strip of wood around the edge of the rack will prevent the jars slipping off when lifting the tray out of the cooker. If furnished with handles made of heavy wire the tray may be lifted out of the cooker entirely for removing or replacing jars.

CONTAINERS—All types of jars that seal perfectly may be used. It is suggested that use be made of those to which one is accustomed or which may be already on hand. New rubbers should be purchased each year, but the glass jars may be used indefinitely. Be sure that no jar is defective. The containers should be thoroughly clean. It is not necessary to sterilize them in steam or boiling water before filling them, for the reason that in the cold-pack process both the insides of containers and the contents are sterilized. The jars should be heated before the cold product is put in them.

Directions for Cold Pack Method

The cold-pack method of canning is so simple and the directions so easily followed that almost any one may successfully can vegetables or fruits with it. The steps to be taken and the precautions to be observed are as follows:

Select sound vegetables and fruits. (If possible can them the same day they are picked.) Wash, clean, and prepare them. Have ready, on the stove, a can or pail of boiling water. Place the vegetables or fruits in cheese-cloth, or in some other porous receptacle—a wire basket is excellent—for dipping and blanching them in the boiling water. Put them whole into the boiling water. (See time-table for blanching on next page.) After the water begins to boil, begin to count the blanching time.

The blanching time varies from one to twenty minutes, according to the vegetables or fruit. When the blanching is complete remove the vegetables or fruits from the boiling water and plunge them a number of times into cold water, to harden the pulp and check the flow of coloring matter. Do not allow to stand in cold water.

The blanching of vegetables removes excess acids, improving the flavor. It also causes some shrinkage, so that a large quantity may be packed in a container. The blanching and cold dip cause vegetables to retain their original coloring, which enhances their appearance.

Pack the product into the containers, leaving about a quarter of an inch of space at the top.

With vegetables add one level teaspoonful of salt to each quart container and fill with boiling water.

Test the rubber by stretching or turning inside out. Fit on the rubber and put the lid in place. If the container has a screw top do not screw up as hard as possible, but use only the thumb and little finger in tightening it. This makes it possible for steam generated within to escape and prevents breakage. If a glass top jar is used, snap the top bail only, leaving the lower bail loose during sterilization.

Place the filled and capped containers on the rack in the sterilizer. If the home-made or commercial hot water bath outfit is used, enough water should be in the boiler to come at least one inch above the tops of the containers, and the water, in boiling out, should never be allowed to drop to the level of these tops. Begin to count processing time when the water begins to boil.

Consult the time-table on next page, and at the end of the sterilizing period remove the containers from the sterilizer. Fasten covers on tightly at once, turn containers upside down to test for leakage, leave in this position until cold and then store in a cool, dry place. Be sure that no draft is allowed to blow on glass jars, as it may cause breakage.

If jars are to be stored where there is strong light wrap them in paper, preferably brown, as light will fade the color of products canned in glass jars, and sometimes deteriorate the food value.

Vegetable Canning in Cold Pack

Vegetables may be divided into five classes, all the vegetables of each class being sterilized by practically the same process under the cold-pack method. These classes are: (1) vegetable greens; (2) roots and tubers; (3) tomatoes and corn; (4) pumpkin and squash; (5) pod vegetables, such as beans, peas, and okra. Directions for these various classes are given herewith.

VEGETABLE GREENS—Besides spinach, dandelions, and kindred greens this class includes cabbage, brussels sprouts and cauliflower. Greens should be trimmed, the old leaves and coarse stems removed, and the greens then blanched in steam from fifteen to twenty minutes, in a regular steamer or in any other closed receptacle in which the greens will be suspended or raised above the water. After blanching they should be plunged into cold water. They are then packed tight in containers. If one wishes one may season with meat, olive oil, etc., to taste. Add hot water to fill up the crevices and sterilize two hours in the hot-water bath outfit.

Plant seeds that you possibly overlooked last season.

CANNING DIRECTIONS—Continued

Root or Tuber Vegetables—This class includes carrots, parsnips, beets, turnips, and sweet potatoes. After being thoroughly washed and scrubbed with a vegetable brush they should be scalded long enough to loosen the skin. Plunge them immediately into cold water, then scrape or pare off the skin. They may be packed whole or cut into cubes. Fill containers with boiling water, with one level teaspoonful of salt to each quart container. Screw on the tops lightly and sterilize for an hour and a half in the hot-water bath outfit. Cool and store.

Tomatoes—These demand special canning directions. Scald the tomatoes enough to loosen the skin. Then plunge them into cold water, core and skin them and pack them whole. Do not put in any hot water, but add a level teaspoonful of salt to each quart container. Loosely seal and sterilize twenty-two minutes in hot-water bath outfit. Tighten covers, invert containers to cool and test, wrap in paper and store.

Corn on the Cob—Be sure to have fresh corn. After removing the husks and silk blanch the corn on the cob from five to fifteen minutes. Then plunge it into cold water and pack the ears, alternating butts and tips, in half-gallon containers. Fill the containers with boiling water and put two level teaspoonfuls of salt in each gallon. Sterilize the partially sealed containers three hours in the hot-water bath outfit. Tighten covers, tip the containers on their sides to cool, wrap them in paper and store.

