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##  <br> Flower Seeds and Bulbs for Florists

## A'I REASONABIEE PIRICES.

In presenting our Annual Catalogue and Price List, we feel it our duty to thank our many friends and customers for their liberal patronage bestowed upon us for so many years. We would also respectfully suggest that you gire the reading matter in this Catalogue your careful attention; it is interesting to the Farmer, Gardener, Florist and Amateur. We do not boast of being the largest or the oldest Seed-house in America, or as some claim, in the world. If you have been dealing with us, you know us: if not, give us a trial order and we will have you for a customer. It will be to your advantage to send your orders early, as many articles are short.

Very respectfuliy, JOS. F. DICKMANN SEED COMPANY.
 Eprache, Dem hice wivi muth Icutid) geintocken.

Reliable Vegetable Seeds for Market Gardeners.


Interior View of Salesroom, 1110 North Third Street.

## DESCRIPTIVE PRICE LIST

...OF...

## Vegetable, field and flower SEEDS

## With Directions for Cultivation.

(1)UR PRICES INCLUDE POSTAGE on all Vegetable and Flower Seeds by the packet, ounce or pound, except Peas, Beans and Corn, when 15 cents per quart and 10 cents per pint must be added to Catalogue prices for postage. Order Early.-It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received; but during the busy season it is nearly impossible-hence the advisability of ordering early.

## The Most Liberal Premiums Ever Offered By Any Seedsmen.

50 CENTS' worth of seeds extra will be allowed on each ONE DOLLAR sent us for seeds in PACKETS. Thus, any one sending us $\$ 1.00$ can select seeds in packets amounting to $\$ 1.50$; for $\$ 2.00$, seeds in packets amounting to $\$ 3.00$; for $\$ 3.00$, seeds in packets amounting to $\$ 4.50$; for $\$ 4.00$, seeds in packets amounting to $\$ 6.00$, and so on.

25 CENTS' worth of seeds extra will also be allowed on each ONE DOLLAR sent us for seeds in OUNCES. Thus, any one sending us $\$ 1.00$ can select seeds in ounces to the value of $\$ 1.25$; for $\$ 2.00$, to the value of $\$ 2.50$; for $\$ 3.00$, to the value of $\$ 3.75$; for $\$ 4.00$, seeds in ounces to the value of $\$ 5.00$, and so on.

## Vegetable Seeds that May Be Sown in Each Month, from January to October.

JANUARY-Sow in Hot=Bed_Early Beet, Early Cabbage, Forcing Carrot, Cauliflower, Early Lettuce, Italian Onion, Radish.

FEBRUARY-Sow in Hot=Bed—Early Beet, Broccoli, Early Cabbage, Forcing Carrot, Celery, Cucumber, Egg Plant, Early Lettuce, Parsley, Pepper, Italian Onion, Radish, Tomato.

MARCH-Sow in Hot=Bed-Early Beet, Early Cabbage, Forcing Carrot, Cauliflower, Celery, Cucumber, Egg Plant, Kohlrabi, Lettuce, Melon, Parsley, Peas, Pepper, Italian Onion, Radish, Spinach, Tomato, Herbs.

Sow in Open Ground-Beans, Beet, Cabbage, C'auliflower, Celery, Carrot, Cress, Leek, Lettuce, Onion, Parsnip, Peas, Potato, Radish, Spinach, Early Turnip.
APRIL-Sow in Hot-Bed-Cucumber, Egg Plant, Melon, Pepper, Tomato.
Sow in Open Ground-Asparagus, Beans, Beet, Cabbage, Carrot, Cauliflower, Celery, Sweet Corn, Cucumber, Cress, Endive, Kale, Kohlrabi, Leek, Lettuce, Melon, Onion, Parsley, Parsnip, Peas, Potato, Radish, Rhubarb, Salsify, Spinach, Tomato, Early Turnip, Sage, Herbs.

# Vegetable Seeds that May Be Sown in Each Month from January to October- 

## Continued.


#### Abstract

MAY-Sow in Open Ground-Artichoke, Asparagus, English Beans, Pole Beans, Bush Beans, Beet, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Celery, Sweet Corn, Cress, Cucumber, Endive, Kale, Kohlrabi, Leek, Lettuce, Melon, Nasturtium, Onion, Parsley, Parsnip, Peas, Potato, Pumpkin, Radish, Rhubarb, Salsify, Spinach, Squash, Tomato, Turnip, Herbs.


JUNE-Sow in Open Ground-Bush Beans, Lima Beans, Pole Beans, Beet, Carrot, Cabbage, Sweet Corn, Cress, Cucumber, Endive, Kale, Kohlrabi, Lettuce, Melon, Okra, Peas, Potato, Pumpkin, Radish, Salsify, Spinach, Squash, Turnip, Rutabaga.

JULY-Sow in Open Ground-Bush Beans, Beet, Carrot, Sweet Corn, Corn Salad, Cress, Cucumber, Endive, Gherkin, Kale, Kohlrabi, Lettuce, Okra, Early Peas, Pumpkin, Radish, Spinach, Squash, Turnip, Rutabaga.
AUGUST-Sow in Open Ground-Bush Beans, Corn Salad, Cucumber, Endive, Lettuce, Early Peas, Radish, Spinach, Turnip.
SEPTEMBER_Sow in Open Ground-Cabbage for Cold Frames, Cauliflower for Cold Frames, Corn Salad, Cress, Kale, Lettuce, Mustard, Winter Radish, Spinach, Turnip.

OCTOBER—Sow in Open Ground-Corn Salad, Cress, Kale, Lettuce, Mustard, Spinach.

## Directions for Making a Hot=Bed.

In the vicinity of St. Louis, from the first to the middle of March is quite early enough to make a hot-bed and even a little later will do well enough. The time must vary according to the latitude. Provide a quantity of fresh horse manure from the stables, and add to this, if they can be had, one-third to one-half of its bulk of leares. Mix them thoroughly, tramping down the mass of successive layers, and form into a large pile, so that fermentation will proceed, even in severely cold weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now turn again and allow the heap to remain two or three days longer, or until the second fermentation commences. Nake an excavation, or pit, 2.2 feet deep, and of a size suited to the number of plants required. The pit will be better if built up of brick. It should be made in some dry, sheltered spot, facing the south or east, if possible. Hot-bed sashes are usually $6 \times 3$ feet, and one sash will generally give early plants enough for a large family. The frame for sashes should be 18 inches high at the back and 12 inches in front, which will give the proper slope to catch the sunlight. Cross-pieces should be placed for the sashes to slide on, to facilitate opening and shutting the frames. When everything is ready, the manure is placed in the pit and trodden down firmly in layers to the required depth, 2 to $2 \frac{1}{2}$ feet. Then put on the sashes, and keep the pit closed until the heat rises. At first it will probably be 100 or more, which is too hot to sow the seed in ; but in two or three days it will subside to 90 or a little less, when the soil will be put on to the depth of 6 to 8 inches. The heat may be readily ascertained by plunging a thermometer into the manure. The soil should be of well-rotted sod (or common garden soil will do), mixed with about a third of fine, old manure, and in this the seeds may be sown thinly in drills 2 to 3 inches apart, and afterwards (as soon as out of the seed-leaf) either thinned out or else transplanted to another frame. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary, and during cold nights and snow storms keep covered with straw mats or board shutters. Tomatoes, Peppers and Egg Plants should be sown in a separate frame from the Cabbage, Cauliflower and Lettuce, as they require more heat than the latter. The same directions may apply to hot-beds made on the surface of the ground, except that the manure should be at least a foot wider on all sides than the frame.

# BRIEF DIRECTIONS 

For the Sowing and Culture of

# GARDEN VEGETABLES 

For the Private Garden and for Exhibition.


#### Abstract

ASPARAGUS. German, Spargel. French, Asperge. Spanish, Esparragos. 1 ounce for 60 feet of drill.


Asparagus can be grown from seed, but the best way for the amateur to grow it is from roots, which can be planted any time for six to eight weeks from the opening of spring. Besides, a year or more can be saved by planting roots. For private use or for marketing on a small scale, beds should be formed five feet wide, with three rows planted in each, one in the middle and one on each side, a foot from the edge; the distance of the plants in the rows, 9 inches. The alleys between the beds should be two feet wide. In planting, a line is set and a cut made, a little slanting, to the depth of six or eight inches, according to the size of the plants. The plants are then laid against the side of the trench, at the distance already named (nine inches), care being taken to properly spread the roots. The crown or top of the plant should be covered about three inches. In a week or so after planting, the beds should be touched over lightly with a sharp steel rake, which will destroy the germinating weeds. The raking had better be continued at intervals of a week or so, until the plants start to grow, when the hoe or hand cultivator may be applied between the rows and alleys. The weeds that come up close to the plant must of necessity be pulled out by the hand. The deeper the soil and greater abundance of manure that is used, the greater will be the crop, for Asparagus is what the gardeners call a gross feeder. An application of one-half pound of salt per square yard annually, in spring, is very beneficial.

## BEANS, Dwarf or Bush.

German, Bohne. French, Haricot. Spanish, Frijorenano.
1 ભt. to 100 feet of drill; $11 / 2$ bushels to the acre in drills.
A succession of sowings can be made every two weeks from the second week in April until September. These dates are for the latitude of St. Louis. Further south the first sowing must be done earlier; further north, later. Plant in drills about two fnches deep, and from eighteen inches to two feet apart, according to the richness
of the soil. The poorer the soil, the closer they can be planted. The seeds should be dropped about two inches apart in the drills.

For Exhibition.-Thoroughly manured, stiff, well-worked soil is preferable, with a liberal surface application of commercial fertilizer, high in potash, well raked in. When the plants have taken good hold of the soil, sprinkle around each plant about a tablespoonful of nitrate of soda and rake in. When fairly in bloom, liquid manuret may be given; if pods are to be exhibited, thin out all but three or four to a stalk. When the pods begin to swell, pinch off the top of the plant, tie the plants to stakes to prevent the wind from loosening the roots and weakening the plant; the plants should stand a foot apart. For exhibition, they should be grown on sandy or gravelly soil and the plants at least two feet apart each way. Yosemite Mammoth Wax, Flageolet Wax, Long Yellow Six Weeks and Early Mohawk are the best varieties for exhibition.

## BEANS, Pole Lima, or Climbing.

German, Stangen Bohnen. French, Haricot a Rames. Spanish, Judias.
1 qt. to 150 hills; 10 to 16 qts. to the acre in hills.
These are more tender and require rather more care in culture than the Bush varieties, and should be sown two weeks later. They succeed best in sandy loam, which should be liberally enriched with well-rotted manure in the hills, which are formed, according to variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep. As the matured bean is mostly used, the season is too short for succession crops in the North, though it is advantageous to plant succession crops in the Southern States, where the season of growth is often from March to November. Rough Cedar or similar poles about seven or eight feet long should be used for Pole Beans, especially the Limas, to climb on. They should be set in the ground at least eighteen inches, so as to prevent being blown over.

For Exhibition.-The plants should be freely watered with liquid manure and only a few pods desired for show should remain on the plant.

## BEET.

German, Runkel Rube. French, Betterave. Spanish, Betteraga.
1 oz . to 50 feet of drill; 5 lbs . to the acre in drills.
The soil best suited for the culture of the Beet is that which is rather light than otherwise, always provided that it is thoroughly enriched with well-rotted manure. For an early supply, sow in spring, as soon as the ground is fit to work, in drills about one foot apart and two inches deep. For main crop, sow the first week in A pril, and for winter use, sow in June. These dates are for the latitude of St. Louis. For the South, sow earlier; for the North, later. When the plants have attained three or four leaves, thin out so that they may stand five or six inches apart. Keep free from weeds. In October the roots may be taken up and stored in cellars or pits outside.

For Exhibition.-Salt applied to the soil some time before sowing, and in small quantities during the growing season, will prove beneficial. Fresh manuring should be avoided, liquid manure should be given, but not close to the roots, as it would encourage side roots. The plants should stand not closer than ten inches apart, in rows one and a half feet apart. Mangels or Field Beets should stand two feet apart, in rows three feet apart. If the soil has any small stones or pebbles in it, they should be sifted out where the roots are to grow, so they will come out smooth and free from indentations. For the large, long varieties, the soil should be two to three feet in depth, and holes prepared as recommended for Carrots.

## BRUSSELS SPROUTS.

German, Kopfkohl Gruner. French, Chou de Bruxelles.
Sow outside in drills, in April or May and transplant two feet apart in July. Cultivate same as Cabbage; thus it may be had in fine condition from October until December, and in the Southern States may be had in use from November to March.

## CABBAGE.

German, Kopfkohl. French, Chou Pomme. Spanish, Repollo.
1 oz . will produce 1,500 plants; half pound to transplant ior an acre.
The early varieties of Cabbage are cultivated more extensively than any other vegetable. In latitudes where the thermometer never indicates twenty degrees below the freezing point, seed may be sown in the open border in October and planted out on the first opening of spring; but in our Northern States they must either be sown in hot-beds in February, or, what is still better, wintered over in cold frames; for this purpose the seed is sown from the 10th to the 20th of Septem-
ber. Attention to date is important; if too soon, the plants might run to seed, and if too late, they would be too small. In four or fire weeks from the time of sowing, they will be fit to transplant into the cold frames. In planting, it is very important with Cabbage or Cauliflower that the plant is set down to the first leaf, so that the stem is all under ground, for, if exposed, it will be split by the action of the frost, and will be injured in consequence. The plants are usually set out from the middle of March to the middle of April, in rows about two feet apart, and eighteen inches between the plants in rows. This earliest crop matures in June. For second early, the early kinds should be sown first week in April and planted out in May. This crop should mature in July and August. The late varieties are usually sown in the early part of May, and the plants are set in July, at distances of three feet between the rows and two feet between the plants. This crop matures September, October or November.

For Exhibition.-Grow Henderson's Early Spring, Henderson's Succession and Dickmann Seed Co.'s Giant Summer. Sprinkle around the plants, every few weeks, some of our Garden Fertilizer and water frequently with liquid manure. If Cabbage or other plants of this nature have been grown on the ground before, it is well to give a liberal dressing of lime to guard against club root.

## CAULIFLOWER.

German, Blumen-Kohl. French, Choufleur. Spanish, Coliflor.
1 oz . Will produce about 1,000 plants.
Any soil that will grow Cabbage will grow Cauliflower, as their requirements are almost similar; but as the product is more valuable, extra manuring and preparation of the soil will be well repaid.

The seed may be sown in September and wintered over in the same manner as described for early Cabbage. Where this is not practicable, it may be had nearly as well by sowing the seeds in the hot-bed in January or February, and transplanting the plants at two or three inches apart in boxes or in the soil of another hot-bed, until such time as they are safe to be planted in the open ground, which, in this latitude, is usually from the 15 th of March to the 10 th of April. If properly hardened off, they are seldom injured by planting out too early. For second early and late crop, sow at same date as given in the directions for Cabbage cróp.

For Exhibition.-Follow directions given for Cabbage. Henderson's Early Snowball, whether grown as an early or late variety, is the best for exhibition.

## CARROT.

German, Mohre. French, Carotte. Spanish, Zanahoria.
1 oz . for 125 feet of drill; 4 lbs . for an acre.
The Carrot, like other root crops, delights in a sandy loam, richly tilled. For early crops, sow in spring, as soon as the ground is in good working order; for later crops they may be sown any time until the middle of June. Sow in rows about fifteen inches apart, thinning out to three or four inches between the plants. In field culture, when grown for horses or cattle, the rows should be two feet apart, so that the crop can be worked with the horse cultivator. As Carrot seed is slow to germinate, extra precautions must be taken to firm the seed in the soil.

For Exhibition.-By means of a crowbar, holes are made in the ordinary garden soil. These holes should be made when the soil is dry, and may be two to three feet deep and three to four inches across at the top. Fill the holes with sifted soil, so the roots will come out smooth and free from indentations caused by lumps and pebbles. The soil should be composed of equal parts of sand, leaf-mould, well-rotted manure and turfy loam, and an addition of about 5 per cent of our Garden Fertilizer. Sow five or six grains on top of each place thus prepared, covering about onequarter inch. When the plants appear, thin out, leaving only one plant at the center. This method may also be used for Parsnips and Long Beets.

## CELERY.

German, Sèleri. French, Celeri. Spanish, Apis. 1 oz . for 3,000 plants.
Sow in the open ground as soon as it is fit to work in April, and keep carefully clear of weeds until time of transplanting in June or July. The tops should be shorn once or twice before transplanting, so as to insure "stocky" plants. The lower half of the root should also be cut off before transplanting.

After the ground has been prepared, lines are made on the level surface three feet apart, and the plants set six inches apart in the lines. If the weather be dry at the time of planting, great care should be taken that the roots are properly "firmed." Our custom is to turn back on the row and press by the side of each plant gently with the foot. This compacts the soil and excludes the air from the roots until new rootlets are formed, which will usually be in forty-eight hours, after which all danger is over. After the planting of the Celery is completed, nothing further is to be done for six or seven weeks, except going through between the rows with a cultivator or hoe, and freeing the plants of weeds until they get strong
enough to crowd them down. This will bring us to about the middle of August, by which time we have usually that moist and cool atmosphere essential to the growth of Celery. Then we begin the "earthing-up" necessary for the blanching and whitening of that which is wanted for use during: the months of September, October and November. The first operation is that of "handling," as we term it; that is, after all the soil has been drawn up against the plant with a hoe, it is further drawn close around each plant by the hand, firm enough to keep the leaves in an upright position and prevent them from spreading. This being done, more soil is drawn against the row (either by the plow or hoe, as circumstances require), so as to keep the plant in this upright position. The blanching process must, however, be finished by the spade, which is done by digging the soil from between the rows and banking it up clear to th $\Leftrightarrow$ top on each side of the row of Celery. Three feet is ample distance between the dwarf varieties, but when larger sorts are used the width of the rows must be at least four and a half or five feet.

## CORN, Sugar.

German, Welschkorn. French, Mais. Spanish, Maiz. 1 qt. for 200 hills; 8 to 10 qts. in hills for an acre.

All varieties of Sweet, or Sugar, Corn may be either sown in rows four and a half feet apart and the seeds placed about eight inches apart in the rows, or planted in hills at distances of three or four feet each way, according to the variety grown or the richness of the soil in which it is planted. The taller the variety, or the richer the soil, the greater should be the distance apart. We make our first plantings in this vicinity about the middle of May and continue successive plantings every two or three weeks until the last week in July. In more southerly latitudes planting is begun a month earlier and continued a month later.

For Exhibition.-Plant six feet apart in very rich soil, allowing only one ear to each plant. Country Gentleman, Stowell's Evergreen and Mammoth Sugar are the best for exhibition. Water occasionally with liquid manure.

## CRESS, or Pepper Grass.

German, Kresse. French, Cresson. Spanish, Mastruco.
A well-known, pungent salad. Requires to be sown thickly in rows and covered very slightly. Sow in April in open ground in rows one foot apart, and thin out as needed. To keep up a succession, sow frequently, as all varieties deteriorate rapidly.

## CUCUMBER.

German, Gurke. French, Concombre. Spanish, Cohombro.

1 oz . for 60 hills; 2 to 3 lbs. in hills for an acre.
Cucumbers succeed best in warm, rich, sandy loam. They should not be planted in the open air until there is a prospect of settled warm weather, in the vicinity of St. Louis about the middle of May. Plant in bills about four feet apart each way. The hills should be previously prepared by mixing with the soil of each a shovelful of well-rotted manure. Plant eight or ten seeds in each hill. When all danger from insects is past, thin out the plants, leaving three or four of the strongest to each hill. The fruit should be gathered when large enough, whether required for use or not, as, if left to ripen on the vines, it destroys their productiveness.

For Exhibition.-The White Spine is most handsome. Not more than two or three fruits should be allowed to grow on each vine, and superfluous growth of vine should be removed in order to throw all the strength into the fruit.

## EGG PLANT.

German, Eierpflanze. French, Aubergine. Spanish, Berengena.
1 oz . for 1,000 plants.
The Egg Plant will thrive well in any good garden soil, but will repay good treatment. The seed should be sown in hot-beds or warm greenhouse in March or April, and when about an inch high, pot in two-inch pots. Plant out, about June 1st, two and a half feet apart. If no hot-bed is at hand, they can be grown in any light room where the temperature will average seventy-five degrees.

For Exhibition.-The New York Improved Spineless is unsurpassed. Set the plants three to four feet apart and water with liquid manure, allowing not more than two fruits to each plant.

## ENDIVE.

German, Endivien. French, Chicoree. Spanish, Endivia.
1 oz . for 100 feet of drill, or 2,000 plants.
Endive is one of the best salads for Fall and Winter use. Sow for an early supply about the middle of April. As it is used mostly in the Fall months, the main sowings are made in June and July and transplanted one foot apart each way when of sufficient size. It requires no special soil or manure, and after transplating, if kept clear of weeds until the plant has attained its full size, the process of blanching begins. This is effected by gathering up the leares and tying them by their tips in conical form, with Raphia. This excludes the light and air from the inner leaves, which become blanched in the course of from three to six weeks, according to the temperature at the time. Another and more simple method consists in laying slats or boards on the plants as they grow, which serves the same purpose as the tying up. It can also be grown by sowing the seed and thinning out to one foot apart each way, as recommended for Lettuce.

KALE, or Borecole.<br>German, Blatter-Kohl. French, Chou V'ert. Spanish, Breton.<br>1 oz. will sow 150 feet of drill.

Kale, or Borecole, may be grown in almost any soil, but the richer it is the more abundant the product. If wanted for use in late Fall or early Winter, sow early in June and transplant as directed for Cabbage, middle of July. If needed for Spring use, sow Siberian about middle of August and transplant a month later. Of all the Cabbage tribe this is the most tender and delicate, and would be much more extensively grown than it is, if its excellent qualities were generally known. The varieties are all extremely hardy, and are best when touched by frost.

## LEEK.

German, Lauch. French, Poireau. Spanish, Puerro.
1 oz . will sow 100 feet of drill.
The Leek is very hardy and easily cultivated; it succeeds best in a light but well-enriched soil. Sow as early in Spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as possible, that the neck, being covered, may be blanched. If fine Leeks be desired, the ground can hardly be made too rich, for the Leek is a gross feeder.

## LETTUCE.

German, Lattich. French, Laitue. Spanish, Lechuga.

## 1 oz . for 3,000 plants.

The cultivation of Lettuce is universal by all who have gardens, and from its tractable nature and freedom from nearly all insects and diseases, it is manageable in the hands of every one. For early crop, seed may be sown in the open ground in the middle of September, and transplanted to cold frames as soon as large enough to handle, being wintered over in the same manner as early Cabbage. Seeds may be sown in well-protected frames in February and in hot-beds in March, and by careful covering up at night will make fine plants by April for Spring planting. But for ordinary private use in the Summer months, the simplest way is to sow it thinly in rows one foot apart, early in the Spring, and thin out the plants so that they will stand one foot apart. This is easier than transplanting, and if sown every two or three weeks from the middle of April to the middle of August, Lettuce may be had in perfection the whole season. Lettuce plants may be saved over the Winter without glass covering in Southern parts of the country, in dry, well-sheltered spots, by covering with leaves or litter late in the season.

## MELON, Musk.

German, Melone. French, Melon. Spanish, Melon. 1 oz . for 60 hills; 2 to 3 lbs. in hills for an acre.

Melons thrive best in a moderately enriched light soil; the hills should be from three to six feet apart each way, according to the richness of the soil. If soil is poor or sandy, plant at four feet. Previous to planting, incorporate well with the soil in each hill a couple of shovelfuls of thoroughly rotted manure; plant eight or ten seeds in each hill early in May, for latitude of St. Louis; for south earlier, for further north later, and when well up thin out to three or four of the most promising.

## MELON, Water.

German, Wasser-Melone. French, Melon d'Eau. Spanish, Sandia.
1 oz . for 30 hills; 4 to 5 lbs. in hills for an acre.
Water Melons require a rich though rather sandy soil for best development, and thrive best in warm latitudes, growing best in the Southern or Southwestern States, although in warm, sandy soils in this latitude fine crops are often obtained from northern-grown seed. Cultivate exactly as for Musk Melons, except that the hills should be eight and ten feet apart.

## OKRA, or Gumbo.

German, Essbarer. French, Gombo. Spanish, Quibombo.

It is of the easiest culture, and grows freely, bearing abundantly in any garden soil. It is sown at the usual time of all tender vegetablesin this section middle of May-in drills two inches deep, thinning the plants from two to three feet apart in row.

## ONION.

German, Zwiebel. French, Oignon. Spanish, Cebolla.
1 oz . for 100 feet of drill; 5 or 6 lbs. in drills for an acre.

The Onion thrives best in a rather deep, rich, loamy soil. The best culture requires that the ground should be deeply trenched or ploughed and manured the previous Autumn, and laid up in ridges during the Winter to pulverize. As early in the Spring as the ground is in working order, commence operations by leveling the ground with a harrow or rake, and roll or tread it firmly ; sow thinly in drills, about a quarter of an inch deep and one foot apart; cover with fine soil and press down with the back of a spade, or a light roller, or with the foot, along each row. When the young plants are strong enough, thin gradually so that they stand three or four inches apart. Keep the surface of the ground open and free from weeds by frequent hoeing, taking care not to stir the soil too deeply or to collect it about the growing bulbs.