Corn off the Cob—If you do not care to can corn on the cob, after blanching slice the corn from the cob with a thin, sharp knife. Pack corn in containers, add a level teaspoonful of salt to each quart, fill with hot water and sterilize for three hours as in the case of corn on the cob.

Pumpkin and Squash—For pie filling cut pumpkin or squash into small pieces, then cook for thirty minutes, so that it becomes pulp. Add one quart of sugar and one teaspoonful of salt to each quart of pulp. After partially sealing sterilize ninety minutes in hot-water bath outfit. Cool, wrap, and store. Pumpkin or squash may also be put in cubic form for special uses, such as frying, creaming, or baking. To do this blanch for ten minutes, dip into cold water, pack into containers, fill each container with boiling water and add one level teaspoonful of salt to each quart, but no sugar. Sterilize for ninety minutes in the hot-water bath outfit.

Pod Vegetables—Such vegetables as lima beans, string beans, peas, and okra, should be blanched in boiling water from two to five minutes, plunged into cold water and packed. Fill container with boiling water, adding a level teaspoonful of salt to each quart. Sterilize two hours in hot-water bath outfit. Cool and store.

Precautions

One of the troubles to be guarded against in keeping canned goods is the development of mold during storage. Mold is apt to develop if the sealing is defective. Care must therefore be used in sealing. Mold may also develop if the tops of jars are removed, after sterilizing, for replacing rubber rings. It is unsafe to keep jars in a damp place where the rubbers may decompose, as this, too, may result in the develop of mold.

Another thing to guard against is improper or inadequate blanching and cold dipping. If vegetables or fruits which require blanching are not handled properly in the process shrinkage is apt to occur during the period of sterilization. Care should be taken to follow the instructions on this point.

Careless packing must be avoided. Vegetables and fruits should be packed closely in containers, and after this has been done the containers should be filled with hot salted water in the case of vegetables and syrup in the case of fruits.

In canning vegetable greens, including spinach, dandelions, and kindred vegetables, and cabbage, brussels sprouts, and cauliflower it is important that the mineral salts and volatile oils should not be lost. The retention of these is required for perfect results. For this reason the greens must never be blanched in hot water. The blanching must be in steam. This may be done by having them suspended in a closed vessel partially filled with boiling water, taking care to see that they are above the water line.

It is important that vegetables and fruits should not be allowed to remain too long in the sterilizer. If sterilization is allowed to continue too long the product will shrink. Watch the time and follow the schedule as given in the table.

One of the things to be avoided with canned peas, corn, beans, and asparagus, is the development of what is known as the state of being "flat sour." The canned goods may show no signs of spoilage, and yet be found, on opening, to be in this condition. The trouble is manifested by a sour taste and disagreeable odor. It may be avoided by making use of vegetables that have not been gathered more than five or six hours. Blanch, cold-dip, and pack one jar at a time, placing each jar in the canner as it is packed. This is a wise precaution, and one that should not be overlooked.

TIME-TABLE FOR BLANCHING OR STERILIZING

The following time-table shows blanching and sterilizing time for various vegetables:

	Blanching Minutes	Sterilizing Minutes		Blanching Minutes	Sterilizing Minutes
Vegetable Greens.....	15 to 20	120	Tomatoes	To loosen skin	22
Cabbage	15 to 20	120	String Beans.....	2 to 5	120
Cauliflower	15 to 20	120	Lima Beans.....	2 to 5	120
Brussels Sprouts.....	15 to 20	120	Corn (on cob or off).....	5 to 15	180
Carrots	5 to 8	90	Pumpkin (for pie).....	Cook 30 min.	90
Parsnips	5 to 8	90	Squash (for pie).....	Cook 30 min.	90
Beets	3 to 8	90	Pumpkin or Squash Cubes.....	10	90
Turnips	5 to 8	90	Peas	2 to 5	120
Sweet Potatoes.....	5 to 8	90	Okra	2 to 5	120

Reference Tables

Number of plants to the acre at given distances

Dis. apart.	No. plants.	Dis. apart.	No. plants.	Dis. apart.	No. plants.	Dis. apart.	No. plants.
12x 1 In.	522,720	24x24 In.	10,890	36x36 In.	4,840	60x60 In.	1,743
12x 3 In.	174,240	30x 1 In.	209,088	42x12 In.	12,446	8x 1 Ft.	5,445
12x12 In.	43,560	30x 6 In.	34,848	42x24 In.	6,223	8x 3 Ft.	1,815
16x 1 In.	392,040	30x12 In.	17,424	42x36 In.	4,148	8x 8 Ft.	680
18x 1 In.	348,480	30x16 In.	13,068	48x12 In.	10,890	10x 1 Ft.	4,356
18x 3 In.	116,160	30x20 In.	10,454	48x18 In.	7,790	10x 6 Ft.	728
18x12 In.	29,040	30x24 In.	8,712	48x24 In.	5,445	10x10 Ft.	435
18x18 In.	19,360	30x30 In.	6,970	48x30 In.	4,356	12x 1 Ft.	3,630
20x 1 In.	313,635	36x 3 In.	58,080	48x36 In.	3,630	12x 5 Ft.	756
20x20 In.	15,681	36x12 In.	14,520	48x48 In.	2,723	12x12 Ft.	302
24x 1 In.	261,360	36x18 In.	9,680	60x36 In.	2,901	16x 1 Ft.	2,722
24x18 In.	15,520	36x24 In.	7,260	60x48 In.	2,178	16x16 Ft.	170

Quantity of seed requisite to produce a given number of plants and sow an acre

Dis. apart.	No. plants.	Dis. apart.	No. plants.
Artichoke, 1 oz. to 500 plants.	6 oz.	Grass, Orchard, Perennial Rye, and Wood Meadow.	2 bu.
Asparagus, 1 oz. to 800 plants.	6 oz.	Hemp	1/2 bu.
Asparagus Roots.	1000 to 7250	Horse Radish Roots.	10,000 to 15,000
Barley	2 1/2 bu.	Kale, 1 oz. to 5,000 plants, or 200 feet of drill.	1/2 bu.
Beans, dwarf, 1 pint to 100 ft. of drill	1 bu.	Kohl Rabi, 1/4 oz. to 100 feet of drill.	4 lbs.
Beans, pole, 1 pint to 100 hills.	1/2 bu.	Leek, 1/4 oz. to 100 feet of drill.	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill	7 lbs.	Lettuce, 1/4 oz. to 100 ft. of drill.	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill	5 lbs.	Martynia, 1 oz. to 100 feet of drill.	5 lbs.
Broccoli, 1 oz. to 5,000 plants.	2 oz.	Melon, Musk, 1 oz. to 100 hills.	1 to 3 lbs.
Brussels Sprouts, 1 oz. to 5,000 plants	2 oz.	Melon, Water, 4 oz. to 100 hills.	1 1/2 to 4 lbs.
Buckwheat	1/2 bu.	Nasturtium, 2 oz. to 100 feet of drill.	15 lbs.
Cabbage, 1 oz. to 5,000 plants.	2 1/2 lbs.	Okra, 1 oz. to 100 feet of drill.	8 lbs.
Carrot, 1/4 oz. to 100 feet of drill.	2 1/2 lbs.	Onion Seed, 1/4 oz. to 100 ft. of drill.	4 to 5 lbs.
Cauliflower, 1 oz. to 5,000 plants.	2 1/2 lbs.	Onion Seed, for Sets.	40 to 80 lbs.
Celery, 1 oz. to 15,000 plants.	4 lbs.	Onion Sets, 1 quart to 40 feet of drill.	8 bu.
Chicory	4 lbs.	Parsnip, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alsike and White Dutch.	6 lbs.	Parsley, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alfalfa, or Lucerne.	15 to 25 lbs.	Peas, garden, 1 pint to 100 ft. of drill.	1 to 3 bu.
Clover, Crimson Trefoil.	10 to 15 lbs.	Peas, field.	2 bu.
Clover, Mammoth and Medium	8 to 12 lbs.	Pepper, 1 oz. to 1,500 plants.	2 bu.
Collards, 1 oz. to 5,000 plants.	4 lbs.	Pumpkin, 1/4 quart to 100 hills.	3 to 4 lbs.
Corn, rice (shelled).	2 qts.	Radish, 3/8 oz. to 100 ft. of drill.	10 to 12 lbs.
Corn, sweet, 1/4 pint to 100 hills.	6 qts.	Ruta Baga.	2 to 4 lbs.
Cowpea, in drills.	1 bu.	Rye	1 1/2 bu.
Cress, 3/4 oz. to 100 feet of drill.	12 lbs.	Sage in drills.	4 to 5 lbs.
Cucumber, 1 oz. to 100 hills.	1 to 3 lbs.	Salsify, 3/4 oz. to 100 feet of drill.	8 lbs.
Dill, 1/4 oz. to 100 feet of drill.	5 lbs.	Spinach, 1/2 oz. to 100 feet of drill.	8 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.	Summer Savory.	3/4 lbs.
Endive, 1/4 oz. to 100 feet of drill.	4 1/2 lbs.	Sunflower	8 lbs.
Flax broadcast.	1/2 bu.	Squash, Summer, 4 oz. to 100 hills.	2 lbs.
Garlic, bulbs, 1 lb. 100 feet of drill	2 bu.	Squash, Winter, 8 oz. to 100 hills.	2 lbs.
Gourd, 2 oz. to 100 hills.	1 bu.	Tomato, 1 oz. to 4,500 plants.	2 lbs.
Grass, Blue, Kentucky.	2 bu.	Tobacco, 1 oz. to 5,000 plants.	2 lbs.
Grass, Blue, English.	1 bu.	Turnip, 1 oz. to 250 feet of drill.	1 to 3 lbs.
Grass, Hungarian and Millett.	1/2 bu.	Vetches, Spring.	90 to 120 lbs.
Grass, Meadow Fescue.	1 bu.	Vetches, Winter.	30 to 60 lbs.
Grass, Mixed Lawn.	3 to 5 bu.		
Grass, Red Top Fancy.	8 to 10 lbs.		
Grass, Red Top Unhulled.	20 to 28 lbs.		
Grass, Timothy.	1/4 bu.		

Quantity per acre.