## PARSLEY.

German, Petersilie. French, Persil. Spanish, Peregil. 1 oz . for 150 feet of drill.
Parsley succeeds best in a rich, mellow soil. As the seed germinates very slowly, three or four weeks elapsing sometimes before it makes its appearance, it should be sown early in spring, great care being taken that the drills be not more than an inch in depth and that the seed be well pressed down after sowing. Sow thickly in rows a foot apart and half an inch deep. For winter use, protect in a frame or light cellar, or a few plants may be placed in pots or boxes and kept in the house for convenient use in Winter.

## PARSNIP.

German, Pastinake. French, Panais.
Spanish, Pastinaca.
1 oz . for 200 feet of drill; 5 to 6 lbs . in drills for an acre.
Sow as early in Spring as the weather will admit, in drills eighteen inches apart, covering half an inch deep. When well up, thin out to five or six inches apart in the rows. Unlike Carrots, they are improved by frost, and it is usual to take up in Fall a certain quantity for Winter use and store as directed for Turnips, leaving the rest in the ground until Spring to be dug up as required.

## PEAS.

German, Erbse. French, Pois. Spanish, Guizante. 1 qt. for 75 feet of drill; 2 to 3 bushels
in drills for an acre.
Peas come earlier to maturity in light, rich soil. For general crop, a deep loam, or a soil strongly inclining to clay, is best. For early crops, decomposed leaves or leaf-mould, if convenient, may be used; or, if the soil is very poor, well-rotted manure should be used. For general crop, a good dressing should be applied, and for the dwarf growing kinds the soil can hardly be too rich. When grown as a market crop, Peas are sown in single rows, two or three inches deep and from two to three feet apart, according to height of variety or the strength of the soil. When grown in small quantities for private use, they are generally sown in double rows, six or eight inches apart, and the tall varieties staked up by brush or Pea Trellis. For an early crop, sow in February, March or April, according to latitude, as soon as the ground can be worked, and make repeated sowings every two weeks for succession. After the first of June sowing should be discontinued until August, when a good crop may sometimes be secured by sowing an extra early sort for fall use.

## PEPPER.

German, Pfeffer. French, Piment. Spanish, Pimiento. Requires exactly the same treatment as directed for Egg Plant.
For Exhibition.-Ruby King, Sweet Spanish and Bull Nose are the most desirable and attractive varieties. The plants should stand two and one-half to three feet apart to admit abundance of sunlight. Plenty of manure or fertilizer should be worked into the soil around the roots, and frequent applications of liquid manure should be given.

## PUMPKIN.

German, Kurbis. French, Courge. Spanish, Calabaza. 1 oz . for 30 to 50 hills.
Pumpkins are now principally cultivated for agricultural purposes. They are usually planted in fields of corn or potatoes, but may be profitably raised in fields by themselves. Sow first of May in this latitude, in hills eight feet apart.

## RADISH.

German, Rettig, Radieschen. French, Radis, Rave, Petit Rave. Spanish, Rabano.
1 oz . for 100 feet of drill; 9 to 10 lbs . in drills for au acre.
Radishes thrive best in a light, sandy loam. Heavy or clayey soils not only delay their maturity but produce crops much inferior, both in appearance and flavor. For a continuous supply sow from the middle of March until September, at intervals of two or three weeks. For an early supply they may be sown in a hot-bed in February, care being taken to give plenty of ventilation, otherwise they will run to leaves. If plaster is incorporated with the soil in the rows at time of sowing the seed, the Radishes will always turn out brighter in color, crisper and of better quality.

## RHUBARB.

## German, Rhabarber. French, Rhubarbe. Spanish, Ruibarbo Bastardo.

Sow in April, in drills a foot apart, thinning out to about the same distance apart in rows when a few inches high. The following spring transplant into deep, rich soil, about three feet apart each way. If propagated by dividing the roots, it may be done either in fall or spring, planting it at the same distance apart as given above. The soil can not be ton rich.

## SALSIFY, or Oyster Plant.

German, Bocksbart.
French, Salsifis, Spanish, Ostra V'egetal.
1 oz . to 75 feet of drill.
The Oyster Plant succeeds best in light, wellenriched, mellow soil, which, previous to sowing the seeds, should be stirred to a depth of eighteen inches. Sow early in spring, in drills eighteen inches apart; cover the seeds with fine soil an inch and a half in depth, and when the plants are strong enough, thin out to six inches apart.

## SPINACH.

German, Spinat. French, Epinxrd. Spanish, Espinaca.
1 oz . for 100 feet of drill; 10 to 12 lbs in drills for an acre.
Sow thinly in rows about twelve or fifteen inches apart. The main crop is sown in September. It is sometimes covered up in exposed places with straw or salt hay during winter, which prevents it from being cut with the frost, but in sheltered fields there is no necessity for covering. For summer use it may be sown at intervals of two or three weeks, from April to August. Spinach is best developed and most tender and succulent when grown in rich soil.

## SQUASH. <br> German, Kurbiss. French, Courge. Spanish, Calabasa Tomtanera.

## 1 oz . for 50 hills; 3 to 4 lbs. in hills for an acre.

It is useless to sow until the weather has become settled and warm. Light, rich soils are best suited to their growth, and it is most economical of manure to prepare hills for the seeds in the ordinary manner by incorporating two or three shovelfuls of well-rotted manure with the soil for each hill, as is done for Melons. For bush varieties, from three to four feet each way, and for the running sorts, from eight to ten feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their third and fourth leaves, leaving three or four of the strongest plants.

## TOMATO.

> German, Liebesapfel. French, Tomate. Spanish, Tomate.

1 oz. for 1,500 plants; $1 / \frac{1}{4} \mathrm{lb}$. to transplant for an acre.
The seed should be sown early in March in a hot-bed, greenhouse, or inside the window of sit-ting-room, where a night temperature of not less than sixty degrees is kept, in drills five inches apart and half an inch deep. When the plants are about two inches high they should be set out three inches apart in boxes three inches deep, or potted into three-inch pots, allowing a single plant to a pot. They are sometimes shifted a second time into larger pots, by which process the plants are rendered more sturdy and branching. About the middle of May, in this latitude, the plants may be set in the open ground. They are planted for early crops on light, sandy soil, at a distance of three feet apart, in hills in which a good shovelful of rotten manure has been mixed. On heary soils which are not suited for an early crop, they should be planted four feet apart. Water freely at the time of transplanting, and shelter from the sun a few days until the plants are established. Tomatoes will always produce greater crops and be of better flavor when staked up, or when trained against walls or fences.

## TURNIP.

> German, Steekrube. French, Navct. Spanish, Nabo Coman.

## 1 oz . to 150 feet oí drill; 1 to 2 lbs . per acre in drills.

Turnips do best in highly enriched, light, sandy or gravelly soil; commence sowing the earliest varieties in A pril in drills, from twelve to fifteen inches apart, and thin out early to six or nine inches in the rows. For a succession, sow at intervals of a fortnight until the last week in May for early crop, and from August to September for late. August sowings may be made for the Fall and main crops. Turnips may be preserved until Spring by cutting off the tops about one inch from the bulb and storing them in a cellar or cool shed during Winter, covering the roots with dry sand: they should be harvested before severe frosts set in, for, though comparatively hardy, few of the varieties will survive the Winters of the Northern States in the open ground.

# SEEDS 으 SPECIAL MERIT 

## LATE FRENCH MARKET.

This is the original Late French Market Cabbage Seed. Two years ago we bought a quarter pound of this original stock seed at a very high price, from one of our French friends, and sent it to one of America's best Cabbage Seed growers, on Long Island. We have a limited quantity to offer this season. A trial will convince you that this is the only Late Cabbage to grow.


Late french market cabbage.

It is mưch later than any other, and will keep better than any other. Per ounce, 40c.; per quarter pound, \$1.50; per pouud, \$5.00

## IMPR0VED LONG GREEN CUCUMBER.

This is one of the best Cucumbers; dark green, long fruit of excellent quality; good for early or late. Per packet, 5 c.; per ounce, 10c.; per quarter pound, 20c.; per pound, 65c.


IMPROVED LONG GREEN CUCUMBERS.

GOOD Seed is the most important item to a gardener or farmer. From them the products that bring their profits are produced. Buy our Seeds and increase your profits.


AMERICAN DRUMHEAD SAVOY. The largest heading Savoy; of excellent flavor, and a general favorite with market gardeners and truckers. Plkt., 10c; oz., 30c; $1 / 4 \mathrm{lb} ., \$ 1.00 ; 1 \mathrm{lb} ., \$ 3.25$.


This is one of the earliest Musk Melons; very productive; densely netted; free from ribs.

## LETTUCE.

ST. LOUIS BLACK=SEEDED FORCING. This is the leading forcing variety with St. Louis market gardeners, and should be used by all who grow Head Lettuce for the market. It is the best for forcing under glass or early planting outdoors. Plants medium size, having thick green leaves, and when well grown forming very compact, solid heads. Pkt., $5 \mathrm{c} ;$ oz., $15 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c} ; 1 \mathrm{~b} ., \$ 1.75$.



NE PLUS ULTRA RADISH.

## RADISH.

## NE PLUS ULTRA, OR EARLY DEEP

 SCARLET TURNIP, FORCING. This has as small a top, and is as early as any variety in cultivation, making it one of the best for forcing. Roots fit for use may be had in three weeks, or less, from the time of sowing. Roots small, globular; deep, rich red color; flesh white, crisp and tender when young. May be planted very closely, owing to its small tops. Oz., 10c ; 1/4 lb., 25c ; 1b., 90 c .
## Dickmann Seed Co.'s St. Louis Market Lettuce

DICKMANN SEED CO.'S ST. LOUIS MARKET LETTUCE is one of the best for all purposes. It can not be recommended too highly. Good for forcing and out of doors. A solid heading sort. Will not grow into seed as quick as other Lettuce. Will stand the heat through the hot Summer months. There is a good deal of St. Louis Market Lettuce sold by other seedsmen, but not this original strain. No gardener can afford to be without this, the best of all lettuces, not only sold under that name, but the genuine stock. A small trial will convince you. Oz., 15 c ; $1 / 4 \mathrm{lb}$., $50 \mathrm{c} ; 1 \mathrm{~b} ., \$ 1.75$.

Here is an Unsolicited Letter from one of our Leading Gardeners.
St. Louis, May 31, 1895. Mr. Jos. F. Dickmann, City.
Dear Sir-I have sold the first St. Louis Market Lettuce raised from the seed I bought of you. It turned out fine. I am satisfied that none. can be bought in St. Louis, or anywhere else, that would surpass it in quality. I thereiore recommend it to all gardeners as the genuine St. Louis Market Lettuce.

Most respectfully, John R. WUEBBOLD.


DICKMANN'S 'ST. LOUIS MARKET LETTUCE.

## NEW TOMATOES.

It is ialse economy to try to save on the first cost of Tomato seed-a little seed goes so iar. And yet the country is almost "flooded", with cheap Tomato Seed, saved without any regard to selection, and sometimes even the reíuse oi canning establishments. Our Tomatoes are grown especially or seed, and actually cost us more than double the prices at which we are offered annually so-called "pure seed cheap." "A word to the wise is sufficient."

WHITE'S EXCELSIOR. Described as follows by the originator, Mr. White, who has made a specialty of growing and periecting this Tomato for years, and is confldent that this variety is a great improvement over all other Purple Tomatoes:
"The vine is dark green, grows rapid and to a great size, bears a heavier crop than any other purple variety, and continues bearing untill killed by irost. The ruits are a beautiful glossy dark or purple red, very large, set in great clusters, and retain their size until the end oi the season. The seed cavity in the fruits is so small that they are nearly solid, unlike other purple Tomatoes, the skin is tough and they will bear long shipments and hold their firmness several days longer than any other variety. This is a great advantage for the local market, as well as for shipping. Is ree irom cracking, and ripens up evenly around the stem. The iruits of this variety are the most beautiful, most uniorm, and have a greater diameter than any other Tomato. Many varieties are too long or too thin ior their circumference. This objection is removed in the Excelsior."


WHITE'S EXCELSIOR NEW TOMATO.

Our stock 18 grown for us by the originator, and all seed of this variety offered this season has its percentage in or irom one 18 -ounce Tomato grown by the originator last year that shows how carefully this variety is bred. Pkt., $5 \mathrm{c} ; \mathrm{OZ} ., 35 \mathrm{c} ; 1_{4}^{1 / 1 \mathrm{~b} ., \$ 1.25 ; 1 \mathrm{~b} ., \$ 1.00 \text {. Prices given include postage or iree delivery. }}$


THE NEW BUCEEYE STATE TOMATO.
BCCKEXE Described as iollows by the STATE. originator:
"It averages at least double the size of Livingston's Beauty. We have always held that no matter how large a sort may be, if it is rough and uneven, it is of little value. Many mammoth sorts have been introduced of late, but the market gardener rejects them as unfitted for his business on account of their roughne s. In addition to its very large size, it is also smooth and unilorm. This is not all, however, for although its large size might lead some to believe the fruits are few in number, yet the fact is, it is even more proliflc and abundant than the standard sorts now in cultivation. It is unquestionably the heaviest cropper known. The Tomatoes are borne in inmense clusters of four to eight iruits, and occasionally ten large, periect fruits have been iound on a single cluster. In time of ripening, it matures with Livingston's Stone. In solidity and quality, none surpasses it. The color is much the same as our Beauty, but oi a richer shade, and this, together with its very large and clear-cut outlines, makes it very showy and striking. In shape, it is a little thicker from blossom end to stem than most other sorts. The past season we grew this variety by the ordinary method, as well as on stakes, and they were the admiration of all who visited our grounds, and nearly every caller insisted on having 'just one for seed, or to carry home to show friends." With the above characteristics, it must be apparent to all that the Buckeye State will immediately take its place in the front rank, and should not be omitted from a single order. Do not simply experiment with this variety this season (we have already done that for you), but order suffcient to grow a good portion of your crop. Pkt.,5c;oz., $25 \mathrm{c} ;{ }^{1} 1 \mathrm{lb} ., 90 \mathrm{c} ; 1 \mathrm{~b} ., \$ 3.25$. Prices given include postage or iree delivery.


## The Matchless Tomato.

The vines are of strong, vigorous growth, well set with iruit; the foliage is very rich dark green in color. The engraving accurately shows the shape and also the remarkable solidity of a section. They are entirely free from core, of a very rich cardinal red color, and are not liable to crack from wet weather. The fruits are of the largest size, and this is maintained throughout the season, the healthy growth of foliage continuing until killed by frost. Per packet, 5c.; per ounce, 30 c ., per quarter pound, $\$ 1.00$; per pound, $\$ 3.50$.

## NEW MUSK MELON-PAUL ROSE.

In the "Paul Rose", we are offering the best orangefleshed Musk Melon introduced for many years. It is a cross of the Osage with the Netted Gem, and combines the sweetness of the former with the fine netting of the Gem. It also has a firmness of rind and "cheesy" structure of flesh peculiarly its own, and is superior in these respects to many melons in existence. It surpasses many melons as a shipper and long keeper, and no other melon equals it in smallness of seed cavity or approaches it in firmness. It is uniform in shape and averages about five inches in diameter, weighing about one and a half pounds. It is an excellent seller and brings better prices than any other orange-fleshed melon. Per packet, 10 c . ; per ounce, 25 c ; per quarter pound, 75 c . ; per pound, $\$ 2.50$, postpaid.

# TWO NEW MILLETS FROM DAKOTA. 

## THE NEW SIBERIAN and the BROOM CORN or HOG MILLET.

THE NEW SIBERIAN is claimed to be a most wonderfully productive and satisfactory forage plant, possessing in a superior degree all the essential merits of any of the older sorts-exceeding them by far-besides many other points of excellence that distinguish it and render it a most valuable addition to the list of forages, and if the claims are well founded, destine it to take front rank, if not lead all the rest.

It is said to have come from Russia, which would, of course, give it a degree of vigor and hardiness not possessed by those originating in a warm climate. The claims made for it by its introducers, and by parties who have been growing it in small quantities for a few years in Missouri, Kansas, Nebraska and Illinois, are substantially as follows:

1. That it is from two or three weeks earlier than the German millet, thereby making a crop when the latter may fail on account of unfavorable weather at the time of maturing.
2. That it grows an extra fine stalk, with a wonderful profusion of blades, being of a stooling habit, fortyone stalks having, it is said, been grown from one seed, which is remarkable indeed.
3. That it has been known to yield from twenty acres 905 bushels of seed, while as much as three to four tons and over of the choicest hay have been cut from one acre of ground.
4. That coming from Russia, a cold climate, the seed possesses a vitality and vigor not found in seed originating in a warm climate.
5. That the seed of the New Siberian Millet being so much smaller than that of other sorts, the cost is lessened greatly in quantity of seed required per acre, which is given as only four quarts if wanted for seed and irom six to eight if wanted for hay, according as it is drilled or broadcast.
6. That it not only grows much taller than any other millet (four feet or over), and though the average length of the head is six inches, yet the stalk is elastic and stands up well, a point of excellence worthy of note.
7. That it is rust-proof, and that cinch bugs do not relish it, but that stock eat it as readily as other kinds, and waste much less in the feeding, owing to the fineness of the stalks.

Reports from the Brookings (S. D.) Agricultural Experiment Station bulletin on Millets, under date of May, 1898, speak of the New Siberian as "the most promising variety yet tested."

Description.-Plant, about four feet in height; blades, pea-green color, very profuse; stalk, fine and very elastic; heads, about six inches in length; seeds, of reddish brown color; habits of growth, stooling to a remarkable degree; not subject to rust; maturity, first crop about July or August.

It has also been tried in a limited way in several other States, as well as in Canada, and all reports unite in giving it unstinted praise, and the up-to-date farmer can not, it would seem, afford to let this chance slip to be among the first to secure such a valuable and promising addition to the list of plants for stock food. Its early maturity brings it into use at a time when other green feed is scarce, as is often the case in Kansas and the Southwest during the months of July and August, while its drouth-resisting qualities render it a much more certain crop than the other sorts. Evidently the NEW SIBERIAN is to be the Millet of the future. The supply of this new variety is very scarce and we have, at considerable trouble and expense, secured a limited quantity, which we offer at these very low prices: Per pound, 10 c .; per 10 pounds, 65 c .; per 100 pounds $\$ 4.00$, f.o.b. St. Louis.


The First Form of a Dwarf Sweet Pea. This is a novelty of unusual importance. It is a Dwarf Sweet Pea, the plant growing only 5 inches high, yet spreading out and forming a solid mat of foliage and flowers $1 \%$ feet across. The blossoms are pure milk white, very sweet, of largest size and great substance, and borne on stems 4 inches long, 3 flowers on each stem. It begins to bloom as early as May, and, unlike the climbing Sweet Peas, continues in profusion until killed by frost. This is a remarkable feature, and makes it at once one oî the most superb plants for bedding, massing and edging in cultivation. For pot culture, also, it is of great value, being novel, unique, fragrant, always full of flowers and superlatively beautiful. Small pkts., 5c; large pkts., 10c

Mixed Colors. Many beautiful varieties are included in this, different from those shown on the plate; there are solid colors, ranging through reds from s ft rose to crimson, bronze and garnet maroon; from daintiest light blue to ultramarine, indigo and blackish purple; from snow white to cream and silver gray. Some are striped, blotched and spotted; others have magnificent edges and throats; including purple, with white edge and red throat; white flushed pink, with wine red throat; carmine, with white edge and red shaded throat; garnet, with white throat; copper color, with white throat, etc. Pkt., 10c

DOUBLE=FLOWERING MORNING GLORIES. Mixed Colors. Per pkt., 10c.

## THE BEAUTIFUL CINNAMON VINE.



The Cinnamon Vine is one of the most charming of climbers and will quickly cover an arbor, window or flowers, making it a perfect bower of beauty. The vine is perfectly hardy, and once planted will grow for many years, and be a source of constant delight to the possessor. There is nothing that will give a home a more homelike and cozy appear nce, or be asurer index of retinement and culture, than beautiful vines twining about the porch and trellises.

Prices of the Cinnamon Vine. We will mail three nice roots or tubes for 30 c ; six for 50 c ; 12 for $\$ 1.00$; 30 for $\$ 2.00 ; 100$ for $\$ 5.00$ (no order filled for less than three roots). We pack them carefully in boxes, and guarantee safe arrival.

## BONNET GOURDS.



Rapid-growing vines, producing a great variety of curious fruits, some oi which are quite useful, and others are valued for the rich, variegated markings. These markings retain their bright colorings ior years if fruits are gathered in the fall and thoroughly dried in a cool, airy place. Seed should be sown in hills or slightly raised borders when the weather becomes warm and the trees are out in iull leaf, and should have a trellis or brush support on which to climb. Large pkt., 10 c .

## Vegetable Seeds.

## Fresh and True to Name. Crop 1899.

The prices quoted are those ruling this month, January, 1900. Fluctuations may be expected; as the season advances many articles are short and scarce.

Jos. F. Dickmann Seed Company give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and 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.

All. seeds in this list can be had in $5=$ cent packages.
We sell one-quarter pound at one-pound rates.


PALMETTO ASPARAGUS.

## ASPARAGUS. Spargel.

$\mathrm{Oz} . \mathrm{Lb}$.

COLOSSAL. The most approved and standard sort
PALMETTO. Of Southern origin, a very desirable Asparagus........... 10

75
COLUMBIAN MAMMOTH WHITE. A variety producing large white shoots ................................ 10

75
ARTICHOKE. Large green globe .... $25 \quad 325$
For Roots, see page 57 .

## BEETS. Snlatriilten.

Oz Lb. Extra Early Flat Egyptian ................ $\$ 0$ 10 $\$ 045$ Extra Early Crosby......... ......... .... 10
Edmund's Blood Turnip .......... ...... 10 50
Eclipse......................................... . . . 10
Bastian's Blood Turnip .... ............. . . 10
Long Smooth Blood Red.................... 10
Swiss Chard . . . . . . . . . . . . . . . . . . . . . . . . . 10 50


VARIOUS IEETS.

## SUGAR BEETS AND MANGELS.

Mangel Marjel ober Muttel Riibet.


## BRUSSELS SPROUTS. ভproifict=\{ogi.



## BROCCOLI. ভpargelfobl.

| BROCC | Suargelfoll. |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Oz. | Lb. |
| Early Purple Cape, the best for this climate |  | \$0 10 | \$0.4.5 |
| Early White Cape, with large, close heads |  | 10 | 60 |

## DWARF OR BUSH BEANS. Bulidublurcu.



## 2 FIELD Eneasteds ORPDER SHEEET. JOS. F. DICKMANN SEED CO.

 1110 and 1112 North Third Street, ST. LOUIS, MO.

## WAX PODDED BEANS. Kandis Bufurtu.



The Best Wax Bean for the Market Gardener.

|  | Qt. | Gal. | Bush. |
| :---: | :---: | :---: | :---: |
| Wardwell's Kidney Wax. | 3025 | \$1 00 | \$7 50 |
| Yosemite Wax, large. | 25 | 100 | 750 |
| Speckled Wax, very fine. | 25 | 90 | 675 |
| Golden Eyed Wax. | 25 | 85 | 600 |
| German Black Wax. | 25 | 90 | 700 |
| Davis Kidney Wax. | 30 | 115 | 875 |
| White Kidney Wax. | 20 | 75 | 600 |
| New Prolific Black Wax. | 20 | 75 | 600 |
| Improved Golden Wax, a standard sort. | 25 | 100 | 750 |
| New Improved Rust-proof Wax. . | 25 | 100 | 750 |

## POLE BEANS. Stantgen Bofucu.



## POLE LIMA BEANS.

Staugen Bobuth


## BUSH LIMA BEANS.

Buid = oier Micorige Butter=ßolyuen.

|  | Qt. | Gal. | Bush. |  |
| :--- | ---: | ---: | ---: | ---: |
| Henderson's Bush Lima.. $\$ 0$ | 25 | $\$ 1$ | 00 | $\$ 7$ |



## ENGLISH DWARF BEANS.

 (6iraje Bofnel.|  |  | Qt. | Gal. | Bush. |  |
| :--- | :--- | :--- | ---: | ---: | ---: |
| Broad Windsor $\ldots . .$. | $\$ 0$ | 25 | $\$ 0$ | 90 | $\$ 700$ |
| Sword Long Pod $\ldots . . .$. | 25 | 90 | 675 |  |  |

DICKMANN'S RELIABLE CABBAGE SEED.
§irant ভamelt.

| field |  | \$3 50 |
| :---: | :---: | :---: |
| Charleston Wakefield | 25 | 350 |
| Early Summer, a fine s | 25 | 300 |
| Early Brunswick | 20 | 225 |
| Early Dwarf Flat Dutch | 20 | 22. |
| Early Eclipse | 25 | 32 |



## CABBAGE - Continued.

|  | Oz. | Lb. |
| :---: | :---: | :---: |
| Dickmann's Giant Summer, the best summer |  |  |
| All Season | 25 | 325 |
| Premium Late Drum head. | 25 | 300 |
| Premium Late $F$ Dutch | 20 | 300 |
| Succession (Hende son's) | 25 | 350 |
| Sure Head (Burpee's) | 20 | 300 |
| Luxemburg | 25 | 325 |
| Hollander, or Danish | 30 | 400 |
| Late St. Louis Market the very best for late. | 40 | 500 |

Red Cabbage. Ћoth תitaut.

|  | Oz. | Lb. |
| :--- | ---: | ---: |
| Red Dutch.............. $\$ 0$ | 20 | $\$ 300$ |
| Early Blood Red Erfurt, | 20 | 275 |
| Mammoth Rock Red... | 25 | 300 |

## AMERICAN DRUMHEAD SAVOY.

The largest heading Savoy; of excellent flavor, and a general favorite withmarket gardeners and truckers.Early Dwarf Ulm Savoy$\$ 030$$\$ 325$
Netted Savoy20275
CAULIFLOWER.
$\mathfrak{B h}$ untenfiohl.
1 Oz . 2 Oz.
Erfurt Earliest Dwarf. . . . $\$ 400$ ..... 700
Extra Early Dwarf Erfurt 400 ..... 700
Extra Early Paris ..... 350
Extra Early Snowball.... 300 ..... 550
Large Select Danish ..... 200 ..... 350
Large Late Algiers ..... 200 ..... 350


ERFURT EARLIEST DWARF CAULIFLOWER.