Dis. apart.	No. plants.	Dis. apart.	No. plants.
Artichoke, 1 oz. to 500 plants.	6 oz.	Grass, Orchard, Perennial Rye, and Wood Meadow.	2 bu.
Asparagus, 1 oz. to 800 plants.	6 oz.	Hemp	1/2 bu.
Asparagus Roots.	1000 to 7250	Horse Radish Roots.	10,000 to 15,000
Barley	2 1/2 bu.	Kale, 1 oz. to 5,000 plants, or 200 feet of drill.	1/2 bu.
Beans, dwarf, 1 pint to 100 ft. of drill	1 bu.	Kohl Rabi, 1/4 oz. to 100 feet of drill.	4 lbs.
Beans, pole, 1 pint to 100 hills.	1/2 bu.	Leek, 1/4 oz. to 100 feet of drill.	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill	7 lbs.	Lettuce, 1/4 oz. to 100 ft. of drill.	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill	5 lbs.	Martynia, 1 oz. to 100 feet of drill.	5 lbs.
Broccoli, 1 oz. to 5,000 plants.	2 oz.	Melon, Musk, 1 oz. to 100 hills.	1 to 3 lbs.
Brussels Sprouts, 1 oz. to 5,000 plants	2 oz.	Melon, Water, 4 oz. to 100 hills.	1 1/2 to 4 lbs.
Buckwheat	1/2 bu.	Nasturtium, 2 oz. to 100 feet of drill.	15 lbs.
Cabbage, 1 oz. to 5,000 plants.	2 1/2 lbs.	Okra, 1 oz. to 100 feet of drill.	8 lbs.
Carrot, 1/4 oz. to 100 feet of drill.	2 1/2 lbs.	Onion Seed, 1/4 oz. to 100 ft. of drill.	4 to 5 lbs.
Cauliflower, 1 oz. to 5,000 plants.	2 1/2 lbs.	Onion Seed, for Sets.	40 to 80 lbs.
Celery, 1 oz. to 15,000 plants.	4 lbs.	Onion Sets, 1 quart to 40 feet of drill.	8 bu.
Chicory	4 lbs.	Parsnip, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alsike and White Dutch.	6 lbs.	Parsley, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alfalfa, or Lucerne.	15 to 25 lbs.	Peas, garden, 1 pint to 100 ft. of drill.	1 to 3 bu.
Clover, Crimson Trefoil.	10 to 15 lbs.	Peas, field.	2 bu.
Clover, Mammoth and Medium	8 to 12 lbs.	Pepper, 1 oz. to 1,500 plants.	2 bu.
Collards, 1 oz. to 5,000 plants.	4 lbs.	Pumpkin, 1/4 quart to 100 hills.	3 to 4 lbs.
Corn, rice (shelled).	2 qts.	Radish, 3/8 oz. to 100 ft. of drill.	10 to 12 lbs.
Corn, sweet, 1/4 pint to 100 hills.	6 qts.	Ruta Baga.	2 to 4 lbs.
Cowpea, in drills.	1 bu.	Rye	1 1/2 bu.
Cress, 3/4 oz. to 100 feet of drill.	12 lbs.	Sage in drills.	4 to 5 lbs.
Cucumber, 1 oz. to 100 hills.	1 to 3 lbs.	Salsify, 3/4 oz. to 100 feet of drill.	8 lbs.
Dill, 1/4 oz. to 100 feet of drill.	5 lbs.	Spinach, 1/2 oz. to 100 feet of drill.	8 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.	Summer Savory.	3/4 lbs.
Endive, 1/4 oz. to 100 feet of drill.	4 1/2 lbs.	Sunflower	8 lbs.
Flax broadcast.	1/2 bu.	Squash, Summer, 4 oz. to 100 hills.	2 lbs.
Garlic, bulbs, 1 lb. 100 feet of drill	2 bu.	Squash, Winter, 8 oz. to 100 hills.	2 lbs.
Gourd, 2 oz. to 100 hills.	1 bu.	Tomato, 1 oz. to 4,500 plants.	2 lbs.
Grass, Blue, Kentucky.	2 bu.	Tobacco, 1 oz. to 5,000 plants.	2 lbs.
Grass, Blue, English.	1 bu.	Turnip, 1 oz. to 250 feet of drill.	1 to 3 lbs.
Grass, Hungarian and Millett.	1/2 bu.	Vetches, Spring.	90 to 120 lbs.
Grass, Meadow Fescue.	1 bu.	Vetches, Winter.	30 to 60 lbs.
Grass, Mixed Lawn.	3 to 5 bu.		
Grass, Red Top Fancy.	8 to 10 lbs.		
Grass, Red Top Unhulled.	20 to 28 lbs.		
Grass, Timothy.	1/4 bu.		