## CELERY. ©clleric.

|  | Oz. | Lb. |
| :---: | :---: | :---: |
| White Plume. |  | \$2 75 |
| Pink Plume (new). | 25 | 300 |
| Kalamazoo | 20 | 250 |
| Golden Self-Blanching | 25 | 325 |
| New Giant Pascal. | 25 | 275 |
| Boston Market | 25 | 250 |
| Heart well's Perfection | 25 | 250 |
| Drarf Golden Heart. | 20 | $\bigcirc 75$ |
| Flaroring Celery |  | 25 |

We Sell One=Fourth Pound at Pound Rates.

## CARROTS.

## (6efloe Miiblen.

|  | oz. | Lb |
| :---: | :---: | :---: |
| Extra Early Forcing | Su 10 | 80.90 |
| Early Half Long, stump-rooted | 10 | 65 |
| Early Half Long Scarlet, pointed. | 10 | 65 |
| Oxheart, or Guerande | 10 | 65 |
| Danver Half Long. | 10 | 75 |
| Market Gardeners' Best Strain. | 10 | i5 |
| Long Orange Improred | 10 | 70 |
| Chantenay, or Model. | 10 | 65 |
| Half Long Rubicon. | 10 | . 50 |
| Victoria, good for stock | 10 | 50 |
| White Belgian | 10 | 50 |

## CELERIAC. תinollen Eelleric.

Lb

| Giant Prague, the largest of all | $\$ 020$ | \$2 50 |
| :---: | :---: | :---: |
| Large Erfurt, smooth and fine flaror | 20 | 250 |
| Apple Shaped, smaller than the other sort | 20 | 250 |
| Large Improved Paris, a new imported kin | 20 | 250 |

## SUGAR CORN.

## 3 utfer תorm.

If to be sent by Mail, 15 Cents per Quart for Postage must be added.

Gal. Bush.
Country Gentleman . . . \$0 $40 \quad \$ 300$

Early Cory
$40 \quad 300$
Crosby's Extra Early . . $40 \quad 300$
Early Minnesota
40
275
Perry's Hybrid
50
325
Clark's None-Such
50
325
Stowell's Evergreen
40
300
Late Mammoth........ . $40 \quad 275$
Extra Early Mammoth. $40 \quad 275$
Shakers' Early . . . . . . . $50 \quad 325$
Ballard's Early . . . . . . . $50 \quad 325$
Early Champion
$50 \quad 375$


CARDOON. תarbonil.
Oz. Lb
Large Solid, the best kind
$\$ 0 \quad 30 \quad \$ 325$

## CHERVIL. Brjeulfurif).

Curled $\$ 0 \quad 20 \quad \$ 200$

## CHICORY. ©たficoricnuntzel.

Large Rooted, the best for this climate
Oz Lb.


## CORN SALAD. Æelojanat.

Oz. Lb.Large Leaved$\$ 0 \quad 10 \quad \$ 0 \quad 75$Small Leaved ..... 10 ..... 75

## CUCUMBER. (\#) Hfcu.


Evergreen White Spine. ..... 8010
Lb. ..... \$0 75Improved White Spine10
Arlington White Spine ..... 10
Long Green ..... 10
Extra Early Russiau. ..... 10
Early Frame ..... 10
Tailby's Hybrid, the best for pickles ..... 10
St. Louis Pickle, very fine for pickles ..... 10
New Giant of Pera, a very large sort ..... 10
Boston Pickling, an old standard sort. ..... 10
West India Gherkins, very small ..... 10
Japanese Climbing, fine for trellis ..... 207575

## FORCING CUCUMBER. Trcill (3urfen.

Pkt. $80 \quad 15$

General Grant, American grown
Oz.
Giant of Armstadt, imported.
15
Glory of Erfurt, a farorite sort 15 15

## CRESS. firtiic.



TRCE WATER CRESS.

| True Water. | \%0 35 |
| :---: | :---: |
| New Upland | 50 |
| Common, or Peppergrass | 10 |

Lb.
8400
500

## DANDELION. ? Р̈̈ucujantu.

Improved Large-leaved
French Garden, the very finest
8015
8090
20
275

## EGG PLANT. Eieruflanze.

|  | Oz. | Lb |
| :---: | :---: | :---: |
| New York Improved | \$0 35 | \$3 00 |
| Black Pekin. | 30 | 325 |
| Early Long Purple | 25 | 300 |

## ENDIVE. Cubivien.

|  | Oz. | Lb. |
| :---: | :---: | :---: |
| Green Curled Summer | \$0 15 | \$2 00 |
| Green Curled Winter | 15 | 200 |
| Broad Leaved Escarolle | 20 | 325 |
| Self Blanching (new) | 20 | 325 |



IMPROVED SIBERIAN KALE.


IMPROVED NEW YORK PURPLE.

## KALE OR BORECOLE.

Blätterfohl oder תraugiohl.

|  | Oz. | Lb. |  |
| :--- | :--- | :--- | :--- |
| Predeck's Winter . . . . . . . $\$ 0$ | 10 | $\$ 0$ | 50 |
| Improved Siberian . . . . . . | 10 | 65 |  |
| Dwarf German Greens . . . . | 10 | 75 |  |
| Dwarf Green Scotch . . . . | 10 | 75 |  |
| Tall Green, imported from |  |  | 75 |
| Germany . . . . . . . . . . . | 10 |  | 75 |

## KOHLRABI. תiofl=Sinfi.

|  | Oz. | Lb. |
| :---: | :---: | :---: |
| Earliest White Erfurt | 20 | \$2 75 |
| Early White Vienna | 20 | 275 |
| Early Purple Vienna. | 20 | 300 |
| Green Large, good for late. | 20 | 300 |



LARGE AMERICAN FLAG.


WHITE VIENNA KOHLRABI.

## LEEK. Worte Dier Rautif.

|  | Oz. | Lb. |
| :---: | :---: | :---: |
| Large American Flag | 25 | \$3 25 |
| Broad Leaved | 25 | 300 |
| Large Musselburg | 20 | 275 |
| Large Carantan. | 25 |  |

## LETTUCE. Sattidid oder ©nlat.

## New Sensation Lettuce.

This remarkable variety, first introduced a few years since, has rapidly grown in popularity until it has become one of the leaders in our sales of seed among gardeners. It is valuable for growing in cold frames, and in open ground during the summer months. No other lettuce thrives so well, witbstanding the hottest weather in a remarkable degree. It is a beautiful light yellowish green color, leares much blistered on the surface, and has the peculiarity of forming a solid head, even before half grown. Its uniform, handsome and even growth is unequaled, and it is one of the easiest to grow. Pkt., 10c ; oz., 25c ; 1/4 lb, 70 c ; 1b., \$2.25.


Jos. F. Dickmann's St.Louis Market
Lettuce, W. S....................
Early White Butter, W. S......... Big Boston, new, W. S.............. $20 \quad 300$ St. Louis Forcing, B. S. Royal Butter, new, W. S. Buttercup, W. S.


GENUINE HARD HEADIŇG HANSON LETTUCE

HANSON'S LETTUCE.


## COS OR ROMAINE LETTUCE.

|  | Oz. | 12. |
| :---: | :---: | :---: |
| Early White Self Folding. | $\$ 015$ | \$2. 50 |
| Paris White Cos | 15 | 2 50 |

Curled Varieties. תranic ©ortelı.

| Simpson's Early, very curled, white seed | \$0 15 | \$1 65 |
| :---: | :---: | :---: |
| Black Seeded Simpson, black seed. | 15 | 165 |
| Early Curled Silesia, white seed | 15 | 165 |
| Boston Curled, white seed. | 15 | 165 |
| Grand Rapids Forcing, black seed | 15 | 165 |



## MUSHROOM SPAWN. ©finuluiguoubut.



MUSHROOM.

CULTURE.-Mushrooms may be grown in cellars, under benches of greenhouses, or in sheds, wherever the temperature of 50 degrees can be kept up through the winter. The beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin bearing. Secure.fresh horse dung, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day, to prevent heating, until the pile is large enough to make a bed of the required size. Three or four feet wide, eight inches deep, and any length desired, are the proper proportions for a bed, but these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees, make holes in the bed about a foot apart each way, into which put pieces of the spawn two or three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. Take special care, however, when water is given, that it be at a temperature of about 100 degrees.

From experience with French and English Spawn, we find there is an important difference between them. li the manure in the bed is in proper condition the French Spawn will take hold and grow fully as well as the English, but if the bed is not in the right state it will often rot. The English Spawn on the contrary, after starting a little, will remain in a com* paratively dormant state for a long time without losing its vitality. It is well to keep these points in mind in crdering Spawn.

Lb. 100 lbs . English........................ . ..... .................. ....: ......... .............. \$0 20 \$11 00
$\qquad$

ROBINSON'S MUSHROOM CULTURE. A book giving directions how to raise Mushrooms.
Per copy, postpaid
MUSHROOMS, AND HOW TO GROW THEM. By Wm. Falconer. The most complete book published in America on the cultivation of Mushrooms. Per copy, postpaid

## MUSK MELON. 3uffer=Melnite.

## Rocky Ford (Colorado) Nutmeg Melon.

This is one of the best-selling Melons on the St. Louis market-has brought double the price of other nutmeg varieties. We have the true seed of this Melon, have bought the Melons here and took the seed out ourselves, so as to get the original stock. A trial will convince you.
Oz . ..... Lb.
Rocky Ford Nutmeg Melon ..... $\$ 015$
Dickmann's Best ..... 15
The Banquet ..... 10
Osage, or Improved Miller's Cream ..... 10
Tip Top ..... 10
Early Hackensack ..... 10
Large Hackensack ..... 10
Improved Cantaloupe. ..... 10
Early White Japan ..... 10
Baltimore, or Acme ..... 10
Montreal Market ..... 10
Improved Large Nutmeg, green ..... 10
Perfected Delmonico. ..... 10
Jenny Lind, very fine. ..... 10
Netted Gem ..... 10
Banana, New Improved. ..... 10
Extra Early Citron ..... 10


DICKMANN'S BEST MUSK MELONS.

# WATERMELON. Naniier=Miclour. 

## "Triumph" Watermelon.

This new Melon, as a market sort and for shipment, is the best ever introduced. It is very prolific, very early, and of uniformly large size. It is a cross between the Duke Jones and Kolb Gem; has the fine, handsome appearance of the former and the fine shipping qualities of the latter. The rind, like the Duke Jones, is of dark green color, the seed exactly the same color as the Kolb Gem. As a table melon it is of much better flavor than the Kolb Gem. The average size of the melon is very large. The originator gathered from $21 / 2$ acres, 2,418 melons weighing over 40 pounds each. Comparatively speaking, there were no small melons on the vines at the time of harvesting seed. The "Triumph" is very early very large, very prolific, deliciously sweet, of finest flavor -in fact, the finest Watermelon in the United States. The farmer who values his melon
 patch, and looks forward to the good times in June and July, can not afford to do without the Triumph. Plant only the best; you get it in the Triumph. Prices: Packet, 10 c ; ounce, 20 c ; quarter pound, 50 c ; pound, \$1.50.

|  | Oz. | Lb. |  | Oz. | Lb. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cuban Queen. | \$0 10 | \$0 65 | Rattlesnake, or Gypsy | \$0 10 | \$0 65 |
| Jordan Gray Monarch | 10 | 65 | Florida Favorite. | 10 | 65 |
| Green and Gold | 10 | 75 | Scaly Bark | 10 | 60 |
| Sweet Heart | 10 | 75 | Black Spanish | 10 | 65 |
| The Dixie. | 10 | 50 | Seminole. | 10 | 60 |
| Kolb's Gem | 10 | 50 | Mammoth Ironclad | 10 | 65 |
| Peerless, or Ice Cream. | 10 | 50 | The Boss | 10 | 65 |
| Mountain Sweet. | 10 | 50 | Citron. | 10 | 65 |
| Improved Ironclad | 10 | 65 | Johnson's Christmas | 10 | 60 |
| Dark Icing, or Ice Rind | 10 | 65 | Jones' Jumbo | 10 | 65 |

## JOS. F. DICKMANN SEED CO.'S RELIABLE ONION SEED. 3widfirl smuren.



RED WETHERSFIELD ONION.
For a more detailed description as to culture, see the book, "Onions for Profit;" price, 50c. Onion growers should have this book. No one can appreciate the value of reliable seeds better than those who have been once disappointed. Too much care can not be exercised in selecting your supply of Onion seed. There is no vegetable in which the quality of the seed exerts a greater influence upon the crop. Fully realizing this, we have for some years made a specialty of Onion seed, and have all our crops raised under special contract subject to careful supervision. In vitality it is very strong, being carefully tested. The rapid increase in our Onion seed trade among market gardeners and large growers of Onions, many of whom order from twenty-five to one hundred pounds, is the best evidence that our Onion seed is unexcelled in quality. If you use large quantities of Onion seed, it will pay you to write us for special prices, stating the amount required. Our prices will be as low as good Onion seed can be sold for. We are not in the market to compete with old and worthless seed, but we are ready and willing to have our prices compared with any reliable seed house.

## Jos. F. Dickmann Seed Co.'s Reliable Onion Seed-Continued.

GOOD ONION SEED is of the utmost importance. Fully realizing this, we make a specialty of the BEST Onion Seed. A dollar saved on the purchase of the seed is likely to be lost many times over when the bulbs are harvested. The first cost of the seed is a comparatively smallitem as compared with the expense involved in the proper preparation, fertilizing and cultivation of the soil. This cost is fully as great, and frequently more cultivation is required to raise a crop of inferior bulbs from poor seed than to harvest a crop of fine, evenly ripened bulbs from a good strain of seed. Our Onion Seed is grown only from choice selected bulbs, examined critically before being set out to produce seed. In quality, it is vastly superior to much that is put on the market, and which is grown chiefly with the object of producing the largest quantity of seed per acre. In vitality our seed is very strong, of quick and positive germination, as vitality trials are made from each bag of seed as soon as received, and further comparative trials as the season advances. The steady increase in our onion Seed trade, particularly among market gardeners, proves that DICKMANN'S ONION SEED is unexcelled in quality.


## ITALIAN ONIONS.

Staliänifate Bwiebelt.
Oz . $1 / 4 \mathrm{lb}$. Lb.
Mam'th Silver King \$0 $20 \quad \$ 075 \quad \$ 250$
Early Round Hard
El Paso, or Large Mexican
Extra Early White Pearl
Neapolitan Maggiajola
White Adriatic Barletta.
White Queen
Giant White Tripoli Red Mam'th Tripoli or Bermuda Red. Giant Red Rocca... Giant White Rocca. Mammoth Pompeii, or Copper King.... Giant Yellow Rocca, or Spanish King. .
True Bermuda Onion Seed Shallot Seed, Imp Chives Seed.

THE GENUINE PRIZETAKER.

## ONION SETS. Sch=3midhellu.

Yellow Bottom
White Bottom
Red Top, or Button $\qquad$ Garlic, ...... per lb. New White Multiplier.......... White Top, or Button........... $\}$ Market Price. Shallots
Boxes, crates and barrels charged at cost price.


DWARF, EXTRA CURLED PARSLEY.


| 20 |  | 75 | 2 | 50 |
| ---: | ---: | ---: | ---: | ---: |
| 20 |  | 75 | 2 | 50 |
| 20 |  | 75 | 2 | 75 |
| 30 | 1 | 10 | 3 | 50 |
| 25 |  | 90 | 3 | 50 |
| 25 | 90 | 3 | 25 |  |
| 25 |  | 90 | 3 | 50 |
| 40 | 1 | 50 | 5 | 00 |
| 30 | 1 | 10 | 3 | 50 |
| 25 | 90 | 3 | 00 |  |
| 25 |  | 90 | 3 | 00 |
| 35 | 1 | 25 | 4 | 25 |



## PARSLEY. ßeteriflic.

Triple Curled, or Myatt's Garnishing
Turnip-Rooted, or Hamburg...
Fern-Leaved
Champion Moss Curled
Dwarf̂, Extra Curled .

| Oz | $1 / 4$ | 1 b | Lb. |
| ---: | ---: | ---: | ---: |
| $\$ 0$ | 10 | $\$ 0$ | 20 |
| 10 | $\$ 0$ | 75 |  |
| 10 | 20 | 65 |  |
| 10 | 20 | 75 |  |
| 10 | 20 | 75 |  |
| 10 | 20 | 75 |  |
| 10 | 20 | 75 |  |



PARSNIPS.

# PARSNIP. Wratiunten. 

| Magnum Bonum | 8010 | \$0 60 |
| :---: | :---: | :---: |
| Large White Sugar | 10 | 60 |
| Student. | 10 | 60 |
| Hollow Crown | 10 | 65 |
| New Maltese | 10 | 65 |

## PEAS. Cirfitn. JOS. F. DICKMANN SEED CO.'S NORTHERN GROWN PEAS.

Our Seed Peas are of the very best qual ity obtainable, being all grown far north riddled and careiully hand-picked. They are raised from the best selected stocks, and the crops are carefully "rogued," being subjected to the most critical and constant inspection.

PEPPER. Wiefifr. $\begin{array}{cc}\text { Oz. } & \text { Lb. } \\ \text { Golden Upright, } \\ \$ 0 & 20 \\ \$ 275\end{array}$ Improved Sweet Mountain .... Long Red Cayenne
Chili or Mexican
Ruby King
Celestial...
Cherry Red....
Large Bell, or Bull Nose.. Golden Dawn..
$20 \quad 275$
$20 \quad 275$
$20 \quad 275$
$20 \quad 275$
$20 \quad 275$
20300
$20 \quad 300$
$20 \quad 300$


IMPROVED SWEET MOUNTAIN.

## JOS. F. DICKMANN'S PRIZE=TAKER PEA.

LARGEST, MOST PROLIFIC AND SWEETEST.
This Pea is the result of years of careful selections among peas; and, as it is now offered to the public, is without doubt one of the best sorts in cultivation. Its habits resemble the Stratagem, branching, but compact in growth. Pods are long, straight and very broad. Seeds are green, wrinkled and flattened, resembling Yorkshire Hero, but much larger. It grows about eighteen inches high, and is ready for market just after Dickmann Seed Co.'s Second Early Market Peas. Coming in when peas are in demand, every garden should have them in it to be complete. Packet, 10 c ; half pint, 15 c ; pint, $2 \overline{5} \mathrm{c}$; quart, 40 c ; gallon, \$1.50.

## EXTRA EARLY VARIETIES.



American Wonder. . $\$ 025 \$ 090 \quad 675$ Extra Early Premium

| Gem. | 20 | 7.5 | 550 |
| :---: | :---: | :---: | :---: |
| Laxton's Alpha | 20 | 75 | 575 |
| Daniel O'Rourke | 15 | 50 | 375 |
| Nott's Excelsior | 25 | 90 | 650 |
| Alaska. | 20 | 65 | 450 |
| Little Gem. . | 20 | 75 | 5. 50 |

## SECOND EARLY and LATE VARIETIES. Epäte ©゚rbien.

Qt. Gal. Bush.
Dickmann's Second Early Market Gar-
den..............
Abundance
Long Island Mammoth
McLean's Advancer
Horsford's Market Garden

$20 \$ 075 \$ 525$ $25 \quad 90 \quad 675$
$20 \quad 75 \quad 5 \quad 25$
$20 \quad 75 \quad 575$
$20 \quad 75 \quad 5 \quad 25$
$\begin{array}{lll}20 & 75 \quad 600\end{array}$

Qt. Gal. Bush
Everbearing ........ \$0 $20 \$ 075 \$ 575$
Telephone ........... $20 \quad 75 \quad 550$
Stratagem Improved.. $20.75 \quad 575$
Pride of the Market.. $25 \quad 90 \quad 675$
Champion of England, $20 \quad 75 \quad 500$
Large Black-Eyed Marrowfat

1550
$50 \quad 3.50$
Large White Marrow-
fat.
15
$50 \quad 350$

EDIBLE PODDED SORTS. Зuffer=erbien mit câbaren Edjoten.

Dwarf Sugar (gray seeded).
$8025 \$ 0 \div 10 \$ 700$

## POTATO SEED.

The Potato, as ordinarily propagated, is not grown from the seed, but from the tuber, a cutting of which resembles a graft or bud from a tree, and perpetuates the good or bad qualities of the parent. The irue seed, which is borne in a seed-pod following the blossom, is very seldom seen, is very difficult to gather, and consequently is very expensive. In appearance resembles a tomato seed of about one-tenth development, the Potato belonging to the Tomato family. The seed germinates very easily, and the plants can be cultivated by any one, producing tubers the first year about the size of buckshot; these, planted the second year, double in bulk, and after about three or four years become of edible size. As entirely new sorts are thus produced, the cultivation is very interesting and often profitable. Per pkt., 30c.

Carman No. 1


RURAL NEW YORKER No. 2.
VIRGINIA PEANUTS. Per 1 b ., 20 c .

The Freeman ${ }^{\text {Nar }}$
Thery reeman
Ohio Junior.
Early Puritan
Mammoth Pearl
Burbank Seedling
Rural New Yorker No. 2
Market
Clark's No. 1...
Chas. Downing.
Beauty of Hebron
The Thorburn
Late Burbank
White Star...
Empire State.
Early Rose.
Green Mountain.
Crown Jewel.
In addition to this we can also supply a choice stock of Ajax, Peerless, Dakota Red, Snowflake Colorado Red and White Elephant at the market price. Barrels and boxes at cost.

## SWEET POTATOES.

## Gühz=Sartofictu.

Early Red Jersey
Red Nansemond
Farly Yellow Jersey... Early Red Bermuda Yellow Nansemond. White Southern Queen. Yam or Vineless

Price. Market Price.


PUMPKIN. תiurrī̈.

|  | Oz | 1/4 1 lb . | Lb. |
| :---: | :---: | :---: | :---: |
| Japanese Pie. | \$0 10 | \$0 20 | \$0 75 |
| Crookneck | 10 | 20 | 75 |
| Connecticut Field | 10 | 20 | 50 |
| Large Cheese | 10 | 20 | 50 |
| Mammoth Chili | 15 | 50 | 165 |
| Nantucket | 10 | 20 | 75 |
| Etampes Mammoth Red | 10 | 25 | 90 |
| Kentucky Field | 10 | 20 | 60 |
| Mammoth Tours | 15 | 50 |  |
| Tennessee Sweet Potato. | 10 | 20 | 75 |

RHUBARB, or PIE PLANT. आhabarber.

|  | Oz | $1 / 4 \mathrm{lb}$. | Lb. |
| :---: | :---: | :---: | :---: |
| New Giant | \$0 15 | \$0 50 | \$200 |
| Victoria. | 15 | 50 | 175 |
| Linnaeus. | 15 | 50 | 175 |




Early Scarlet Turnip, forcing... | Oz | 10 | $1 / 4 \mathrm{lb}$ | Lb | 20 | Lb |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 75 |  |  |  |  | Dark Blood Red Turnip........... 10 Early Scarlet Turnip, white tipped, forcing

Early Scarlet, Glo. e

| 20 | 75 |
| :--- | :--- |
| 20 | 75 |

## RADISHES．अettig．



DICKMANN SEED CO．＇S MODEL WHITE BOX
RADISH．No Radish ever introduced has net with so large a sale，or giving such general satisfaction as the Philadelphia White Box．But our customers， however，were gratified and surprised to find that we offer a still better and more desirable Radish－Dick－ mann Seed Co．＇s Model White Box．It possesses all the excellent qualities of the once popular Phila－ delphia White Box，and is superior in the following respects：In the first place，the shape is rounder and much handsomer，as shown in our engraving，made from nature．It is also earlier，with fewer and shorter leaves，hence it can be sown more thickly in the row，enabling the grower to raise at least one－ third more radishes in the same space，whether under glass，in frames or boxes，or on squares or borders in open ground．It is indeed a model，perfect in all respects，solid，juicy and unsurpassed in flavor in all stages of growth，and equally valuable for the home or market garden．Per ounce，10c．；per quar－ ter pound，20c．；per pound， 75 c ．



Large White Summer Turnip．．．．．．． $10 \quad 20$
WINTER VARIETIES． $\operatorname{~冂ฎinter=丹ettig.~}$


\section*{SALSIFY，or OYSTER PLANT． －Ean まaferturyel． <br> 

## SPINACH．©pint．

Round Thick Leaved ．．．．．．．．．．．．．．．．．．．．．．．．．${ }^{1 / 4} 15$
Improved Thick Leaved（Viroflay
Prickly Seeded
Curled Leaved Savoy（Bioomdale）
Long Standing
New Zealand



SEA KALE. Micer=』ohl. Sea Kale. Oz., 15c; 1/4 1b., 50c; 1b. , \$1.75
SORREL. ভnterampifer. Broad Leaved French, Oz., 15c; $1 / 41 \mathrm{lb} ., 50 \mathrm{c} ; 1 \mathrm{lb} ., \$ 1.50$

TOMATO. Siebesmpid.


## TOBACCO SEED.

 Tabad Samert.Oz. $1 / 4 \mathrm{lb} . \mathrm{Lb}$.

Gold Leaf. White Burley. Yellow Prior. Missouri Broad Leaf Havana. Big Oronoko Connecticut ........ Leaf...


Oz. 1/41b. Lb. $\$ 025 \$ 075 \$ 275$ ${ }_{25}^{25} \quad 75 \quad 275$ $\begin{array}{lll}25 & 75 & 275 \\ 25 & 75 & 275\end{array}$ 25 25


## Favorite.

$$
\begin{aligned}
& \text { Favorite. } \\
& \text { Husk, or Strawberry. }
\end{aligned}
$$

Perfection Acme.
Dickmann’s N.Jersey
White's Excelsior

## TURNIP. Weifie ఇiibern.

Oz. $1 / 4 \mathrm{lb}$. Lb. Extra Early Purple Top Milan White Flat Dutch Early White Fla
strap leaved. Early Purple Top Munich Long White, or Cow Horn Large White Globe.

## HERBS. תriüuter.

## SEEDS OF SWEET, POT AND MEDICINAL.

| Anise. For garnishing and seasoning |
| :---: |
| Balm. Used for balm tea or balm win |
| Basil, Sweet. Used for highly-seasone |
| Bene. A medical plant. |
| Borage. Excellent for bees |
| Caraway. Used for flavoring. |
| Castor Oil Plant |
| Catnip. Used for bees |
| Coriander. Used chiefly for garnishing |
| Dill. Used to flavor soups, etc. |
| Fennel |
| Henbane |
| Hop Seed. |
| Horehound. Useful tonic properties |
| Hyssop. For medicinal purposes |

Hyssop. For medicinal purposes

Lavender. A popular aromatic herb, emitting a delightful perfume.........................................
$\$ 005$
Marjoram, Sweet. Popular for seasoning.
Marjoram, Pot. Used or seasoning.
Rosemary. An aromatic herb.
Saffron..................
age. The leaves and tender tops are used in stuffing and in sauces
Savory, Summer. Used for seasoning
Thyme, Bruad Leaved. For seasouing, also useful as a bee food.

Oz. 1/1b. Lb.
 Buckeye State........... 25 Red Cherry, Yellow Cherry, Yellow Plum, Red Pear Shape, excellent for pickles, preserves and pies. excel, 5 c ; oz., 25 c .

Pkt. $\$ 005$ 05
05 05 05 05 05 05 05 05 05 05 05 05 05
05 05

Opium Poppy

## Tansy

Winter Savory.
Wormwood $\begin{array}{lllll}\$ 0 & 10 & \$ 0 & 20 & \$ 0 \\ 75\end{array}$ 05

Early White Egg.
Purple Top Globe. Sweet German.
Purple Top, strap leaved
Seven Top
Yellow Globe, or Amber

| $\underset{\substack{\mathrm{Oz} \\ 10}}{ }$ | 1/4 1 lb | Lb ${ }_{\text {L }}{ }^{\text {a }}$ |
| :---: | :---: | :---: |
| 10 | 15 | 45 |
| 10 | 15 | 45 |
| 10 | 15 | 45 |
| 10 | 15 | 40 |
| 10 | 15 | 45 |

5
5
5
0
5


RED OR PURPLE TOP, STRAP LEAVED.


LONG REI) MAMMOTII MANGEL, WURZEL.

## FARM SEEDS.

## feli dament.

## Sugar Beets and Mangels.

Minugel Murzel ober Minufel Miifecn.

Golden Tankard

$\$ 0 \quad 15 \quad \$ 035$

Golden Yellow Mammoth................... 15
Mammoth Long Red................. ........ 15
Norbiton Giant ......................... .... 15
Red Globe. 15
Yellow, or Orange Globe.................... 15
Sugar Cane. 15
SUGAR BEETS. ふutfer शübe».


## Turnips, Rutabaga Varieties.

## 厄terf अӥ̈cn.

${ }_{1} 1 \mathrm{lb}$. Lb.
Improved American.................... $\$ 020$ \$0 50
Shirving's Purple Top.... .................. $20 \quad 50$
Large White French
20
$\begin{array}{r}50 \\ 50 \\ \hline\end{array}$

## SPRING WHEAT. Nacijel.

Bush
Pillsbury Spring Wheat. ... . ...................... $\$ 150$
Wellman Fife
150
Saskatchewan Fife ............................... 150

## SPRING BARLEY. (beritc.

|  |
| :---: |
|  |  |

## RYE. Moggcll.

Spring

| Excelsior | Market Price |
| :---: | :---: |
| Winter... |  |
| Thousandfold |  |

## DWARF FIELD BEANS. sero Bohnen.

Dwarf White Navy

| Bush. |
| :--- |
| $\$ 250$ |

Boston Small Pea Soup Bean. 275
Prolific Tree.
275

Bush.
New Japanese.. $\$ 150$
Silver Hull
150
Common.
Special rates on large quantities.

## SUNFLOWER. Somucubluucu.

Nammoth Russian ................. $\$ 0$ Lb. $10 \quad \$ 400$ lbs. 100 ibs

## HIGH GRADE GRASS AND CLOVER SEED.

Freiniten Grả̉ umd תfre ভnuten.


ORCHARD.


KENTUCKY BLUE.


HARD FESCUE.


TIMOTHY.


ITALIAN RYE.

## HIGH GRADE GRASS SEED. G์naz ธamen.



OUR SPECIAL GRASS MIXTURE. (Waniid)ter ©raç Samen. For Hay and Permanent Pasture

| CLOVER SEED. Slee Saucu. |  |
| :---: | :---: |
|  | Lb. 10 lbs . |
| Lucerne, or Alfalfa Cl | \$0 $15 \quad \$ 130$ |
| Alsike, Swedish or Hybri | $20 \quad 180$ |
| Bokhare Clover | $30 \quad 280$ |
| Sainfoin, Esparsette, or Holy |  |
| Japan Clover | $25 \quad 200$ |
| Honey, or Bee | 20180 |
| White Dutch | $30 \quad 270$ |
| Red Clover | Mkt. price |
| Yellow Trefoil | $15 \quad 125$ |
| Mammoth, Sapling, or Pea <br> Vine Red............... .... Mkt. price. |  |
| Crimson, or Scarlet | $15 \quad 125$ |
| Prices for large quantitie | pplication. |



EARLY BUTLER YELLOW DENT.


RIPLEY'S FAVORITE is one of the best white field corns; forms large, full-grown ears; very heavy and pure white. Per quarter bushel, 40 c . half bushel, 75 c . ; bushel, \$1.25.

| ly H | \$0 30 | \$0 50 | $\$ 100$ |
| :---: | :---: | :---: | :---: |
| Golden Beauty. | 30 | 50 | 100 |
| St. Charles White | 25 | 40 | 75 |
| Leaming | 25 | 45 | 0 |
| Pride of the North | 25 | to | 90 |
| Champion White Pearl | 25 | 50 | 00 |
| Giant White Normandy. | 30 | 50 | 00 |
| Black Hawk. | 35 | 60 | 110 |
| Murdock's 90-day. |  | 45 | 90 |
| Prolific Fodder Corn | 50 | 90 |  |
| White Cap Yellow Dent | 30 |  |  |
| Hickory King | 35 | 60 |  |
| Iowa Silver Mine |  | 60 |  |
| Iowa Gold Mine | 35 | 60 |  |
| Early Butler Yellow |  |  |  |

POP CORN. \$iqpy §orn.

| hite Ric | \$0 10 |
| :---: | :---: |
| Silver Lace | 10 |
| Golden Queen | 10 |
| Red Rice. | 10 |
| Striped Beauty | 10 |
| White Pearl. | 10 |

SEED OATS. जूacr.
Black Russian Winter
White Russian
Welcome....
Probestier
White Chester
Rust-proof

# CHOICE FIELD AND FODDER PLANTS－Continued． 

## COW PEAS．

They are great soil improvers．Makes poor land rich；makes good land more productive；also makes a splendid and nutritious green forage or hay crop，enriching the soil even when the crop is cut off．Leguminous crops plowed under are one of the best and cheapest ways of improving the soil．For this purpose the Cow Pea has no superior，especially for medium or light soils． For this class of soils the Cow Pea is superior to Clover as a soil improver；it also makes splendid green food or a most nutritious hay．There is no surer or cheaper means of improving soil than by sowing Cow Peas，and if we consider that land improved by the use of clover（excepting the crimson）takes eight months at least，while this， a much heavier crop，is produced in three to four months，their great value is obvious to all．In its capacity as a nitrogen gatherer，its growth largely enables the farmer to dispense with the use of nitrogen or ammonia fertilizers．Nitrogen or ammonia in commercial fertlizers is valued at fifteen cents per pound．The Cow Pea，to a greater extent than other leguminous crops，has the power to extract the costly nitrogen or am－ monia from the atmosphere．The removal of the vines from the land to use for fodder purposes decreases，to some extent，the value of the crop as a feeder of nitrogen to the soil，but the roots being rich in nitrogenous matter，are great im－ provers．From 10,000 to 18,000 pounds of green fodder per acre have been produced by the Cow Pea．To grow for hay they are most valuable，as they yield an immense quantity of food．
\(\left.\left.$$
\begin{array}{l}\text { Black ．．．．．．．．} \\
\text { Black Eye．．．．} \\
\begin{array}{l}\text { Clay ．．．．．．．．．} \\
\text { Whippoorwill }\end{array}\end{array}
$$\right\} $$
\begin{array}{l}\text { Market } \\
\text { Price．}\end{array}
$$ \begin{array}{l}Red Ripper ．． <br>
Crowder．．．．． <br>
Wonderful，or <br>

Unknown．．\end{array}\right\}\)| Market |
| :--- |
| Price． |

FIELD PEAS．ひels をrbjen．


FIELD LUPINS．テ̌eld Rupinen．

|  | Pk． | Bu |
| :---: | :---: | :---: |
| Yellow | \＄1 25 | \＄4 |
| hite | 125 | 450 |
| Blue | 125 | 450 |

## SOJA BEANS．

The Tall Variety．－Habit of growth，very luxuriant；grows $31 / 2$ to $41 / 2$ feet high on good land． Will yield 3 to 4 tons of dry forage per acre，and the feeding tests show it to be richer than clover hay．A test acre，grown on rich river bottom land，threshed over 100 bushels of clean seed per acre．The Massachusetts Experiment Siation says of them：＂They are probably the richest vegetable substance grown for farm use．＂

[^0]The Tall Variety
Dwarf

VETCHES，SPRING TARES．Witifen．


FORAGE PLANTS．Futter $\mathfrak{B} f 1$ lanzer．
Dwarf Essex Rape $\ldots . . . . . . . .$.

Karf Essex Rape ．．．．．．．．．．．．．．．．\＄0 15 \＄1 00
$\begin{array}{lll}\text { Kaffir Corn．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．} 10 & 85 \\ \text { New Rural Branching Dhoura ．．．．} & 10 & 85\end{array}$
Wild Rice．．．．．．．．．．．．．．．．．．．．．．．．．．． 20 185

Early Orange Sugar Cane ．．．．．．．．．．． 10 ． 85
Jerusalem Corn ．．．．．．．．．．．．．．．．．．．．．． 15140
Brown Dhoura．．．．．．．．．．．．．．．．．．．．． 10 ． 85
Sacaline，pkt．，10c；oz．，$\$ 1.25$ ；1／2 lb．，$\$ 8.00$ ；lb．， $\$ 15.00$ ．
Teosinite，pkt．，5c；oz．，10c；1／2 lb．，65c ；lb．，\＄1．25． Lathrus Sylvestris，pkt．，20c；oz．，40c； $1 / 4 \mathrm{lb}$ ．， $\$ 1.25$ ；lb．，$\$ 4.50$ ．
CANE OR SORGHUM．Зudéerrohr．

| Early Orange | $\begin{array}{cc} \mathrm{Lb} . & \begin{array}{c} 10 \\ \$ 0 \\ \$ 0 \end{array} \mathrm{lbs} . \end{array}$ |
| :---: | :---: |
| Early Amber Sugar Cane． | $10 \quad 85$ |

FLAX．©flactu．

OSAGE ORANGE．Æృectín ßflanzen．
Lb． $50 \mathrm{lbs} . \quad 100 \mathrm{lbs}$.
Osage Orange

## EGYPTIAN CASTOR BEAN．

This is a New Ornamental Bean，which grows about twenty feet high，with large leaves．A wonder among the bean family．Per lb．，40c．

## AUSTRALIAN SALT BUSH．

THE FORAGE PLANT FOR ALKALI SOILS．－ Yields 20 tons to the acre on any soil without water． Introduced into the United States by the University of California．Experiments and actual tests have shown that Salt Bush is a hardy，dry－air plant，capable of thrifty and substantial growth in any soil．Its nutri－ tious strength is equal to Alfalfa or Lucerne．Hogs， sheep and cattle are extremely fond of it，and chickens will leave almost any other food for it．It will stand cold to a temperature of 19 degrees，and heat to 150 degrees．Experiments in California，Colorado，Ari－ zona，New Mexico，Montana，Idaho，Utah，South Caro－ lina and Florida have been uniformiy successful．

One plant will cover 500 square feet in one season， covering the ground with a matting of from six to eight inches thick．It remains green all winter，and will yield 20 to 30 tons to the acre．It produces wool and mutton of superior quality．Horses fed on it seem to be possessed of inexhaustible endurance．One pound of seed will plant an acre．Sow broadcast，in soil well pulverized，after all danger of frost is past．Mix the seed with ten times its weight of loam，sand，ashes or plaster；cover lightly with a brush harrow or roll lightly．The seed germinates quickly，and the plants soon take possession of the ground；or，it may be sown in a hot－bed，cold frame or boxes．Transplant when two inches high．

Prices：Seed of the TRUE AUSTRALIAN SALT BUSH（Atriplex semibacratum），grown for us in Cali－ fornia，per pkt．，10c；oz．，20c；1／4 lb．， $50 \mathrm{c} ; 1 \mathrm{lb} ., \$ 1.50$ ，post－ paid．

New Domestic Coffee Berry Beans．

# TOWER GROVE PARK LAWN GRASS. 



## To see the fine LAWNS grown from our PREMIUM LAWN GRASS SEEDS

 you can go to any Park of St. Louis. We have been supplying the City for a number of years in succession, which you can see on record.This Grass is composed exclusively of the very best varieties, such as long experience has shown to be the best adapted to produce a thick, heavy, carpet-like lawn. In this mixture we use only the very best recleaned seed, and we can guarantee that for purity and germination it is equal to any variety sold under any name. One of the greatest troubles in obtaining a good lawn is to get it free from weeds. These, while not always in the seed, are quite often in the ground, or come from the use of stable manure. Our customers can rely, in buying the Tower Grove Park Lawn Gracs, on its being the purest seed obtainable, and entirely free from any foreign seeds. The quantity required for making new lawns is five bushels per acre, or for renovating old lawns, two to three bushels. For a space fifteen by twenty, or three hundred square feet, one pound is required for new, or half a pound for renovation. There are two ways of forming a lawn, by turfs, and by sowing the Grass seeds. If good turfs can be had the lawn may be formed very quickly. By the making of a lawn by transplanting the sods is at best a laborious and expensive method, and in many cases is absolutely impossible, on account of their being no good turf in the neighborhood. A good lawn can be had in from ten to twelve weeks by sowing the Grass seeds, and the final result will be the most eatisfactory.

The best time to sow is early in Spring, as the moist weather then experienced is favorable to the quick germination of the seed, and gives the young plants a chance of being established before the Summer comes with its hurning heat. The next best time is in September and October, as the weather is then comparatively cool, and sufficient growth may be made to establish the plants before the approach of Winter. Sow thinly and evenly, selecting a calm day for the purpose, and cover the seeds lightly with a wooden rake. After the Grass is well up, a moderately heavy roller may be passed over it to firm the surface.

During the season frequent watering and mowing will be necessary. A good supply of water is very important, as the fierce heat during the Summer is apt to burn the Grass out. The best time to water is in the evening or early morning, and the application should be copious; a slight sprinkling will do very little good.

MEN WHO KICK about weeds in their lawns should blame themselves for it. If they buy their lawn seed from a man who makes the seed business a "side line," they can not get as good seed as when they go to a reliable seed store. Our lawn seed is a mixture of the best recleaned seeds, and we guarantee it to make a beautiful lawn the first year, without weeds, unless they are in the ground from manure, or in the "black soil" hauled in.

# FLOWER SEEDS $\cdots$ ANNUALS 

## And Other Flowers, Blooming the First Year from Seed.

In this department we include not only Annuals that bloom and die the first year, but also those Perennials that flower freely the first year from seeds. Upon this class of plants the garden is dependent for many of the brightest, most showy and beautiful flowers, and consequently we have taken special care in the growth and selection of the choicest seeds. We have this year transferred to the following pages many novelties of recent introduction and of real beauty. For Flower Seeds by the pound and ounce, send for special prices.

> TH ON ALL ORDERS FOR SEEDS IN PACKETS the purchaser may select TWENTY-FIVE CENTS' WORTH EXTRA for Each ONE DOLLAR sent us. Thus any one sending $\$ 1.00$ car select seeds in packets amounting to $\$ 1.25$; for $\$ 2.00$, seeds in packets to the value of $\mathbf{\$ 2 . 5 0}$, and so on.

[^1]111 Salicifolius (Fountain Plant). Willow- PER PKT. 11 foliage ........................................................... 5
112 Tricolor ( 7 osepli's Coat). Yellow,red, green 5 113 Mixed. All kinds.5

ANTIRRHINUM (Snap Dragon). Those who have cultivated only the old fashioned, faded Snap Dragon have no idea how bright and beautiful these new and improved varieties are. They are easily raised from seeds, make a gorgeous bed on the lawn, and if freely cut they bloom incessantly throughout the season. Our mixtures contain all the new and choice colors, including the beautifully striped, variegated and margined.
114 Tall varieties. Mixed.. 5
115 Dwarf varieties. All colors mixed ............... 5
116 Anagallis. Low-growing plants, with remarkably bright and handsome flowers; mixed varieties.
ABUTILON (Flowering Maple). Although universally admired, comparatively few are aware how easily Abutilons can be raised from seed and how beautifully they flower all Summer the first season. To get them in bloom early the seed should be started in the house and the young plants set out in the garden when the weather is warm and settled. They grow rapidly bearing a rich profussion of the elegant, bellshaped flowers. A splendid house plant, blooming freely in Winter.
117 Prize. Mixed. Embracing the most elegant colors, both selfs and streaked and veined.... 15
118 ADONIS Estivalis. The Flos Adonis has fine, pretty foliage, with bright-scarlet flowers
119 AGROSTEMMA Coeli rosa (Rose of Heaven). Abundant bloomer, with deep rose flowers, very pretty in masses..
ALONSOA (Mask Flower). Free-flowering bedding plant, with handsome flowers, in bloom until frost.
120 Grandiflora. Bright scarlet, one and onehalf feet.
121 Linifolia. Orange scarlet, one and onehalf feet


GLOBE FLOWERED ASTER.

ASTERS.

Not only the most popular, but the most effective in the entire list, while most easy of culture, there is no flower which combines so much beauty and variety of color and shape and habit as the modern Aster. For a late Summer or Fall display they have no successful rival. Give them a rich soil, and in hot, dry weather they should be mulched and well watered.

## TRUFFAUT'S PAEONY PERFECTION ASTER.

A very favorite type. Thrifty, upright plants, large, fine flowers, with long in-curved petals. The florists' Aster and one of the finest. PER PKT. 122 Pæony Perfection. Finest mixed..
 12566 D 66 Dark blue......................... 5
DWARF CHRYSANTHEMUM FLOWERED ASTERS. Plants only ten to twelve inches high, producing flowers of the largest size and choicest colors.
126 A. Chrysanthemum Flowered. Mixed...... 5 VICTORIA ASTERS. A magnificent race of Asters. The colors include many delicate and some gorgeous shades, flowers very double and four inches across and from twenty to thirty in a single plant, fifteen to eighteen inches high.
127 A. Victoria. Choice mixed.
128
Pure white.
GERMAN QUILLED ASTER. Flowers composed
of tube or quill-shaped petals. Very beautiful with a great variety of colors.
129 German Quilled. Mixed.
130
Pure white....
Pure white....

131 Ch, nese Asters. Choice mixed, ,twelve sorts.
132 Dwarf Bouquet. A most charming class, of compact habit, only six to eight inches high. Each plant is covered with handsome flowers and looks like a bouquet set in the ground. Fourteen colors...
133 Globe Flowered. Best German mixed....
134 White Plume Aster. A grand Aster having large, plume-like flowers, cream white in color and lasting a long time. $\qquad$
135 New White Plume Aster. Extra Fine Florist Strain. A pure white Aster of great beauty; it cannot always be relied upon to produce feathery form, but a first-class flower may always be expected of grand size and pure color.

137 Balsam, Double White. Oz., $\$ 1.00$
138 Balsam, Double Perfection. Very double, immense, solid round flowers. Oz., $\$ 1.50 . .10$
139 Balsam, Double Camellia Flowered. Finest mixed. Oz.. \$1.00.
.10
140 Balsam, Double Mixed. Occasionally semidouble. Oz., 50c
141 Balsam, Double. Collections of six colors. 50
142 Balsam, Double Scarlet (King).................. 5
143 6 " Pink (Maiden's Blush)...... 5
144 Balsam, Double Solferino. Striped and spotted
145 BARTONIA. - Aurea. One of the most showy of our hardy annuals. The plants grow eighteen inches to two feet high, with thistle-like, downy leaves, commence to flower early and bloom continuously throughout the Summer; the large, saucershaped flowers, two and one-half inches across, are of a bright metallic yellow, and intensely brilliant.
146 BRACHYCOME.-Iberidifolia(Swan River Daisy). Very effective dwarf-growing plants, covered for months with a profusion of single daisy-like flowers, blue and white mixed; one-half foot.
147 BROWALLIA. Handsome plants, eighteen inches tall, with shining green foliage and bright blue and pure white flowers, mixed.. 5
ASPERULA. A hardy dwarf annual, with clusters of small, sweet-scented flowers, lasting a long time while in bloom, fine for bouquets; one foot.

PER PIKT.
136 Odorata (Sveet Woodruff). Chief ingredient in the "Maitrank," or May wine of the Germans. The dried flowers and leaves have a delicious perfume, and imparts an agreeable perfume to clothes, etc., when kept among them.
BALSAM (Lady's Slipper). An old and its gorgeous favorite garden flower, producing ored double flowers in the greatest profusion, of easy culture, succeeds in a good rich soil.


> BALSAM PERFECTION.
size and pure color..

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BEET.-Ornamental Foliaged. The large, growing varieties of the Chilian Beet are very attractive as the center of the circular beds surrounded by the Dracæna Leaf Beet, Nasturtiums, and other dwarf plants.