Standard weights of various articles

Dis. apart.	No. plants.	Dis. apart.	No. plants.
Artichoke, 1 oz. to 500 plants.	6 oz.	Grass, Orchard, Perennial Rye, and Wood Meadow.	2 bu.
Asparagus, 1 oz. to 800 plants.	6 oz.	Hemp	1/2 bu.
Asparagus Roots.	1000 to 7250	Horse Radish Roots.	10,000 to 15,000
Barley	2 1/2 bu.	Kale, 1 oz. to 5,000 plants, or 200 feet of drill.	1/2 bu.
Beans, dwarf, 1 pint to 100 ft. of drill	1 bu.	Kohl Rabi, 1/4 oz. to 100 feet of drill.	4 lbs.
Beans, pole, 1 pint to 100 hills.	1/2 bu.	Leek, 1/4 oz. to 100 feet of drill.	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill	7 lbs.	Lettuce, 1/4 oz. to 100 ft. of drill.	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill	5 lbs.	Martynia, 1 oz. to 100 feet of drill.	5 lbs.
Broccoli, 1 oz. to 5,000 plants.	2 oz.	Melon, Musk, 1 oz. to 100 hills.	1 to 3 lbs.
Brussels Sprouts, 1 oz. to 5,000 plants	2 oz.	Melon, Water, 4 oz. to 100 hills.	1 1/2 to 4 lbs.
Buckwheat	1/2 bu.	Nasturtium, 2 oz. to 100 feet of drill.	15 lbs.
Cabbage, 1 oz. to 5,000 plants.	2 1/2 lbs.	Okra, 1 oz. to 100 feet of drill.	8 lbs.
Carrot, 1/4 oz. to 100 feet of drill.	2 1/2 lbs.	Onion Seed, 1/4 oz. to 100 ft. of drill.	4 to 5 lbs.
Cauliflower, 1 oz. to 5,000 plants.	2 1/2 lbs.	Onion Seed, for Sets.	40 to 80 lbs.
Celery, 1 oz. to 15,000 plants.	4 lbs.	Onion Sets, 1 quart to 40 feet of drill.	8 bu.
Chicory	4 lbs.	Parsnip, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alsike and White Dutch.	6 lbs.	Parsley, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alfalfa, or Lucerne.	15 to 25 lbs.	Peas, garden, 1 pint to 100 ft. of drill.	1 to 3 bu.
Clover, Crimson Trefoil.	10 to 15 lbs.	Peas, field.	2 bu.
Clover, Mammoth and Medium	8 to 12 lbs.	Pepper, 1 oz. to 1,500 plants.	2 bu.
Collards, 1 oz. to 5,000 plants.	4 lbs.	Pumpkin, 1/4 quart to 100 hills.	3 to 4 lbs.
Corn, rice (shelled).	2 qts.	Radish, 3/8 oz. to 100 ft. of drill.	10 to 12 lbs.
Corn, sweet, 1/4 pint to 100 hills.	6 qts.	Ruta Baga.	2 to 4 lbs.
Cowpea, in drills.	1 bu.	Rye	1 1/2 bu.
Cress, 3/4 oz. to 100 feet of drill.	12 lbs.	Sage in drills.	4 to 5 lbs.
Cucumber, 1 oz. to 100 hills.	1 to 3 lbs.	Salsify, 3/4 oz. to 100 feet of drill.	8 lbs.
Dill, 1/4 oz. to 100 feet of drill.	5 lbs.	Spinach, 1/2 oz. to 100 feet of drill.	8 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.	Summer Savory.	3/4 lbs.
Endive, 1/4 oz. to 100 feet of drill.	4 1/2 lbs.	Sunflower	8 lbs.
Flax broadcast.	1/2 bu.	Squash, Summer, 4 oz. to 100 hills.	2 lbs.
Garlic, bulbs, 1 lb. 100 feet of drill	2 bu.	Squash, Winter, 8 oz. to 100 hills.	2 lbs.
Gourd, 2 oz. to 100 hills.	1 bu.	Tomato, 1 oz. to 4,500 plants.	2 lbs.
Grass, Blue, Kentucky.	2 bu.	Tobacco, 1 oz. to 5,000 plants.	2 lbs.
Grass, Blue, English.	1 bu.	Turnip, 1 oz. to 250 feet of drill.	1 to 3 lbs.
Grass, Hungarian and Millett.	1/2 bu.	Vetches, Spring.	90 to 120 lbs.
Grass, Meadow Fescue.	1 bu.	Vetches, Winter.	30 to 60 lbs.
Grass, Mixed Lawn.	3 to 5 bu.		
Grass, Red Top Fancy.	8 to 10 lbs.		
Grass, Red Top Unhulled.	20 to 28 lbs.		
Grass, Timothy.	1/4 bu.		

Per bu.