PER PK
148 Scarlet Ribbed Chilian. Immense leaves, of indescribably rich crimson bronze, with mid-ribs of shining scarlet. Oz., 15 c
149 Yellow Ribbed Chilian. Leaves greenishyellow, with deep golden-yellow midribs. Oz., 15c $\qquad$
150 Dracæna Leaf. Entirely unique, its ornamental, dark red, lustrous leaves resembling the Dracæna, very rich and beautiful for borders. Oz., 15c

163 NEW DWARF CANNAS. These new dwarf ever-blooming, large flowering French Cannas bloom freely the first year from seed. They are much less expensive and incomparably more beautiful for bedding than the best Geraniums. In fact, we cannot recall any other plants that have ever given us such satisfaction in masses or in beds, while even single specimens are most attractive in the garden. The roots can be kept in the cellar over Winter, and each clump will give six to eight good roots for planting out in the following Spring. The Mixed Seed we offer has been saved from the finest varieties of all colors. Oz., 60c; 3 pkts., 25c
164 Calandrinia Grandiflora. Very beautiful dwarf growing annual for the flower garden; in the sunshine the large rosecolored flowers expand into a perfect blaze of beauty.
165 Cacalia (Tassel Flower). Small tassellike blooms, often called Flora's Paint Brush, gracefully borne on long stems; useful for cutting ; bright scarlet and yellow mixed

CENTAUREA (Blue Bottle, or Bachelor's Button). One of the most attractive of all hardy annuals, the graceful beauty of its old-fashioned flowers being universally admired. A hardy annual of the easiest growth, and flowers freely and continuously, height two to three feet, flowers excellent for cutting.
166 Cyanus. Mixed. Including dark and light blue, purple, pink, rose, white, etc. Oz., 25 c .
167 Mascuta, or Sweet Sultan. 5

168 Clarkia. Very free flowering, flowers white with brilliant carmine center

170 CHRYSANTHEMUM.- Double, Corona= rium mixed. White and yellow, double flowers
171 Sulphureum fl. pl. Produces numerous very pretty, double flowers, of a rich lemon color.
172 CASTOR OIL BEAN. See Ricinus. $\qquad$
CALLIOPSIS. Very handsome and showy plants, with numerous flowers of brilliant colors and of long duration in bloom. Of the easiest culture, they require no care and thrive in any garden.
173 Drummondii (Golden Wave). Bushy, compact plants, covered all summer with bright golden flowers, two inches across, each distinctly marked with dark brown center. Oz., 20c.

5
174 Mixed. All varieties and colors. Oz., 20c.... 5
CELOSIA (Cockscomb). Quite easy to grow and certainly one of the most showy and brilliant of annuals. The combs of the best varieties often grow a foot or more across the top.
176 Fire=Feathered. The plant grows three feet high, and the main stems puts forth thirty to thirty-five branches, each crowned, with a feathery flowery head of an intense fire color.

177 PREMIUM COCKSCOMB. This is the best dwarf-growing Cockscomb we have, are firmly set in the crown, with well-balanced, large heads, two to twenty inches across. They grow very uniform and present an unusually solid effect in color, which is a rich ruby-red of extreme brilliancy. 3 pkts., 25 c. $\qquad$


178 Dwarf Golden Rose. Large combs of bright rose, marked with a stripe of clear golden yellow
179 Empress. Mammoth, bright purple combs, 5
180 Glasgow Prize, or Tom Thumb. A fine dwarf variety, dark leaves and crimson combs.
181 Dwarf Mixed. Various shades of red......... 5
182 Gold Feathered. This is in all respects like the Fire Feathered Celosia, except that the feathered flower heads are of a bright golden-orange color.

184 CREPIS Rubra (Hawkweed). Rosy, double flowers
185 CUPHEA Miniata. A pretty little half-hardy annual, bearing numbers of curiouslyshaped flowers, of a bright vermilion scarlet, with violet center.
186 CINERARIA Maritima (Dusty Miller). Very ornamental for bedding and as a decorative plant. Of dwarf, compact habit, with a handsome silvery-white foliage; can be grown very easily from seed. A beautiful plant for decorative purposes..
157 COLLOMIA Coccinea. Numerous heads of fine red flowers, somewhat like a Bouvardia

COSMOS Hybridus. Of very rapid growth, and make large bushes fully five feet high, which are a mass of elegant foliage until they bloom in August. From September until November each plant is covered with hundreds of showy blossoms two inches in diameter. The flowers resemble single Dahlias, and are pure white, flesh color, charming light pink, and deep rose in color, each with a bright yellow center. They are very easily raised and they make a grand display.

PER PKT.
188 All Colors. Mixed. 5
189 Pure White. Large, pure white flowers, extremely beautiful; very valuable for florists
190 Pure Pink. Beautiful large flowers of a clear, delicate pink color5

191 CYNEGLOSSUM (Venus Nazelworth)........ 5
DATURA (Angel's Trumpet or Sweet Nightingale). Yery showy, large-branching plants, growing three to five feet high, bearing immense trumpet-shaped flowers, six inches in length and very fragrant. They bloom freely from seed sown in the open ground the first season, but the roots can be taken up and kept over Winter the same as Dahlias.
192 Wrightii. Large, single, white flowers...... 5
193 Fastuosa, fl. pl. Large, double white........ 5
194 Fastuosa, fl. pl. Double purple.................... 5
195 Mixed. Seeds of all the above....................... 5
DIANTHUS (PINKS). The China and Japan Pinks are deservedly very popular, as few flowers can equal them in beauty and profusion of bloom. They comprise many distinct and most beautifully marked varieties, of rich and varied colors. They bloom continually all Summer and Fall, until severe frost; they live over Winter and bloom finely again the second season. They are alike ornamental in the garden and for bouquets. Plants ten to fifteen inches high, and are of the easiest cultivation.
196 Chinensis (Double Chinese Pinks). Clusters of small double flowers, finest mixed. Oz., 50c.
197 Chinensis albus, fl. pl. Double white........ 5
198 Diadematus, fl. pl. (Double Diadem Pink.) Marked like the original Chinese Pinks, very double, large flowers, magnificent in color and variety
199 Heddewiggii, Finest Single. Mixed. Flowers two to three inches in diameter. Oz.. 7ōc
200 Heddewiggii, fl. pleno. Finest double mixed, in great variety, extra choice. Oz., 75́c .......................................................... 5
201 OUR OWN MIXTURE of all the above splendid varieties. $1 / 2$ oz., 3.5 c ; oz., $60 \mathrm{c} \ldots 5$
Slug Shot is sure death to all insects 5 that injure the garden and field crops.

## MARKET GARDENERS

 Who buy seeds in large quantities are requested to write for WHOLESALE PRICES. While the prices quoted in this Catalogue are very reasonable, yet frequently we have orders for large quantities of certain seeds (such as Onion, Cabbage, Carrot, Cucumber, Melon, Radish, Turnip, etc.), and the purchaser naturally expects to buy at a price lower than that charged for a single pound.DAHLIAS. Every one knows and admires the Double Dahlia but comparatively few are aware that it can be grown so easily from seed and flowers so beautifully the first season that the purchase of bulbs is a needless expense. We offer the choicest seed, that, if sown in the Spring, will give a magnificent display of the brightest colors by August. Ркт. 202 Choice Mixed Pom= pon
.... 10 203 Mixed. Single sorts.. 5

204 ESCHSCHOLTZIA
single dahlia. (Calfornia Poppy). Mixed. Flowers yellow, orange and white, leaves finely cut, height, ten to twelve inches, very showy.... 5
205 EUPHORBIA Marginata (Snow-on-theMountain). A hardy annual, growing two feet high, with beautiful foilage, elegantly veined and margined with white, very showy. Oz., 25 c .

OrEGG=PLAIJT. Not edible. Ornamental, fruit-bearing plants, growing freely in rich, light, warm soil.
206 White $=$ fruited. Eggshaped
...... ...................... 5

214 GODETIA Albemarle. Plants compact, pro-
fusely covered with rosy-carmine flowers.. 5
215 Fine mixed. Many varieties. Oz., 25c........ 5
216 GYPSOPHILA Elegans. A mass of the finest little leaves and branches, covered with tiny, white flowers. Useful for bouquets, its delicate sprays imparting a light appearance
217 HELIANTHUS (Sunflower). The Dahlia. Produces numerous bright golden-yellow flowers, which are generally perfectly double
218 Mammoth Russian. Very large. Oz., 10c.. 5
219 Primrose. Small Sunflower of trim appearance5

HELIOTROPE. Every one loves the delightful fragrance and beauty of the Heliotrope, but very few are aware of the fact that it can be raised from seed as easily as Verbenas. From seed sown in the open ground the plants will flower in August, while a fine display can be had earlier by starting the seed in the house and setting out plants when the weather is warm.

207 Scarlet=fruited. Handsome, dark-green foilage
208 ERYSIMUM Hedge Mustard. Hardy annual, sweet scented, good for bouquets, etc.. 5
209 FORGET=$=$ IE $=$ NOT. See Myostosis5

210 FOUR=0'CLOCK. See Marvel of Peru. 5
GAILLARDIAS. Although long neglected, the single Gaillardia, or Blanket Flower, has lately come into welldeserved popularity. Of magnificent size and wonderful profusior, the flowers are greatly admired for their fine forms and rich blending of colors, while they thrive well everywhere.
211 Mixed colors. 5
212 GILIA. Mixed. All varieties. Good for cutting, of dwarf habit, will bloom almost anywhere 5
213 GAMOLEPIS Tagetes. Of compact growth, with fern-like foilage and bright-yellow, daisy-like flowers.


220 Choice mixed. Many varieties.
221 Dark Bouquet. The large flower heads are intensely dark, of the deepest blue in color and most deliciously fragrant. It comes true from the seed
222 HIBISCUS. Hardy annual, with large, showy flowers, very ornamental................. 10
223 ICE PLANT (Mesembryanthemum crystallinum). Fine for vases, singular icy foliage. 5
224 JACOBGEA ELEGANS. Double mixed, an old favorite for flower borders, continuously in bloom and useful for cutting, one foot high
LARKSPUR. Well-known annuals of great beauty, and noted for richness of their colors.
225 Double Dwarf Rocket. Finest mixed:......... 5
226 Tall Rocket. Double mixed.
227 Emperor Larkspur. Really splendid, a single plant having fifty or more erect spikes of flowers
228 LINARIA Bipartita splendida. A very attractive, free-flowering, hardy annual, heads of handsome purple flowers, resembling the snap-dragon.
229 LINUM Grandiflorum rubrum (Crimson Flax). One of the most beautiful annuals known. Valuable for bedding.
LOBELIA. Very dwarf plants, growing four to six inches high and forming dense masses of flowers. Of easy culture, and well adapted for bedding, edging, pots or rockeries.
230 Erinus, compacta. Deep, rich blue. $1 / 2$ oz., 75c.
231 Erinus compacta alba. White. $1 / 2$ oz., 75c.. 5
232 Erinus Crystal Palace. Dark blue, splendid. 5
233 Finest mixed varieties. Oz., 50c.
LYNCHNIS (Burning Star). Grand, hardy perennials, which grow and bloom from the same roots, year after year, requiring no protection. They will flower freely the first year if the seed is sown early.
234 Chalcedonica. Intensely bright scarlet........ 5
235 LOVE=IN=A=MIST. See Nigella.
236 LUPINUS Subcarnosus (The Deep-Blue Lupin). Its neatly cut, lively green foliage carpets the ground, from which are borne upright, on stems six to eight inches long, lovely spikes of the deepest sea-blue flowers, delicately fragrant...
237 Mixed. All annual varieties.
MALOPE. This old hardy annual is a favorite wherever known, as few plants produce more beautiful flowers. The plants grow eighteen to twenty inches high, and bear large single flowers.
238 Grandiflora mixed. Crimson, rose and white $\qquad$
MARIGOLD. The African varieties are stronger in habit, and produce larger flowers than the French.
239 African Double. Mixed. All varieties........ 5
240 French Double Dwarf. Mixed colors, of compact habit, numerous bright flowers..

MARVEL=OF=PERU (Mirabilis). The Marvel-of-Peru, or Four o'clock, is as easily grown as a weed, and is one of the most brilliant and showy of annuals. Planted in beds or masses, their compact growth, rich, glossy leaves, together with their profusion and diversity of bloom, present a gorgeous sight during the afternoon.

PER PKT.
241 Marvel of Peru. Mixed, all colors. Uz., 15c.. 5
242 MATRICARIA (Feverfew). Eximia fl. pl. Extremely beautiful plants, twelve inches high. Grows freely in any soil and bears numerous, perfectly double, pure white flowers, one inch in diameter.
MEDICAGO. These plants are grown for their curiously shaped seed pods-being of most peculiar shapes.
243 Acutellata (Snails). Flowers small, yellow.. 5
MATHIOLA (Sweet-scented Stock). A charming hardy annual, which sown early begins to flower in June, and bears a great profusion of fragrant flowers.
244 Bicornis. Light lilac- pink, very sweet.
245 Martynia fragrans. Fine Summer blooming garden plants, with large crimson Gloxinia-like flowers, followed by curiously horned fruits, one and a-half feet......
246 Mixed Varieties.. ............................................. 5
MIGNONETTE. The Mignonette is a uniof its sweet and delicate fragrance. The seed should be scattered liberally in sunny situations. The flowers of some of the newer varieties, described below, are of wonderful perfection.
247 Reseda odorata, Sweet Mignonette. Oz., 15c...................................................................
248 Odorata grandiflora ameliorata. Oz., 20c.. 5 249 Giant Pyramidal. Very fine, large flowers ${ }^{\circ}$ of compact, pyramidal habit. Oz., 35 c...... 5
250 PURE MATCHET. Of vigorous, pyramidal growth, with very thick, dark-green leaves, numerous stout flower stalks, bearing massive spikes of deliciously scented reddish-gray flowers, of great substance. $1 / 2$ oz., 50 c
251 Golden Queen. Very fine new variety, with flowers of a golden hue, highly effective, of dense, pyramidal habit. Oz., 40c.. 5
252 Mixed. Including many varieties. Oz., 25c.. 5
MIMULUS (Monkey Flower). Tender-looking plants, with singularly shaped and brilliantly colored flowers, blotched and spotted in every conceivable manner. Excellent for baskets or vases, while they thrive well in the garden if planted in partial shade.
253 Tigrinus. Fine hybrid varieties, mixed...... 5
254 Tigrinus grandiflorus. Very large-flowered and tigered and spotted varieties, most beautiful
255 Moschatus (Musk Plant). Leaves muskscented.
MYOSOTIS (Forget-me-not). These charming little favorites succeed best in damp, sandy situations, but thrive well in almost any soil.
256 Palustris. The true marsh, Forget-me-not, small, blue flowers.
257 Alpestris. Blue, dwarf, free-flowering...... 5

PER PKT.
258 Alpestris alba. White, height, six inches.... 5 259 Semperflorens. Blue, a dwarf variety, flowers from early Spring until the Autumn very fine.

10

## TOM THUMB NASTURTIUMS.

The improved Dwarf or Tom Thumb Nasturtiums are unrivaled in beauty and effect. When planted in poor soil, they flower most profusely and remain long in bloom. We recommend a liberal use of the seed, in variety.
260 Tom Thumb Beauty. Yellow and scarlet.... 5
261 Palace Gem. Sulphur, spotted maroon...... 5
262 Lady Bird. Its striking flowers are produced in profusion throughout the Summer. The ground color of the flowers is rich golden yellow, each petal barred with a broad vein (starting from the base) of bright ruby crimson. Oz., 25 c...
263 Tom Thumb Varieties. Mixed. Including the above and other choice colors. Oz., $15 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 40 \mathrm{c}$; 1b., $\$ 1.25$.
NEMOPHILA (Love Grove). Of neat, compact habit, blooming freely all Summer.. If thinned to four inches apart the plants will present a dense mass.
264 Mixed. Many rich, bright colors. $\qquad$
NIGELLA (Love-in-a-Mist). Very showy in foliage, flowers, and seed pods. The pretty flowers are surrounded by a delicate wreath of fine, mossy, green fibers.
265 Damascena, Double. Mixed. With finely cut leaves and curious blue and white flowers
266 Dwarf, Double. Of compact, neat habit of growth. A little gem, with white and blue flowers
267 NICOTIANA Affinis. Produces splendid pure white, Bouvardia-like flowers on long terminal tubes. When its large flowers are fully expanded in the evening and morning it has a most striking effect, and is so fragrant that a small bed will perfume the whole surrounding atmosphere. Taken up in the Fall, cut back, and potted, it will bloom freely all Winter.
268 NOLANA. Mixed. Very pretty trailing plants for rock-work, hanging baskets, flower borders, etc. Flowers resemble the


269 GENOTHERA (Evening Primrose). Acaulis alba. Saucer-shaped, silver-white, flowers, of enormous size, very striking and fragrant
270 Drummondii. Very large, bright-yellow flowers
271 OXALIS. Exceedingly free-flowering little............................................. plants with lively foliage, and entirely covered with bright flowers from June until September. Very useful for edgings, as they form an even and pleasing border.. 5


PANSIES. Pansies are the most popular of all flowers grown from seed. It is needless to say anything in praise of such a universal favorite. It is everywhere popular, both for the brilliant beauty of its flowers and the long continuation of bloom. Pansy seed is a specialty, and we have not only a large collection of varieties, but also the very best seed of each variety.
272 Giant Odier. The flowers, of immense size, are of the popular Odier type, being all three-spotted or five-spotted on back-grounds of very rich colors, the flowers are of good substance and fine form, plants are of neat, compact growth. 1/8 oz., 85c; oz., \$6.00; pkt., 15c.
273 Odier, or Blotched. Superb, large-eyed flowers of very good shape, and beautifully blotched with rich



275 Prince Bismarck. Beautiful shades of brown and golden-bronzed marbled. $1 / 4$ oz., 50 c ; oz., $\$ 1.50$
276 Snow Queen. Flowers of a delicate pure satiny-white. $1 / 4 \mathrm{oz}$., 50 c; oz., $\$ 1.50$.
277 King of the Blacks, or Faust. Flowers intensely black, almost coal-black. $1 / 4 \mathrm{oz}$., 40c; oz., \$1.25.
278 Lord Beaconsfield. Large flowers of deep purple violet, shading off in the top petals to a white hue, highly effective. $1 / 4 \mathrm{oz}$., 40c; oz., \$1.25.
279 Emperor William. Flowers of a splendid ultramarine blue, with a well-defined pur-ple-violet eye. $1 / 4 \mathrm{oz}$., 40 c; oz., $\$ 1.25 . . . . . . .5$
280 Dark Purple. Rich, deep color. $1 / 4$ oz., 40c.. 5
281 Silver=edged. Dark purple, white border.... 5
282 Striped and Mottled Varieties. Very fine and exceedingly beautiful. $1 / 4 \mathrm{oz}$., 40 c ; oz., \$1 25

5
283 Gold=margined. Strikingly handsome........ 5
284 Pure Yellow. Large, golden flowers. $1 / 4$ oz., 40c.
285 Large Flowering. Very fine mixed. Embracing all the separate colors of German Pansies. $1 / 8$ oz., $25 \mathrm{c} ; 1 / 4 \mathrm{oz}$. $40 \mathrm{c} ;$ oz., $\$ 1.25 . .10$ 286 Good Quality. Nixed. Fine for bedding, many rich colors. $1 / 40$ oz., 25 c ; oz., 85c.... 5
287 PRIZE MIXED. An extra fine mixture of all the best varieties of show, fancy, striped and spotted Pansies, and also the giant-flowered Pansies of the improved Giant Odier types. 1/8 oz., 50 c ; oz., $\$ 350 . .10$


PETUNIA.
PETUNIA.
Most valuable plants, succeeding well everywhere. They are particularly showy in beds or masses, and are universal favorites on account of their richness of color, fragrance and continuous blooming.

288 Petunia Hybrida. Finest mixed. A good mivture, embracing all colors, including striped and blotched varieties, very profuse flowering and excellent for bedding or massing. $1 / 4 \mathrm{oz}$., 30 c .
289 Hybrida. Mixed. Good imported seed. Oz., 50c
290 Large flowering. Fine Mixed. All colors. 15
291 Blue Veins. Fringed. Elegant flowers, deeply fringed, of various shades of purple, rose and lavender, delicately veined and penciled.
292 BEST DOUBLE PETUNIA. The Double Petunia produces no seed and but little pollen-which is carefully used to fertilize the finest single flowers-and from these the seed is saved. In raising plants from this seed great care should be taken to preserve the smallest and weakest plants, as these are the ones that bear the finest double flowers.
293 PERILLA Nankinensis. Valuable for bedding and for general effect as an ornamental plant, beautiful, metallic, bronzypurple foliage. Oz., 20c.
294 POPPIES. Improved Double Car= nation. Mixed. For dazzling richness and variety of colors, the flowerś are unequalled. Simply scatter the seed in the open ground and a mass of beauty will result which will be a constant source of pleasure. Oz., 25 c .
295 Double Pæony=Flowered. Mixed. Splendid large double flowers, all colors. $\mathrm{Oz}, 20 \mathrm{c}, 5$
296 Somniferum (Opium Poppy). True, gigantic white, single flowers. Oz., 20c.
297 THE NEW PHLOXES. (Starred and Fringed.) These Starred and $F=n_{0}$ ed Phloxes are really entitled to rank as a new race, and are beyond question the most striking novelties in Phloxes ever introduced, being of unique and indescribable beauty. In the Fringed flowers the petals are partly fimbriate and partly three-toothed, all distinctly bordered with white, which, together with the bright eye of the center, picturesquely contrasts with the magnificent velvety colors, in more than twenty distinct shades. In the Starred Phloxes the pointed central teeth of the petals (five in number) are five to six times as long as the lateral ones and project beyond them like little spines, snehalf inch long, giving the flowers a aistinctly marked, regular, star-like form, the beauty of which is enhanced by the broad white margins bordering the edges of the petals. 3 pkts., 25 c ..


## PHLOX DRUMMONDII. No flowers <br> are more

 showy or brilliant than this popular annual which thrives so universally throughout our country. The Improved Grandiflora varieties particularly are exceptionally beautiful.PER PKT.
298 Fine Mixed. All colors of the original type of Phlox Drummóndii. Oz., 60c.......... 5
299 Alba (Pure White). Our strain of this is really magnificent, the chaste white flowers being of unusual size and perfect form.. 10
300 Carnea. A very beautiful Phlox; flowers of a delicate, fleshy pink, with a chamoisrose center.

10
301 Large Blood Red. The darkest colored of all, being of the deepest blood-red color.... 10
PORTULACA. In brilliancy and beauty of rivaled. They delight in sunny situations, where they rapidly carpet the ground, each plant covering a space of about fifteen inches in diameter. 302 Finest Single. Mixed. In great variety, large flowers of most brilliant colors. Oz., 40c.

305 " " Red. Richest....................... 5
306 Double Rose-flowered. Mixed. Unsurpassed for brilliancy and beauty. From first-class seed, over one-half of the plants will produce magnificent double flowers; these can be transplanted eight inches apart as soon as they bloom, thus making the entire bed of double flowers.
RICINUS (Castor-oil Bean). Picturesque foliage plants that speedily attain gigantic proportions, and are ornamental until destroyed by frost.
307 Gibsoni Coccineus. The stalks and leaves are of a bright metallic bronze color; the large bunches of fruit are of a burning crimson color

5

SALPIGLOSSIS (Velvet Flower). One of the most graceful in growth, as well as the most beautiful in flower of the many easily grown garden annuals. The flowers are singularly marked and delicately penciled-in shape somewhat resembling the Petunia.

PER PKT.
309 Mixed. All colors.. 5
310 Grandiflora. The flowers are larger in size, and are most vividly marked, spotted and striped on ground colors of deep blue, rose, dark violet, light yellow, reddish bronze, etc
SCABIOSA (Mourning Bride). The old and wellknown Sweet Scabious is not as generally cultivated as it deserves. The perfectly double flowers are useful for cutting; they are gracefully borne upon long slender stems, well above the foliage.
311 Tall German. Mixed. All colors; height, two feet. $\qquad$
312 Dwarf, Double. Mixed. Plants of compact habit, profusely bearing globe-shaped double flowers of great beauty.
313 SALVIA (Flowering Sage). Of all the Salvias the Splendens is the brightest and best, well worthy of cultivation.
314 SANVITALIA (Procumbens ff.pl.). Dwarf creeping plant, with profusion of double, bright yellow flowers, compact and effective as border plants.
SCHIZANTHUS. Half hardy annuals, one and one-half feet in height, literally covered with flowers.
315 Papilionaceus (Butterfly Flower). A charming variety, marked with violet, yellow, crimson, etc.
316 Mixed. All colors............................................ 5
SENSITIVE PLANT. The Sensitive plant is very chaste and elegant in foilage, the leaves being delicately pinnated, while it bears attractive small pink flowers in globose heads. It affords much amusement by its sensitive charactereven when slightly touched the leaves close and droop; easily grown.
317 Mimosa Pudica (Sensitive Plant). $\qquad$
318 STEVIA SERRATA. Produces a mass of tiny, star-shaped, pure white flowers. Most excellent for bouquets. The plants grow about eighteen inches high, stems branching freely and almost completely covered with the corymbs of flowers. Very pretty in beds, and almost unequaled for cutting to arrange in bouquets and vases with other flowers. Flowers freely the first season from seed
319 Saponaria Calabrica. Mixed. Dwarf continuous blooming annuals for beds and edgings, pink, white, etc., $1 / 2$ feet.
320 SWEET SULTAN (Centaurea Suaveolens) The Yellow Sweet Sultan produces its handsome brush-like, bright-yellow flowers in wonderful profusion; the flowers have long stems, keep well, and are very valuable as cut flowers, finding a ready sale
SILENE (Catchfly) Suitable for the open border or rock work. Hardy annuals.
321 Armeria. Different colors, fine mixed...