Dis. apart.	No. plants.	Dis. apart.	No. plants.
Artichoke, 1 oz. to 500 plants.	6 oz.	Grass, Orchard, Perennial Rye, and Wood Meadow.	2 bu.
Asparagus, 1 oz. to 800 plants.	6 oz.	Hemp	1/2 bu.
Asparagus Roots.	1000 to 7250	Horse Radish Roots.	10,000 to 15,000
Barley	2 1/2 bu.	Kale, 1 oz. to 5,000 plants, or 200 feet of drill.	1/2 bu.
Beans, dwarf, 1 pint to 100 ft. of drill	1 bu.	Kohl Rabi, 1/4 oz. to 100 feet of drill.	4 lbs.
Beans, pole, 1 pint to 100 hills.	1/2 bu.	Leek, 1/4 oz. to 100 feet of drill.	4 lbs.
Beet, garden, 1 oz. to 100 feet of drill	7 lbs.	Lettuce, 1/4 oz. to 100 ft. of drill.	3 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill	5 lbs.	Martynia, 1 oz. to 100 feet of drill.	5 lbs.
Broccoli, 1 oz. to 5,000 plants.	2 oz.	Melon, Musk, 1 oz. to 100 hills.	1 to 3 lbs.
Brussels Sprouts, 1 oz. to 5,000 plants	2 oz.	Melon, Water, 4 oz. to 100 hills.	1 1/2 to 4 lbs.
Buckwheat	1/2 bu.	Nasturtium, 2 oz. to 100 feet of drill.	15 lbs.
Cabbage, 1 oz. to 5,000 plants.	2 1/2 lbs.	Okra, 1 oz. to 100 feet of drill.	8 lbs.
Carrot, 1/4 oz. to 100 feet of drill.	2 1/2 lbs.	Onion Seed, 1/4 oz. to 100 ft. of drill.	4 to 5 lbs.
Cauliflower, 1 oz. to 5,000 plants.	2 1/2 lbs.	Onion Seed, for Sets.	40 to 80 lbs.
Celery, 1 oz. to 15,000 plants.	4 lbs.	Onion Sets, 1 quart to 40 feet of drill.	8 bu.
Chicory	4 lbs.	Parsnip, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alsike and White Dutch.	6 lbs.	Parsley, 1/4 oz. to 100 feet of drill.	3 lbs.
Clover, Alfalfa, or Lucerne.	15 to 25 lbs.	Peas, garden, 1 pint to 100 ft. of drill.	1 to 3 bu.
Clover, Crimson Trefoil.	10 to 15 lbs.	Peas, field.	2 bu.
Clover, Mammoth and Medium	8 to 12 lbs.	Pepper, 1 oz. to 1,500 plants.	2 bu.
Collards, 1 oz. to 5,000 plants.	4 lbs.	Pumpkin, 1/4 quart to 100 hills.	3 to 4 lbs.
Corn, rice (shelled).	2 qts.	Radish, 3/8 oz. to 100 ft. of drill.	10 to 12 lbs.
Corn, sweet, 1/4 pint to 100 hills.	6 qts.	Ruta Baga.	2 to 4 lbs.
Cowpea, in drills.	1 bu.	Rye	1 1/2 bu.
Cress, 3/4 oz. to 100 feet of drill.	12 lbs.	Sage in drills.	4 to 5 lbs.
Cucumber, 1 oz. to 100 hills.	1 to 3 lbs.	Salsify, 3/4 oz. to 100 feet of drill.	8 lbs.
Dill, 1/4 oz. to 100 feet of drill.	5 lbs.	Spinach, 1/2 oz. to 100 feet of drill.	8 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.	Summer Savory.	3/4 lbs.
Endive, 1/4 oz. to 100 feet of drill.	4 1/2 lbs.	Sunflower	8 lbs.
Flax broadcast.	1/2 bu.	Squash, Summer, 4 oz. to 100 hills.	2 lbs.
Garlic, bulbs, 1 lb. 100 feet of drill	2 bu.	Squash, Winter, 8 oz. to 100 hills.	2 lbs.
Gourd, 2 oz. to 100 hills.	1 bu.	Tomato, 1 oz. to 4,500 plants.	2 lbs.
Grass, Blue, Kentucky.	2 bu.	Tobacco, 1 oz. to 5,000 plants.	2 lbs.
Grass, Blue, English.	1 bu.	Turnip, 1 oz. to 250 feet of drill.	1 to 3 lbs.
Grass, Hungarian and Millett.	1/2 bu.	Vetches, Spring.	90 to 120 lbs.
Grass, Meadow Fescue.	1 bu.	Vetches, Winter.	30 to 60 lbs.
Grass, Mixed Lawn.	3 to 5 bu.		
Grass, Red Top Fancy.	8 to 10 lbs.		
Grass, Red Top Unhulled.	20 to 28 lbs.		
Grass, Timothy.	1/4 bu.		

FOREIGN NAMES OF VEGETABLES AND HERBS

English	German	French	Spanish	Italian	Danish-Norwegian	Polish
Anise.....	Anis, Grüner Anis.	Anis.....	Anis, Matalahuga.	Aniso, Anacio.....	Anis.....	Anyz.....
Artichoke.....	Artischoke.....	Artichaut.....	Alcachofa.....	Articiocca.....	Artiskok.....	Karczochy.....
Asparagus.....	Spargel.....	Asperge.....	Esparago.....	Sparagio.....	Asparges.....	Szparagi.....
Balm.....	Citronen-Melisse.....	Melisse citronelle.....	Toronjil, Citronell.....	Melissa.....	Balsamurt.....	Balsam.....
Basil.....	Basilikum.....	Basilic grand.....	Albaca.....	Basilico.....	Basilikum.....	Bazylija.....
Beans.....	Bohnen.....	Haricots.....	Habichuela.....	Fagioli.....	Boenner.....	Fasola.....
Beet.....	Rübe.....	Betterave.....	Remolacha.....	Barbabietola.....	Roedbede.....	Buraki.....
Borage.....	Boretsch.....	Bourrache.....	Borraja.....	Boragine.....	Borago.....	Boraz.....
Broccoli.....	Spargelkohl.....	Chou Brocoli.....	Broculi.....	Brocoli.....	Broccoli-Kaal.....	Brokuly.....
Brussels Sprouts.....	Rosenkohl.....	Chou de Bruxelles.....	Bretones de Bruse.....	Cavolo di Brusselles.....	Rosenkaal.....	Latorvil.....
Cabbage.....	Kopfkohl, Kraut.....	Chou pommé.....	Col repello.....	Cavolo cappuccio.....	Hovendkaal.....	Kapusta.....
Cabbage, Savoy.....	Wirsing.....	Chou de Milan.....	Col de Milan.....	Cavolo di Milano.....	Savoikall.....	Sabaudzka.....
Caraway.....	Feld-Kümmel.....	Cumin des pré.....	Comino.....	Carvi.....	Karve.....	Kminek.....
Carrot.....	Carotten, Möhren.....	Carotte.....	Zanahoria.....	Carota.....	Gulerod.....	Marchew.....
Cauliflower.....	Blumenkohl.....	Chou-fleur.....	Coliflor.....	Cavolfiore.....	Blomkaal.....	Kalafiori.....
Celery.....	Sellerie.....	Céleri.....	Apio.....	Sedano.....	Selleri.....	Selery.....
Celeriac.....	Knoll-Sellerie.....	Céleri-rave.....	Apio-nabo.....	Sedano-rapa.....	Knopselleri.....	Selery.....
Chervil.....	Kerbel.....	Cerfeuil.....	Perifollo.....	Cerfoglio.....	Kjoersvel.....	(Korzen).
Chicory.....	Cichorienwurzel.....	Chicorée.....	Achicoria.....	Cicoria selvatica.....	Cichorie.....	Czykorya.....
Coriander.....	Coriander.....	Coriandre.....	Culantro.....	Coriandorlo.....	Koriander.....	Koledra.....
Corn Salad.....	Feldsalat.....	Mâche.....	Canonigos.....	Valeriana.....	Vaarsalat.....	Ziarno Salaty.....
Corn.....	Mais.....	Mais.....	Maiz.....	Mais.....	Mais.....	Kukurydza.....
Cress.....	Garten-Kresse.....	Cresson alenois.....	Maiz.....	Agretto.....	Karse.....	Rzerzucha.....
Cress, Water.....	Bdunnenkresse.....	Cresson de fontain.....	Berro.....	Nasturtio aquatico.....	Broendkarse.....	Rzerzucha.....
Cucumber.....	Gurken.....	Concombre.....	Cohombro.....	Cetriolo.....	Agurk.....	Ogorek.....
Dandelion.....	Löwenzahn.....	Pissenlit.....	Diente de leon.....	Diente de leone.....	Loetvand.....	Papawa.....
Dill.....	Dill.....	Aneth.....	Eneldo.....	Aneto.....	Dil.....	Koper.....
Egg Plant.....	Eierpflanze.....	Aubergine.....	Berengena.....	Petronciano.....	Aegplante.....	Gruszka.....
Endive, Curled.....	Endivien.....	Chicorée Endive.....	Endivia.....	Endivia.....	Endivie.....	milosna.....
Endive.....		Chicorée-Scarole.....				Endywia.....
Broad Leaf.....	Escariol.....	Ronde.....	Escarolo.....	Endivia Scariola.....		
Fennel.....	Fenchel.....	Fenouil.....	Hinojo.....	Finocchio.....	Fennikel.....	Koper.....
Garlic.....	Knoblauch.....	Ail.....	Ajo.....	Aglio.....	Hvidloeg.....	Czosnek.....
Horseround.....	Andorn.....	Marrube.....	Marrubio.....	Marrubio.....		Marrubium.....

FOREIGN NAMES OF VEGETABLES AND HERBS—Continued

English	German	French	Spanish	Italian	Danish-Norwegian	Polish
Horse Radish	Meer Rettig	Raifort sauvage	Taramago	Rafano	Peberrod	Chrzan
Hyssop	Isop	Hyssope	Hisopo	Issopo	Isop	Hyzop
Kale	Blätterkohl	Chou vert	Breton, Berza	Cavolo verde	Groenkaa	Solanka
Kohl Rabi	Knollkohl	Chou-rave	Col rabano	Cavolo rapa	Kaalrabi	Kalarepa
Lavender	Lavendel	Lavende	Espliego	Lavanda	Lavendel	Lawenda
Leek	Porree, Lauch	Poireau	Puerro	Porro	Purre	Pory
Lettuce	Lattich, Kopfsalat	Laitue	Lechuga	Lattuga	Salat	Salata
Marjoram	Marjoran	Marjolaine	Mejorana	Maggiorana	Merian	Majeranek
Melon	Melone	Melon	Melon	Popone	Melon	Melon
Melon, Water	Wasser-Melone	Melon d'eau	Sandia	Melone d'acqua	Vandmelon	Melon, wodny
Mushroom	Schwamm	Champignon	Seta	Fungo pratajolo	Champignon	Gryzb
Nasturtium	Kapuciner Kresse	Capucine	Capuchina	Nasturzio	Blomkarse	Nasturcya
Okra	Ocher	Gombaud	Gombo	Ocra	Hibiskus	Glinka
Onion	Zwiebel	Ognon	Cebolla	Cipollo	Roedloeg	Cebula
Parsley	Petersilie	Persil	Perejil	Prezzemolo	Persille	Pietruszka
Parsnip	Pastinake	Panais	Chirivia	Pastinaca	Pastinak	Pasternak
Peas	Erbsen	Pois	Guisante	Pisello	Erter	Groch
Pepper	Pfeffer	Piment	Pimiento	Peperone	Spansk Peber	Pieprz
Pumpkin	Melonen-Kürbiss	Potiron	Calabaza totanera	Zucca	Graeskar	Bania
Radish	Radies	Radis	Rabanito	Ravanello	Reddik	Rzodkiew
Rhubarb	Rhabarber	Rhubarbe	Ruibarbo	Rabarbaro	Rhabarber	Rubarbarum
Rosemary	Rosmarin	Romarin	Romero	Rosmarino	Rosmarin	Rozmaryn
Rue	Raute	Rue	Ruda		Rude	Ruta
Ruta Baga	Kohlrübe, Wrucken	Chou-navet	Col nabo, Nabicol	Cavolo navone	Roe	
Saffron	Safran	Safran	Azafran	Zafferano	Safran	Szafran
Sage	Salbei	Sauge	Salvia	Salvia	Salvie	Szalwija
Salsify	Haferwurz	Salsifis	Salsifi blanco	Sassefrica	Havrerod	Jarzynvwa
Sorrel	Sauerampfer	Oseille	Acedera	Acetosa	Syre	ostryga
Summer Savory	Bohnenkraut	Sarriette annuelle	Ajedrea comun	Santoreggia	Sar	Szczaw
Spinach	Spinat	Epinard	Espinaca	Spinace	Spinat	Caber
Squash	Kürbiss	Courge	Calabaza	Zucca	Squash-graeskar	ogrodowy
Swiss Chard	Beiskohl	Poirée	Bleda	Bieta	Blad bede	Szpinak
Thyme	Thymian	Thym	Tomillo	Timo	Timian	Miekurz
Tomato	Liebesapfel	Pomme d'Amour	Tomate	Pomo d'oro	Pomod	Macierzanka
Turnip	Weisse-Rübe	Navet	Nabo	Navone	Turnips	Pomidor
Wormwood	Wermuth	Absinthe	Ajenjo	Assenzio	Malurt	Rzepa, brukiew
						Piotun