STOCK, TEN=WEEKS. All the variesirable as pot-plants, as well as in open garden. They are greatly prized for cut flowers, on account of their fragrance and diversity of color. To have a continuous succession of bloom, sow at intervals from the beginning of March to the end of May.

PER PKT.
322 NEW DWARF WHITE PYRAMID. Of very dwarf growth, the little plants are each crowned with magnificent heads of beautifully-shaped, perfectly double flowers, of fine form and paper-white color. The strain is so high-bred that a remarkable percentage comes double. 2 pkts., 25 c
323 NEW WHITE PERPETUAL (Cut and Come Again). Of strong growth and fine branching habit, it grows to the height of one and a half feet, and if sown early will produce uninterruptedly a great abundance of bloom from June until November. The individual flowers are uncommonly large, of a fine, rosette-like shape, and the purest possible white. The flowers appear on each little shoot, and the oftener they are cut the better they seem to like it. 2 pkts. 25 c . 15

324 RED VICTORIA Each itself a naturally-grown bouquet, of a beautiful pyramidal shape, the natural branches being symmetrically arranged around the main stem, which is slightly raised in the center, brilliant, double dark blood-red flowers.
325 GIANT PERFECTION. A splendid race, growing two and a-half feet high, with large spikes of perfectly double-flowers of great substance. Mixed...
326 Dwarf=German Ten-Weeks. Finc mixed.. 5
327 Large=flowering Dwarf. Choice mixed... 10
328 Mixed. All colors and kinds.5

329 TARGETES Lucida. Even if it never bore its small, bright yellow flowers, this would be well worth growing for its delicate, fern-like foilage, of such powerful and delicious fragrance.
330 Patula nana (Cloth of Gold). An attractive, dwarf-growing bedding plant, with very numerous golden-orange blossoms, delicate, fern-like foilage, useful in bouquets and of delicious fragrance...
331 TRIFOLIUM Suaveolens (Sveet-scented Clover). A great favorite in gardens on account of its delicately scented flowers, six inches high. Oz., 25c; 1/4 lb., 75c; lb., $\$ 2.50$
VERBENAS. Verbenas flower very quickly from the seed and thrive much better than from cuttings.
332 Hybrida. Mixed. This seed, although so cheap, is really quite good, and embraces all colors. $1 / 4 \mathrm{Oz} ., 30 \mathrm{c} ;$ oz., $\$ 100$.
333 VERBENA HYBRIDA. Extı a line mixed. From a superb collection of named varieties. Very large in flower and corymbs, and of the richest and most brilliant colors as now perfected, this is superior to the Mammoth Verbena, and is one of the finest strains of Verbena hybrida in cultivation to-day. The seed has been saved not only from a large collection of many bright and pleasing self-colors, but also from the finest varieties of the auriculaeyed type. 2 pkts., 25 c ; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$; oz., $\$ 2.50$
334 Italian Striped. Very showy striped flowers
of many bright colors. $1 / 4 \mathrm{oz}, 75 \mathrm{c}$............. 10
335 Scarlet Defiance. True, brightest scarlet, Intensely rich. $1 / 4 \mathrm{oz} ., \$ 1.00$


## VIOLAS, or SWEET VIOLET.

Extremely popular in Europe for bedding Violas or Tufted Pansies should be more generally used in America. Sow the seed in May, and when in flower in August or September, transplant into well-enriched beds, assorting as to color or arranging in any design desired. Soon after the snow is off the following Spring they will begin to bloom, and throughout the Spring and early Summer will give a profusion of flowers.
336 Admiration. Deep violet............................... 10
337 Cornuta alba. Pure white................................. 10
338 Perfection. Fine, light blue ......................... 10
339 Purple Queen. Rich, deep purple............... 10
340 Finest mixed. All the above colors. is. 10
oz., 50 c.

VINCA (Madagascar Perizinkle). Splendid house and bedding plant, eighteen inches high, with glossy green leaves and circular flower. per pet. 341 Rosea. Fine rose color
342 Rosea alba. White rosy eye.
343 Alba pura. Clear, pure white.
344 Mixed. The above three varieties. 5
VISCARIA (Rose of Heaven). Adapted either for beds, edgings or clumps, their profuseness of bloom will always rank them among general favorites. Hardy annuals.
345 Fine Mixed. One foot.
ZINNIAS. No flowers are more easily grown from seed sown in the open ground, and few bloom so continuously throughout the entire Summer. Those acquainted only with the old-time Zinnias will be surprised at the perfection to which the newer strains have attained.
346 Choice, Double. Mixed. All colors
347 Superb, Double. Mixed. Perfectly double flowers, of grand form, large size, brilliant colors

349 Tenuiflora. Of dwarf habit, a good grower. succeeding everywhere, and desirable as a border plant. Sown where they are to bloom, in rows, they make a striking effect, the plants bear upright, small, single, dark carmine flowers in profusion..
350 Haageana fl. p1. Of elegant habit, making a circular bush of two and one-half feet in diameter and only eighteen inches high, almost entirely covered with small, perfectly double flowers of an intensely ich, orange yellow color; fine for cutting.......... 5
MIXTURE. The following mixture is carefresh seeds and cannot fail to give satisfaction. The packets are liberally filled, and in no other manner can so many seeds be obtained for such light cost.
351 WILD FLOWER GARDEN MIXTURE.

These mixed flower seeds embrace more than a hundred varieties of such easygrowing and pretty flowers as are suitable for forming a wild-flower garden. They for forming a wild- flower garden. They
are very useful for woodland walks, roadsides, railroad embankments, and for sow-
ing alongside of fences and on any untidy, sides, railroad embankments, and for sow-
ing alongside of fences and on any untidy, bare spots of ground which are so fre-
quently unsightly and which, if properly quently unsightly and which, if properly cared for and kept free from weeds, can be made to produce a continual display of bloom during the Summer. Oz., 25c........ 10

## SEEDS OF ANNUAL CLIMBERS.

In the flower garden and for the adornment of rural homes, no class of flowers is more useful than these. Many a trellis, fence, tree-stump or veranda, otherwise unattractive, can be rendered beautiful by planting seed of rapid-growing Climbers. We recommend a liberal use of seeds of a number of varieties. By a careful reading of the following list a judicious selection can easily be made.

> On all orders for SEEDS IN PACKAGES the purchaser is entitled to select 25 Cents WORTH EXTRA for each ONE DOLLAR sent us for Seeds in Packets.


[^2]
## Seeds of Annual Climbers-Continued.



HUMULUS JAPONICES, OR JAPANESE HOP. PER PKT.
370 HUMULUS Japonicus (Fapanese Hop). A very ornamental and extremely fast growing Climber. While the foliage resembles in shape that of the common hop it has more incisions, is very dense, and of a lively green; the stems and leaves are somewhat rough and hairy. The principal and most valuable feature of this new climbing plant is that it can be sown in the open ground in Spring, and that it attains enormous dimensions very quickly.
IPOMGEA. Rapid-growing, tender annuals, with ornamental foliage and most beautiful varied colored flowers. Valuable Climbers for the garden and as easily grown as the Morning Glory.

$$
371 \text { Bona Nox (Good Night, or Evening Glory). }
$$ Most beautiful large flowers

MAURANDYA. Charming Climbers, elegant alike in foliage, and from their graceful growth are weltsuited for hanging baskets, vases and light trellis.

PER PKT.
372 Barclayana. Rich violet blue; ten feet........ 10
373 Finest Mixed. Blue, white and mauve....... 5
374 THE MOON FLOWER, the Original
Variety. This variety makes an immense growth of vine and dense foilage, but must be started early to flower in the North. The large flowers are some a beautiful blue and others pure white in color. Even when it does not bloom it is one of the handsomest vines in cultivation, on account of its quick -growing and dense foilage, which is not torn by wind or rain. The leaves are of a bright, glossygreen color, uniformly heart-shaped.
375 MINA LOBATA. The flowers appear on fork-like racemes, rising almost erect out of the dense and luxuriant foilage; they are as buds, at first bright red, but change through orange-yellow to yellowish-white when in full bloom. It is a very rapidgrowing climber, forming pyramids of over eighteen feet in height.
376 MOMORDICA Balsamima (Balsam Apple). A very beautiful climbing plant, with handsome apple-shaped fruits.
377 Charantia. (Balsam Pear). Rapid-growing climber with very beautiful fruits, of a rich golder yellow color, which, when ripe, open, disclosing the seeds encased in a carmine covering. The fruits, preserved in alcohol, make a most useful liniment. Oz., 50c.
NASTURTIUM. The Tropæolum Majus, or Tall Nasturtiums, are among the easiest grown and prettiest and thrive on poor soil. Free-bloomers, and the green seed-pods make excellent pickles.
378 Majus, Finest Mixed Tall Nasturtium. Many bright colors. Oz., 15c..
379 TROPAEOLUM Lobbianum 5
ORNAMENTAL GOURDS. A large and interesting class, producing a great variety of curious fruits, many of which are peculiarly marked. All the fruits are hard-shelled, and will keep for years, exciting much attention.
380 Mixed
5
THUNBERGIA. Very elegant, slender-growing Climbers, rapidly covering wire trellises, and also useful for vases in the garden or house. The colors are pure white, light yellow, and deep orange, and of each color there is a variety with white eye and also with black eye-the latter often called "Black Eyed Susan." They continue in flower all Summer.
381 Mixed. Six varieties.

REMEMBER. $\qquad$ Ou all Orders for Seeds in Packets (whether Vegetable, Farm or Flower Seeds), the purchaser may select twenty-five cents, worth extra for each One Dollar sent us. Thus any one sending us $\$ 1.00$, can select seeds in packets amounting to $\$ 1.25$; for $\$ 2.00$, seeds in packets to the value of $\$ 2.50$; for $\$ 3.00$, to the value of $\$ 3.75$, and so on. This discount applies only to seeds in packets, purchaser's selection, and does not apply to seeds by weight or measure.

## 382 SWEET PEAS.

## (LATHYRUS ODORATUS).

The Sweet Pea has become one of the most popular of cultivated flowers, and admired not only in the largest and best "places," but in the humblest garden. Not only do they readily adapt themselves to circumstances, giving some bloom no matter how unfavorable the conditions, but repay better care and culture, with a proportionate abundance of bloom. Everyone who cultivates flowers should plant Sweet Peas, for the list of distinct and beautiful varieties is now so large that no one will ever


SWEET PEAS. tire of them.

Culture.-Sweet Peas do best in a moderately rich soil, which has been made so by repeated manurings rather than by a single heavy application. The use of fresh manure or even a large quantity of well rotted manure tends to produce coarse vines and smaller, weaker colored flowers. Work the soil thoroughly as early in the Spring as it can be done without making it sticky and hard; then make a trench about six inches deep and about eight inches wide at the bottom, the sides sloping to the surface, and sow the seeds in double rows six inches apart, dropping in each row from six to twen-ty-four seeds to the foot, according as size or quantity of bloom is most desirable; thin sowings will give the largest flowers and thick sowings the most of them. Cover with one to two inches of soil and see that the ends of the partially filled trenches are open, so that no water can stand in them. After the plants are about five inches high fill up the trench; this method secures deep rooting, essential to long continued blooming, without danger of losing the seed from too deep planting. As fast as the flowers come into full bloom they should be cut, for if the pods are allowed to form, the plants will soom stop flowering.

Our list of Sweet Peas includes all of the best varieties, both old and new.

1 ADONIS. Carmine Rose. Pkt., 5c; oz., 10c; 1b., 75c.
2 APPLE BLOSSOM. Bright pink and blush. Pk., 5c; oz., 10c; lb., 90c.
3 BLANCHE FERRY. White petals, red standard. Pkt., 5c; oz., 10c; 1b., 75c.
4 BOREATON. Dark brown wine color. Pkt., 5c; oz., 10c; 1b., 75c.
5 BLUSHING BEAUTY. Soft pink, suffused with lilac. Pkt., 5c; oz., 15c; 1b., $\$ 1.25$.
6 BUTTERFLY. Pale gray, with distinct porcelain edge. Pkt., 5c; oz., 10c; 1b., 75c.
7 CARDINAL. Crimson scarlet. Pkt., 5c; oz., 10c; 1b., 75c.
8 CARIINE INVINCIBLE. Brightest crimson. Pkt., 5c; oz., 10c; 1b., 75c.
9 COUNTESS OF RADNOR. Delicate lavender. Pkt,5c; oz., 10c; lb., 90c.
10 CROWN PRINCESS OF PRUSSIA. Blush Pink. Pkt., 5c; oz., 10c; 1b., 75c.
11 DELIGHT. White, crested with crimson. Pkt., 5c; oz., 10c; lb., 75 c .
12 DUCHESS OF EDINBURG. Scarlet, flushed with crimson. Pkt., 5 c ; oz., 10c; 1b., 75c.

13 DUKE OF CLARENCE. Rosy claret, selfcolored flower. Pkt., 5c; oz., 10c; 1b., 75c.
14 EMILY HENDERSON. White. Pkt., 5c; oz., 15c: 1b., $\$ 1.25$.
15 EMILY ECKFORD. Porcelain, suffused with reddish mauve. Pkt., 5 c ; oz., 10 c ; 1b., 75c.
16 EMPRESS OF INDIA. Rosy pink standards, white wings. Pkt., 5c; oz., 10c; 1b., 75c.
17 FAIRY QUEEN. White, flushed and feathered with pink. Pkt., 5c; oz., 10c; 1b., 90c.
18 ISA ECKFORD. Creamery white and rosy pink. Pkt., 5c; oz., 10c; lb., 90c.
19 INDIGO KING. Very dark purple and indigo. Pkt., 5c; oz., 10c; 1b., 75c.
20 ITIPERIAL BLUE. Bright blue, rather dark. Pkt., 5c; oz., 10c; 1b., 75c.
21 LOTTIE ECKFORD. Rose and white, edged with blue. Pkt., 5 c ; oz., $10 \mathrm{c} ; 1 \mathrm{~b} ., 90 \mathrm{c}$.
22 LETION QUEEN. Blush pink and lemon. Pkt., 5c; oz., 10c; lb., 75c.
23 MRS. ECKFORD. White, delicately shaded with primrose. Pkt., 5c; oz., 10c; lb., 75 c .
24 MISS HUNT. Carmine, salmon and soft pink. Pkt., 5c; oz., 10c; 1b., 75c.

Prices on large quantities, on application. The forty-seven kinds for $\mathbb{\& 2 . 0 0}$.

## SWEET PEAS - Continued.

25 MRS. GLADSTONE. Delicate soft pink, with rosy blush wings. Pkt., 5c; oz., 10c; lb., 75c.
26 MRS. SANKEY. The purest white, the most perfect form, the largest size, a profuse bloomer and unsurpassed for florist's use. Pkt., 5c ; oz., 15c; lb., \$1.25.
27 MONARCH. Dark maroon. Pkt., 5c; oz., 10c; lb., 75c.
28 MIXED. All colors, light and dark. Pkt., 5c ; oz., 10c; lb., 75c.
29 ORANGE PRINCE. Orange pink, flushed with scarlet. Pkt., 5c., oz., 10c; lb., 75c.
30 PAINTED LADY. Rosy crimson and blush white. Pkt., 5c; oz., 10c; 1b., 75c.
31 PRINCESS BEATRICE. Delicate plush pink, marked with deeper shades. Pkt., 5 c ; oz., 10 c ; lb., 75 c .
32 PRINCESS OF WALES. White, striped with lavender and mauve. Pkt., 5 c ; oz., 10c; 1b., 75 c .
33 PRINCESS LOUISE. Rosy pink standards, wings deep lilac. Pkt., 5 c ; oz., 10c; lb., 90 c .
34 PURPLE PRINCE. Maroon, shaded with bronze purple, wings blue. Pkt., 5c ; oz., $10 \mathrm{c} ; 1 \mathrm{~b} ., 90 \mathrm{c}$.

35 PURPLE STRIPED. Pkt., 5 c ; oz., 10 c ; 1b., 75 c .
36 PRIMROSE. Pale primrose yellow. Novel and distinct. Pkt., 5 c ; oz., $10 \mathrm{c} ; \mathrm{lb} ., 75 \mathrm{c}$.
37 QUEEN OF ENGLAND. White; of large size. Pkt., 5c; oz., 10c; lb., 75̃c.
38 QUEEN OF THE ISLE. Rose and scarlet, mottled with purple and white. Pkt., 5 c ; oz., 10c; lb., 75c.
39 RED STRIPED. Pkt., 5 c ; oz., 10c; lb., 75 c .
40 ROSE AND WHITE. Pkt., 5 c ; oz., 10c ; 1b., 75 c .
41 SENATOR. Chocolate, creamy white. Pkt., 5c; oz., 10c; lb., 90c.
42 SPLENDOR. Coppery crimson suffused with rosy pink; very rich. Pkt., 5c ; oz., 10c; lb., 90c.
43 SCARLET INVINCIBLE. Scarlet striped. Pkt., 5c; oz., 10c; 1b., 75c.
44 THE QUEEN. Bright pink, shaded with heliotrope. Pkt., 5c; oz., 10c; lb., 75c.
45 VESUVIUS. Carmine rose, shaded to a velvety violet. Pkt., 5c; oz., 10c; lb., 75 c .
46 VIOLET. Pkt., $5 \mathrm{c} ;$ oz., $10 \mathrm{c} ; 1 \mathrm{~b} ., 75 \mathrm{c}$.
47 WHITE. Pkt., c c ; oz., 10c; lb., 75 c .

## EVERLASTING FLOWERS.

The Everlasting Flowers, with their rich, brilliant colors, are very valuable for Winter decoration. They should be cut as soon as they come into full cloom, tied into small bunches, and dried slowly in the shade, with the heads downward, to keep the stems straight.

393 ARCOLINIUM. Mixed. Rose and white.. 5
394 AMMOBIUM. Small white flowers, pretty.. 5
395 AGOMPHREN (Globe Amaranth or Bachelor's Button). Mixed. Small, globeshaped, double flowers of perfect form and bright colors.
396 Nana compacta. Of very compact, dwarf habit, double flowers of a deep violet-red.... 10
397 HELIPTERUM Sanfordi. Small, yellow flowers ................................................................... 5
HELICHRYSUM. Fine, large, double flowers of most brilliant colors, often called The Eternal Flower.
398 Fireball. Flowers of the richest crimson.... 10 399 Snowball. Large, double, pure white......... 10

400 Golden Ball. Rich, golden yellow............... 10
401 Dwarf. Mixed....................................................... 5
402 RHODANTHE Manglesii. Graceful.......... 5
403 XERANTEMUM. Mixed. Double flowers.. 5
404 Superbissimum fl. pl. Purple, pomponflowering; fine.
405 Superbissimum album fI. pI. A new white. 10
406 MIXED EVERLASTING. A single packet will give in abundance a great variety of the most attractive Everlasting Flowers. No more welcome present can be given a visitor when looking through the flower garden than a bouquet of these imperishable flowers. Three pkts., 25 c .

## ORNAIENTAL GRASSES.

If our customers could see the wonderful variety and graceful forms of the Ornamental Grasses, they would be induced to use them much more largely, particularly when it is considered how indispensable they are in the arrangement of graceful bouquets.

407 Agrostis nebulosa. Fine and feathery, elegant.
408 Avena sterilis (Animated Oat). $21 / 2$ feet.... 5
409 Briza gracilis. Small, graceful racemes.... 5
410 Briza maxima (2uaking Grass). Large racemes of beautiful rattles, very ornamental
411 Bromus brizæformis. Drooping panicles, beautiful
412 Chrysurus cynosuroides. Dwarf, with yel* lowish, feathery spikes, useful in bouquets. 5

413 Coix lachryma (Fob's Tears)
414 Erianthus Ravannæ. As fine as Pampas Grass.

415 Eulalia Japonica zebrina (Zebra Grass). Grows five to six feet high, with stripings across the leaves
416 Gynerium argentium (Pampas Grass). Flowers the second season; requires protection10

417 Hordeum jubatum (Squirrel-tail Grass). Fine
418 Lagurus ovatus (IIare's-tail Grass)............. 5 419 Pennisetum Longistylum. Soft, fuzzy flower heads, extremely graceful in appearance
420 Stipa pennata (Feather Grass). Perennial. 10
421 Trycholæna rosea. Perennial, but flowers the first season, most beautiful rose-tinted grass

## SEEDS OF PERENNIAL FLOWERS.

In the following list we describe Biennials and Perennials which live in the garden over Winter, and flower in the Spring and Summer of the following year. While they do not reward the planter so quickly as do Annuals, yet they are well worth waiting for-as they embrace some of the most beautiful flowers-and many of them, with scarcely any care, continue to give a fine display of bloom year after year. PER PKT.

422 ALYSSUM (Gold Dust). Saxatile, small, golden-yellow flowers.
423 AQUILEGIA (Columbine). Choice double, mixed. Beautiful and varied colors.
424 Skinneri. Flowers vivid scarlet, tipped with yellow. About 80 per cent come true from seed.
425 ARISTOLOCHIA Sipho. (Dutchman's Pipe). A beautiful, hardy, climbing plant; large, luxuriant foliage with brownishyellow, heart-shaped leaves and siphonshaped, rich purple flowers
426 ASPERULA (Woodruff) Odorata. Found in the dry woods of Great Britain, and much prized everywhere. The flowers are white and fragrant.
CAMPANULA (Canterbury Bells). Popular perennials producing bell-shaped flowers of many different colors.
427 Single Varieties. Mixed. Various colors.... 5
428 Double Varieties. Mixed $\qquad$ 5
429 CHRYSANTHEMUM, New Fancy Peren= nial Varieties. It is not generally known that these are quite easily raised from seed, and that seed sown in the Spring will produce strong plants that will flower freely in the Autumn

## CARNATIONS AND PICOTEES.

Large, beautiful and very fragrant flowers, as perfect in form as the rose. Seeds sown in open ground in May or June will flower splendidly the next season. They are nearly everywhere hardy, but in very cold situations should be protected by straw or a few boughs.
430 German. Extra fine, double, mixed. First quality, from choicest flowers.
431 Choice, Double. Mixed. Very good............ 10
432 Red Grenadin. From 60 to 70 per cent. produce charming double flowers of a brilliant scarlet.

15
433 MARGUERITE. These superb new dwarf Carnations have created a great sensation, not only by reason of their fine, double, fragrant flowers, but also because they can be treated as annuals. They flower freely the first season from seeds sown in the open ground.
434 Picotee. Fine, double, mixed. A good strain of double Picotees; edges of petals botdered
435 Fancy Picotee. Extra fine, mixed. A superb strain from the finest collection of named varieties
.25
436 DELPHINIUM (Perennial Larkspur)............ 5
437 Formosum (true). Brilliant blue, white eye. 5
438 DIANTHUS (Perennial Pinks). Plumarius (Pheasant Eye Pink). The original clove pink

439 Choice mixed. Best varieties.
PER PKT.
440 Scotcus, fl. pl. (Paisley or Florists' Pink). A very pretty double variety of the preceeding
441 DIGITALIS (Foxglove). Fine mixed. Long racemes of beautifully spotted flowers........
442 HOLLYHOCKS. For majestic growth and massive beauty the Hollyhock stands unrivaled. Flowers very large, perfectly double, and of great variety of color..........
443 Double. Fine mixed. Fine double flowers.. 5
444 Superb Double. Mixed. Of all the brightest and best colors. The perfect doubleness of the magnificent large flowers will please the most critical.
445 HONESTY (Lunaria). Purple racemes of pretty flowers, which form curious, silvery seed pouches.
446 HUMEA Elegans. Grows six to eight feet, producing long, flowing racemes of rubyred flowers.
447 IRIS Kæmpferi ( 7 apan Iris). A perfectly hardy, bulbous plant, with large, showy flowers, pure white and of many shades of blue and purple.
448 LILY OF THE VALLEY (Convallaria).... 10
LATHYRUS (Perennial Peas). These Perennial
Peas, while lacking the delicious fragrance of the Sweet Peas, are equally as beautiful, and are very valuable from the fact that they are in full bloom early in the Spring, before the others have begun to flower. They live year after year, bearing magnificent clusters of flowers. Perfectly hardy, and grow eight to ten feet high.
449 Purple, Clusters of purple flowers................
450 White. Clusters of the purest white flowers .................................................................... 10
451 Mixed. Easily grown, flowers purple and white............................................................... 5
452 PAEONY. A well-known, hardy, herbaceous plant, with large, double flowers of various shades of rose, crimson, and white.. 15
453 PAPAVER (Perennial Poppies). Choicest mixed. The single perennial Poppies are perfectly hardy and are very altractive among shrubbery
454 Orientale. The darkest red; magnificent.... 10
455 PHLOX, Perennial. Choicest mixed. Embracing the newest and best varieties. Clumps of these are gorgeous with brilliant flowers. The fresh seed must be sown in the Fall.
456 PRIMULA Auricula. Fine mixed............... 15
457 Elatior polyanthus. Choice mixed ........... 10
458 Vulgaris. The common wild English Primrose ................................................................... 10
459 PYRETHRUIT Parthenium f1. pl. The double Feverfew

PER PKT.
460 Parthenifolium aureum (Golden Feather).. 10 461 Roseum (Insect Powder Plant). A fine, hardy plant, with large red, daisy-like flowers. Persian Insect Powder or Bubach is made of the dried and powdered flowers. Oz., 50 c .
$\$ 62$ ROCKET. Sweet, mixed. White and purple. 5 STOCKS. The Emperor stock frequently lives for several years if protected from frost, the Brompton is a biennial, of branching habit and a profuse bloomer.
463 Emperor or Perpetual. Fine mixed ........... 10
464 Brompton or Winter. Fine mixed.............. 10


SWEET WILLIAM.