Sorghum Grains for Stock Feeding

Horses, mules, cattle sheep hogs and poultry have been fed the grains of non-saccharine sorghums with very satisfactory results. Breeding animals or those which are working or being fattened for the block eat properly prepared sorghums with much relish. However as the grains are small and rather hard grinding or crushing is recommended before feeding except for sheep and poultry. Sheep masticate the small kernels well thus rendering them readily accessible to the digestive juices while poultry feed upon the unbroken grain which is especially palatable to them in this form. If the grain is not ground for other stock it is less palatable and much of it passes through the digestive tract unbroken; thus much of the total feeding value is lost.

Very often the entire heads are ground up producing a feed of greater bulk. The resulting meal called head chop, resembles corn-and-cob meal in food value. It is recommended especially where the supply of roughage is limited, and usually is economical for feeding stock not being finished for market. Head chop is valuable in producing a high finish when supplemented by a rich concentrate, such as cottonseed meal.

The quantities to be fed to the different kinds of animals depend upon many factors, such as the amount and kind of roughage and of other concentrates available, the age, type and size of the animals, and for what purpose the stock is being fed. Rations for various classes of stock are hereinafter suggested.

The feeder always should remember that sorghum grains alone do not form a balanced ration, and the same care which is exercised in feeding corn should be applied when feeding

grains of the sorghums. This applies with particular emphasis to the rations for young and growing stock. Some feed which is rich in protein must also be given if favorable results are to follow heavy feeding of this class of grains.

Millet as a Catch Crop

Millets are adapted to the same conditions as is sorghum. They do not require as long a growing season as does sorghum, but they also yield less. They are used chiefly as catch crops when the time is too short for other crops to mature. They are especially suitable for seeding where corn failed to make a stand or was destroyed by hail or flood. Seeding may be done between May 15 and July 15. The most commonly grown and probably best suited varieties of millet are the Common, German, Hungarian and Siberian.

Millet hay is an unsatisfactory feed for horses because of its injurious effect upon their kidneys. The degree of this injuriousness seems to be somewhat proportional to the degree of maturity. No injurious effects follow, however, when fed to cattle and sheep. It should be cut before the seed is formed when intended for horses, but may be left until the seeds are in the milk stage for cattle and sheep.

Being coarser, millet requires somewhat more time for curing than does timothy.

Sweet Clover for Pasture

Sweet clover should be primarily grown for green manure. It is, however, quite desirable for pasture because it makes an early growth in the spring, remains late in the fall, and does not die out, as many of our pas-

ture crops do, during the hot dry part of the summer. It is drought resistant and has the ability to produce a good quality of feed during the season of little rainfall.

It is a very nutritious feed and the few pasture experiments which have been conducted show clearly that it ranks well among pasture crops. Hogs, sheep, and cattle seem to be exceptionally fond of sweet clover pasture. The chief objection to it as a pasture crop is that the plants grow very coarse unless they are kept down. This is especially true the second season. Sweet clover should not be pastured too closely the first season, for if this is done the crop is likely to suffer from winter killing.

Sudan Grass is Good Feed

Sudan grass, which is yet new in the corn belt, is excellent food for live stock. It belongs to the sorghum family and compares favorably with the best kinds of silage crops. It may be broadcast, or drilled and it makes little difference in the yield of hay whether 10 pounds or 30 pounds of seed are sown to the acre, as it is a great stooler.

It can be sown as late as the latter part of July, and the early seeding sometimes makes two cuttings. It should be cut as soon as the bloom begins to drop and handled the same as sorghum. If the weather is hot and dry it can be cured into hay and stored.

In securing sudan seed care must be taken to make sure not to get Johnson grass instead. Johnson grass is a great pest in certain sections and its seed so closely resembles that of Sudan grass that the average person can not tell the difference.

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