SWEET WILLIAM. As now improved they make matchless border plants, with Keads of bloom of great size and wonderful beauty, should be in every garden, height one and one-half feet.
465 Single. Mixed. A splendid strain, flowers of many bright colors, large size, and' varied markings, including the finest auri-cula-eyed varieties.
466 Dunetts. Beautiful, rich crimson................... 5
467 Double. Mixed. Fine double flowers, which, however, to our fancy, are not so beautiful as the single.

5
468 TRITOMA Uvaria Grandiflora (Red-hot Poker Plant). A most gorgeous plant, grown either singly or in masses, brilliant flowers, spike nearly a foot in length, golden-ycllow to dazzling scarlet.
VIOLA (Violet). The popular Sweet Violet flowers very early in the Spring, but the seed often requires many months to germinate.
469 Odorata (Sweet Violet). Blue...
470 WALLFLOWER Fine German, Double. Mixed. Spikes of deliciously fragrant double flowers, combining many shades of color, chocolate and orange purple predominating. Sow early in hot-bed and prick out the small plants into pots, sink the pots in the earth and in Autumn remove to the house, where they will bloom all Winter.
471 Single. Mixed.

## Seeds for Greenhouse and Window Culture.

The growth of rare plants from seed is very interesting, and many of the choicest varieties can readily be grown in the house by those who are willing to give them careful attention. For Winter blooming, the seed should be sown in shallow boxes any time during the Spring or Summer. Procure a mellow soil, almost one-fourth sand; sow the seeds on the surface, covering lightly with a little fine, sandy earth; cover the box with a pane of glass, keep darkened, and keep the soil slightly moist until the seeds germinate, when light and air should be admitted by partially or wholly removing the glass, and placing the boxes in a warm, sunny window. When the plants are large enough to handle they should be potted singly into small pots, and afterward removed to six-inch pots for flowering; to insure an abundance of fine bloom in Winter, they should be kept growing vigorously during Summer and Fall, in good rich soil. Florists can rely upon our seed of Begonias, Calceolaria, Cineraria, Gloxinias and Primulas.

In Greenhouse as well as all other SEEDS IN PACKETS the purchaser is entitled to select 25 Cents WORTH EXTRA for each ONE DOLLAR sent us for Seeds in Packets. "rax

472 AGAPHANTHUS Umbellata (Blue Lily of the Nile). This is a splendid ornamental plant, bearing large clusters of bright blue flowers on long flower stalks and lasting a long time in bloom. There is no finer plant than this for out-door decoration, planted in large pots or tubs on the lawn, terrace or piazza. It does well in the house or greenhouse in Winter, requiring but slight protection. It is a rapid grower, and increases in size and beauty every year; the chief point in its cultivation is to divide the plants before the pots or tubs become overcrowded with roots. With the most ordinary kind of care it is a plant that will last for ever...... 10
ASPARAGUS, Plumrosus. A greenhouse climber, wi'h exquisitely graceful and feathery lace-like foliage; extensively grown by florists for cutting purposes....... 25

BEGONIA, Tuberous=rooted hybrids. These charming and showy Begonias, with their orchidlike flowers and rich tropical foliage, can be raised planted in light, moderately rich soil, with a liberal mixture of sand. Seedlings raised from sowings made early in the year will bloom freely in the course of the Summer, but not so freely as those of greater age.

PER PET.
473 Tuberous=rooted Begonias, Extra. Fine mixed seed of single varieties.
474 CALCEOLARIA Hybrida. Splendid mixed. One of the most beautiful of house plants, bearing hundreds of showy, pocket-like flowers of various colors, including handsomely spotted and tigered.

475 Finest Double-flowering Begonias ${ }^{\text {PER PKT........ }} 35$ 476 CENTAUREA Gymnocarpa. White foliage. 10 477 Candidissima. White leaved; beautiful...... 15 478 CHRYSANTHEMUM Indicum. Finest double
479 CHRYSANTHEMUM Frutescens. The well-known Paris Daisy, produces large, white, star-like flowers most profusely........ 15 CINERARIA. The Cineraria is one of the brightest and best of house plants, blooming most profusely during the late Winter and early Spring. When in full flower the plants present a gorgeous sight, being each covered with one mass of bloom of richest colors - crimson, magenta, violet, blue, and variegated. Seeds should be sown from May to August, when they will bloom the first Winter. Keep the plants in a cool, shady place during the Summer.
480 Hybrida. Fine mixed. All colors..
481 Hybrida. Large flowering. Finest mixed. Flowers measuring two inches across, of rich colors.
482 COLEUS. Fine mixed. Leaves of all shapes, shades and colors, mostly having a velvety appearance


CYCLAMEN PERSICUM.
CYCLAMEN Persicum. Most charming bulbousrooted plants, with beautiful foliage, variegated in different shades of green, and richly colored orchid-like flowers. They are universal favorites as pot plants for Winter and Spring blooming. If the seed is sown early, in sandy loam, they make flowering bulbs in one season. After flowering, the bulbs should be allowed to rest in a dry state over Summer.
483 Persicum. Splendid mixed. All colors...... 15 484 FUCHSIAS, Double and Single. Mixed. It is not generally known that Fuchsias can be raised very easily from seed, and will flower freely the first year in the open ground, while the plants can be taken in the house in the Winter, where they will flower still more freely. We offer the very finest mixture of double and single Fuchsias, saved from splendid varieties.

485 FERNS. Mixed, embracing seeds̀ (spores) of many desirable varieties of these graceful plants.
GERANIUMS. These favorite plants are easily raised from seed, which will frequently reward the cultivator with charming new varieties. Plants from seed started early in the house will bloom the first Summer in the garden.
486 Zonale. Mixed10

487 Zonale. Choice mixed. Saved from the best varieties of single Geraniums
488 Fancy mixed Pelargoniums (Lady Washington Geraniums). Very choice and rare varieties
489 Finest Double. Produces a good percentage of fine double flowers. Packet of twenty-five seeds.
490 Apple Scented. This favorite, with sweetscented leaves can best be grown from seed; sow in light soil and keep moist until they germinate.
GLOXINIAS. A splendid class of house-blooming bulbous-rooted plants, flowering in great profusion during the Summer months. The handsame bell-shaped flowers embrace a great variety of the richest and most beautiful colors; the bulbs must be kept warm and dry during the Winter.
491 Large Flowering Hybrids. Mixed. From a grand collection, comprising the most superb spotted and blotched.
492 LANTANA. Finest mixed. Well-known shrubby plants, with clusters of Verbenalike flowers; make a grand display the first season. Large bushes of these in full flower all Summer were much admired and visitors expressed surprise that so fine a display could be obtained from springsown seed.
493 LEIION VERBENA. The delightfully fragrant foliage of this favorite plant makes it very desirable for cutting; it is easily grown from seed.
494 LINARIA Cymbalaria (Kenilworth Ivy). The very pretty trailing species for covering rockwork, stumps, and for vases and hanging baskets.
495 MUSA ENSETE (The Abyssinian Banana Tree). Strikingly effective as single specimens upon the lawn as well as in clumps or masses. The rapidity of its growth is astonishing, if the seed is sown early in hot-beds and repotted several times, the plants will attain the height of eight feet the first Summer. They can be stored in a cellar during the Winter with a covering of soil, or planted in a tub, watered sparingly, and will attain gigantic proportions the second season. The leaves are magnificently long, broad and massive, of a beautiful bright green. Packet of five seeds.
496 PASSIFLORA Coerulea (Passion Flower).. 10
Order Flower Seeds by NUMBER, the name is not necesfary.


## Primula Sinensis Fimbriata.

FRINGED CHINESE PRIITROSE. The Clinese
Primrose is the most beautiful and satisfactory
of all house plants for Winter blooming, and it is as easily grown as a geranium. It is never attacked by insects, and will even thrive in a window where there is but little sun, and where few other plants would bloom. Seeds sown from April to July will produce plants that will flower most profusely throughout the following Winter.

PER PKT.
498 PRIMULA, Alba Magnifica. Flowers, borne
in large trusses well above the foilage, are pure white, with large, bright, yellow eye. 25
499 Splendid mixed, large flowering. A grand mixture, embracing the above and many other finest fringed, large flowering varieties
500 SIILAX (Myrsiphyllum Asparagoldes.) The popular Boston Smilax is the most desirable window vine on account of its charming, glossy green, elegant and graceful foilage, while for florists' use it is as essential as roses. Oz., $75 \mathrm{c} ; 1 / 2 \mathrm{oz}$. 40 c .... 10
VINCA. Handsome, bushy plants, producing freely round single flowers one and one-half inches across, suitable for pot culture and sunny flower beds; tender perennial, one and one-half feet.
501 Rosea. Bright rose............................................... 10
502 Rosea alba. White, with rose eye................ 10
503 Alba pura. Pure white ...................................... 10
504 Mixed. Above varieties...................................... 5
Florists will do well to get our special prices before buying elsewhere.

## SUMMER FLOWERING BULBS.

The Summer-flowering Bulbs for Spring planting contained in the following list are inexpensive, very easily grown and produce some of the most showy and beautiful of all Summer and Autumn flowers. There are but few flowers that can compare with the noble and brilliant spikes of the Gladiolus, the grace and elegance of the Lily, the purity and sweetness of the Tuberose, the majestic foilage of the Caladium, or the wonderful markings of the Tigridia. They require scarcely any care, and quickly make a gorgeous display, while the bulbs can be kept over Winter, and will, year after year, continue to return a hundred fold (in beauty and satisfaction) the trifing expense of the original cost. I have priced these Bulbs very low, to bring them within the reach of all. They are in splendid condition, fine, large Bulbs, properly stored, and will be sent securely packed in the same parcels with flower or vegetable seeds. My prices are for choice Bulbs, post-paid, by mail, to any address in the United States.
AMARYLLIS. Beautiful flowering bulbs, which should find a place in every garden. They force readily, and by proper care can be had in bloom during the whole year.
Formosissima (Facobrean Lily.) Crimson, blooming early in the Summer. The flowers have a most graceful appearance. 30c each; $\$ 3.00$ per doz.
Johnsoni. Very large flower of a rich crimson scarlet color, striped with white. 75 c each;
$\$ 7.00$ per doz.
Hybrids of Vittata. White ground, striped with red. 705 each.
Hybrids of Vittata. Red ground, striped with white. 75 c each.
AMORPHOPHALLUS RIVIERI. A remarkably distinct and pretty Aroid of easy culture, especially adapted for sub-tropical bedding or for the mixed border, producing a solitary Palm-like leaf on a tall stout stem which is curiously spotted and speckled with rose and olive green. The flower is similar in shape to the Calla Lily,
the outside being of a similar color to the leaf stem; the inside is deep blood-red, veined with black.
First size, strong tubers, 50 c each; $\$ 5.50$ per doz. Second size,strong tubers,30c each; $\$ 3.00$ per doz.

## CINNAMON VINE.

Dioscorea batatas. Beautiful Summer climber; glossy foliage and fragrant flowers; stem dies down in Winter, but the root is hardy. Large roots, 5 c each; 50 c per doz.

## Tuberous=Rooted Begonias.

Our mixed tubers are all from varieties with splendid flowers, of fine form and substance, of dwarf growth, well adapted for bedding, and present in unsurpassed misture all the following distinct colors: Bronze, yellow, crimson, dark crimson, magenta, orange, scarlet, pink, red, rose and white. They are covered with bloom the entire season; the gorgeous tropical effect for bedding can scarcely be imagined.

Single varieties in finest mixture, 15 c eaich four for $50 \mathrm{c} ; \$ 1.50$ per doz.

## SUMMER FLOWERING BULBS - Cont'd.



BUTTERFLY GLADIOLUS. Choice mixed sorts. Each, 10c; doz., 75c.
HYACINTHUS CANDICANS (Giant Summer Hyacinth). Luxuriant, free-growing Summerflowering plant, spreading two to three feet, throwing up great, tall spikes four to five feet in height, each bearing twenty to thirty large white bell-shaped flowers; of easiest culture and splendid for groups. If planted in the center of beds of scarlet Gladiolus, the effect is magnificent. Each, 10 c ; doz., $\$ 1.00$ or extra large bulbs, each, 15 c ; doz., \$1.50.
IPOMGEA MEXICANA (Mexican Morning Glory). A distinct and pretty Mexican species, bearing fine clusters of large, purplish rose-colored flowers; it grows rapidly and succeeds in almost any position; as a plant for covering arbors, veranders, etc., it is invaluable; being tuberous-rooted, it may be Wintered like a Dahlia. Each, 35 c ; doz., $\$ 3.00$.

TIGRIDIAShell Flower. Curious and beautiful Summer flowering bulbs, producing large, gorgeous flowers, exquisitely spotted, flowering from July to October. The bulbs can be planted about the middle of May, and taken up in October and kept over Winter in dry sand.
Conchiflora. Orange, with crimson spots. Each, 10c; doz., $\$ 1.00$.
Pavonia Grandiflora. Red, with yellow spots. Each, 10 c ; doz., $\$ 1.00$.
Grandiflora Alba. Large ivory white flowers, spotted with maroon and rosy lake in center. Each, 10c; doz., $\$ 1.00$.
TUBEROSES. $\begin{gathered}\text { One of the most delight- }\end{gathered}$ of the Summer flowering bulbs. By skillful management a succession of flowers may be

excelsior pearl tuberose. obtained all the year round. For early flowers they can be started in February or March, in the greenhouse or hot-bed; and for a succession they can be planted at intervals as late as August. For flowering in the open border plant about the first of May.
Excelsior Pear 1. Extra large bulbs. Each. 8c; doz., 50c; 100, \$3.50.
Dwarf Pearl. Each, 5 c ; doz., $35 \mathrm{c} ; 100, \$ 2.50$.
Tall Double. Each, 5c; doz., 35c; 100, $\$ 2.50$.

Longiflorum. The well-known Garden Lily; flowers trumpet-shaped, six to eight inches long; height, one and one-half to two feet. Each, 25 c ; doz., $\$ 2.50$.
Tigrinum Splendens (Improved Tiger Lily). Very large flowers; orange-salmon, spotted black. Each, 25 c ; doz., $\$ 2.50$.
Tigrinum Flore Pleno (Double Tiger Lily). Immense double bright orange-red flowers, spotted with black. Three to five feet. Each, 25 c ; doz , $\$ 2.50$.
Album. Purest white. Each, 30c; doz., $\$ 3.00$.
Rubrum. White, shaded with deep rose and spotted red. Each, 20c; doz., $\$ 2.00$.
Auratum (The Golden Rayed Lily of Fapan). Grandest of all the Lily family, flowers pure white, with crimson spots, through the center of each petal runs a clear golden band, flowers measure nearly a foot across, produced abundantly, deliciously fragrant, two to five feet. First size bulbs, each 35 c; doz., $\$ 3.00$.


Lily of the valley.
LILY OF THE VALLEY (Convallaria Majalis). One of the most charming of our Spring-flower= ing plants Its slender stems, set with tiny bells, diffusing a delicious odor, have rendered it a universal favorite. They are entirely hardy, and delight in a shady, well-enriched border. Strong clumps for out-door planting delivered until April and after September 1st. Each, 50c.
MADEIRA VINE. The old favorite Climbing Mignonette. Thick glossy leaves, and long, hanging stems of feathery fragrant flowers, Each, 5c; doz., 50c.
OXALIS, Summer Flowering. Valuable for edging walks, flower beds, etc. Bulbs planted three inches apart form rounded rows of delicate foliage, about one foot high, which produce flowers in endless succession.
CHINESE PAEONIES. The herbaceous Pæonies are exceedingly hardy, and will succeed in any ordinary soil, well enriched with good manure. During the Summer month mulching will be beneficial to the roots, especially on dry soils. We offer a splendid assortment, embracing alf the leading shades, white, pink, rose, purple, etc., etc. Each, 30c; doz., \$3.00.

## SUMMER FLOWERING BULBS Cont'd.

SPOTTED CALLA (Richardia Alba Maculata). The leaves of this variety are deep green, with numerous white spots, which give the plant a very ornamental appearance. The flowers are pure white, with a black center. They grow freely, either in-doors or out. 20 c each; $\$ 2.00$ per doz. WHITE CALLA (Richardia Ethiopica). The White Calla, or Lily of the Nile, is a well-known plant of easy culture, and in Winter is one of our best window plants. To aid profuse blooming, keep them dormant from the middle of June to last of August, repot in good rich soil, using a four to six-inch pot, give water, light and heat in abundance, and the result will be most satisfactory. Dry bulbs, 20 c each; $\$ 2.00$ per doz.; extra large, 30 c each; $\$ 3.00$ per doz.

## CALADIUM ESCULENTUM.



Elephant's Ear. Grand tropicallooking plant, producing enormous leaves three to four feet long. A favorite for specimens on the lawn. Height, four to five feet. (See cut).

ELEPHANT'S EAR.
Extra size bulb, 10 to 12 in . circumference...... 75 c First " " 8 to 9 " ".....50c
Second " " 6 to 7 " "..... 25 c
Third " " 4 to $5 \frac{1}{2}$ " "..... 15 c

## Ever=blooming French Cannas.

Capt. P. de Suzzoni. A tall growing variety, deep yellow, lightly spotted with red, so that the general effect at a distance is yellow. As a companion to Trocadero it is excellent; large flower and fine green foliage. Each, 25 c; doz., $\$ 2.50$.
Egandale. A fine dark foliaged variety, with flowers of a soft currant red, very distinct and striking in appearance. Each, 25 c ; doz., $\$ 250$.
FRANCOISE CROZY. The color is of unique shade of apricot, bordered with bright yellow.
Horace Choisel. Deep rich magenta, strong, compact grower, a very fine variety.
J. D. Cabos. Another dark foliage variety, with flowers of very rich orange, tinged with apricot. As a contrasting variety in foliage and flower it is unsurpassed. Each, 30c; doz., $\$ 3.00$.
M. Laforcade. Bright, orange-scarlet flowers, coffee-colored foliage, dwarf, compact grower, very fine.
MAD. CROZY. Resembles Francois Crozy, finer. Each, 30c.
Pres. Hardy. Deep orange, mottled with rich chrome yellow, a unique and pretty variety. Each, 25c.
Pres. Carnot. A majestic variety with dark chocolate foliage, flowers deep scarlet, large and beautifully rounded. Each, 20c.

TROCADERO. A grand sort in flower and foliage. The blooms are a deep crimson lake of the richest shade, and are borne in wonderful profusion. Twenty-seven separate heads of flowers, were counted on a single plant. Price for any of the above, except where noted; each, $30 \mathrm{c} ;$ doz., $\$ 3.00$. Choice Mixed Canna Roots. Our selection; each, 15 c ; doz., $\$ 1.50$, post- paid.


## DAHLIAS

Too wellknown to need any description. We can supply, roots of any of the following colors. Red, White, Purple, Lilac, Rose, Yellow, Brown, Red Spotted, Blue, Canary, Straw Colored and Variegated. 20 c each; $\$ 2.00$ dozen.
MIXED GLOXINIAS. These comprise all shades of color and erect, horizontal and pendulous flowers; for those who do not care aboutspecial color they will be found very desirable, as only fine varieties have been kept, the poor and dull colors having been discarded. 20 c each; $\$ 2.00$ per doz.

GLADIOLUS. Our bulbs of this magnifithe very finest variet cent flower includes only found of a high standard of excellence. A succession of bloom may be had from July to September by planting at intervals from April to June. The strongest bulbs should be kept for the latest planting. The cultivation of Gladiolus is very simple, as they will thrive in any good garden soil, but amply repay good care and liberal feeding by enhanced size and beauty.
All Colors. Mixed. Each,5c; doz.,30c; 100, $\$ 2.00$.
Extra Choice. Mixed. Each, 5c; doz., 40c. 100, \$2.50.
Scarlet and Crimson Varieties. Mixed. Each, $5 \mathrm{c} ;$ doz., $30 \mathrm{c} ; 100, \$ 2.00$.
White and Light Varieties. Mixed. Each, 5 c ; doz., 50c; 100, $\$ 3.25$.
Yellow Varieties. Mixed. Each, 5c; doz., 50c; $100, \$ 325$.
Pink and Variegated Varieties. Mired. Each, 5 c ; doz., 40c; 100, \$2.50.
Separate Colors of Red, Scarlet, Crimson, White, Yellow, Pink, Variegated, Rose or Striped. Each, 10c; doz., 75̄c.

## ROOTS. <br> HORSERADISH.


#### Abstract

Per 100. 65c.; per $1000, \$ 5.75$


## ASPARAGUS.

Columbia Mammoth White . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per 100, 70 c. ; per 100,60 per $1000, \$ 6.50$
Palmetto . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per $1000, \$ 5.50$
Colossal . . . . . . . . . . . . . . . . . . . . . . . per $1000, \$ 5.50$

## RHUBARB.



In Fall we have a complete and well-selected assortment of Dutch Bulbs, our own importation, direct from the best Bulb growers. Our assortment consists of Hyacinths, Tulips, Crocus, Narcissus, Snowdrops, Anemones, etc., etc., all of which should invariably be planted in the Fall. Price List ready in September and mailed free on application.

## REMEDIES FOR INSECTS AND FUNGUS.

Hammond's Slug Shot. . . . . . . . . . . . . . 5-lb. pkgs., 25c.; 10-lb. pkgs., 50c.; carton, 15c
London Purple.
Paris Green
Persian Powder, or Bubach
Lemon Oil............................. . . in pint tins, each, 40c.; qts., 75c.; per gal., $\$ 2.75$
Hellebore
Carbolized Soap . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 gal. cans, $\$ 1.00$
Nicotine
Lenox Concentrated Bordeaux Mixture. . . . . . . . . . . . . . . . . . . . . . . . . . . 1-gal. cans, $\$ 1.00$
Tobacco Dust, fine . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . lb., 10c.; 5 lbs., 35c.; 10 lbs., 65c
Tobacco Soap . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per lb., 35c
Whale Oil Soap. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .lb., 15c.; 2 lbs., 25c.; 5 lbs., 60c
Thrip Juice. . . . . $\frac{1}{2}$-pt. can, 30c.; 1 pt., 50c.; 1 qt., 75c.; 1 gal., $\$ 2.00$; 5-gal. keg, $\$ 7.00$
Guicide Powder............................................... . 5-lb. pkg., 50c.; 25 lbs., $\$ 1.75$
Bordeaux Mixture. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25-lb. pkg., $\$ 1.00$
Copperdine. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per qt., 50c.; 1-gal. cans, $\$ 1.50$
Grape Dust, Hammond's . . . . . . . . . . . . . . . . . . . . . . . . 5-lb. pkg., 35c.; 100-lb. keg, \$5.00
Flour of Sulphur . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per lb., 10c.; 10 lbs., 60c
Sulpho-Steatite Powder. . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 lbs., 60c.; 25-lb. boxes, $\$ 1.50$ Should any of the above be sent by mail, 15 c. per lb. must be added to pay postage.

## FERTILIZERS.




THE DOUBLE=TUBE LIGHTNING Insect Exterminator No. 20.

(Patented August 30, 1888.)

## Kills, Drives Away and Exterminates Every

 Living Thing Obnoxious to Yourself, Your Animals or Your Crops.No. 20 Sprayer has detachable glass reservoir, provided with our patent spring leather plunger expander, which at all times keeps the leather washer expanded, and will not allow it to wrinkle or dry up, which is the case in former sprayers, which will be appreciated at a glance by anyone who is familiar with sprayers. Our No. 20 Sprayer is the only sprayer having a glass reservoir, detachable, encased so that the operator at all times can see the ingredients mixing, and just how they are working. Also have a glass reservoir, which is made of the pattern of a Mason fruit jar, and any such will fit this sprayer; being oblong gives a churning motion while the sprayer is being used, mixing the ingredients-which can not be done with any other shaped sprayer-and will not allow Paris green to settle. The glass sprayer will not corrode or rust out, as is the case with all other metal. This will be appreciated at a glance.

The screw cap of this sprayer is made of heavy zinc, and the air chamber and jacket are made of heavy tin, nicely painted a bright red, making it very durable and attractive.

The Double-Tube Lightning Insect Exterminator is double the capacity of any other sprayer made, covering a radius of $2 \frac{1}{2}$ feet, producing two large sprays with one operation. The reservoir filled with water and a teaspoonful of Paris green is sufficient to kill 2,000 hills of potato bugs, which can not be done with any other sprayer made. Price, \$1.00 each.

## CATTLE FLY OIL.

Cattle Fly Oil is prepared and put up in one-gallon cans, expressly for keeping flies from stock during the summer months, and which is guaranteed to do the work, by simply spraying with the Lightning Insect Exterminator. It is perfectly harmless, and will be found a great comfort to the cows, also when milking; also for horses. The Lightning Insect Exterminator throws a very fine spray of the oil mixture, and a gallon of Cattle Fly Oil is sufficient to spray 500 cows. This is usually applied while the cows are in the stables, and before milking. After a few applications, only every other day is necessary. A greater flow of milk is guaranteed by using the Cattle Fly Oil. No farmer can afford to be without this valuable invention after a few applications. Full description on every can.



# The Lightning Compressed Air Sprayer, No. 21. 

PATENT APPLIED FOR.

Will throw any kind of spray, from the finest dew to a heavy or solid continuous stream 30 feet high.

The Lightning Sprayer No. 21 is operated by compressed air. An air pump is attached to the tank, which is made of heavy galvanized iron. The air is forced in up to a pressure of 60 pounds, and is governed by a check valve, which prevents over-pressure. This Sprayer is made strong, and nicely painted.

To Operate this Sprayer. - The tank holds nearly four gallons, and is filled about two-thirds full, and then it takes about one minute to pump the air in, and the machine is then ready for use. All the operating you need do is to open the stopcock, which is turned to throw a fine mist or a coarse spray, or a continuous stream. The compressed air tank, being powerful and elastic, forces the liquid out through the outlet pipe, making a very fine or solid continuous stream. This Sprayer is one of the greatest inventions of the age. No labor is required after the air is once pumped into the tank, which only takes about one minute.

## Automatic Spray and Force Pump.

## PUSH DOWN-THE SPRING DOES THE REST.

 UNIQUE AND MOST PRACTICABLE. NO FOOT FASTENING REQUIRED.It is made of nickeled brass, galvanized iron tubing, extra large air chamber or reservoir, brass spring, pure rubber valves, saucer shaped, anti-clogging foot with strainer on top, and with the sprays that go with it, warrants us in claiming that it is what has long been needed for all purposes. It will pump from the pail or will CARRY the material to be used in "a field;" and, with the fine spray, carries enough to last ten to fifteen minutes in potatoes, fruit trees, grapes, tobacco and greenhouses. The Automatic is otherwise generally useful, is first class in construction, nicely finished, and, at the price named, should be acceptable to all. Our experience of last season gives us great confidence in making this guarantee. Price, \$3.00.


## THE LENOX SPRAYER.



The straps are provided with buckles and are adjustable to fit a boy or man of any size. It is also provided with a fine strainer cloth at the top where the liquid enters, to prevent leaves or dirt from getting into the Spraver, thus impossible to clog up the nozzle. A man with one of these Sprayers will only use one half the Paris Green that is required by the whisk broom or any other method, the spray being a mere mist. No waste whatever. No burning of the vines as by large drops. You will only require to take out one barrel of water to the field instead of four by any other method. The most economical and perfect working apparatus on the market. It pays for itself by very little use. Full directions with every machine, including many valuable recipes. Price, $\$ 4.00$.

A reliable chemist advises always to strain your liquid poison through two thicknesses of burlap (sacking). You do not need the poison thick, for the moment it touches the water it is poisoned. Strain the poisoned water before putting it in the Sprayer and you will have clear liquid poison.

We have all the Extras belonging to this Sprayer.

## BIRD SEED.

## Our Bird Seeds are always Recleaned, Fresh and Sweet.




## CREAM CITY RAT EXTERMINATOR.

This is not a poison, and is specially recommended for places where rats and mice are numerous, as it is not dangerous for cats, dogs or chickens. Is warranted to drive away rats or mice.

Put up in 25c. and 50c. packages.

## DUST CANS. <br> For applying Slug Shot or other similar Powders.

Small size
Medium size
each, 35c. Small size, filled with Slug Shot each, 20c

## Fox's Potato Bug Exterminator.



The best machine in the world for applying liquid poison to plant, vine or bush. Full description and directions how to use will be sent with every machine. No better investment could be made, and certainly not a more profitable one, than in the investment of $\$ 3.00$ in this machine, as it will save its price many times over in a season's use Price $\$ 3.00$

## PLANT SPRINKLERS.



For Sprinkling Flowers, etc. Postpaid, $\$ 1.10$.

Scollay's Improved Putty Bulb.
Postpaid, \$1.10.

## Crescent Force Pump and Sprayer.

Similar to the Automatic, but smaller in size, works the same and gives good satisiaction. Each, $51.2 \overline{5}$.

SNOW FLAKE AND FIRE KING SWEET PEAS CAN'T BE BEAT. IYCLUDE A PACKIGE OF EACH IN YOUB ORDER.

RAFFIA. Used for Tying.

# POULTRY SUPPLIES. 

## Patent Stoneware Drinking Fountain,

For Poultry, Pigeons and Bees.


## THE BEST AND CHEAPEST FOUNTAIN

 IN THE MARKET. THOUSANDS OF THEM IN USE.They keep the water cool and clean, and chicks from getting wet. Are easily filled. Never tip over or get out of order.

To fill, set it up on end and pour the water in; then lay it down on its side, as shown in the engraving, and a vacuum is formed, which keeps the water in, but allows free access to it. To clean, if it needs it, fill with water and sand, turn it sideways, and shake the water and sand out.

Many do not appreciate the necessity of a fountain, but impure water, caused by exposure to the sun, and filth scratched into old crocks and pans, are the cause of much disease and death in the poultry yard, loft and cages. Chicks also get into open jars, and either drown or get wet and die. Saving the life of one valuable bird will pay for a dozen fountains.
Half-gallon, weight 3 lbs..................... . each, \$0 25 One-gallon, weight 6 lbs.......................each, 35 Two-gallon, weight 12 lbs ....................each, 50


New Chick Manna
Try our
Chicken Manna. It will keep your Poultry in a good, healthy condition.
A trial will convince you. Contains Everything for Poultry.
Is the Best and Healthiest of all

CHICKEN FOODS. Send for sample FREE.


## PIONEER CLOVER MEAL.

Pioneer Clover Meal contains every part of the egg shell, white and yolk, and is considered by all eminent authorities as a perfect Poultry Food. Give it a trial, and we are confident that it will make you a confirmed friend. Trial package, 3 lbs., 20c; 50-1b. sack, $\$ 100$; 100-1b. sack, \$2.00.

## CUT CLOVER.

An excellent article for green feed during winter months; $50-\mathrm{i}$. sack, 75 c ; $100-1 \mathrm{~b}$. sack, $\$ 1.25$.

## IMPORTED MILLET.




## POULTRY SUPPLIES-Continued.



It will keep your chickens strong and healthy. It will make young pullets lay early. Worth its weight in gold for moultiug hens, and prevents all diseases.

## OYSTER SHELLS.

This is one of the Best of Poultry Foods.


## GRANULATED BONE.

Contains all the elements that go to form the egg. We have this in two sizes-coarse ground for hens and turkeys, and fine for young chicks. $5-1 \mathrm{~b}$. pkg., 25 c ; $10-\mathrm{lb}$. pkg., $40 \mathrm{c} ; 25-\mathrm{lb}$. pkg., 602 ; $50-\mathrm{lb}$. pkg., $\$ 1.15$; $100-1 \mathrm{~b}$. sack, $\$ 2.25$.

## BUCKWHEAT.

10-1b. pkg., 35c; 50-lb. pkg., $\$ 1.40$; 100-lb. sack, $\$ 2.25$
CANADA FIELD PEAS.
10 lbs., $35 \mathrm{c} ; 50 \mathrm{lbs}$., $\$ 1.25$; 100 lbs., $\$ 2.00$. Prices variable.


## $\mathrm{EGG}=0$

A.....table Pegetab Regulator. We.. Guarantfe IIs Purity.
Is invaluable for the moulting fowl and will make hens lay regularly.

We guarantee EGG-O to prevent and cure all Poultry diseases.
Egg-0 is packed in trial packages containing twenty-eight ounces of food, at 25 c . Also in large bags-10, 25, 50 and 100 pounds-which retail at 10 c . per pound. A trial will convince you of its wonderful powers as a regulator and egg producer.

## LAMBERT'S "DEATH TO LICE."

$15-$ oz. box, $25 \mathrm{c} ; 40-\mathrm{oz}$. pkg., $50 \mathrm{c} ; 100-\mathrm{oz}$. pkg., $\$ 1.00$. If to be sent by mail, add ic per ounce for postage.

## "DEATH TO LICE" OINTMENT.

A pure white, perfumed mixture that will do the work quickly without injury to the chicken in any way Invaluable also for lice on children, scaly shanks on fowls, etc. A $1-o z$. box is sufficient for 100 little chicks. We improved the formula last spring; it will now keep in any climate. 1-oz. pkg., $10 \mathrm{c} ; 3-\mathrm{oz}$. pkg., 25 c .

If you prefer a liquid louse-killer, for painting roosts, nest boxes and inside of henneries, buy

## LAKE'S LICE EXTERMINATOR.

It is a liquid preparation and is the first liquid lice killer ever put on the market. Absolutely harmless to all kinds of stock, poultry and pet stock of all kinds. Sure death to lice, mites, fleas, roaches, bedbugs, etc. on horses, cattle, sheep, hogs, dogs, cats, chickens, pigeons, house plants, etc. Pint can, 30c; quart can, 45 c ; $1 / 2$-gallon can, 65 c ; gallon can, 90 c . Give it a trial.

## THE GREELEY ROUP CURE

Is the best remedy ever used for a case of this dreaded disease. It will cure a severe cold in twenty-four hours, will reduce the swelled head and eyes, and put the bird in a good condition in a few days' time. It is not safe to be without it, especially when exhibiting poultry. We sell it with a guarantee. Per box, 25 c , postpaid; one doz. by express, $\$ 200$.

## CORN MEAL.

Fine, 100 lbs.. ....... $\$ 200$ Coarse, 100 lbs. .... $\$ 150$
LINSEED MEAL. Extra Fine, in Barrels. OIL CAKE MEAL. In Sacks.

Write for Special Prices.

## WHEAT.

Per bushel
.$\$ 100$
Price variable.

## BARLEY.

Per bushel................ . 85c.
Price variable

## PREPARED CHARCOAL.



## Excelsior Stock Food.

A Nutritive and Restorative Tonic, Purely Vegetable, for Cattle, Horses, Sheep and Swine. Saves grain by causing perfect assimilation.

BREEDERS, FEEDERS and DAIRYMEN

Can not afford to be without EXCELSIOR STOCK FOOD, and you can save money by buying in large quantities. ?-11. yackage, 50c.

# RELIABLE INCUBATOR \& BR00DER CO. <br> <br> Anything You Want in the Poultry Line? 

 <br> <br> Anything You Want in the Poultry Line?}


.. 2 JE are recognized by the expert poultry breeders and farmers all over the world as making the very best line of Incubators, Brooders and Poultry Appliances, and have been the means of making it possible "Why Poultry Pays" and "How to Make it Pay." That which is most important is an incubator and brooder which are perfectly reliable; an incubator that will hatch every fertile egg, a brooder which saves and pushes it along to healthful maturity.


There is only one "best" or one which will meet all these requirements, and that is the world-famous RELIABLE INCUBATOR AND BROODER. They are built exactly right and have given more money-making poultrymen perfect satisfaction than any three machines made.
Reliable Incubator and Brooder Co.,
Quincy, Ill.
I bought over $\$ 2,000$ worth of goods from you. My last purchase was made through
the house of Joseph M. Del Rio, of this city, and was for 10 Incubators, 7 Brooders and
10 Chicken Cages, for hens with chicks and for exposition, boxes for eggs, etc., which cost
over $\$ 1,000$, and in order that you may see that I preier yours to other manufacturers, I
now send you photographs of my installation where I have your production. I am using
incubators of all the American and European systems, but the ones that you make are
the ones I preier, because they are the only ones that moisten the air before it enters the
egg chamber; because no other manufacturer has taken into consideration that we are
situated at a height of 5,000 feet above the level of the sea, and the air in this locality is so
rarefied that all chickens die in the shell from lack of moisture. Many people in this
country have tried to buy from me your machines, but as I had so many difficulties to
get the commission merchant to bring them to me, I have refused to sell them. In order
that you may know who I am, I send you an article on "Incubation"' I wrote, also my
appointment as a juror for the Cattle Exposition, and a letter from the Secretary of the
State inviting me to accompany the President, and I beg of you to return these
documents to me.
I send you 100 cents instead of 10 cents, that you may kindly send me 10 of your
20th Century Catalogues to distribute among my friends. I remain,

Yours truly,
J. R. De Altamira.

Our regulators on the Reliables will regulate to a fractional part of a degree. They have perfect ventilation. No sloppy moisture pan system, as no moisture is used. We claim the Reliable is the only incubator that has the moisture question settled exactly right, as our process of conditioning the air for hatching more nearly reproduces the condition under the hen. See one of the many letters that help to convince us of this fact.

Our 20th Century Poultry Book tells how successful men make the business pay, and is written from a practical, every-day experience standpoint, and is worth a dollar to any one interested in poultry, but we send it FREE, if you will send 10 cents to pay postage.

## Address Reliable Incubator and Brooder Co., ${ }^{\text {Box, } 04,4, \text {, }}$ Quincy,

Do not place your order until you get our catalogue, as we have some surprises in store for you in regard to prices.

The RELIABLE will be on exhibition in Paris, France, in 1900.
JOS. F. DICKMANN SEED CO., Agents Reliable Incubators and Brooders, GOODS KEPT IN STOCK.

## Sure Hatch Incubators

## aㅡㅇ Common Sense Folding Brooders



$\tau$housands of our Incubators and Brooders in successful operation. No experiment in this case. The Sure Hatch is the only incubator with three walls and two dead air spaces around the egg chamber. Late patents and acknowledged leaders. Low priced, fully guaranteed and we pay the freight. Are made for business and do the business. No orerheating center of egg chamber. The moisture question made easy and the instructions so plain and easy that failures can not occur.

needs only to be seen to be appreciated by practical poultry raisers.
$111^{\circ}$
climbing a ladder for the small chicks. Chicks invariably chill and die before they are possessed of sense enough to hunt up a ladder to get in the brooder. The Comifor Sense Brooder sets flat on the ground and the little chicks run in and out as they wish. The heat is applied to their backs in a natural way and they thrive and grow fat. Our 1900 Catalogue is chock full of practical poultry helps. No aircastle figures on profits or misleading statements. Deals with the poultry question from a cool, practical standpoint. Contains more real information than all other catalogues combined. We send the catalogue free to any address. Send for it now.

## SURE HATCH INCUBATOR CO.

CLAY CENTER, NEBRASKA.

## The Acme Hand Corn Planter

Accurate. Its dropping device must always drop as set. There is nothing about it to catch or stick and crack corn. It slides in a cast iron hopper bottom and can't wear out. Light and strongly made throughout, with bass= wood sides, handles well bolted on, strong steel jaws, well riveted together and to the sides. Neatly finished in varnish and well packed $* * \pm * \pm$

## "PLANET JR." TOOLS FOR 1900.

Space will not permit our showing and describing all of the "Planet Jr." tools, but we will send a fully illustrated catalogue free for the asking to any who desires it. "Planet Jr." goods are standard machines; the best; yet great improvements have been made for 1900 . We direct special attention to the new No. 3, 4 and 5 Sowers, the new No. 11, No. 12 and No. 13 steel arch Double Wheel Hoes, and the No. 15, No. 16, No. 17 and No. 18 Single Wheel Hoes. You can rely on getting a bottom price from us on any of the "Planet Jr." goods.

## The 'PLANET JR." No. 2 Seed Drill.

This tool is known the world over, and, with the exception of the "Planet Jr." Hill Dropping Drills, is the most perfect drill known. It holds two and one-half quarts.

The drill sows in an even, regular stream, whether there is much or little in the hopper. The opening plow, being directly between the wheels, follows all irregularities of the ground, is adjustable, and once set opens the furrow at a uniform depth, and the seeds are deposited in a very narrow line. The machine is extremely simple; no agitators, belts or gearing. Price, $\$ \% . \% 5$.

## "PLANET JR." No. 4 Combined Hill Dropping Seeder, Single Wheel Hoe, Cultivator, Rake and Plow.

This is exactly the same style of seeder as the No. 5 "Planet Jr ." Hill Dropper. It is smaller in capacity, though still of good size, holding two quarts. It drops in hills at 4, 6, 8, 12 and 24 inches apart, and in drills any thickness, handling the smallest paper of seed perfectly, and is simple, durable and very light running. Throws out of gear instantly by simply raising the handles. The index is accurate, plain and easily set. The Drill is detached and the tool frame substituted by moving but one bolt. It then becomes one of the most admirable Single Wheel Hoes of the "Planet Jr." family. It has a fine garden plow, two new-style hoes, perfect shape, three delightful cultivating rakes, new form, and made especially to fit $6,9,12,14$ and 16 -inch rows, three cultivator teeth and a practical leaf guard. Price, complete, $\$ 12.00$; as a Drill only, $\$ 8.50$.

## "PLANET JR." No. ir Double Wheel Hoe, Cultivator, Rake and Plow

This tool, first offered for '98, combines in itself the good points of its predecessors with valuable new ideas. It has 11 inch wheels, which can be set at four different distances apart; the frame is malleable, with ample room ior tool adjustment, and can be set at three difierent heights. The handles are adjustable, and being attached to the arch, are entirely undisturbed in making changes of the height of frame, width of wheels or in the adjustment of the tools themselves. The arch is of stiff steel, unusually high. The design of the frame is novel, allowing all changes of tools to be made without removal of the nuts from the standards. A pair of model rakes and a pair of new style hoes are added to the usual equipment-seven pairs of tools in all. The whole set shown in the cut goes with the complete tool. All the blades are of tempered and polished steel. The variety of work possible with this machine is incredible, covering the whole range of wheel hoe work, both in the garden and on the farm, and has our unqualified endorsement. Price, $\$ 9.50$.


Price, $\$ 7.25$.

This latest and best Single Wheel Hoe, improved for 1899, has an 11 -inch wheel, with broad face, and a conveniently arranged and a very full set of tools, several of them being of new, special design, such as have been found to perform Wheel Hoe work in the very best manner. It is very light and strong and easy running; has three more tools than the old "Planet Jr," and does a much greater variety of work and does it better. Has adjustable handles and frame, especially adapted for quick changing of teeth. It is a most perfect Wheel Hoe for market gardeners or private places. The tools are a well-shaped plow for plowing, marking out, covering and late cultivation; a pair of neat 4-inch shield hoes, just right for hoeing in rows from 9 to 12 inches, and a large pair for wider work, and three cultivator teeth. Also a set of three rakes, just right for $6,9,12$ and up to 16 -inch rows, with two arranged side by side; the rakes are just the thing for preparing ground for the Seed Drill. A practical leaf guard completes the equipment.

The frame changes in height, and the wheel to the other side of the frame, when both sides of the row can be hoed at one passage.

## "PLANET JR." Harrow and Cultivator.

This comparatively new tool has rapidly grown into favor with farmers, market gardeners and strawberry growers. It is carefully made and finished, has a high frame and the chisel-shaped teeth cut an inch wide each, and may be worn down three inches before that width is lessened or the teeth worn out; even then they are cheaply replaced. It may be set with teeth trailing, by simply changing one bolt in each tooth. The foot lever pulverizer is a capital addition for preparing ground for the Seed Drill or for plant setting, and controls the depth of the rear teeth. Hand levers regulate both width and depth while in motion; it contracts to 12 inches, and may be further reduced in width by taking off the outside teeth; it expands to 32 inches. It cultivates deep without throwing earth upon the plants, and the smooth, round-throated teeth turn strawberry runners without injuring them. For cutting strawberry runners we make a special attachment, consisting of a 10-inch flat steel disc mounted on an outrigger. Strawberry Runner Cutter Attachment extra. Price, plain, $\$ 7.00$; with Wheel, \$8.75; Complete, $\$ 10.50$.

SE SEND FOR EXTRA CATALOGUE, FREE. Fis

## The "IRON AGE" WHEEL HOES and SEED DRILLS



## The "Iron Age" Double Wheel Hoe, with Cultivator Teeth, Plows and Rakes.

Packed Weight, 40 lbs. PRICE, $\$ 7.00$.

Among the principal labor-saving tools in the hands of the market gardener must be considered Wheel Hoes. Nay, we may insist that it leads all others, for they are really indispensable, and without their aid it would be an almost impossible task to keep the market supplied with such immense quantities of row-grown vegetables. They have done away with the back-breaking and time-killing methods of the olden time, one man performing in a more thorough manner, and with greater ease to himself, the labor of several men. As with all other improved methods of labor, it requires a little practice to enable one to realize the best results with a wheel hoe. A norice will usually push steadily ahead; not so-give the tool a thrust ahead, watching the wheel rather than the hoe, and taking a step at each thrust; this brings a result which the term wheel hoe implies; an ordinary hand hoe would accomplish little if simply dragged through the ground.

Haring shown what is expected of a wheel hoe, we desire to bring to the notice of the reader the "Iron Age" Wheel Hoe. Without disparaging the many excellent tools of


Showing the Double Wheel Hoc set up as a Single Wheel. this character already in use, we recently became convinced from our own practical tests-we have beeu making wheel hoes for years-and the expressions coming from the workers in the field, that further improvement was possible and necessary. Higher Wheels were called for ; the old pattern frames were made of gray iron, and were consequently too heary. to say nothing of their constant breakage. How well we have corrected these points, and still other improvements, we will endearor to show. We have practically made the tool "bicycle construction."

## The "Iron AgE" Combined Seed Drill and Wheel Hoe

Packed Weight, 50 lbs. PRICE, $\$ 10.50$

In desiguing our Seed Drill Attachment for the Double Wheel Hoe, we have kept in view simplicity of construction, convenience of adjustment and perfection of work.

The drill attachment is complete in itself, and when put in place requires but two bolts to secure it; the single wheel is then put in position, the chain run on, and the drill is ready for operation. The seed slide and its index adjustment to sow the various seeds is similar to that used on our well-known New Model Seed Drill, while the agitator is simply a revolving brush, of selected bristles, which will not injure the seed, will wear a long time, and can be cheaply replaced.

In our experience with seed drills we have found that while some round, smooth seed, such as turnip or radish, will flow through the discharge opening, and do not, therefore, need any agitator, one is absolutely necessary for some others to insure a continuous or positive feed.

We have seen acres of beets ragged and forlorn, with long skips and spaces, simply by reason of this attempt to sow such seeds without an agitator.

The brush agitator will be found to be peculiarly adapted to feeding out such seeds as beets and tomatoes, in separating the seeds that may be clinging together and acting as a gentle force feed.

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It is a whole tool house of itself. It plows, levels, furrows, sows, covers, rakes, cultivates, hoes and hills, and does each and every operation in the most satisfactory manner.

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| Ammoniated Food for Flowers |
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| Beans，Burpee＇s Bush Lima |
| Bene |
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| Bone for Chickens |
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Annual Climber
Artichoke seed
Asparagus Seed ．．．．．．．．．．．．．．．．．．．．． Anise

Salt Bush
Barley，Fall and Spring
Beets

Beans，Wax Pod Sorts
Beans，Pole
Beans，Lima
Beans，Field Sorts．

Bene
Beet（ornamental）
Blue Grass
inter Oats
lack Russian Wint
Black Cluster Oats
Borage
Bowker＇s Plant Food
Bone for Chickens
Books on last page of cov

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Broadcast seed Sower
Buckwheat
Cabbage
Cauliflower
Cardoon
astor Oil Plant
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Dhoura Corn
Dill

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Lawn Grass
Leek
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Marjoram
Mangel Wurzel
Millet
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Musk Melon
Oats
Okra，or Gumbo
Olmstead＇s Reliable Mole Trap

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Scorzonera
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Sorrel
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Tansy
Teosinte
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Chrysanthemum（irutescens）
Cineraria（Maritima）
Cineraria（Hydrida）
Cinnamon Vine Roots
Collomia
Convolvulis．
Coix Lachryma
Cobea Scandens
Dahlia（seed）
Dahlia（roots）
Delphinium
Dianthus
Digitalis（Foxglove）
Dolichas（Hyacinth Bean）
Dutch Bulbs
Egg Plant（ornamental）
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Erysium
Eschscholtzia
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Ferns
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Gilia
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Gloxina（seed）．
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Nasturtium（climbing）
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Nigelia（Love－in－Mist）
Nicotiana
Nolana
Oenothera
Ornamental Grasses
Ornamental Gourds
oxalis（seed）
oxalis（bulbs）
Pæony Seed．
Pæony Roots
Pansies
Passiflora（Passion Flower）
Pavaver（Perennial Poppies）
Pennisetum．
Perennial Flowers
Perilla．
Petunias
Phlox．
Phlox（Perennial）
Poppies
Portulacea（Moss）
Primula

Primulas（Chinese）
Pyrethrum
Rhodanthe
Ricinus（Castor Oil Bean）
Rocket
Salpiglossis
Salvia
saponaria
Sanvitalia
scabiosa
Schizanthus
Sensitive Plant
Silene
Stevia Serrata
Smilax
Stipia Pennata
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Stocks（Perennial）
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Vinca
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Violet．
Violets（sweet）
Viscaria
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